PERSIAN GULF WAR VETERANS AND RELATED ISSUES

HEARING

BEFORE THE

SUBCOMMITTEE ON
OVERSIGHT AND INVESTIGATIONS

OF THE

COMMITTEE ON VETERANS' AFFAIRS
HOUSE OF REPRESENTATIVES

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HEALTH CONCERNS OF PERSIAN GULF WAR VETERANS AND RELATED ISSUES

WEDNESDAY, JUNE 9, 1993

HOUSE OF REPRESENTATIVES
SUBCOMMITTEE ON OVERSIGHT AND INVESTIGATIONS,
COMMITTEE ON VETERANS' AFFAIRS,
Washington, DC.

The subcommittee met, pursuant to call, at 8:30 a.m., in room 334, Cannon House Office Building, Hon. Lane Evans (chairman of the subcommittee) presiding.

Present: Representatives Evans, Montgomery, Gutierrez, Kreidler, Kennedy, Clement, Everett, Bachus, Buyer, Quinn, and Stearns.

OPENING STATEMENT OF CHAIRMAN EVANS

Mr. EVANS. Good morning. The subcommittee will come to order. If everyone will please be seated we will proceed.

Today the Subcommittee on Oversight and Investigations is meeting to learn more about the health care problems and concerns of Persian Gulf theater veterans.

In addition, the subcommittee will examine the medical treatment rendered to Desert Storm veterans by the Department of Veterans Affairs, the Department of Defense, and other providers.

No one wants the mistakes of the past to be repeated. For too many years health care problems reported by Vietnam veterans were ignored. We cannot allow this history to be repeated. We cannot allow this legacy of Vietnam to become a legacy shared by the veterans of Desert Storm.

If action is indicated, our purpose is to see that action is taken. Each and every member of this committee is concerned about the health care problems of Persian Gulf veterans, but two members in particular, Joe Kennedy and Bob Clement, have been in the forefront in recognizing and responding to the problems of Gulf War veterans.

Joe Kennedy and Bob Clement have also provided strong support and encouragement for this hearing; their support, assistance, and cooperation are particularly appreciated.

Numerous news media accounts have reported on the health problems encountered by some Gulf War veterans. Today we hope to gain a better understanding of the health care problems and concerns of these veterans.

We do not presume this hearing will provide final answers to all questions. We are hopeful, however, that this hearing will shed

much needed light on existing problems and possible avenues of action.

In recent weeks many individuals, including some Persian Gulf theater veterans, have contacted the subcommittee and volunteered to testify today. We appreciate the willingness of those individuals to come forward and make their stories known. Unfortunately, however, not everyone could be accommodated in person today. In some cases individuals have been invited to submit written testimony for possible inclusion into the printed record. We look forward to receiving these views. Only individuals who have been formally invited in writing by the subcommittee to testify will be called today by the chair to present their views.

A very large number of witnesses are scheduled to testify today. Witnesses recognized to present an oral statement today are, again, requested to limit their presentation to five minutes. Without objection, the complete written statement submitted by each witness will be included in the hearing record.

Our many visitors today are welcome and I would like to remind all in attendance that this is a formal congressional hearing. Courtesy and proper order are to be maintained at all times. Comments, questions or expressions of approval or disapproval, such as applause from the gallery, are to be withheld.

The chair anticipates questions may be submitted to witnesses following the conclusion of the hearing. Those questions and the responses provided by each witness will also be made part of the hearing record.

The chair also notes that Dr. Ruth Edsel, Chief Air Pollution and Respiratory Health Branch, Division of Environmental Hazards and Health Effects, Centers for Disease Control and Prevention, had been scheduled to testify today, but the chair is excusing her from participating in the hearing. Without objection, her prepared statement will be included in the printed record.

For purposes of introductory comments I will now yield to Congressman Bachus.

OPENING STATEMENT OF HON. SPENCER BACHUS

Mr. BACHUS. Thank you.

Mr. Chairman, I want to thank you for the opportunity that we are going to have today to address this distinguished group of panelists. I also want to say that I am grateful to the veterans and their families that have taken the time and effort to be here.

I would like to particularly recognize two veterans. They are Mr. and Mrs. Larry Perry of Goldhill, NC, and Mr. and Mrs. Thomas Lane of Trenton, GA. Both of these gentlemen served in the Gulf War as a part of the Naval Reserve unit in Huntsville, AL.

I would also like to thank many Alabama veterans who have brought this issue to my attention. I have reviewed most of the testimony, and I find it to be very intriguing, very puzzling. I will say that I hope today that we start making inroads into better understanding this disease and the issues before us, and that as a result of these hearings, we are able to have more immediate, more responsive, and more successful care for our Desert Storm veterans.

Thank you, Mr. Chairman.

Mr. EVANS. Thank you very much.

The gentleman from Washington State.

OPENING STATEMENT OF HON. MIKE KREIDLER

Mr. KREIDLER. Thank you, Mr. Chairman.

Mr. Chairman, last week I had the opportunity to have dinner with a friend of mine who told me about a brother of his who had passed away a couple of weeks ago. Both my friend and his brother had served in Vietnam, and my friend's brother's death was attributed, at least by the family and recognized by the VA in some capacity, to be due to the effects of Agent Orange.

We will never know how much of his disability and death was attributable to Agent Orange, but it really brought home the meaning of this particular hearing that you are holding today, Mr. Chairman.

For too long when we dealt with Agent Orange, the government refused to recognize the threat to veterans who had served in the Vietnam theater and denied and ignored their problems and minimized their complaints and neglected their problems.

That neglect is something that reflects poorly in many respects on the military and certainly on our society, when it fosters mistrust, cynicism, and alienation of government, in general.

The veterans of our Nation are entitled to receive medical care and, certainly, be recognized for standing up to defend our country, but they have reason to feel at times that they have been betrayed when certain things are not recognized appropriately.

Each war has brought forward its own list of problems, whether it was the problems of gas in World War I, atomic radiation in World War II, or dioxin in Vietnam. Now we look at a situation where perhaps the oil fires in the Gulf, the depleted uranium, the endemic parasites and diseases, certain environmental and combat stresses are causing new illnesses. We do not know the answer, but we are starting to seek out those answers.

I am an optometrist, and I was a lieutenant colonel in the Army Reserve who was activated as a part of my Army Reserve hospital unit to support military personnel going to and coming back from the Gulf, and in that capacity I certainly recognize that medicine does not know all the answers to the questions in front of us. It is not an exact science. There are some disorders and illnesses that we know very little about.

No one can promise that we are going to offer cures to all of these problems, but we can promise to listen to our patients, take their complaints very seriously, investigate, and to the best of our ability find causes for their symptoms.

I do not know all of the details of the problems that the witnesses are going to present today, but I look forward to this hearing and finding out more facts about these problems as they have been recognized and their conditions and what we can do to help treat them.

I am grateful to you, Mr. Chairman, for taking this course of action and holding this hearing, and we certainly know one thing, that these Persian Gulf veterans deserve our support now as we supported them during the conflict. We must recognize our responsibility to find answers to their questions and help to restore the kind of trust that the veterans should have in our government.

Thank you, Mr. Chairman.

Mr. EVANS. Thank you very much.

The other gentleman from Alabama, Mr. Everett.

OPENING STATEMENT OF HON. TERRY EVERETT

Mr. EVERETT. Thank you, Mr. Chairman.

I, too, want to thank you and Ranking Member Ridge for holding this hearing. I participated yesterday in the Subcommittee on Compensation, Pension and Insurance hearing and heard compelling testimony from the various veterans and service organizations about some of the experiences that they had in Desert Storm and also with the VA.

Obviously a great many things have happened, things we need to look into. For instance, many of the soldiers who were sent to serve in Desert Storm already had medical problems. We need to check into that. That combined with what could be called the witch's brew of toxic substances and a hostile environment have caused us to have thousands of claims filed with the VA.

We have a lot to do in this subcommittee, and I again appreciate very much you making this hearing possible.

Thank you.

Mr. EVANS. Thank you.

The gentleman from Massachusetts.

OPENING STATEMENT OF HON. JOSEPH P. KENNEDY II

Mr. KENNEDY. Thank you, Mr. Chairman.

First of all, I want to thank you, Mr. Chairman, for the efforts that you have made with regard to trying to get to the bottom of this issue. You and I have had, I think, a joint concern about the fact that, dating back from the initial hearings over a year ago, we did not feel that the VA was looking into this issue, nor the Pentagon looking into this issue, with near the vigor that the complaints warrant.

It seems that we were headed a year ago for a repeat of the Agent Orange fiasco. We saw the same individual hired by the military to study this issue of Persian Gulf syndrome sicknesses as was hired to investigate Agent Orange, and I think it sends a message throughout all of the veterans' community that are feeling the terrible sicknesses that somehow the government feels that they are malingerers. There is a sense that if they come forward, they are going to be punished. There is a feeling that the officials of their government really and truly believe deep in their heart that these soldiers simply have something wrong with their head.

Now, I know, and we ought to acknowledge, that President Clinton and the new Secretary of Veterans Affairs have acknowledged this as a problem and have tried to come up with policies that will deal with this in terms of the VA's reaction, but the reality is that what we see at the front lines of the Department of Veterans Affairs has a lot left to be desired.

The tremendous work that you have done in terms of calling for a complete review of all the potential service in terms of the creation of the kind of document that would indicate exactly what the chemical exposures have been and exactly what the presumption of

those chemical exposures might be has fallen well short of the expectations that we had when we voted on that legislation last year.

There are indications that of the 660,000 men and women that served in the Persian Gulf, only about 4,000 have participated in the registry. Now, when we first had these hearings a year or so ago, there were indications that there was only a couple hundred, 250 soldiers that had been complaining of these symptoms, and yet we now know that there are literally thousands and thousands of soldiers that have these complaints.

So the question is whether or not we, as the Congress of the United States, are going to make the presumption that when these soldiers are exposed to chemical contaminants that are very different than the kinds of wounds that have been experienced in past warfares; it seems that we are now dealing with a whole new element of modern warfare. Instead of being shot with a gun and wounded, people are exposed to uranium tipped bullets. They are exposed to oil fires. They are exposed to a whole range of chemical contaminants that have never had that kind of exposure to the human body before.

So we do not know exactly what the outcome of those exposures are going to be, and the question is whether or not we as a Congress are going to make ourselves open and available to the soldiers so that they feel that they can come forward, make the complaint, and have a presumption that if there is a body of knowledge that indicates that excess chemical exposures are going to provide you with symptoms that might indicate things like hair loss, things like stomach cramps, things like vomiting, things like extreme chronic fatigue, that there would be a presumption that those illnesses are directly related to the service that you provided to your country because you were exposed to those kinds of chemicals in your service to your country, and that is the crux of this issue.

It seems to me that what we are trying to accomplish here today is not just to hear directly from the VA and the Pentagon, as this committee has done in the past, but to use the initiative of this investigative subcommittee to say that there is a whole array of different views on this issue; that doctors and health experts from outside the VA have experience, and as a matter of fact, many doctors within the VA.

It is the first time that we will have heard directly from Persian Gulf soldiers themselves, to hear about what they feel and the kinds of problems that they sense that they are incurring, and I think that this is a very important hearing, Mr. Chairman.

I really want to thank you very much for your willingness to take on this issue. I know that it has been very controversial up here, and there is the need for the kind of leadership that you are providing, and I very, very much want to commend you and look forward to today's hearings.

Thank you, Mr. Chairman.

Mr. EVANS. Thank you.

The gentleman from New York.

OPENING STATEMENT OF HON. JACK QUINN

Mr. QUINN. Thank you, Mr. Chairman.

I want to join the other members in thanking you for putting together the hearing today and also thanking the witnesses that we will hear from throughout the day and, I hope, after today. As Mr. Kennedy has already said, the committee has looked at this issue before, and I hope it is only the beginning of a lot more information that this Congress will hear and the subcommittee will hear.

It is clear to all of us that there are Desert Storm veterans, men and women, who face some very unique health problems. I believe that wounds are wounds, whether they are physical, whether they are 50 years ago or five days ago, and I think our challenge here is not only to hear that testimony today, but also to take that information to the rest of our colleagues on both sides of the aisle, from this subcommittee to our full Committee on Veterans' Affairs, and make sure that the story that we hear today, and the stories and information that we can share with others, be shared with this Congress and our country here in Washington, DC.

I look forward to hearing the testimony today and hope that it is only the beginning of some interaction between these veterans and the VA and others to get to the bottom of this problem once and for all. I thank you and Mr. Ridge for putting it together.

Mr. EVANS. The gentleman from Tennessee.

OPENING STATEMENT OF HON. BOB CLEMENT

Mr. CLEMENT. Thank you, Mr. Chairman.

I pushed hard, as you know, for these hearings. I think it is very necessary. I am a veteran myself, and I think we should do everything humanly possible to help our veterans in every way, and I know a number of veterans and their families feel abandoned at this time, that they served in the Persian Gulf, and they just are not getting the attention that they deserve. They know they have got problems. They are really not sure what those problems are. They are concerned about their future. They do not know what is going to happen when it comes to their families and how they are going to provide for them. They are suffering difficulties financially, and their lives are just falling apart.

And it is up to us not to look the other way, but to do everything we can for our veterans because they were representing all of us when they went to the Persian Gulf. They were not just representing part of us, and a lot of us supported that resolution to send those soldiers to the Persian Gulf. Let's now stand by them.

I myself have looked at 70 individual cases concerning veterans and their families and how they have been impacted. Based on my research, I have three areas of concern.

First, there are veterans experiencing common symptoms which have yet to be diagnosed.

Second, the question is not whether the soldiers are being seen at the VA and DOD facilities, but whether or not they are truly being treated.

And, lastly, there are obvious discrepancies between the numbers of affected individuals linked to service reported by service organizations and advocacy groups and those presented by the VA and the individual branches of the Armed Forces.

Mr. Chairman, I have been pleased by recent statements by Secretary Brown indicating his willingness to look into all areas, in-

cluding multiple chemical sensitivity, and reaffirming his commitment to provide access to the best available resources. In fact, recent movement with the VA appears to indicate that the tide is slowly turning.

I have been further encouraged in that the VA appears to be moving away from the solely PTSD, or general population diagnosis, and is now considering other causes and means of treatment.

On the other hand, it is my opinion that the active duty forces are behind the times since there continues to be a general misconception that aside from our very few cases, that there is no problem. The evidence that I have seen, the 70 cases I have investigated leads me to believe that there is a direct correlation between these individuals who are sick and their service in the Persian Gulf.

To this point, all the government studies and research addressing exposure have focused on the oil well fires. I believe these efforts in this area have been exhaustive, and I commend them for this. But I believe that we must pursue every possible explanation, leaving no stone unturned.

Therefore, every possible exposure, such as reactions to inoculations, effects of depleted uranium, contaminated water supply, and pesticides, must be scrutinized in the same manner. The burden of proof should not fall upon the soldiers. They are ill, and there is no question about it. The burden of proof should fall on those discounting this mysterious illness. The dissenters should prove that it is not linked by eliminating every possibility.

Again, Mr. Chairman, thank you for providing this opportunity for the committee to hear first hand from those affected by the mysterious illness and key individuals which have been involved in the treatment and/or study of this mysterious illness. I am hopeful that this hearing will draw attention to a continuing problem and result in a better understanding of this situation.

And I ask that my full testimony be incorporated into the record as if read.

Mr. EVANS. Without objection, so ordered.

The chair is very pleased to recognize the gentleman from Indiana, a Persian Gulf veteran himself. The gentleman may proceed.

OPENING STATEMENT OF HON. STEVE BUYER

Mr. BUYER. Thank you, Mr. Chairman.

I give great compliment to you for having this second set of hearings on Persian Gulf War veterans. I feel kind of awkward here because I almost feel as though I am also in a position of testimony, being a Persian Gulf War veteran myself, and I give great compliment to my colleague, Mr. Kennedy from Massachusetts, for taking a lead at this time where I, like many other veterans, was suffering from some ailments, but had no idea what was wrong with my body.

There are many symptoms out there that veterans have, and they are discounted due to medical ignorance, due to a lack of a specific cause and a specific solution.

I can say affirmatively that the Persian Gulf War changed my life and my body, and that is, in fact, very, very real, gentlemen. These are many of the drugs that I take.

Now, I step forward today to do this because there are many veterans out there that do not know whether or not it is real or in their heads, but the statement that I have to share with veterans today is, in fact, it is real; there is a member of Congress that is a Persian Gulf War veteran who is having problems, who returned from the Gulf War having upper respiratory problems and having the drip down the back of the throat. For someone who went off to the war, who for the first 32 years of his life was of excellent physical health—I did not lift as many weights as you did, Joe—but I was in very excellent physical health; I came back and then to begin to have problems.

And you raised a question when you said that the VA only has 4,000 of these veterans in the registry while over 600,000 went to the Persian Gulf War. When I came back and was personally struggling with many different physical problems, there was a study done in Indiana of the 123rd ARCOM, and over 100 of my comrades went and participated in that study.

My wife Jody said, "Steve, are you going to participate?"

And I said, "No, I am not. Just watch what is going to happen." I said they are going to come back, and they are going to label their problems post-traumatic stress disorder, and, son of a gun, was I absolutely furious when that, in fact, is what happened to my colleagues, and it was labeled as something that was a mental disorder as part of the cause.

So I know though that when you are having to take drugs like this every day, three times a day, and you pay $147 out of your pocket for these drugs, that I am not alone; that there are many veterans out there having to do this kind of thing, and the U.S. Government has a responsibility.

The responsibility is for many of those veterans who do not have an opportunity to have a voice like I do at the moment. That is why I compliment you, sir, for having a hearing like this and, Joe, for your coming forward.

The forum is extremely important. I believe that the multiple chemical sensitivities and environment like that, whether or not it be from the uranium—not all of us handled ammunition. I slept in a tent in the desert that had a space heater eight feet from me that used diesel fuel that contained lead, and the doctors say, "Steve, we know there has been an insult to your immune system," but from what they do not know. So you try to treat what, in fact, is there.

Mr. Clement has said that the responsibility should not be upon the veteran. You bring the veteran into the system, and you acknowledge, in fact, there is a physical problem, and you treat it. That is what is extremely important.

You do not put the burden of proof upon the veteran to step forward. We should bring them in and treat them and recognize, in fact, there is a problem, and that is why I compliment you for this hearing. It is a first step, and, in fact, you will be hearing from panels of experts for the need to perform further research and to, in fact, have chemical sensitivity experiments, and if they need more funding for that kind of thing, step forward and ask us. I know there are many of us who will be strong advocates for it, and I look forward to participating in this hearing.

Thank you so very much.

Mr. EVANS. Thank you very much.

The subcommittee is very pleased to welcome our colleague, Congressman Charles Canady, as our first witness today. If he would come forward, we appreciate your interest in today's hearing, and we look forward to receiving your testimony.

The subcommittee understands your district, Florida's 12th Congressional District, is the home of the 325th Maintenance Company of the Florida National Guard. The 325th was activated and served in the Persian Gulf theater. Since then several members of this unit have reported health problems.

Later today the subcommittee will receive testimony from Dr. William Johnson on the health care problems reported by some members of this unit. So we are very pleased to hear from you today, and we will let you proceed at this time.

STATEMENT OF HON. CHARLES T. CANADY, A REPRESENTATIVE IN CONGRESS FROM THE STATE OF FLORIDA

Mr. CANADY. Thank you, Mr. Chairman, members.

I would like to join in commending you, Mr. Chairman, for your efforts in dealing with the problems being experienced by veterans of the Gulf War, and today, as you have mentioned, I am here specifically to bring to your attention and to the attention of the members of the committee the particular problems that have been experienced by members of the 325th Maintenance Company in the Lake Wales Division of the Florida National Guard.

The members of the 325th have been experiencing serious health problems, and I believe that there is strong, indeed compelling evidence that these problems are a direct result of their service in the Persian Gulf War during Operation Desert Storm.

The 325th was responsible for painting almost 8,000 vehicles with a toxic chemical warfare resistant paint in 1990 and 1991. Members of the unit report conditions were primitive. Safety equipment was virtually nonexistent, and their protest to commanders in the Army and National Guard were ignored. According to Guard members, the paint operations were shut down after the Army's 7th Brigade refused to take over the job in 1991 because of safety concerns.

Dozens of members of the Lake Wales Guard unit report a variety and range of respiratory problems and other symptoms, which experts say result from exposure to toxic agents. The Guard members are in the process of seeking treatment of these problems through Army and VA medical facilities.

As a result of the concerns expressed to me by members of the 325th, I have communicated with the Secretary of Defense, the Secretary of Veterans Affairs, and others, but members of the 325th who have separated from the Guard since Operation Desert Storm are entitled to have their medical problems addressed by the VA.

However, these members of the 325th have reported to me that they are encountering difficulty in obtaining the necessary examinations and treatment. Though the VA has set up a Persian Gulf War registry to document medical problems arising from the Per-

sian Gulf War, the delay in receiving a medical examination following application to the registry is over six months, I understand.

Furthermore, the VA does not recognize the injuries suffered by the 325th during their service in Operation Desert Storm as a medical problem. Veterans from all over the United States, as we have heard, have been complaining of ailments, including chronic fatigue, sore joints, hair loss, loose teeth, skin rashes, breathing problems and memory loss. In order to properly address the problems being experienced by former members of the 325th and other units which served in the Persian Gulf, I believe that two changes must take place.

One, the VA needs to acknowledge and medically address the problems arising from Operation Desert Storm. The VA does not officially recognize the kinds of problems associated with multiple chemical sensitivity and has no experts in the area of chemically based problems. The VA needs to develop an area of expertise on the problems associated with long-term, frequent exposure to chemicals, such as those contained in the paint applied by the 325th during Operation Desert Storm.

Second, the VA should expedite the process for getting veterans examined for possible health consequences as a result of the Persian Gulf War. Presently, once a veteran has applied for a medical exam through the Persian Gulf War registry, as I said before, the waiting period for an examination is more than six months in some cases.

I believe that this is a delay which is simply unacceptable. Many veterans are suffering from symptoms so serious that they are not able to work. If we are going to address the problems of our veterans in a timely and meaningful manner, the speed and process of their applications for medical examination and treatment must be increased.

Again, Mr. Chairman, I appreciate your efforts on behalf of the veterans, and as we gather more information concerning the particular problems of the 325th, we will be submitting information to you and the other members of the committee for your consideration.

[The attachment appears on p. 168.]

Mr. EVANS. Thank you very much.

Mr. CANADY. Thank you.

Mr. EVANS. Let me just ask you one question.

Mr. CANADY. Yes, sir.

Mr. EVANS. Have a large number of members from this unit been discharged from the unit itself because of medical problems?

Mr. CANADY. A number of them have been discharged. Others have voluntarily withdrawn from the Guard.

Mr. EVANS. So we are in a situation where the military recognizes at least some of these folks who were involuntarily separated or separated because of their medical problems have medical problems, but we do not have any governmental acknowledgement that they might be from the Persian Gulf experience?

Mr. CANADY. That is correct.

Mr. EVANS. Thank you.

Does any other member of the subcommittee want to raise a question? The gentleman from Alabama.

Mr. BACHUS. Charles, let me ask you four or five questions. What type of respiratory problems are they having? Are they having bronchitis or shortness of breath?

Mr. CANADY. A wide, wide range of respiratory symptoms have been described to me. It is difficult to get a fix on the particular symptoms, but there is a wide range of symptoms.

Mr. BACHUS. Are they coughing up substance?

Mr. CANADY. In some cases that is happening. Shortness of breath, just difficult breathing in some cases. I think some of them have experienced the drip that has been described earlier. A wide range.

Mr. BACHUS. Post-nasal drip?

Mr. CANADY. Yes.

Mr. BACHUS. Are they described as similar to, say, an allergic drip from allergies?

Mr. CANADY. I think some of them have experienced that type of a problem, yes.

Mr. BACHUS. How about infection, bronchial infection or bacterial? Have any of them been diagnosed as having bacterial infections?

Mr. CANADY. I do not know if any have been specifically diagnosed with bacterial infections.

Mr. BACHUS. What was the site of the painting? Was it in Florida or was it overseas?

Mr. CANADY. Oh, no. This was in the theater of operations in Saudi Arabia. Yes, they were. This was one of the units from Florida that was mobilized and served in the Persian Gulf.

Mr. BACHUS. You mentioned that experts say that their condition was a result of exposure to the toxic agents in your testimony.

Mr. CANADY. Yes.

Mr. BACHUS. Who were these experts?

Mr. CANADY. Well, the expert who has been mentioned by the chairman.

Mr. EVANS. Dr. Johnson.

Mr. CANADY. Dr. Johnson, I believe, has expressed that opinion.

Mr. BACHUS. And he has examined some of these gentlemen?

Mr. CANADY. I believe that is accurate.

Mr. BACHUS. So he could tell us more about the exact conditions?

Mr. CANADY. Yes. He would be obviously in a better position to express his opinion and explain the medical basis for it.

Mr. EVANS. Would the gentleman yield?

He is one of our scheduled witnesses.

Mr. BACHUS. Thank you.

Mr. EVANS. Does anybody else have any questions of this witness?

Mr. BUYER. Just one, Mr. Evans. This paint, was this the CARC paint?

Mr. CANADY. I think that is correct, yes.

Mr. BUYER. And I am familiar with that, and I believe that it is the infra red absorbent paint that was being used, and as far as I know, it also contains a cancer causing agent. So hopefully that is just another area that needs further investigation, Mr. Chairman.

Mr. CANADY. Well, again, the information we have indicates that at a certain point the use of this paint was suspended because of the concerns that were subsequently expressed, but the Guard members were exposed to its use for an extended period of time.

Mr. BUYER. As a matter of fact, I can remember being out there among some of the tanks. Some guys would say, "Well, you shouldn't really lean on this tank. It's got the special paint," whatever that means.

Thank you.

Mr. EVANS. Thank you, Congressman, and we look forward to working with you.

Mr. CANADY. Thank you, Mr. Chairman.

Mr. EVANS. The members of our first witness panel are Thomas Lane, Carol Picou, and Kimo Hollingsworth. If they would come forward at this time and be seated at the witness table.

Tom is a veteran of the Persian Gulf and a member of the Navy Reserve 24th Naval Mobile Construction Battalion. Carol has 14 years of service in the Army, is a Persian Gulf veteran, and is currently serving on active duty. Kimo served two tours in the Gulf theater, and is a Marine Corps Reservist. We will start out with Tom as soon as he gets situated.

As I have indicated earlier, each of your complete statements will be entered into the record. So if you can summarize, we would appreciate it, and, Mr. Lane, we will start with you once you are ready.

STATEMENTS OF THOMAS LUTHER LANE, NAVY RESERVE 24TH NAVAL MOBILE CONSTRUCTION BATTALION, TRENTON, GA; CAROL H. PICOU, ARMY ACTIVE DUTY, UNIVERSAL CITY, TX; AND KIMO S. HOLLINGSWORTH, USMC RESERVIST, ROCKVILLE, MD

STATEMENT OF THOMAS LUTHER LANE

Mr. LANE. Honorable United States of America Congressmen and Congresswomen, it is, indeed, an honor to be able to present to you written and verbal testimony about the health problems associated with Desert Storm.

As the tears streamed down my face caused by the intense pain in my hip, I knew if I could bear it enough I would be able to get into Wal-Mart, get back to my car, and have the Christmas cards needed to send back to my loved ones back home. This is pretty much the same at Meridian, Mississippi, on December 13, 1992, as I traveled to Touro Infirmary down in New Orleans. That is where I was treated by Dr. Hyman for the sickness that I incurred while serving in Desert Storm. At that point in my life——

Mr. EVANS. Mr. Lane.

Mr. LANE. Sir.

Mr. EVANS. Would you pull the microphone closer to you?

Mr. LANE. Yes, sir.

Mr. EVANS. Because it does not pick up unless you have it closer.

Mr. LANE. At that point in time in my life, I was down to using a cane to get around with.

Let's see. In 1988 and 1989, I ran the Marine Corps Marathon here in Washington, DC, with times of three hours and 25 minutes,

three hours and 15 minutes. At age 39, here I looked like I was 75 to 80 years old using a cane.

I only wish you could have felt that pain in the hip. If you take and break your arm or break your leg, that is the intense pain at that time that I was experiencing. Two weeks after treatment by Dr. Hyman, the pain left and has not returned.

Mine is no isolated case. I will refer back to my written testimony about the various problems I experienced, those being watery bowels, loss of appetite, sleeplessness, short term memory loss, depression, fatigue, extreme pain in my joints, night sweats, increased pulse rate.

My normal pulse rate would be around 60 to 65. It stayed between 85 and 90 during that whole time period.

Body weight swings in short periods of time from, say, ten to 15 pounds up and down. I also had uncontrolled emotional outbursts, lack of drive, strange bumps that would come and go at various points in my body. I would have tremors and shakes, unusually itchy scalp, sore throat for long periods of time, problems urinating, and disorientation.

I am very familiar with the Chattanooga area that I live in, and I found myself on two occasions driving alone lost. I had to stop my car, sit there for about 15 minutes to reorient myself, and finally it came back to me. This happened to other people in my unit. One guy, in particular, he had to make a phone call to get out of the location he was in.

We did experience some problems getting first seen by the VA. My first experience with the VA was it is going to cost you money to see the VA. They went through the process of determining how much I made and so forth and so forth, you know. Well, I turned around and left. I was having diarrhea problems, and I figured I will just live with it.

Well, when it got worse to the point that I was having the bumps and everything else showing up, I said I have got to have something done. So I went back to the VA, and I said, "Go ahead. Charge me for it. You know, I'm going to hang in there with you."

So I got bills from the VA. I have not paid them yet, but I have still got bills from the VA from going to see them. They have done every test possible and shown up nothing. As a matter of fact, when I had my hip problem, the doctor I saw, he checked me out. He did a chest x ray, examined my spine, and he said, "I think your spine is causing your problem."

Well, I had never had back problems before. So they sent me to the physical therapist in VA. He lifted my leg just a few inches off the table, and he said, "Something is wrong." So he had my hip x rayed. A week later, as they examined the x ray, it showed deposits forming down there.

My normal association with the doctors at VA is they just gaffed it off. I saw five different doctors. I got five different answers as to what my problem was. It is kind of ridiculous to go back and back and back. I do not get paid travel pay to go see the VA. I have to finance my own expenses, and it has been quite a bit.

Several people in my unit have filed bankruptcy. Several people in my unit cannot work today because of this. They have lost about everything they have.

There have been others like me that have been able to maintain their jobs, but it has been under extreme pressure. Some have been harassed like I have by my work place. My boss keeps tell me, "Well, show me in writing what is wrong with you." I cannot do that. The VA cannot do it. The Navy cannot do it. So I do not have an answer to give to him.

But because of certain problems that I have, like memory loss and the tremors, I have had paper work discrepancies, and I have received letters and days off from work. Others in my unit have been eradicated out of the military because of their problems.

Gene Trucks, a fine fellow that used to work for me over at Saudi Arabia when I was there, he is losing his mind, and he is getting worse every day. We need to do something about it. We may not be able to repair him, but there are others that are going to be just like him.

Two months after treatment from Dr. Hyman, I went on an ACDUTRA for about 18 to 21 days. It was the most physical ACDUTRA I have been on in my Navy career. My assistant resigned before going. So that meant I did my job, his job, and two other jobs. What I am trying to say is I went through 18 days with five hours' sleep a night and came through it in real good health. Had it not been for the treatment I received from Dr. Hyman I would never have been able to do that.

I am not saying I am totally well. I do have to rest periodically, but I am taking medication that costs me $225 a month to help me maintain my health. I do not know what I would do without it.

We need your help and support. Enact a legislation that will research this mysterious illness to find out what it is and to treat for it. Try to financially reimburse those who have spent and lost a lot of money in taking care of themselves. Somehow correct the problems that are created between the employers and employees. Take care of the family members that have been exposed. There have been some spouses, and I do not know if any children have shown up with the same symptoms, but there have been some wives and probably some husbands who have shown up with the same symptoms.

In summary, none of us are heroes. We are just plain, common, everyday folks. All we did was do what any normal, red blooded, patriotic American would do under the same circumstances. We responded to the call to go. We went in. We did our jobs. We did them well.

Take this opportunity to show the Americans and the rest of the world that we, the United States of America, is still the greatest and most godly nation on earth. Take care of those who served you well.

[The prepared statement of Mr. Lane appears on p. 171.]

Mr. EVANS. Thank you very much.

Ms. Picou.

STATEMENT OF CAROL H. PICOU

Ms. PICOU. Good morning. I am Sergeant First Class Carol Hammill Picou. I have served my country now for over 14 years. I was deployed to Saudi Arabia from November 23, 1990, to April 23, 1991.

Before I begin, I have been diagnosed with some memory impairment and cognitive disorder. So if I get lost, I apologize.

During my deployment, I was an NCO at an intensive care ward. I was also a five ton truck driver. I was on a dolly team. I was rear detachment security NCO. I had numerous responsibilities.

I volunteered to go into Iraq when my male counterparts refused to go. I went, and I did a job. During my deployment there into Iraq, we were on a convoy for over three days. During that time period, we were administered drugs that we had to take, pyridostigmine bromide, one in particular. I took that drug as ordered by the command to prevent against any type of nerve poison.

During that time, I experienced severe side effects to that drug. I had twitching of the eyes. They started to run. I had excessive sneezing. I had a runny nose. I had drool, and I had muscle twitches, aches and pains and problems with my urine and bowels.

After three days I went and I told them, "I am not taking this drug anymore," to my platoon sergeant. He said, "It is mandatory. You need to take it."

After that I went to the doctor in charge of our NBC, and I said, "I am having problems with this drug," and she said, "Show me the side effects to it." One hour after I took that drug, I went to him, and I showed him these conditions. He ordered me to continue taking it and just prove that these drugs were working on my muscle and doing what they were supposed to be doing.

During that deployment into Iraq, we came into a heavy hit artillery area. There was exploded ordnances all around us. The convoys were heavy. We sat there where APC carriers, tanks, and charred Iraqi bodies were scattered all over the highway. I was concerned because this is not my first combat situation where I have seen, but what bothered me was the charred bodies. I have never seen this before in 14 years of my military service, but we were in there with unprotective measures. We did not have a protective mask on, gloves or anything, and we sat in that area for over one hour.

We deployed two miles down the road and sat up our hospital and supported the front line troops, 24th Infantry Division. We had over 100-some patients at that time. We saw POWs who complained of gastroenteritis problems. We catheterized them. We received over 2,000 cc's of urine. We had American soldiers that were also ill.

During that time, we started noticing the black oil was on our skin and different problems that we were having, and we were told it was just due to the environment. During my deployment there in the beginning I started having urinary frequencies. They told me this was related to the environment. I was drinking too much water. I also had black, tarry stools, and they told me that if it continues to let them know.

When I came back—I am sorry—prior to being over there, I did injure my back on a sandbag detail, four days of building bunkers and doing sandbag details. I was medicated with Motrin, flexural and naprosyn. I also had a middle ear infection that put me in the hospital for a week.

When I came back, my problems continued, and I tried to see help for my urinary incontinence and bladder. I went to military

doctors, and it was just said it was related to my back injury. So they tried to work me up for my back.

My back indicated was not causing my bladder problems. I could not control my urine. I could not control my bowels. This is the treatment that I received through the military. I have to catheterize myself five times a day to urinate because I cannot go on my own, and if I do, it is usually incontinent. I wear sanitary products every day because I have bladder loss and diarrhea, with chronic episodes of constipation.

I have lost my rectal sphincter muscles. They tested me, and the military found I have lost my rectal sphincter muscles. I also have a grossly distended bladder that holds 1,000 cc's of urine and 250 cc's of residual urine.

So after those findings, they found me unfit for active duty and decided the best thing they could do for me was to medically board me out. They offered me a 20 percent temporary retirement and severance pay. I was getting worse. I was getting sicker, and I refused to accept this. I appealed that board.

I went and I asked for more help. They sent me to a psychiatrist in the military to see if this was stress or a psychosomatic disorder. I went through two weeks of psychological tests that proved that I have a very high IQ of 129. Unfortunately I am not functioning at that level anymore. They told me that it is not psychosomatic. It is not stress related. It is probably something related to the environment, and I should be seen by an environmental health officer or pharmacist in relation to the drugs I took.

That fell on deaf ears. I found a civilian doctor who was an internal medicine, environmental toxicology doctor. I went to him. He worked me up. He did a study. His findings include neuropsychological tests, involved impairment of psychosomatic speed, visual and symbol learning and visual organization. Motor coordination deficits was significant, and tendency to fatigue. Median nerve sotosensory evoke responses, negative response. The ulna nerve are also negative responses. Dermatomes are negative. I have three antibodies that are attacking my immune system. One is an anti-smooth muscle antibody. The other one is an anti-microsomal antibody, and one is C1Q immune complex. These are highly elevated. I also have volume urines of 2,300 cc's of urine.

He says this data support my previous report that indicates that you have neurological abnormalities that relate to your multiple complaints. The sotosensory results are consistent with the thalamic dysfunction as demonstrated on the brain SPECT scan. These results also indicate that some type of immune system perturbation is present. However, it does not fit any specific disease pattern at this time.

I have the chronic joint pains just like my fellow soldiers. I have ten other letters that people have written me and have mailed to me, and there are two other soldiers here in the audience that have contacted me that are having other problems.

I was told that 70 percent disability to get out. Accept those findings from the DAV, disability; said that is a good finding. So accept that. Get out. Go to the VA. See if you can get more disability, and then go on social security.

I do not believe in that. I know I cannot perform my duties as a nurse anymore, but I do not believe in milking the system like that. None of us soldiers care to be ill. We want answers so that we can get better.

My friends are going to the VA and other Congressmen. Mr. Buyer and other Congressmen have stated they are going right now. She applied for her disability in September, has not heard anything. Her next appointments are October, November and December.

So if I get out and go to the VA, how long is it going to take them to help me? I sought the help of a civilian doctor with good intentions, with my husband's insurance company. I got a letter from them saying that they will not pay for these tests that were conducted by a civilian doctor because it is combat related, and there is a war clause.

A lot of my other friends are also having problems with their insurance, that they cannot get any help. Two babies were born with birth defects as soon as their husbands have come back after the war. They cannot get out of the service because no insurance company will cover their babies.

This is a major concern. I have done a lot of research in the problems. I am continuing to look for answers. I have met with Congressman Kennedy, and he showed a great interest in a lot of our problems, and so did Congressman Tejeda, and I ask all of you to look into this and realize that these are not psychosomatic or stress. Our stress comes from our physical ailments that are causing our stress, not stress causing our diseases.

Thank you very much for inviting me here.

[The prepared statement of Ms. Picou appears on p. 177.]

Mr. EVANS. Thank you.

Mr. Hollingsworth.

STATEMENT OF KIMO S. HOLLINGSWORTH

Mr. HOLLINGSWORTH. Mr. Chairman, members of the committee, guests, I want to thank you for the opportunity to testify today on behalf of all veterans.

Before I begin with my written testimony, I would just like to back up here and let the committee know that I am not a malingerer and never have been. I have been an overachiever for 29 years, and hopefully in the future I will continue to do so.

Just to give you a brief background, I put myself through the Pennsylvania State University. I enlisted in the U.S. Marine Corps Reserves in 1983. I was accepted in the Officer Candidate School. In 1985, when I went through Officer Candidate School, I graduated in the top ten percent of my class there.

I was commissioned on active duty in May of 1988 at the basic school in Quantico, VA. I finished in the top of my class there. I also received a physical fitness award for the highest physical fitness person.

At Fort Sill at the artillery school I graduated in the top ten percent of my class. While on active duty I was repeatedly put in positions over lieutenants who were more senior than myself. I was promoted a year earlier than the rest of my peer group to the rank of captain.

In December of 1991, I was offered a regular commission into the U.S. Marine Corps from the Reserves, which I declined, and I will have you know that that board is probably one of the most stringent in the Marine Corps and one of the toughest.

With that said, I will begin my testimony.

I was deployed to the Persian Gulf twice. The first time, actually both times, I was presently on active duty at that time. My first deployment started in January 1 of 1991 and ended in mid-May of 1991. I served with 3rd Battalion, 10th Marines, with 2nd Marine Division. We landed into Saudi Arabia and immediately moved north into Kuwait.

I participated in the invasion of Kuwait, and, gentlemen, I was on the front lines. I was subject to the inoculations and the chemicals that were taken by many soldiers. While we were there, I will tell you that conditions were very unhealthy. There were dead carcasses and dead bodies lying around. The oil well smoke was so thick at times that at ten o'clock in the morning you could put your hand in front of your face, and you would not be able to see it.

I want to point out at this time prior to my deployment there and after I was physically healthy. My job during Desert Storm was that of an artillery platoon commander. As such, I was responsible for a hell of a lot of gear and a hell of a lot of Marines.

Upon return from the Gulf, I was assigned as the executive officer for Hotel 312, which was going to be forward deployed to the Persian Gulf in continuation of Desert Storm. There I served with the 22nd Marine Expedition Air Unit. Prior to and during this deployment, I was also in excellent physical condition.

Prior to that deployment, I had taken a physical fitness test and had scored a first class PFT.

Our highlights of the deployment there were some amphibious landings into Kuwait, Saudi Arabia and Oman. We also had port visits in Israel and Egypt.

Upon return from the Persian Gulf, I was getting prepared to be discharged from active duty. I went through my release from active duty physical. The doctors there found me to be extremely healthy. At that time I had no symptoms whatsoever or none that I was aware of.

Upon release from active duty, I accepted a position with a major Wall Street brokerage firm as a financial consultant. In November of 1991, late November, I came down with the flu. Two weeks later, or shortly thereafter, my symptoms and my troubles began. My symptoms included migraine headaches, severe muscle and joint aches, so severe that there were times I could not pull myself out of bed in the morning; constant fatigue. There were times that I would walk my dog and walk to the top of a small hill, and I would be tired and out of breath and sometimes dizzy.

Pain in my center chest that would not go away; coughing up of dark sputum, so dark green that it was on the verge of being black and so thick that you could cut it with a knife; frequent urination. In the evenings I would have to get up out of bed three to four times a night to urinate.

Periodic blurred vision, and downright plain lack of motivation. Gentlemen, I did not care about my life or my career at that point. My medical conditions got so bad that I decided to seek treatment

from a doctor in the local area. He could not diagnose me and suggested I go through the VA.

At that time I had heard of a contact through the American Legion, who told me of the Persian Gulf registry and of Dr. Edward Hyman in New Orleans. I went to the Persian Gulf registry and was given a complete physical. They indicated to me that I was 100 percent perfectly healthy. The doctor there told me that the coughing, the sputum and the pain in my chest was normal in some persons.

At the end of my visit I was asked to see a social worker. She indicated to me that some veterans have experienced post-traumatic syndrome, and that could be a possible reason for my ailments. At that time I decided to take matters into my own hands, and I sought treatment through Dr. Hyman down in New Orleans.

While there I spent 12 days on intensive antibiotics. Gentlemen, my visit ended almost two weeks ago. I will tell you right now that I have felt better than I have felt in six months. The pain in my center chest has since disappeared. My coughing of sputum has ceased. My migraine headaches are gone, although I still tire easily. My mental and physical health is much better. I have recently started working out again on a regular basis.

On behalf of all veterans, I can only say, gentlemen, that I strongly suggest the committee take into consideration what Dr. Hyman has to offer in the treatment that he is offering. I am not saying that it may be the answer, but it is a solution, I think, or a possible solution that thus far has been ignored.

I can only say, gentlemen, that when I was in the Gulf I did my job. I now only ask that the Department of Veterans Affairs do theirs.

[The prepared statement of Mr. Hollingsworth appears on p. 183.]

Mr. EVANS. Thank you very much.

First of all, I want to thank all of you for your service to our country and let you know that your service to this country continues today in coming forward and giving this very moving testimony, but as a member of this committee for almost 11 years, it sounds in Yogi Berra's words like déjà vu all over again, and I hope we can avoid what happened to Vietnam veterans. As I indicated in my opening statement, that is why it is so very important for you to come forward today, and that is why we appreciate your testimony.

We would like to ask you some questions. First of all, did each and every one of you receive a physical examination at the time you entered into active duty and the time that you separated from active duty?

Mr. HOLLINGSWORTH. Yes, sir.

Mr. LANE. With 24, they wanted to process us out as quick as they could. So ours was more or less a paper formality. We did not actually go through a physical examination on exit from the active.

Mr. EVANS. Carol, you are still on active duty?

Ms. PICOU. Right, but when we were redeployed back, we went for a physical which consisted of blood pressure, temperature, just vital signs, and the doctor asked us if we were having any problems. At that time I told him my problems. I lose my voice. I get

hoarse. He did a throat culture, gave me some Chloroseptics, and I told him I had one nightmare since I was back, and it was because wild dogs had chased us in Saudi, and I guess that night I was at home my first night back a dog barked in the neighborhood, and my husband said I woke up yelling to run because we were chased, and I have never had nightmares since.

But the physical we received was not adequate.

Mr. EVANS. All of you were in good to excellent health prior to your service in the Persian Gulf War?

Ms. PICOU. I was diagnosed with low back pain since 1989, but it never prevented me from being deployed in Germany, Africa or all over, and I was fit for active duty prior to my deployment going to Saudi.

Mr. EVANS. Same with the others?

Mr. HOLLINGSWORTH. Yes, sir.

Mr. LANE. Yes, sir.

Mr. EVANS. You obviously know about the registry at this point that the VA has started. Have you participated in that at this point?

Mr. LANE. Yes, sir.

Mr. HOLLINGSWORTH. Yes, sir.

Mr. EVANS. How many Persian Gulf veterans actually know about this registry, and do many use it, based on your own personal experiences with fellow colleagues? Carol?

Ms. PICOU. Sir, in San Antonio we have 370 registered there, and 60 are from the San Antonio area. Friends have been calling me and ask what to do, and I refer them to the VA. I also help with the VA with the support group over there in San Antonio, and I have helped them gather information on soldiers' epidemiology studies and things like that.

Unfortunately now we had a big Desert Storm support meeting last month in May, and I recommended some of the active duty people come, and unfortunately they requested that the active duty people do not come anymore.

Mr. EVANS. How many of those have actually been referred to one of the three referral centers? Do you know right offhand, Carol?

Ms. PICOU. As of right now I know of the eight people that I have been dealing with, one has been referred to the referral center. I called the referral center in Houston myself, and I was told I cannot come there because I am on active duty.

Mr. EVANS. So you have gone through the registry though?

Ms. PICOU. Yes, I am on the registry, but they told us no longer active duty will be able to register.

Mr. EVANS. Let me ask all of you if you have gone through the registry; did the VA physicians conducting these exams for the health registry pay close attention to the problems that you have been talking about in your testimony, such as occupational exposure, sand flea bites, chemical or biological agents, contaminated food or drink, or other environmental agents which some believe are responsible for the health care problems that you have reported? Did they pay specific attention to these environmental and other problems that you have identified in these examinations?

Mr. HOLLINGSWORTH. Sir, with my experience I have to say, yes, they did. He did take that into consideration, and he asked that. He asked questions about that very seriously.

Mr. LANE. The only problem I had was I took notes in note pads throughout my experience, and while I was sitting there talking to him about the registry and he was taking notes, he would ask me a question. I would say, "Sir, you know, my memory being bad, experiencing the memory problems." I would refer back to my notes constantly. At the end he said, "I see no problem with your memory," and wrote that down.

Ms. PICOU. I was not able to get the physical because I am active duty, but once I am discharged, they told me I could come for the physical, but my friends that were in the same unit, there are eight of them that are going over there. They told them about the oil well smoke and they were told that that did not exist at that time. The report that they had was from a GAO report on Kuwait. They did testing in May, June and July, and people living in Houston, California, Philadelphia have a greater chance of chemical poison than the Gulf War veterans did.

They also have one female doctor there that discredits everything that they have to say. So they no longer use her. They have another doctor that people are going to that they are pleased with now because he is not telling them this does not exist or not related to their problems.

As far as the chemical reactions, as far as all of these problems with the pyridostigmine and all these other drugs, chemicals, the oil wells, they have not touched on that. Basically they are doing CVCs, barium enema studies, and chest x rays.

Mr. EVANS. One last question as my time is about to expire, and I will yield to the other members.

Are you also, all of you, dealing with people who are either in your units or that you know that have been discharged or soon are going to be discharged because of medical conditions and have not yet received help?

Ms. PICOU. Sir, I have five active duty soldiers that are being discharged from the service with etiology unknown, but severance pays of ten or 20 percent disability. The other soldiers that took the downsizing out because of the cuts and the downsizing are now trying to go through the VA for compensation.

Mr. EVANS. Mr. Lane.

Mr. LANE. With us originally some of the guys were turned loose and brought back, but recently what has happened is they have pulled up files on these people previous to the war saying that you had this condition, and you are no longer fit to be in the service. We have guys that have 19 years. All they lack is one year to retire. Some have 18 years, two more years to retire. Well, if they had that condition and they let them go to war, then why are they kicking them out now?

Mr. EVANS. You have about 735 members of your unit. In your testimony you indicated that there are 100 that have reported health problems.

Mr. LANE. Probably around 100. I do not know for a fact. The last time I talked to one of the corpsmen, but it has been a little

while since I have talked to him, it was around 100 were experiencing those problems.

Some people are experiencing problems and are not really aware of what is going on, you know. Until they degrade to a point, you know, but once they degrade to a point where it is really affecting them bad, then they start noticing a lot of things.

Mr. EVANS. Mr. Hollingsworth.

Mr. HOLLINGSWORTH. Sir, my roommate who served in the Gulf currently lives in North Carolina. He has reported some symptoms to me. He has not sought help from the registry yet. Currently he is going through a denial phase.

I will tell you, Mr. Chairman, that when my symptoms first appeared I also went through a denial phase. I will also tell you that other members of active duty I have served with thus far have not come forth.

I just want to emphasize here the fact that coming forth on active duty, especially in the Marine Corps, is a sign of weakness, and as stupid as that may seem, that train of thought still exists.

Mr. EVANS. I understand that as a former Marine, and you obviously are not a "sick bay commando," as we say. You are there because you need the help, and we appreciate that very much.

I want to thank you, and I yield now to the gentleman from Alabama, Mr. Bachus.

Mr. BACHUS. Thank you, Mr. Chairman.

Mr. Lane, I want to ask you a few questions first. What job did you do in Saudi Arabia?

Mr. LANE. I stated out in S–2, which is intelligence and training department. I worked that up till February 15. At that time I went operational, and I was project chief from there on out until we left April 26.

Mr. BACHUS. All right. I have read Ms. Picou's testimony.

Ms. PICOU. Correct.

Mr. BACHUS. Were you ever in an area where you had these NBC alarms?

Mr. LANE. Yes, sir. The first SCUD that came in country exploded a mile and a half north of our camp, about 550 yards up in the air. At that time we did go full gear, and on a few other occasions.

Mr. BACHUS. What was your medical history before you went to Saudi Arabia?

Mr. LANE. I was in excellent health. As I mentioned at the first of my testimony, I ran the Marine Corps Marathon twice. I was a runner in college. I ran cross-country for the college I went to, and I continued to run after that, up until the point of being deployed. Since then I have not.

Mr. BACHUS. Would you describe your treatment that Dr. Hyman gave you? How long were you there? Were you hospitalized?

Mr. LANE. Yes, sir. I was hospitalized for 12 days. He fed me intervenously with special IVs of certain types of antibodies.

Mr. BACHUS. Have you had any of the bumps that you described since your treatment?

Mr. LANE. When I was in Camp LeJune, I used to take eight pills a day. So I took what you can normally get from a pharmacist. I had about ten days' supply when I left to go. I ran out. I went

to the Navy doctor on base. Because I am a reservist, he said, "I do not have the funds to take care of you."

The bumps did come back. The fatigue came back a little bit.

Mr. BACHUS. This was subsequent to your treatment by Dr. Hyman?

Mr. LANE. Right, but I got back. I talked to Dr. Hyman. He took a urine specimen. It did show up in my urine. He prescribed some other medication along with what I had, and it went away.

Mr. BACHUS. Do you know what these pills are that you are taking?

Mr. LANE. The diflucin—well, I really do not want to get into that because I am not a doctor, but I think you can talk to Dr. Hyman and get that information.

Mr. BACHUS. The pills he prescribed since your bumps came back, are they the same medication as he prescribed prior to that?

Mr. LANE. It was the diflucin that took the bumps and took them away, yes.

Mr. BACHUS. When they occurred this last time, how many were there? Where were they on your body?

Mr. LANE. Most of them were centralized in my chest area and on my arms.

Mr. BACHUS. How many bumps?

Mr. LANE. A lot of them. Over 100.

Mr. BACHUS. Was it like measles or chicken pox?

Mr. LANE. It was over 100. There were several of them.

Mr. BACHUS. What did it look like? What was the appearance of them? Did it look like acne?

Mr. LANE. It is kind of like a red bump, kind of like acne.

Mr. BACHUS. Or chigger bite or mosquito bite or not like that?

Mr. LANE. About the size of a pin head or a little bit larger than a pin head.

Mr. BACHUS. Have you had the hip pain since your treatment in New Orleans?

Mr. LANE. No, sir. It lasted two weeks after I got out, and from that point on I have not had any more hip problems at all. He said the inflammation would have to leave my body for it to quit hurting, and it did.

Mr. BACHUS. Have you had any shakes or tremors since being treated?

Mr. LANE. No, sir.

Mr. BACHUS. How about diarrhea?

Mr. LANE. Not to amount to anything.

Mr. BACHUS. Okay.

Mr. LANE. It is more associated with the medicine. The medicine I am taking would, but not like before. Before it is hard to describe, but you would go within five minutes of each other, and you had to be next to the bathroom or you are out of luck.

Mr. BACHUS. Okay.

Mr. LANE. It is a different kind of diarrhea than a person could ever imagine.

Mr. BACHUS. Now, the shakes and the tremors you had, was a disorientation associated with those or was that at the same time?

Mr. LANE. I really did not make the association there. I was having them all during the same time period. The interesting thing

about it, even leaving a room to go do something else, you would forget. Just as soon as you would walk through the door, you would forget what you were going to get, and you look at that room and you say, "Why in the world am I even standing in this room to begin with?"

Mr. BACHUS. You never had that problem prior?

Mr. LANE. No, sir, not to that extreme. This happened constantly, all the time.

Mr. BACHUS. You are not having that symptom since you were treated?

Mr. LANE. No, sir.

Mr. BACHUS. Carol, can I call you Carol?

Ms. PICOU. Yes, sir.

Mr. BACHUS. When you suffered these two asthma attacks——

Ms. PICOU. Yes, sir.

Mr. BACHUS (continuing). Were you given proventil or ventolin?

Ms. PICOU. Yes, sir. I went back to my tent. It was Christmas, Christmas Eve, Christmas night. I went back to my tent, and I laid down, and as I was laying down, it felt like a real heavy type pillow was coming over me. It was real heavy over my chest, and I had a hard time breathing. So I reached over, and I grabbed the Benadryl, and I took a Benadryl, and I could not get any better. So I found someone to help me to our emergency room through the hospital, and they treated me with proventil, and I carried proventil with me, and just had it as an asthmatic attack.

Mr. BACHUS. This is a little breathing aide?

Ms. PICOU. Right, it is a little inhaler.

Mr. BACHUS. And do you get immediate relief from that?

Ms. PICOU. I was there for about two hours. They would monitor my blood pressure and everything. My blood pressure was extremely elevated. Then it was bottoming out on me, and I felt like I was going to pass out.

Mr. BACHUS. Do you still have the bronchial attacks?

Ms. PICOU. No, sir. Every now and then I will get a sharp pain in my chest that will force me to sit down, but I do not have the upper respiratory problems.

Mr. BACHUS. Had you ever had an asthma attack prior to being in Saudi?

Ms. PICOU. No, sir. I did. Well, I cannot call it an asthma attack. I was in Africa, and I got bitten by a bee or a bug or something. They do not know what it is, and I developed a rash, and I had an anaphylaxis reaction to that.

Mr. BACHUS. All right, but other than that?

Ms. PICOU. Never asthmatic.

Mr. BACHUS. You did not have childhood asthma?

Ms. PICOU. No, sir.

Mr. BACHUS. Or bronchitis?

Ms. PICOU. I had pneumonia as a child, as a baby, and that is it.

Mr. BACHUS. All right. This pyridostigmine.

Ms. PICOU. Pyridostigmine bromide, sir.

Mr. BACHUS. Did any of you all ever take that?

Mr. HOLLINGSWORTH. What is that?

Ms. PICOU. It is an anti-nerve agent. It is a little white pill.

Mr. HOLLINGSWORTH. Sir, I was taking some drugs over there, some antibodies that were supposed to be for nerve or biological warfare. I really do not know what they were. I just took them.

Mr. LANE. The white nerve pill, yes, sir. We took that.

Mr. BACHUS. So you did take that?

Mr. LANE. Yes, sir.

Mr. BACHUS. How about the two vaccines, anthrax vaccine and botulism vaccine? Did you both take that?

Mr. HOLLINGSWORTH. Yes, sir. To the best of my knowledge, yes, sir.

Mr. BACHUS. She had an extreme reaction when she took the anthrax vaccine?

Ms. PICOU. I had a typical swelling of the arm, but it was the pyridostigmine that caused my reaction.

Mr. BACHUS. Did you all have a reaction at any time to any medication or vaccine?

Mr. HOLLINGSWORTH. No, sir.

Mr. LANE. No, sir.

Mr. BACHUS. Carol, how many were in your unit in Saudi Arabia?

Ms. PICOU. We deployed at 300. They were made up of our 41st Combat Support Hall, along with what we call PROFES people, the professional fillers that were sent with us from VAMPS, say, nurses, doctors, x ray technicians and other people to make up a unit of 300.

Mr. BACHUS. Do you know how many are suffering from conditions?

Ms. PICOU. Yes. The people that want to come forward, I have eight people that are active, that I am talking with that have come forward, a total of 20 that I have been able to talk to that will not come forward. A lot of them have 17, 18 years of service in, and we even have doctors that have 20 years of service in. When they saw what happened to my career, and they feel that if they come forward and do the complaining of their case histories, they would be put out also.

Mr. BACHUS. Is that the list at the end of your testimony?

Ms. PICOU. These are other soldiers that wrote me written testimonies. I would not put the other soldiers' information in there without their written consent.

Mr. BACHUS. Are they from your unit?

Ms. PICOU. There are two of them in there that are active in my unit, and others are in the San Antonio area, and two soldiers are here from Fort Meade.

Mr. BACHUS. But now there are only two of the names from your unit?

Ms. PICOU. That would give me their information to release it.

Mr. BACHUS. Okay. Dr. Callender, is it?

Ms. PICOU. Callender.

Mr. BACHUS. Callender?

Ms. PICOU. Yes, sir.

Mr. BACHUS. What is his explanation?

Ms. PICOU. Really he does not have one. He is an environmental toxicology, internal medicine doctor, the same as the doctor that was selected for the blue ribbon panel, Claudia Miller. He is in the

same line of work that she does. He feels that it is probably a combination of effects. He cannot pinpoint it. He has made no diagnosis, except what he has found from the test results.

Mr. BACHUS. Have you had any successful treatment?

Ms. PICOU. I catheterize myself. That is the only way I can prevent myself from urinating on myself. As far as treatment, I was prescribed to take antevert because of the dizziness that I experienced and for the middle ear disorder that I have, and that has been helping me with a lot of my dizziness and imbalance problems.

He prescribed those, and when I came back to the military doctors to try to get them through our system, he wrote them up poorly. They were not on accurate paper work. So they could not fill them, but then I went to a medical doctor at Fort Sam, and he wrote the prescription for antevert.

He also prescribed lasix that I requested him to do because I fill up with water real bad in my legs and my hands, and he was reluctant to give me that, he gave me a prescription for one a week for a month. I have not gone back yet.

Mr. BACHUS. I have one follow-up question.

Mr. EVANS. We could come back or if you want just one last question.

Mr. BACHUS. Just one more, and let me ask the three of you. Have you all had shortness of breath?

Mr. HOLLINGSWORTH. Yes, sir, I have.

Mr. BACHUS. All right. Have you all had the diarrhea?

Mr. HOLLINGSWORTH. No, sir, I have not had diarrhea.

Mr. EVANS. The witnesses should actually respond yes or no instead of just by shaking their head, which we all see, but our transcript needs that.

Mr. BACHUS. How about the bumps? Have any of you other than Mr. Lane?

Ms. PICOU. Sir, mine have been diagnosed as a mysterious rash.

Mr. BACHUS. But you have all three had the rash?

Ms. PICOU. Correct.

Mr. EVANS. I need you to actually respond to that.

Mr. BACHUS. Okay. Yes, yes, and yes?

Ms. PICOU. Yes.

Mr. LANE. Yes, I am sorry.

Mr. HOLLINGSWORTH. Yes, sir.

Mr. BACHUS. All right. How about the soreness in your joints? Yes?

Mr. LANE. Yes, sir.

Mr. HOLLINGSWORTH. Definitely.

Ms. PICOU. Yes, sir.

Mr. BACHUS. And how about disorientation?

Mr. LANE. Yes, sir.

Ms. PICOU. Yes, sir.

Mr. HOLLINGSWORTH. No, sir.

Mr. BACHUS. The two of you?

Ms. PICOU. Yes, sir.

Mr. BACHUS. How about the night sweats?

Mr. LANE. Yes, sir.

Ms. PICOU. Yes, sir.

Mr. HOLLINGSWORTH. Yes, sir.

Mr. BACHUS. And the tremors or the shakes during the day?

Mr. LANE. Yes, sir.

Ms. PICOU. No, sir.

Mr. HOLLINGSWORTH. No, sir.

Mr. BACHUS. All right, and how about asthma attacks or bronchial attacks?

Mr. HOLLINGSWORTH. No, sir.

Mr. LANE. No, sir.

Ms. PICOU. Twice, only twice, sir.

Mr. BACHUS. Only twice, and let me see. There was one more. What other symptoms? Soreness in the hips and joints, have you all had that?

Mr. LANE. Yes, sir.

Ms. PICOU. I do not know about the other soldiers. Many of us have grayed. When we were over there in December, I wrote my diary, "Where is this gray hair coming from?" I have the hair loss also.

Mr. HOLLINGSWORTH. I also have post-nasal drip. However, I have bad sinuses. So I discarded that.

Mr. BACHUS. All right. Thank you.

Mr. EVANS. Thank you.

The gentleman from Washington State.

Mr. KREIDLER. Mr. Lane, perhaps you can enlighten me, if you happen to know, if there has been any identification of the particular bacteria that has been involved with this infection?

Mr. LANE. I believe Dr. Hyman has identified it as streptococcus veridans.

Mr. KREIDLER. Okay. Do any of the other panelists know if there has been any identification of a particular organism?

Mr. HOLLINGSWORTH. Yes, sir. Dr. Hyman has also diagnosed me as having a streptococcus.

Mr. KREIDLER. I am also interested in the documentation that might have taken place, or the lack thereof, on the part of the active duty military at the time of administration of drugs or other types of therapies. Is there a feeling that there was not documentation done that is part of the records or that these records were mislaid and not properly collected?

Can somebody respond to that?

Ms. PICOU. Sir, my records have disappeared from Saudi Arabia for the complaints of my illnesses, and the fact that I reported the symptoms of pyridostigmine. None of that is available in my records.

Mr. HOLLINGSWORTH. Sir, I know I have had some documentation, i.e., exposure to the oil well fires. For my shot records, I cannot fully answer that at this time.

Mr. KREIDLER. Since I was involved state-side in processing troops going over and coming back, I know that there were a number of times where records were not present both for troops that were going over because of the rush, in order for the deployment, and also on the return, but it appeared to me that there were always records. My concern was whether they ever got put together at some point or whether there was a real attempt to put these records back together.

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But it was not my belief that there was any attempt to deliberately keep information from being part of an individual's medical file. Is there any suspicion on your part that there was any deliberate attempt not to collect this information?

Mr. HOLLINGSWORTH. No, sir.

Mr. KREIDLER. So it might have happened more because of the nature of the deployment and when soldiers were being processed back from the theater and so forth, that there might not have been proper documentation and follow up; is that correct?

Ms. PICOU. That is right, and our unit did not take their medical records with them for fear that they may get lost over there. So they created medical records for us as we needed it, and on my return, the doctors that I worked for saw my symptoms developing over there, and they did a memory recall and annotated in my medical records the symptoms I was experiencing over there.

Mr. KREIDLER. Ms. Picou, you mentioned the types of treatment that you received over there, and Mr. Hollingsworth did also. Since I went through the whole shot series in preparation for deployment even though we were not deployed to the theater, these are treatments that were unique to the theater that took place in the theater that you have recounted here, as opposed to ones that were part of the state-side vaccinations and so forth that were part of preparation to go over? Your comments are relating to unique types of treatment that took place in the Gulf; is that correct?

Ms. PICOU. When I reinjured my back, I was just put on bed rest and given Motrin and flexural, and when I came back, the physicians to my unit put me on light duty, no lifting, but I still was obligated to do my duties.

When I started having the bladder problems, they just told me that if it continued to let them know, and then after I returned out of Iraq, I went on sick call because my urine was Coca-cola in color, and I went to the 8th Evac. Hospital, and they said they cannot find any bacteria or anything wrong. It must be something mechanical; to check it out once I return back to the United States.

Mr. HOLLINGSWORTH. Sir, prior to that deployment, I had returned from another deployment via shipboard. We did an evacuation of Liberia and West Africa. Prior to that, we received the standard inoculations to go overseas. Once again, we received the standard inoculations for Desert Storm, along with there were a couple of others. I want to say two shots. One of them was the anthrax and there was one other one that I am not exactly sure of.

Mr. KREIDLER. Well, if you cannot remember, I can tell you even though I am in the medical department, I could not remember all of the shots I got. They came too fast, and I just did not keep track of all of them. I can appreciate that.

Thank you, Mr. Chairman.

Mr. EVANS. The gentleman from Alabama, Mr. Everett.

Mr. EVERETT. Thank you, Mr. Chairman.

I am not going to ask this panel to describe a lot of detailed testimony that they have already given in the written testimony. However, I may submit for the record some questions later on.

Mr. EVANS. Without objection.

Mr. EVERETT. Thank you.

I would like to talk to you, Mr. Lane, and you, Mr. Hollingsworth, about your association with Dr. Hyman and your feelings of how he may relate to VA and what they may think about him. I will start with you, Mr. Lane.

Mr. LANE. I think he has got a lot of information, and I think if the VA will cooperate with him in the right way that they can take that information and run with it.

Mr. EVERETT. Did you get any feeling that there is any inclination from VA to cooperate with him?

Mr. LANE. Well, this treatment has to be monitored so carefully that you cannot just take and turn everything that you have got over to these people, and I think that is what the VA expected, and you know.

Mr. EVERETT. The VA discouraged you from taking treatment with Dr. Hyman?

Mr. LANE. Oh, to see treatment I had reached the point where I was going to lose my job. I mean I am a fire fighter instructor, and you cannot very well teach fire fighting with a cane and hurting as bad as I was. So I just totally went away from the VA, and to Dr. Hyman.

To be frank with you, when the x ray was done on my hip, the results were not shown for a total week. In between that time, Dr. Hyman contacted me, and I said, "Hey, I have got a pain in the hip." He said that is a form of arthritis forming in your hip caused by the bacteria that I have found in you.

When I returned to the VA and they read my chart and say that is bacteria, I said, "I do not need nothing else." I called Dr. Hyman and said, "What can you do for me?" He said, "I will treat you. If it works, fine."

Mr. EVERETT. Then Dr. Hyman did find that bacteria that he says he has isolated in your urine specimen?

Mr. LANE. Yes, sir.

Mr. EVERETT. And he thought that was the problem with your particular ailment?

Mr. LANE. Yes, sir.

Mr. EVERETT. Okay, but did VA specifically ask you not to pursue an avenue of treatment with Dr. Hyman?

Mr. LANE. I did not even confer with them. I just did it on my own.

Mr. EVERETT. Okay. Mr. Hollingsworth, some of the same questions to you, please.

Mr. HOLLINGSWORTH. Yes, sir. I just wanted to say that after the VA, I was referred to Dr. Hyman by contacting the American Legion. You have to understand that I contacted a doctor who I knew nothing about, sent him a urine sample, and he came back and told me I had a bacteria.

The first thing that goes through your mind obviously is this guy is trying to take me for a quick buck or who knows? So I was very skeptical at first. I was faced with a situation where the VA did not know what I had at least from the registry, and Dr. Hyman said he was isolating something.

My health was deteriorating such that I chose affirmative action to take care of my problems. I entrusted my care to Dr. Hyman,

and, lo and behold, after 12 days of intensive antibiotics, I feel better.

I will state that while I was there, he was very informative. He took me into his lab, and he showed me under the microscope the streptococci that were forming, and I am not a medical doctor, but I know enough about medicine and bacteria to plainly see under a microscope that there was, indeed, something forming within my urine.

Mr. EVERETT. And you say you have finished this treatment now?

Mr. HOLLINGSWORTH. No, sir. I am still taking medication. The thing you need to understand here is that Dr. Hyman at this point is not claiming a cure. He has been working with people, and he has indicated to me that I may be on some medication for some period of time, until this thing disappears to his liking.

I will tell you as such that I do feel there is a night and day difference.

Mr. EVERETT. And do you know how many people that Dr. Hyman has treated? I understand there are five that he has treated successfully.

Mr. HOLLINGSWORTH. Yes, sir. I was the fifth veteran that he has treated. I will tell you, and he will probably expound on this a little bit more, but he has seen this somewhat in the civilian world, and he has been studying it for some time.

Mr. EVERETT. And what is the cost of this procedure to you?

Mr. HOLLINGSWORTH. Sir, I do not know. I have not received a bill yet, and I can only hope for the best.

Mr. EVERETT. What are your ongoing costs, your medications?

Mr. HOLLINGSWORTH. Well, fortunately through employment I do have a fairly good thrift plan for medication. I will tell you thus far out of my own pocket I have paid in the vicinity of approximately $500 with my initial doctor visits, with the medication that I am currently getting until my medicine can get to me.

Mr. EVERETT. Mr. Lane, do you have any idea what your procedure has cost you?

Mr. LANE. The total hospital bill was a little over $18,000.

Mr. EVERETT. And this was in New Orleans?

Mr. LANE. Yes, sir. I will point out Dr. Hyman has not charged me anything over what the insurance has paid. He has been very good. He has had a lot of out-of-pocket expense that he has absorbed in this, and I am very fortunate that he took the concern to do this.

Mr. EVERETT. And your medication costs you an average of how much?

Mr. LANE. An average of around $225 per month.

Mr. EVERETT. Okay. I want to thank all of the panel. Thank you, Mr. Chairman. I may have other questions for the record. Thank you.

Mr. EVANS. The gentleman from Massachusetts.

Mr. KENNEDY. Thank you very much, Mr. Chairman.

First of all, I want to thank our witnesses very much for coming forward. I know it is never easy to provide testimony on your personal health histories, and I think you are to be commended for showing courage by sharing this with the panel this morning.

I am interested in a couple of issues, but first and foremost, I would just like to get a sense of your feelings towards the military at this point. I think it is important that other veterans that served in the Persian Gulf feel that they can come forward without a sense that they are, as Mr. Hollingsworth indicated, perhaps a malingerer or perhaps as somebody who might be suffering only from mental difficulties, PTSD, and other sort of, I think, indicates that maybe the military hierarchy would suggest is really at the root of some of these medical problems.

Could you three please comment on just the atmosphere that you are currently in and the one that you sensed when you first started feeling these symptoms.

Mr. HOLLINGSWORTH. Sir, first let me state that my attitude towards the military is I love the Marine Corps, and like Pavlov's dog, if the bugle blows, I will be there again. I will say that recently, as of the beginning of May, I just joined the Marine Corps Reserves because I do miss that, and I do enjoy the Marine Corps.

My personal decision to get out was just that I did not want to pursue that full time. So I just want to reiterate that I love the Marine Corps.

With that, I will tell you once again that when you come down with illnesses, you go through a period of self-denial, that maybe you are just running yourself ragged, that maybe you are just trying to adjust from the military to civilian life, and what happens is your health deteriorates as such that you have no alternative to believe that that is not the case, that something is physically wrong.

I will tell you that also the people I have been around with have all been very supportive, and they know the type of individual that I am. They all know that if I say that something is wrong with me, then, by God, something is wrong with me. So in regards to that I have not had a problem.

Mr. KENNEDY. Mr. Lane.

Mr. LANE. I would like to say that my pride for the military, if anything, has increased. I was more than glad to go to Saudi Arabia. If a conflict arises and they need me to go, I will probably be right in front. That is where I want to be.

As far as problems with the military in identifying this, it has been slow. Some of the guys have been treated at Bethesda or looked at at Bethesda. They have stayed in the hospital months on end and are no closer to the answer. Some of them fear coming vocally out, a couple of them, because they have been diagnosed with leishmaniasis, and figure that this will do something to what they are receiving from the military.

One guy in particular, he told me last weekend that he cannot come over to Huntsville where we drill at. He has been told to stay away from there by the military.

Mr. KENNEDY. Carol.

Ms. PICOU. Sir, I served my country for 14 years, and I would like to see my retirement. I came in for patriotic reasons, and I will continue to serve my country. I wanted to see myself be Sergeant Major of the Army, and right now I do not see that happening, but I would still continue to serve, and I feel I am serving my country

right now by trying to help the other Desert Storm soldiers come to grips with what they are dealing with.

Like I said, I have friends in my unit that will not come forward because they have 17, 18 years in. I just talked with a recent Air Force sergeant. She has 18 years in, was deployed for 15 months in Saudi with the Stealth bombers, and they have her diagnosed with the mentality of 90 right now, her IQ. She has her degree, a Bachelor's, and works with the Stealth bombers. They are giving her the run-around saying that this is all stress related.

As we say in the military, in our military mind we know that this is not stress related or combat fatigue. We do have some fatigue, but it comes from our muscle joints and pains, but we have been badgered. We have been put down. We have been neglected. Our consults, follow-ups, when they refer you to somewhere else, they fall on deaf ear.

So they treat you for your symptoms. They are not looking for a cause. When we complain of this mysterious rash, they give you ointment, and that is supposed to help you.

Mr. KENNEDY. Thank you.

Let me just come back briefly. My time is almost up. On the issue of Dr. Hyman, one of the concerns of the VA that I have heard is that he is very, very expensive. Who has paid your bills so far to Dr. Hyman?

Mr. LANE. I had to go through medical insurance at work to get mine.

Mr. KENNEDY. How much was your bill? Do you have any idea?

Mr. LANE. The total bill billed to the insurance was 18,000-something. They paid 15-something. So I have incurred the rest of it myself. This was to the hospital.

Mr. KENNEDY. And how about you, Mr. Hollingsworth?

Mr. HOLLINGSWORTH. As I indicated, sir, I have not received a bill as to date. I want to emphasize——

Mr. KENNEDY. Do you have any idea what it might be?

Mr. HOLLINGSWORTH. No, sir, and at this point I, frankly, do not care. I feel better, and that is all I care about.

Mr. KENNEDY. Well, that is another issue with regard to health insurance in this country.

(Laughter.)

Mr. KENNEDY. But the fact is I think that we have to come to grips with the ability of the VA and the military to deal with many of these issues themselves. We are looking forward to Dr. Hyman's testimony, as well as testimony from the doctors of the VA.

I want to again thank the three of you for your testimony.

Thank you, Mr. Chairman.

Mr. EVANS. Thank you.

The gentleman from New York.

Mr. QUINN. Thank you, Mr. Chairman, and I, too, want to thank all of you for coming forward today. I have a feeling and a sense that there are an awful lot of people out there for whom you speak today, and while there are three of you at the table, I have a sense we are hearing other voices across the country.

I know in Buffalo, NY, where I come from, we have got about 400 people on the registry so far, and that is not a good indicator of what is out there.

Just a couple of specific questions, if I may, Mr. Chairman.

Carol, you talked about earlier that while you were over in Desert Storm for the year, you were ordered to take some drugs. We were told to do this or they told me to do this.

Who told you to do those things?

Ms. PICOU. Our command. When you start your hospital commander and the commander of your unit, they were ordered by higher headquarters to administer these drugs, and they gave us packets, and we got information, and we had to take them.

Mr. QUINN. Thank you.

I am also convinced that, as you said earlier today, veterans do not want handouts.

Ms. PICOU. Correct.

Mr. QUINN. At least those of you in this situation, but you need some answers.

Ms. PICOU. Right.

Mr. QUINN. And regardless of cost to whom, we have got to get some of those answers for you. We will have some medical questions later on with some of the other witnesses, but there are just two areas in which I am concerned in. I would like to ask all three of you this.

In terms of the registry, what is it that we can do, that the subcommittee can do, that the Congress can do, that the VA can do to get people to come forward and to talk about this?

Now, you are here today, and I think that is a start. I think when we, as a subcommittee, and the media and others, talk in the coming days and weeks about today's hearing, Mr. Chairman, that is going to help.

You have served with some of your colleagues. You know that they are not coming forward, whether it is in Buffalo, New York, or in Texas or in California or North or South Carolina. What can we do to help you? What can we do to help the veterans and the VA work together to get people to come forward on this, to sign this registry and to get some help?

Mr. Hollingsworth, would you start, please?

Mr. HOLLINGSWORTH. Yes, sir. I would like to say I think most veterans do not want to come forward because they are reluctant basically to be labeled as those with post-traumatic stress syndrome, and they do not want to go through the scrutiny of having to deal with that.

Secondly, I would like to say that the word needs to get out there more than what it is, and I think the VA has done a fair job thus far. However, it needs to get out there more.

I think also the problem that you deal with, like myself, is that you go through a period of self-denial, and until you can overcome that self-denial that something is really wrong with you, I do not think you are going to get a lot of veterans to come forth.

Mr. QUINN. Sir, to interrupt just for a minute, I said to Steve earlier today that I think every person goes through some self-denial whenever they are sick. You know, if I wait a day or two, it is only the flu. It will go away. It is only a minor tooth ache right now or back pain. We'll wait a couple of days, and that is not uncommon for a lot of people, especially now if they are service-connected. That denial period is acute.

I do not disagree with either of the things that you said. What can we do to help vets not feel threatened to come forward? Maybe that is the question of the day. Maybe it is too tough to ask now.

Mr. LANE. The only comment I have got is do some type of interview system within the unit itself. The medical board can talk to these guys and make sure they account for everybody. Let them show the registry to the individual, and those that are experiencing the symptoms fill out the paper work.

Ms. PICOU. Sir, at the San Antonio VA, I have gone over there, and they have support meetings, and I have gone to different units in the San Antonio area and asked them to hang them up on their boards throughout the hospital that soldiers can come for the Desert Storm support meetings.

I have also talked to the hospital active duty commanders there at Fort Sam, and I have asked them to start finding one physician that we can refer the active duty people to.

Mr. QUINN. And how is the response to that, Carol?

Ms. PICOU. So far just recently the military has decided to help me, and they are sending me now to—I went to nephrology, and I will be going to rheumatology. So if we can establish some type of protocol for both the active duty to be screened and be tested and also for the VA.

The biggest part with the VA is the psychological test, and I encourage the soldiers to take it because if they go in there with an open mind and they take this and they do not go in there angry and they take that psychological test, they can prove that it is not psychological.

Mr. QUINN. Sir.

Mr. HOLLINGSWORTH. Sir, I would just like to add that I think part of the problem may lie in the fact that, particularly in my case, I had a delayed reaction. I felt no symptoms until well after the Persian Gulf crisis, and whether that is because I felt vulnerable, my immune system was down, I do not know, but that may be part of the problem.

Mr. QUINN. I was on the phone to the Buffalo VA Hospital last night late in the evening in preparation for the hearing this morning, and I make one suggestion, Mr. Chairman: there are 435 of us Members here. Maybe we all ought to go back and help get that message out to veterans who live in our towns and our cities and our villages, and start this week to tell them that as Members of Congress representing their area, their district, we want to help them, not just the members of this committee, but all 435 of us may be able to help you out, and that is a suggestion I would make.

Thank you for those responses. Yes, sir?

Mr. LANE. One thing I would like to mention is if we can eliminate the fear. At least some guys have 16 years, 18 years. If they go register, for some reason they feel like somebody is going to find out, and if the VA does find something wrong with me, how am I going to get my 20 in?

Mr. QUINN. You know, from what we have heard today, just today, why shouldn't they feel that way?

Mr. LANE. Right.

Mr. QUINN. It is happening, and that is not right.

Mr. LANE. So we need to eliminate that fear somehow.

Mr. QUINN. Mr. Chairman, we will ask a little bit later, but one area that concerns me and will in these next few months is how this information will affect future military situations. We know what happened with Agent Orange. We are hearing first hand what happened in Desert Storm, and we read in the newspapers about Bosnia. What is going to happen next and what kinds of problems will our veterans face across the world?

And when we hear things about issuing drugs and taking orders, inoculations, missing documentation, I want to be able to dialogue with the Secretary to make sure that some of these things are not going to occur in the future.

And I thank you for your testimony and thank you for the time.

Mr. EVANS. Thank you.

The gentleman from Tennessee.

Mr. CLEMENT. I know all of you have shared your testimony. Is your main criticism of the DOD and VA because they are looking at individual symptoms rather than looking at the total being?

Mr. HOLLINGSWORTH. Sir, I would like to say that my main criticism of the VA and the DOD is that you have a doctor in New Orleans who has a possible solution. We do not know that, but he says he can help, and I think the point is that that is something that needs to be taken into consideration. It needs to be looked at as opposed to just discarded.

Mr. LANE. One of the drawbacks with the VA, especially on the Reserve side of my guys, I get more feedback. I am the type of person I don't ever give up, you know. I keep going until I finally find a solution to what is going on, but you have got a lot of guys that come into the VA. They do a financial study, and they say, "It is going to cost you money." They are gone. They will not come back, and until you give them the assurance that we are not looking at finance; we are looking at taking care of you, then you are going to miss out on a lot of people.

Mr. CLEMENT. Carol.

Ms. PICOU. I feel it is not so much the individuals. I feel it is the lack of care that we are receiving, the lack of concern. When you have elevated or depressed blood levels and abnormal hematocrits and that, they just blow it off. For mine it showed a ratio of one to 80. When the military did it on this anti-smooth muscle, they said one to 40. It is nothing to worry about.

So where do I go? What happens next? They told me just not to worry about these.

So our concern with the soldiers are they send us for these appointments. They get their findings, and they say, "We do not know how to help you."

Mr. CLEMENT. Now, I know all of you have shared your health ailments and health illnesses. I know you have shared your feelings toward the military, and I know Carol mentioned about causes, that we really do not know what the cause is.

Do a lot of you feel like it is a lot of different causes? Because, you know, all of our bodies are different. I mean we might be exposed to the same elements, but we might be impacted in a different way, how it affects us.

Mr. LANE. Personally, it is a Third World country. Those people have been around the environment they are in for years and years and years. Their bodies have learned to adapt. We were thrown into an environment that we have never experienced before. So as our bodies go through a process of being down physically, it opens us up to any bacteria or anything in that area that we would be exposed to.

Ms. PICOU. Sir, I feel it is a combination. I really do. I feel that the depleted uranium may have some effect on some soldiers that were in the front line. The leishmaniasis is in Iraq. I mean it is there. It is part of their disease. The World Health Organization did a report on that years ago, of the leishmaniasis that is there.

We had the insecticide sprays, the pesticide sprays. We also have the radiation from the radars and from all the other type of aircraft that was used over there. So we cannot pinpoint it, and if you look at the diseases that we have, the complaints that we have, if you look at leishmaniasis, depleted uranium, the drugs of pyridostigmine, every one of our muscle aches, joints, memory problems, bladder problems, diarrhea problems can fall into those categories.

Mr. CLEMENT. Mr. Hollingsworth.

Mr. HOLLINGSWORTH. Sir, I would like to say that with what I have seen with Dr. Hyman in his lab, I am almost convinced—I am convinced that he has isolated the bacteria.

I think more importantly than seeing with my eyes though is as a Marine I have learned to use my gut feel, and my gut tells me that he is right.

Mr. CLEMENT. If you had your way, not only speaking for the three of you, but for all of the other veterans that have come home from the Persian Gulf and are experiencing serious problems, what would you like the DOD and the VA to do that they are not doing now?

Mr. HOLLINGSWORTH. As I indicated, sir, I would just like them to pay attention to what Dr. Hyman is doing without trying to discredit him and his work.

Mr. LANE. An example, there is a man by the name of Gene Trucks whose mind is deteriorating more and more as we speak. It would have been good if the DOD or VA could have sent him down there as quick as they found out that here is a doctor that is right on the verge of breaking this rather than sitting on their bottom sides letting this guy deteriorate.

Ms. PICOU. Sir, I also contacted Dr. Hyman, and I left a message on his answering machine when I found out that he was helping soldiers, and I never received a call back from him. However, the doctor that I am dealing with has been open minded and is willing to work with the DOD, with the VA. I made a point of contact. He went to the Randolph Air Force Base in May 18 and gave a seminar on the effects of multichemical sensitivity.

So these doctors are willing to work with our doctors. It is just that they are trying to discredit him. Right now they are trying to discredit my doctor because of his financial charges.

Mr. CLEMENT. Now, did you call Dr. Hyman one time?

Ms. PICOU. My husband called also.

Mr. CLEMENT. I see.

Ms. PICOU. So I have not heard from him, and I do not know if he has the answer, but I am sure there are doctors out there who are trying to help soldiers, and I think with the expert of this blue ribbon panel that they created, if they would call these doctors, find out what tests are being done, and talk with them and try and come to a common grounds for doing tests, and the other thing I would like to see: prior to going to war, we all get a physical, a complete physical, PAP smears, everything. The men get their male exams and everything like that, and blood work, x rays, and we should have those tests repeated once we come back because in six months from now, a year from then, maybe they could compare the blood work that was done prior to going and after coming back and see if it is elevated or if it is decreased or any changes are happening.

I think those physicals need to be taken seriously prior to deployment.

Mr. CLEMENT. All right. Thank you.

Mr. EVANS. The gentleman from Indiana.

Mr. BUYER. Carol, just to respond to you immediately, you are absolutely right about the seriousness of the physicals. There was a real sense of urgency of many of the hospitals located state-side to get them, true?

Ms. PICOU. True.

Mr. BUYER. Did all of you experience that?

Ms. PICOU. Correct.

Mr. BUYER. They even asked whether or not you wanted to waive the physical process, to which some of them responded, "I cannot wait to get home to my family. Sure. Why not?"

And I will tell you, Mr. Hollingsworth. I sat here and had goose bumps as I listened to you and compared myself to you, and you talked about the denial and Jack talked about it. There is a great tendency and fears of stigmatization, and especially those of our comrades who are still serving on active duty in all of the different corps, especially at a time when they are downsizing the military and the pressures that are placed upon them and their wish to retain their career for which they have worked. There is a great sense, and I do not know if there is something that we can do to protect from that fear because they are going to continue to stay in there and say no until they can get their 20 years.

And to your immediate response. Mr. Clement brought up an excellent point, about how all of our bodies physiologically are different and how we all react differently to different environments, to different chemicals, different sprays. We are all so very, very different, and we all have different reactions: delayed, some remain dormant, and some come later.

Yours happened to be immediate. You know, Mr. Hollingsworth, both of us can say, well, we took those nerve agent pills and we took those anthrax shots, and we did not have any problems. Sure our arms were sore. They get sore after you take any kind of shots.

You happened to have an immediate response. Now, therein lies part of the problem. Even if you have a lot of these physicals and say everybody has to take a physical, therein also lies part of the mental process that I am sure you went through. That is to say that when you come back home and you feel fine, and all of a sud-

den after a month you go out and you try to run. I made it about a mile and could not figure out why I could not even run, and then I went out and tried to do it again and thought, gee, I got out of shape pretty quick and did not pay much attention to it until I got the flu. I could not believe you said that.

But this is a great healing process in and of itself right here, folks. It really is. To let other people know that the problems they have are real, and, as we have doctors out there who are treating symptoms, herein lies another one of our problems. Many of us have to go to private doctors for that problem, and we are also approaching a new avenue of medicine of which not all is being recognized within the medical fields, that of environmental sciences and environmental physicians.

So we are tapping into a new area where doctors really do not know enough about it, and, ma'am, you being a nurse, you understand through your training. I was a medical service corps officer, and even when I was on active duty as an Army lawyer and defending Army doctors for malpractice, I will tell you I knew enough about medicine to be dangerous.

But I understand through their training, that is what they know, that in which they are trained very well, but there is a great deal of ignorance out there, especially about environmental contamination of all sorts and all sources, whether it be as Representative Kennedy testified about the paint, or not. Some of us may not have been around the paint, but we were exposed to other things.

And that is what makes this so very, very difficult. We like the pigeon holes in our society or those in Vietnam can say, "It was Agent Orange," and pinpoint the exact cause. Here we can't pinpoint it to say it is the exact cause, but we do know that we were exposed to a wide range of contaminants within an environment, and we also know we are touching an area that does need to be explored, that of multiple chemical sensitivities because it is polysomatic, correct?

Ms. PICOU. Right.

Mr. BUYER. So therein lies a responsibility of our government, and I look forward to the continued testimony, and I join this panel to salute your courage to come here and to talk about what has personally been affecting you because today was the first day I even admitted publicly about my own health problems.

Thank you so very much.

Mr. EVANS. Thank you.

The gentleman from Illinois.

Mr. GUTIERREZ. Thank you so much, Mr. Chairman, and thank you for calling attention to this committee and obviously the attention to many others to an issue that deserves deep study and decisive steps. You have worked very hard on those afflicted by Agent Orange, Mr. Chairman, and it will be of much use to us in this effort, and it will serve as an example to new members of how to serve those who have served us so honorably.

I must admit, however, that while I enter this hearing with an open mind, willing to hear all sides, I also enter this hearing with some feelings already set in stone. I feel frustration and sorrow and anger. I feel this way because I hear about brave men and women

who turned away a tyrant, but who were turned down and away by those who were supposed to treat their wounds.

I am alarmed that once again veterans are forced to earnestly prove that those wounds are real. Once again veterans are put on the spot to show that they were exposed to more than just the ghostly horrors of war.

These men and women defended our country, and now they are being asked by the VA to defend their own words. We took great pains to insure that these men and women were healthly and able bodied before they entered the fight on our behalf. Unfortunately, someone forgot to see how healthy they were when they came back.

It is unfair to ask veterans to wait much longer. We saw their bravery and their skill. The ground war lasted 100 hours. Soldiers who fought a war in 100 hours should not have to wait much longer for answers and solutions to their problems.

This past Memorial Day all of the members of this committee and probably all of the Members of Congress had the opportunity to visit great monuments and simple headstones that pay tribute to those who have fought for us in a battle long ago. Let's keep in mind that not all our heroes fought a long time ago. For some, the soldiers of Desert Shield and Desert Storm, the battle ended recently. Some, in fact, still wear the uniform.

These recent heroes, today's heroes, are heroes just the same, and while we justifiably build quiet monuments of stone to honor some wars, today we have the opportunity to honor those soldiers with a tribute more fitting to their particular needs. We can honor them by giving them hope and by giving them action.

I do not believe that the men and women of this country suffer from some kind of collective psychosis or neurosis after coming back from the Middle East. They went there. We applauded them, and we should make sure that unlike Vietnam, we give them a proper tribute and proper treatment when they come back home to us, and I am here to listen a lot this morning and to learn a lot, and maybe we can avoid some of the mistakes we have made in the past.

It is always easy and it seems that everybody is eager to call to war. I do not see the eagerness to take care of the men and women once they come back from war, and so I am here to make sure, as I am sure all of the members of this committee, that they are properly treated.

Thank you very much, Mr. Chairman.

Mr. EVANS. Thank you.

The gentleman from Florida.

Mr. STEARNS. Thank you, Mr. Chairman. I am glad to be back on the Veterans' Committee, and I appreciate your courtesy of allowing me to attend. I am not a member of this subcommittee, but I think what you are doing is very important.

I would like to make part of the record to the subcommittee my testimony on this issue and also to bring to the committee's attention Hester Adcock, whose son died recently, who participated in the Persian Gulf War. I believe firmly it was chemical sensitivity, and the doctors who treated her son did not know of all the problems. He eventually died of cancer, but he was a young man, and

I would like to make that part of the testimony, and then I would like to ask a few questions, which perhaps you may have answered.

I would like to ask what you think our subcommittee should do. Do you think a civilian or military health care task force could be set up to not only survey all of the veterans that came back from the Persian Gulf, but to start to define a biological marker, an accepted case definition for chemical sensitivity?

I think the question is: should it be civilian or military? I will start with Mr. Lane.

Mr. LANE. It is going to be hard to find out what it is that caused this. I mean was it environment? Was it the chemicals, and so forth? I mean it is going to be real hard to find that out.

I think what we should do is take the breakthrough that Dr. Hyman has done, pour research into that area of studying bacteria, studying what is going to eradicate it out of the bodies. Once that is done, then the other exposures that are left behind can be treated for.

Mr. STEARNS. So you would prefer to rely on his research and not have the government establish a civilian or military task force?

Mr. LANE. What I am looking at is results. Out of the millions of dollars that have been spent up to this point, who can say that they have had the marked results that this guy has had?

Mr. HOLLINGSWORTH. Yes, sir, I want to add onto that. You need to realize that Dr. Hyman has treated five veterans, five veterans who have come forth and said they are feeling better. Okay? I want to assure you I have no monetary compensation in this whatsoever. Okay? I am well.

He is batting 1.000. Other physicians, people are just kind of maintaining or they are getting worsen Okay? I think that says something right there, that obviously Dr. Hyman is onto something that should be looked into, and it is that simple.

How that goes about, that is not my job to decide, but that is something that needs to be looked into. The man is batting 1.000.

Mr. STEARNS. Carol.

Ms. PICOU. Sir, my experience on active duty is we did not have an environmental doctor that could see me through the active duty. That is why I sought the help of a civilian doctor, and only because my condition was getting worse, but I feel that we have some great doctors in our military. Unfortunately if they are not familiar with the disease process that we are going with, they really cannot help us. All they can do is refer us to somebody else.

So my suggestion would be to if we do have environmental health officers in the military or someone in infectious disease, I feel a panel should be made up of both civilian and military doctors so that they can take and treat both soldiers, active duty, and the VA.

Mr. STEARNS. Do all of you think a mandatory review of health care records of Persian Gulf personnel should be done at this point?

Mr. HOLLINGSWORTH. I think at this point, sir, I do not know the magnitude of this thing. I have a feeling it is going to get better. I think at this point it would probably be wise to just take it as those who start coming forth, to take it from there.

There may be some people out there who were unaffected. I do not know, and if that is the case, you know, as veterans, it is also their duty to come forward when they are not feeling well.

Mr. STEARNS. Mr. Lane, do you have anything more to add?

Mr. LANE. I do not think we should go as far as looking at all of the records. Personally, I thought the record keeping of my unit was done very good. The documentation of the shots and so forth, they only did what they were told to do, and they did it. They documented it, and I believe our service records are in good condition.

Mr. STEARNS. Would you favor a voluntary survey?

Mr. LANE. Maybe a selective one.

Mr. STEARNS. A selective one, okay.

Mr. LANE. I'm sorry.

Mr. STEARNS. Go ahead. Finish.

Mr. LANE. Select 15 percent, 20 percent, you know, of the unit's records, and that way you are auditing them, and it might give you an idea of where you are at right now and whether you need to go further with it.

Mr. STEARNS. It just seems to me that it would be worthwhile to do a voluntary survey at the minimum, to find out the size of this problem and do it immediately, and then at that point move to sort of a civilian-military health care task force to find the results of this, and then go back to look at the folks that have come back and subsequently have died, and do an analysis there.

It just seems like we should do more, Carol?

Ms. PICOU. Sir, I agree with you. I feel that there were 500,000 troops deployed there. You can take a percentage of those troops and send them a survey and do a control group on them, and then take another group that did not go to war and study them and see how healthy and compare them. Analysis needs to be done, and we need something to get started right away. If we could start an epidemiology on the health effects of the soldiers in the Persian Gulf, I think there would be great benefits.

I have testimonies of people who have come back diagnosed with cancer. Two females in my unit have had complete hysterectomies, 21 and 23 years old, Hodgkin's disease, babies born with OAV. I mean this is not normal. So I really feel a study should be done and adequately.

Mr. STEARNS. I agree with you, and I think that is what the subcommittee is moving towards. I think for those young men and women that died, we have to look at this matter in terms of the effect on their heirs, and maybe a lump sum disability settlement, something along these lines, if we can find a correlation here. A lot of the families are devastated because they have no idea why their sons or daughters have died, and I think this would be a first step, to start this survey and start this civilian-military task force.

So I thank you.

Mr. EVANS. Thank you.

Does any other member have any more questions? The gentleman from Alabama.

Mr. BACHUS. I want to ask this to Messrs. Lane and Hollingsworth because you were both treated by Dr. Hyman.

Did he tell both of you that it was a strep infection?

Mr. HOLLINGSWORTH. He told me it was a strep infection, yes, sir.

Mr. LANE. A streptococcus, yes, sir.

Mr. BACHUS. All right. Which, I guess, can be a very common infection.

Mr. LANE. Well, there are strains of it, and you know, I am not a doctor. So I cannot——

Mr. BACHUS. But he said streptococcus?

Mr. HOLLINGSWORTH. He said to me, sir, that possibly streptococcus and also I want to state staphylococcus.

Mr. BACHUS. All right. Both of you are still on medication?

Mr. HOLLINGSWORTH. Yes, sir.

Mr. LANE. Yes, sir.

Mr. BACHUS. Are you all experiencing fatigue?

Mr. HOLLINGSWORTH. Sir, I will say that since I have been back, I have experienced a minor relapse. The doctor immediately increased the medication that I was taking, and it subsided.

Mr. BACHUS. Go ahead.

Mr. LANE. The comment I was going to make is I am so much better now as to compared to before. They are not even in the same ball park. Every once in a while I get tired enough I have to go take me a nap for ten or 15 minutes, but before I would have to stay in bed 24 hours, you know.

Mr. BACHUS. Mr. Lane, are you all on daily medication, though?

Mr. LANE. Yes, sir.

Mr. BACHUS. So would it be incorrect to say you have been cured?

Mr. LANE. I did not say cured.

Mr. HOLLINGSWORTH. I never indicated that I was cured.

Mr. LANE. Just extremely better.

Mr. HOLLINGSWORTH. All I can say is there is a night and day difference before I went to New Orleans.

Mr. BACHUS. So you are better, but not cured?

Mr. HOLLINGSWORTH. Yes, sir.

Mr. LANE. Truly better.

Mr. BACHUS. And you are both on daily medication?

Mr. HOLLINGSWORTH. Yes, sir.

Mr. LANE. Yes, sir.

Mr. BACHUS. And you do continue to have some of the symptoms?

Mr. LANE. Very minute, very minute. Like I was saying, if I take a nap for 30 minutes when I get to feeling tired, it will bring my pep back up just like I took a pill or something, you know, and go strong again. Whereas before you might start the morning out feeling halfway decent, but by the end of the day, you are totally worn out. You have to stay in bed the whole evening, night, get up in the morning and start over again.

Mr. BACHUS. In your testimony, did one of you indicate that Dr. Hyman said that you would never be cured completely?

Mr. HOLLINGSWORTH. Sir, when I went down for his treatment, I had to sign a statement saying he was not sure that he could cure this. He says he may have found a possible solution, and that is basically what I had to sign, and I had no problems with that.

I think your question would be best to be directed at him when he comes on the panel.

Mr. BACHUS. Let me ask you this. Ms. Picou mentioned the VA hospital at San Antonio, which is the Army's western medical facility, and I am familiar with it because I was stationed there.

Your treatment just in the last month there, have you found those facilities to be—what is your experience?

Ms. PICOU. Sir, I have not received any treatment.

Mr. BACHUS. You have not?

Ms. PICOU. No, and, sir, I did not experience these joint pains until the day before Mother's Day. I used to have just general aches and pains, but on Friday evening I started having what felt like my spinal column was on fire, started feeling real achy. By Saturday I woke up and I was real stiff. I bent down, and my bones would ache. I started getting real cold, the chills and the sweats, and I did not experience all of this.

Mr. BACHUS. All right.

Ms. PICOU. I just started with these symptoms, and then on Sunday morning, and I had that mysterious rash again from head to toe. So I sent myself into the emergency room at Brook, and they documented general arthritic pains, chronic arthritic pains, and a viral rash. So I got an appointment for rheumatology.

So far what they are doing is just sending me through these clinics, and I have not received any treatment.

Mr. BACHUS. I guess I will ask this to Mr. Lane or Mr. Hollingsworth. Would you all be willing to go to, say, Walter Reed or Brook Army Hospital for some tests for our benefit, to see if those tests reveal something that could help other veterans?

Mr. LANE. I have no problem with it.

Mr. HOLLINGSWORTH. Sir, I do not have a problem with that. I just think it might be a little bit redundant. They did that at the Gulf registry, and they came up empty handed.

Mr. BACHUS. I understand. I am just saying that if it were a concentrated examination, not at your all's expense.

Mr. HOLLINGSWORTH. Yes, sir. I have no problem with that.

Mr. BACHUS. Because especially in both of your all's cases we have some sort of strep infection, and you have responded to a certain type of treatment. So obviously for what you have there has to be some kinship.

All right. I have no further questions.

Mr. EVANS. Thank you.

The chair is very pleased to acknowledge the presence of the committee Chairman, the distinguished gentleman from Mississippi, Sonny Montgomery, and we appreciate, Mr. Chairman, your participation in this hearing.

Mr. MONTGOMERY. Thank you very much.

I congratulate you and the subcommittee for having a hearing like this on the Persian Gulf veterans, and we certainly want to be fair to them, and probably we should have done this right after the Vietnam War. We might have eliminated a number of problems that developed for these veterans, but I commend you, Mr. Chairman and the members of the committee and also our witnesses, for giving us this opportunity.

Mr. EVANS. Thank you, Mr. Chairman.

If there are no further questions of this panel, thank you very much for your lengthy testimony. Your service to this country, as

I indicated earlier, continues. We appreciate what you have done, and we will work with you in the future, I hope.

Thank you.

Ms. PICOU. Thank you.

Mr. LANE. Thank you, sir. I appreciate meeting you.

Mr. EVANS. The second panel is comprised of Betty Zuspann, Michael Ray Ange, Vic Silvester, and Jean Ralph. If they would come forward at this time, we would appreciate it.

Betty is National Director of Desert Storm Veterans Coalition. Michael is Congressional Liaison for the Military Families Support Network, Incorporated. Vic is National President, Operation Desert Shield/Desert Storm Association, and Jean is President, the National Association of Radiation Survivors.

Betty, once you get situated, we will start with you.

Mrs. ZUSPANN. Thank you.

I am sorry, Mr. Chairman.

Mr. KENNEDY (presiding). That is fine. Give them a big smile, and then let's clear them out of there.

Mrs. ZUSPANN. Sorry.

Mr. KENNEDY. Thank you very much.

The panel, we are pleased to welcome the panel, and, Mrs. Zuspann, please proceed.

Mrs. ZUSPANN. Excuse me if I am a little nervous, Mr. Chairman.

Mr. KENNEDY. Oh, do not worry about it, Mrs. Zuspann. You will get over it quick.

Mrs. ZUSPANN. It is easier to take on Walter Reed.

STATEMENTS OF BETTY ZUSPANN, NATIONAL DIRECTOR, DESERT STORM VETERANS COALITION; MICHAEL RAY ANGE, CONGRESSIONAL LIAISON, MILITARY FAMILIES SUPPORT NETWORK, INC.; VICTOR SILVESTER, NATIONAL PRESIDENT, OPERATION DESERT SHIELD/DESERT STORM ASSOCIATION; AND JEAN RALPH, PRESIDENT, THE NATIONAL ASSOCIATION OF RADIATION SURVIVORS

STATEMENT OF BETTY ZUSPANN

Mrs. ZUSPANN. Mr. Chairman, may name is Betty Zuspann. I am here today in two roles. Number one, I am the wife of a disabled Desert Storm veteran who proudly served his country not only in Desert Shield and Storm, but as an active duty Navy person. Three years prior to Desert Storm, he finished up his service.

My husband is not a malingerer. My husband was a Navy Sailor of the Month in his division on one ship. Plus, when he left Desert Storm, his commander wrote in his records that he was an exemplary sailor who worked above and beyond the call of duty and extra hours on weekends to get the job done during Desert Storm, while others were sleeping or otherwise.

I also am currently serving in a volunteer capacity as the National Director of the Desert Storm Veterans Coalition, which was formed by active duty military wives and others after the last hearing that was held in September, I believe, of last year, when we heard the military say that there was no one involved in this except Naval Reservists or Guards who did not want to do anything but get something off of the government or the military. I do not

know the exact quote, and that afternoon we went into action to form our coalition to prove them wrong.

We would like to thank you for allowing our coalition to give our views regarding the issues at hand pertaining to the Desert Storm illnesses.

Congressman Buyer, I would like to commend him for coming forward today because one of the problems we have is the denial by some veterans. It is one of the first of the four stages that we are seeing in these veterans, is the stage of denial, and I think his courage to come forward will help other active duty, as well as other veterans to come forward.

A wound is defined as an injury to body tissue. In other words, you do not have to be shot with a bullet to bleed. Thousands of Desert Storm veterans across this country, both active duty as well as veterans, are suffering from chemically induced injuries, chemical wounds, if you will, as a result of combined toxic exposures, including radiation, which result in toxic overloading and extensive damages to different parts of the body.

Desert Stormers across this country have shown in civilian medical testing damage to all parts of the body, including brain, immune system, central nervous system damage, amino acid, and red blood cell depletion, and also the bacterial infections as the prior panel testified to.

My husband when to Operation Desert Shield/Storm, and he left on December 1st of 1990. He arrived in the theater on the 14th of January of 1991. February 1st, he reported to sick bay with the first symptoms of chemical poisoning. He had the scratchy, burning eyes, the severe burning throat, trouble swallowing, sweat and nausea.

They gave him some medication and sent him back to work. He continued to process to sick bay with symptoms that were getting worse: flu-like symptoms, major headaches, all types of problems, the nausea, extended on down through his duty at Desert Storm, chronic fatigue, the continuing flu, major, major headaches, and they wrote into his chart that he was stressed, and they suggested that he have some stress management.

SPECT scan testing on my husband at a later date by civilian physicians show that he had severe brain damage. The notes in the active duty medical chart where they were showing the headaches are the locations where he does have the brain damage. As well, he has fluid build-up at the base of his brain.

He persisted to go to sick bay during Desert Storm. When he came home from Desert Storm, after six and a half months of service, he virtually fell off the plane, and from talking to him, I found that they were in the oil spill. He was in the Navy and was in the oil spills during Desert Storm, and they took oil up through the desalinization plant of the ship, and the military persons evidently ingested this oil, the byproducts of this oil.

They were also in the oil fires. Colonel Ertmann—I apologize if that is not his rank—during a recent VA teleconference even made reference to the fact that a lot of the smoke went out over the Navy.

So he was in the oil spills. Generators and stuff from going through the oil spill and the ship going through the oil spills broke

everything. They had to repair boilers. They had to put generators on the ship to run the power with Saudi diesel fuel and so forth, fires on the ship, everything.

He went to Walter Reed after he came home, and it took Congressman Kennedy's office and others to get him there. Walter Reed told us the second day that we were there, without any testing or anything, that they were going to put on his discharge summary that it was not service related, and then that way his medical insurance would pay for it. This was without any medical testing.

The whole two and a half months he was at Walter Reed, all they tried to do was convince him that he was depressed and he should be on Prozac. They were going to convince him that he did not have bronchial asthma. So they took him for a test for asthma. He went into near respiratory arrest and only had 17 percent lung capacity.

He was transferred to a Houston Persian Gulf Referral Center, where they persisted to try to convince him at first that he was depressed. When he had a severe chemical reaction to some exposure that he had while he was there, they finally brought in Dr. Claudia Miller, who diagnosed him with multiple chemical sensitivity.

They told me they could not treat him because they had not been given permission to do so. They had only been given permission to diagnose Desert Storm veterans. The VA still refuses to treat my husband. To this day he has been turned away from the emergency room for acute respiratory distress.

And I would like to close with a comment, please. As a disabled Desert Storm veteran, my husband feels that his country has deserted him. As the wife of a Desert Storm veteran, I am devastated. As an American, I am furious. These last two years has been a travesty for every Desert Storm veteran in this country. We all should be ashamed of ourselves.

Excuse me.

I find wounded in the line of duty under hostile fire in the time of war. Give Desert Storm veterans the health care they so desperately deserve. They have earned it. Give them back their dignity. They deserve nothing less.

I am sorry.

Mr. KENNEDY. Mrs. Zuspann, we know that this is very difficult testimony for you, and I think all of the panel very much appreciate your efforts to speak out on behalf of your husband. My sense is that there are people that are very much interested in hearing about your husband's case and trying to make sure now that the military takes care of people that have served our country.

That is the purpose of this hearing, and that is why it is important that you come forward and share with us your testimony. So it is appreciated, and we will do everything we can to make sure that your testimony makes a difference in your life and in the lives of others.

Thank you very much.

Mrs. ZUSPANN. Thank you, Congressman Kennedy.

[The prepared statement of Mrs. Zuspann appears on p. 187.]

Mr. KENNEDY. I would now like to turn to Mr. Ange. Mr. Ange is with the Military Families Support Network, and we look forward to your testimony. Please proceed.

STATEMENT OF MICHAEL RAY ANGE

Mr. ANGE. Thank you, Mr. Chairman and members of the subcommittee.

I am Michael R. Ange, a disabled Persian Gulf veteran and a Legislative Liaison for the Military Families Support Network, Incorporated. We are a national nonprofit organization with a membership consisting of veterans and their family members.

Over the past two years, our organization has worked in close cooperation with those support groups and veterans organizations in an attempt to answer the many medical questions which plague Persian Gulf veterans. In that period, we have dedicated our efforts to the gathering of information, interviewing and compiling data from veterans, and examining the handling of several specific cases, like that of Gary Zuspann and Michael Adcock, who is now deceased.

The Military Families Support Network, Incorporated, has asked me to address the overwhelming evidence indicating that the most severe illness facing Gulf War and other veterans today is an internal affliction, an affliction that has debilitated our VA system and rendered it unable and unwilling to meet its obligations to the veterans.

Both the congressional and executive branches of government have made obvious attempts to insure that the medical needs of veterans are met and the support is available to insure a reasonable standard of living for the disabled veteran or active duty person. These attempts are apparent in various administrative codes, laws, and regulations that seek to govern the actions of the VA.

Unfortunately these various regulatory acts have not resulted in the provision of timely, accurate, and efficient health care for veterans, and they have not deterred the loss of homes, businesses, and assets due to service-connected disabilities. They have even failed to keep the disabled veteran out of homeless shelters and off the streets.

The subcommittee has already heard and/or will hear numerous accounts and numbers today which will verify this statement of fact. Literally thousands of patriotic veterans who honorably served their country have now been abandoned by their Veterans' Administration, but hopefully this hearing is evidence that they have not been abandoned by their government.

Numerous veterans, civilians, and media sources have asked what one thing could be done to make the system work effectively. In order to answer that question, we have examined the handling of the veteran, his record and medical care both on active duty and within the VA system. What emerged from our research was a distinct pattern of misinformation, mishandled records, and unacknowledged hazards, including investigational drugs, medical experiments, and radiation.

The most surprising hazard was a chronic circumvention of existing regulations in order to avoid providing care.

The pattern has continued to plague the veteran even after release from active duty. Many of the illnesses which plague Persian Gulf veterans are distinctly identified in various regulations. In addition, a lack of diagnosis cannot justify the denial of medical care for the veteran, according to the law.

Both the public law and common human decency require that this policy end.

In spite of these clearly identifiable facts, veterans are being denied care on a daily basis. It is even documented that veterans who are rated with 100 percent service-connected disabilities are being denied medical care in VA hospitals. Gary Zuspann is a prime example.

There is no legal defense for the gross mistreatment and neglect of Persian Gulf veterans. There is no excuse available as a claimed lack of knowledge regarding the origins of these illnesses. Given the common conditions of service in the Persian Gulf, determining the origin of these illnesses seems to be a matter of common sense.

It is interesting to note that when a number of people in New Mexico became deathly ill with an unknown mystery illness, the Centers for Disease Control did not begin their search for the cause in some other location like the Middle East.

The VA has now appointed a blue ribbon panel to undertake the study of medical problems afflicting Persian Gulf veterans. This panel plans to undertake a study of several months or years in an attempt to provide medical care for the vet. Although definitive scientific diagnoses are important, our veterans cannot afford continued delay.

Untold numbers of Persian Gulf veterans have already died mysteriously from these illnesses. Countless others have lost jobs, homes, and their quality of life. How many vets must lose their dignity before we begin as a nation to meet our base responsibility?

The people of Kuwait received a response from this Nation within several days of Iraq's invasion. Perhaps the members of that panel can explain why Kuwaiti citizens deserve more immediate assistance from our government than our military veterans do.

An examination of the VA policy which is reflected in a memorandum which is attached to my statement demonstrates that the policy is budget oriented, not veteran oriented. It is too late for concerns of a budgetary nature on this issue. As a nation we must realize that the cost associated with war continue long after the last strategic bomb has fallen.

Budget concerns cannot be allowed to continue to control these policies and even allow federal laws, regulations, and administrative codes to be subverted and circumvented. These legal codes already make the necessary provisions for guaranteed immediate medical care for the veteran.

In short, our system is not broken, but the people running it are failing to follow the regulations set forth by our own legislative and executive branches of government. This is the true origin of our illness.

As we see it, the problems facing the Department of Veterans Affairs and the various Veterans' Affairs committees are twofold. First, we must insure that the appropriate policies, laws, and regulations are followed by staff members of the VA. The only way this can be insured is through past regulations, holding VA staff members and administrators personally accountable for their actions. As long as any group within our government acts above the law, the law will continue to be a mere inconvenience, not a policy to be respected and followed.

This body as a part of our legislative branch of government has made great strides toward insuring the welfare of our Nation's veteran. It is time to take this policy one step further and act upon the obvious intent of current regulations by implementing a policy of accountability.

The legislature has expended great energy and resources to protect the rights and interests of our veterans. Let's hold those who disregard this effort responsible.

The second problem is to restore the veteran's trust in our VA. Not one member of the blue ribbon panel studying Persian Gulf problems is a Persian Gulf veteran. We feel that as a minimum equal representation is necessary.

Therefore, we have co-sponsored a letter requesting seats for Persian Gulf veterans on this panel. That letter has been sent to Secretary Brown, but as of this date we have received no response.

Surely as veterans we are at least entitled to an official response. I am quite certain that our sacrifice and service have earned it.

We are once again requesting equal representation on this panel, and we are asking for assistance from this subcommittee in achieving that objective. We are anxious to see if you will respond.

We hope to work together with this subcommittee and any other governmental agency to resolve the crisis facing Persian Gulf veterans and to restore our faith as veterans in the VA. In the words of President Lincoln, our Veterans' Administration should foster and perpetuate the Nation's tradition of service to our sick and disabled comrades and their widows and orphans.

We must all strive to insure that this noble intent does not continue to be perverted and distorted for any reason.

Thank you, and I look forward to answering any of your questions.

Mr. KENNEDY. Thank you, Mr. Ange. Evidently we did not get your written testimony.

Mr. ANGE. I brought 100 copies of that with me today. I understand that it got lost in the mail or the shuffle somewhere.

Mr. KENNEDY. That is okay. Yes, we just want to make sure that it is submitted for the official record.

Mr. ANGE. Yes, sir.

Mr. KENNEDY. Thank you very much.

[The prepared statement of Mr. Ange appears on p. 211.]

Mr. KENNEDY. I would now like to ask Mr. Victor Silvester, who is the representative of Operation Desert Shield/Desert Storm Association to please testify.

Please proceed.

STATEMENT OF VICTOR SILVESTER

Mr. SILVESTER. Thank you, Mr. Chairman.

Mr. Chairman, my name is Victor Silvester. I am National President of the Operation Desert Shield/Desert Storm Association.

Mr. Chairman, members of the subcommittee, ladies and gentlemen, may I express on behalf of the membership and participants of the Operation Desert Shield/Desert Storm Association and myself this opportunity to address this distinguished committee. Over the past 24 hours, these halls have heard heart-breaking stories of

men and women who have served this Nation and humanity in the cause and the name of freedom.

I have heard stories of mysterious illnesses, illusive diagnosis, government bureaucracy, and the destruction of family units. Each day the list of stories will continue to grow. Each day the cost of the human element of these stories will continue to grow. Each day the cost to our own nation will continue to grow.

Time and time again the men and women of our Armed Forces, both active duty and veterans, have been told there is nothing wrong with them or, as we were told yesterday, that the establishment does not know what is wrong with them.

Mr. Chairman, the credibility not only of the defense establishment, but also the very government on which this great nation is built is at stake. Since the Persian Gulf conflict, the men and women of our Armed Forces, both veteran and active duty personnel and their families, along with the American people have been told conflicting stories, been given conflicting documentation, and subject to just plain conflict.

Mr. Chairman, to say that the health problems of the Persian Gulf conflict, the environmental manipulations, the chemical exposure, the parasitic exposure, the radiation exposure, and the results of the investigational drugs and vaccine exposure that could not be helped, could not be foreseen, or did not exist, cannot be and should not be accepted.

The fact that a single man or woman who has served this Nation in the defense of freedom should lose his or her home, family, quality of life, or capability to earn a living because of bureaucracy is not acceptable. Since 1969, the Defense Department and the U.S. Government has appropriated more than $1 billion for research into the very problems that face the Desert Storm veterans today. Mr. Chairman, it is now time for the American taxpayer, including the very same veterans who are sick, to receive the accountability for those expenditures.

The American taxpayers who are footing the bills for these veterans while they are waiting for the Department of Veterans Affairs to make their determination, who are paying for the indigent care costs when these guys lose these jobs and cannot meet their bills; the very taxpayer would like to see the results of those research programs and the answer to why the Department of Defense and the Department of Veterans Affairs do not have the capability to treat the very same problems that these millions of dollars of research funds were spent on.

Mr. Chairman, there will have to be numerous numbers of personnel, descriptions and theories about the mysterious Gulf illness situation. The fault or the reason for the problem cannot be laid at the feet of the Veterans Affairs Department. It cannot be laid at the feet of the Defense Department, and it cannot be laid at the feet of the veteran. The problem stems from all of them, each sharing their own problem.

If you have a veteran that can't remember why he was sick or how he was sick a week ago, he cannot tell a doctor the description of the diagnosis. At the same time, the doctor cannot make a diagnosis, a complete diagnosis, if he does not have the records of that man's military medical service. So it is nothing but a vicious circle.

Mr. Chairman, 30 countries formed a coalition of the best fighting force known to man to win the Persian Gulf conflict. Those same 30 countries have the best medical minds known to man. Let us utilize these minds, plus the billions of dollars that have been spent in research, and restore the Desert Storm veteran to a viable participant in this Nation's community.

Millions of Americans have spent the last decades fighting from being kept on the welfare lines of the country, fighting to keep their homes, their farms, their jobs, their chance at a decent life. Today the veterans of Desert Storm are fighting those very same fights, fighting for the very same principles, with the additional burden of the Persian Gulf syndrome.

The United States Armed Forces and its world counterparts have spent millions of dollars training the military personnel within their ranks. It is a believe of the Operation Desert Shield/Desert Storm Association that we can use this training to assist in meeting the challenges that face the veterans of any conflict in the service of their nation.

The Persian Gulf conflict has given rise to a situation that has never been faced before in the conflict of modern warfare: coverage, live as it happens, when the service member and the service member's families watch their people in harm's way from their own living room.

Mr. Chairman, I thank you and the members of this subcommittee for the opportunity to voice the views and opinions of the Operation Desert Shield/Desert Storm Association, and I would like to conclude with this final comment.

No service member should have to lose his or her family, home, life savings, or self-respect because they answered this Nation's call to defend the principles of freedom.

I thank you.

Mr. KENNEDY. Thank you very much, Mr. Silvester. We appreciate your testimony, the substance of your testimony.

That is the strangest mix of Australia and Texas I think I have ever heard.

(Laughter.)

Mr. KENNEDY. I do not know if I got it right.

Mr. SILVESTER. You missed one, Mr. Chairman.

Mr. KENNEDY. Excuse me?

Mr. SILVESTER. You missed one, which is British.

Mr. KENNEDY. Is that right? British, excuse me.

[The prepared statement of Mr. Silvester appears on p. 221.]

Mr. KENNEDY. Our final witness on this panel is Ms. Jean Ralph, who is the president of the National Association of Radiation Survivors.

Ms. Ralph, please proceed.

STATEMENT OF JEAN RALPH

Ms. RALPH. Mr. Chairman and members of the committee, I am from Streator, Illinois. The chairman of this group is Lane Evans, and Mr. Gutierrez is on your panel also.

Soon after the war ended in the Gulf, the National Association of Radiation Survivors' Executive Director and Region V Vice President began receiving calls about the possible use of weapons coated

with DU during the Gulf War. We were all quite ignorant about DU and began to investigate.

We learned that there was such a substance, and in fact, it was used on tanks and shells during the Gulf War. We learned that DU might be harmless as a coating on a tank or weapons. However, if the tank or weapons were to explode and a fire followed, the results could be quite harmful to anyone who inhaled or ingested the oxidized DU.

Not only the Gulf veterans, but DU munitions threatened permanent contamination at 50 domestic U.S. sites where DU was manufactured, assembled, tested, or disposed, and the workers and neighbors at those sites are at risk.

NARS is certainly not in possession of all the facts, but we have been working with veterans who were there and with the Military Families Support Network organization. Because of the similarities of the symptoms of hair loss, rashes, fatigue, and other illnesses between our atomic veterans and the Gulf War veterans, we created a seat on our board of directors for these particular veterans and are working closely with them.

Now we understand that a very high rate of miscarriages and children being born are suffering from defects from post-Gulf pregnancies.

Our concern goes beyond the possible exposure to DU. Our concern is that history shows an attitude among the defense establishment that permits them to use servicemen as guinea pigs by exposing them to chemical, biological, and radioactive substances, as well as drugs, in an effort to determine whether these substances and drugs would be effective in use against an enemy.

We would like this committee to examine the Gulf War veteran situation within a context of the history of the treatment of servicemen who have served their country from World War II onward. When we talk about exposures, we are referring to the mustard gas exposures, LSD experiments, dioxin exposures for the Vietnam veterans, and of course, the radiation exposures for the atomic veterans.

History has shown a failure to adequately inform servicemen about upcoming exposures and potential dangers of these exposures. Usually it is just the opposite. These men and women are told there is no danger, and when health effects begin to show, it is often too late for medical follow-up.

Veterans are also denied health care and compensation because the official policy has been that the exposure could not be the cause or science has not yet made a connection between the exposure and the problem. The burden of proof always shifts to the veteran.

While under the law the VA is obligated to assist claimants in developing their claims, the reality is that the VA does not do so. We have proof of this, and it is evidenced by the remands of the Court of Veterans Appeals, and in 1986, the Department of Veterans Affairs deliberately destroyed records, documents during the discovery phase of *NARS* v. *Turnage*, a class action suit on the $10 fee limitation issue.

More often than not, veterans are told they have a psychological problem or stress disorder. Some are even placed under psychological observation, and sometimes veterans are accused of seeking

a free ride or a handout. Men and women who were willing to give their all to their country are told they are equivalent of a welfare chiseler or a cheat.

In 1977, when I first put a claim in on my husband's disability, I was called a cheat. We know that the Gulf War veteran was exposed to at least one experimental drug administered in the desert that was not approved by the FDA. Because these shots were administered in the desert, veterans were told the shot information could not be placed on their records since home base had no knowledge of the shot.

So now what happens if there is a problem in the future from this shot?

Gulf vets were also told they had nothing to fear from the DU coated tanks and weapons. Trust your government. Atomic veterans trusted their government during the testings and were told they had nothing to fear. My husband has been in his grave 15 years.

It is interesting to note that one of the men on the panel mentioned something about a study. Currently the National Academy of Sciences is doing this study on crossroads, a testing that happened in 1946. The National Academy of Sciences hopes to have this study done by 1996, 50 years later.

Gulf veterans' problems must be handled now, not 50 years from now.

History has also shown that military records are not always available, and in the VA claims process, the veteran is denied compensation if those records are missing, and he or she cannot produce his or her own documentation about exposure. Again, the burden of proof is on the veteran.

We have listed in our written testimony eight detailed pieces of legislation that Congress could pass, and we hope this will happen. One of them is that declassification to be demanded, and individuals and records should be subpoenaed relating to the knowledge of DU, the vaccine, and other causes of Gulf War illnesses, and sufficient funds should be appropriated for the Gulf health problems.

Finally, there should be a resolution by Congress stating that there will be no more experimentation on U.S. military personnel for any purpose, and if the military finds it necessary to use any weapon or substance that might cause future health concerns, servicemen should be advised of the potential health problems prior to and post-use of that weapon or substance.

Various legislation has been passed not only during the Democratic administration, but also during the Republican administration, but most of that legislation that has been passed makes it ever so difficult for veterans to receive justice in any form, and these include the $10 fee limitation for attorneys assisting veterans in the VA claims process, the Ferris Doctrine that prevents a veteran from suing the government for injuries incidental to military service, claims of sovereign immunity or discretion function which are exceptions to the Federal Tort Claims Act, the Warner amendment which provides total immunity to government contractors involved in nuclear weapons work.

So we question: will the manufacturers of the vaccine or the producers of the DU tanks and shells request Warner-type legislation

for blanket immunity, as well? Will exposure to DU or the vaccine become another exception of the Federal Tort Claims Act?

These are questions that have to be answered.

To conclude on a personal note, not only do I hold the office of President of NARS, but for the past ten years I have also held the office of Director of Atomic Widows. Fifteen years ago this August 18, my husband, a 2nd Division U.S. Marine who spent a full nine months in Nagasaki, Japan, with the occupation forces, died a horrible death, a victim of multiple myeloma, a bone marrow cancer related to radiation exposure.

It took ten years, from 1978 to 1988, before Congress finally passed Presumptive Radiation Exposed Veterans Act on May 1, 1988. The problem with that bill is that less than three percent of over the 12,000 claims that went into the Veterans' Administration have been honored.

Something is wrong with the system, something seriously wrong with the process.

Effective January 1, 1993, Congress also passed Public Law 102–568 granting all widows $750, monthly payments, and $100 for each dependent child. So Gulf widows will be paid accordingly, provided they can prove service connection.

I would like to challenge anyone on this panel to budget a household on $750 or $950 if you have a couple of kids living in the household with you. It would be an impossibility for a young widow with children. Ask somebody who knows. I found out the hard way. For ten years I had no government assistance whatsoever, and when my husband died, I had a boy, my younger son, a second year college student, and a 12 year old daughter at home to raise.

For 17 years I have continued to work for justice not only for veterans, but for all radiation survivors. As an atomic widow, I am just one example of the many widows, survivors, and families who have suffered severely because nuclear contractors and our government have lied to us. We have been used and abused, and it must stop.

It is my sincere hope that Gulf veterans, widows and orphans never experience the long wait for justice that atomic veterans, widows, and orphans had to suffer.

Thank you very much.

Mr. KENNEDY. Thank you very much, Ms. Ralph, for that important testimony.

[The prepared statement of Ms. Ralph appears on p. 231.]

Mr. KENNEDY. I want to thank all of our witnesses for their testimony.

First and foremost, I have a brief question that I would like you to respond very briefly. Could you just tell us how many people are involved in each of your organizations and how many cases your organizations have advocated for or have witnessed?

Mr. Ange.

Mr. ANGE. We are actually working in a combined database situation with several other veterans groups. We have well in excess of 3,000 veterans that we have currently worked with in some capacity as far as compiling data, that type of thing.

Mr. KENNEDY. Yes, but how many has your specific organization?

Mr. ANGE. Sir, I am sorry. I do not know that information.

Mr. KENNEDY. Can you give me an idea? Is it 100 or is it 3,000?

Mr. ANGE. Oh, it is well over 1,000.

Mr. KENNEDY. It is?

Mr. ANGE. It was over 1,000 over a year ago. So I am sure it is well over that number now.

Mr. KENNEDY. And when you say you have assisted those, have they had personal contact with your organization?

Mr. ANGE. Some of the contact has been by mail. Some of it has been personal interviews. Some of it has been telephone interviews.

Mr. KENNEDY. But there has been some kind of direct contact between your organization and those veterans?

Mr. ANGE. That is correct.

Mr. KENNEDY. Thank you.

Ms. Ralph.

Ms. RALPH. We know that there are over 250,000 veterans exposed to radiation. Within our group, we also help uranium miners, the down-winders, and all of those veterans, of course, that were at the testing.

Mr. KENNEDY. Yes, I was trying to refer to Persian Gulf veterans specifically now.

Ms. RALPH. Okay.

Mr. KENNEDY. Do you have any idea?

Ms. RALPH. I have no idea at this point. I am sorry.

Mr. KENNEDY. Mr. Silvester.

Mr. SILVESTER. Mr. Chairman, actual members of our organization, we have 596. However, since we installed the 1–800 line December 15, this past year, we have received 6,789 calls——

Mr. KENNEDY. My goodness, have you really?

Mr. SILVESTER (continuing). In reference to problems and questions about Desert Storm.

Mr. KENNEDY. Thank you very much.

Mr. Ange, I was interested in the testimony you provided. I think you were referring to Mrs. Zuspann's husband when you said he is 100 percent disabled, service-connected?

Mr. ANGE. I believe that is correct. He has been rated 100 percent disabled.

Mrs. ZUSPANN. He is 70 percent service-connected, and then the rest is a pension. It goes up to 100 percent.

Mr. KENNEDY. You made some fairly tough charges against the VA, indicating that they had absolutely refused to treat him in the hospital.

Mr. ANGE. He is not the only case.

Mr. KENNEDY. Can you grab the microphone so that we can hear you directly, please?

Mr. ANGE. Mr. Chairman, he is not the only case.

Mr. KENNEDY. Could you explain that in a little bit more detail, please?

Mr. ANGE. He is not the only case. We have a number of veterans who are seriously ill that have been denied care at various medical facilities. I did not hear all of Mrs. Zuspann's testimony, but I think she probably alluded to the fact that her husband was turned away from the emergency room doors of a VA facility in Texas in a life threatening situation, and the Texas Veterans' Commission had to step in on his behalf and get a letter of credit from

the State of Texas government in order to get him into a civilian facility to save his life, you know, late one evening because he needed immediate medical intervention, and the VA refused to take him.

Mr. KENNEDY. It would be enormously helpful to the committee to have specific names and addresses. We hear constantly anecdotal information about these kinds of cases. When the VA comes up later in the day, you are going to hear them say that that could not possibly be true I would bet dollars to doughnuts. So it would be enormously helpful for us to have some specific information that we could bring forward and bring to their attention, especially, I should say, if you have got it prior to their testimony today, it would be enormously helpful.

Mrs. ZUSPANN. We have the letter here from the Texas Veterans' Commission. We are citing dates, times and names, and we will be glad to give that to you. As well as I can give you other dates, times and names where I did not have witnesses. I started getting witnesses so that people would believe that he was actually being turned away because they said, well, it is my word against theirs. So I asked his service officer of the American Legion, as well as the Texas Veterans' Commission, to intervene as witnesses that he was being refused health care for any condition.

Mr. KENNEDY. Do you have other veterans that you might have specific information on, Mr. Ange?

Mr. ANGE. Yes, sir, we have some other veterans. I am prepared at this point to give you specific details as far as in writing. I do have the President of our organization who is here also.

Mr. KENNEDY. We would appreciate it. We can easily take that for the record, and then we will follow up with questions for the VA specifically.

(This information was not submitted for the record.)

Mr. ANGE. It is also important, Mr. Chairman, if you will notice in the written statement that I have submitted that there are a number of inconsistencies and data that have been given out. For example, leishmaniasis disease, we have been receiving briefings saying that this is a harmless disease that has no problems, but yet we have a manual from the United——

Mr. KENNEDY. Who gives you those briefings?

Mr. ANGE. The briefings come from the active duty military. The information has been verified by the VA. I have actually enclosed one of the memorandums that came from Detachment 1, the 1450th Trans Company, which is a North Carolina National Guard unit. This is a memorandum that was put out to all of their unit memberships, and it was a part of the VA briefing they received, you know, for medical care, et cetera, when they were discharged from active duty and went back to Reserve status.

And if you look in the United States GOD for diagnosis and treatment of diseases of tactical importance in Southwest Asian theater, which is a U.S. government publication, signed at that time by Brigadier General Ronald Blank, you will find that the diseases listed as being usually fatal within months and that it is sexually transmitted and it is not self-limiting, as they say, that it is transmitted from mother to fetus vertically, et cetera, et cetera.

I mean these policies, in addition to being atrocities to the veteran, they look to me as though we are opening ourselves up to create, you know, a public health epidemic, as well as anything else.

Mr. KENNEDY. Mr. Ange, when you make a charge like that, is it your presumption that this is a coordinated effort or do you think these are just sort of haphazardly done by individuals in the military that are trying to answer the questions for somebody?

Mr. ANGE. Looking at the data, Mr. Chairman, and I do not mean to be sarcastic with this, but looking at the data, it almost would appear as a conspiracy, but having dealt with the system, I quite frankly do not think the system is capable of pulling off a conspiracy.

(Laughter.)

Mr. KENNEDY. Well, that is an important observation. After six years on this committee, I think I would probably agree with that.

I know it is difficult for you to come forward in these circumstances. I think that it is important because the fact is that you are representing organizations that certainly have been in contact with my office, and these are the kinds of anecdotal information and perspective that I think several members of this committee have received.

It is very different than the official testimony that we hear from the military itself or the VA, and so it is just this kind of conflict that I think is the purpose of today's hearing. I only wish that we could have the VA sitting with you at the table because I think it would be helpful to have you present when they make their testimony. We might be able to find a way to work some of you in if you are able to stick around for the later testimony that occurs when the VA comes in.

That is the end of my questions. I want to see if Mr. Bachus has any.

Mr. BACHUS. Thank you, Mr. Kennedy.

I have been reviewing the testimony for the past two days and trying to sort of, if I can, simplify, and I am not sure I can, but from reading your all's testimony, I think it was more helpful than anyone else's in that you did try to categorize the conditions these veterans were suffering from.

Let me ask you about this. I have just made a summary, and tell me if I am wrong. Tell me if there is anything that I have left out.

One, there appears to be three basic conditions that our veterans are suffering from. One is parasitic diseases, leishmaniasis, and perhaps what Mr. Hollingsworth and what Mr. Lane testified to apparently fall under either parasitic diseases or lack of sanitation which resulted in strep infection, leishmaniasis, and that I am just going to classify under the term parasitic conditions or infections.

Now, secondly, and this one is more elusive, but there have been at least suggestions that some of our veterans are suffering from the anthrax shot or from the nerve agent pill, one or both. Is that safe to say?

Mr. SILVESTER. Yes, sir.

Mr. BACHUS. Now, there is disputed testimony over whether these are investigative drugs or whether they have been used before.

Mr. ANGE. Sir, I think it would be important to say, speaking for Military Families, I am not a doctor, and I am not prepared in any way to make any type of a supposition. I am saying these are possibilities.

Mr. BACHUS. Right. Oh, and I am, too. Let me say this. I am just hitting three, and I am just saying what you talked about with your husband, for instance. Now, I think Mr. Hollingsworth and Mr. Lane obviously fall in that first category. The second I am just saying is more of a possibility. For the first and third, I think it is true. I mean these have happened. I do not think there is any doubt, but maybe the anthrax shot and the swallowing or ingestion of the nerve agent pill is a possibility.

And the third one, and I think your husband, Mr. Zuspann, and I think Ms. Picou from our first panel, the toxic exposures which I think have been confused sometimes with these parasitic diseases.

Mrs. ZUSPANN. My husband has the bacteria which was diagnosed by Dr. William Ray in December while he was in the hospital as a secondary condition to his toxic exposure.

Mr. BACHUS. Right.

Mrs. ZUSPANN. So he has both problems going on at the same time.

Mr. BACHUS. But you know, that can happen and, I think, confuse people because I did not realize until I started reading this testimony that we have apparently at least got two problems. One is the leishmaniasis or other parasitic diseases, and then we have got the toxic exposures.

Mrs. ZUSPANN. Toxics, right.

Mr. BACHUS. Now, let me run through the toxic exposures and see if I am missing anything as the third one because I think it is the more complex as far as cause.

We have the oil well smoke, which some people are suggesting cause environmental hazards. We have the heavy metal exposure, several of them. That is the second. The third one is the depleted uranium, which I think has proven consequences. That is from the ammunition and the armor plating.

Are there any others? Those apparently are three types of toxic exposures.

Mr. KENNEDY. Will the gentleman yield?

Mr. BACHUS. Yes.

Mr. KENNEDY. I have just been given this can of insect repellant here that was evidently distributed to thousands of Persian Gulf veterans. This stuff, I do not think I would spray on my dog, you know. It says here, "Avoid contact with face, eyes or skin." You know, it says, "Do not allow spray to contact food or water supplies. Thoroughly wash dishes and food handling utensils contaminated with this product. If on skin, wash affected areas of skin with soap and water. If inhaled"—I guess my sense is that there is probably a whole array of contaminants that exist out there that you and I are probably going to have a hard time——

Mr. SILVESTER. Mr. Chairman, may I make a comment on that point?

Mr. KENNEDY. Yes, sir.

Mr. SILVESTER. When you read those—I am sorry, sir—but when you read those instructions and then you consider the fact that some of our troops in Desert Storm went for 55 days without a shower and over three months in the same uniform, wearing that same stuff, no wonder we have problems with rashes and skin problems.

Thank you.

Mr. KENNEDY. Thank you.

Mr. ANGE. I would like to also interject something here. There is a growing body in the scientific community that feels as though actually the two problems that you have identified, the toxic exposures and the parasitic diseases and other bacterial problems, are actually interrelated, and that the toxic exposures have resulted in may an immune deficiency, which makes the vet more susceptible to being affected by the other diseases, and I think that has certainly been documented in radiation cases in the past and, you know, some of the other exposures. I think it has also been documented in lead poisoning cases in the past.

So we feel like the two issues are very closely related from that perspective if from no other.

Mr. BACHUS. Oh, I agree, from when you lose your immune system through allergic reactions.

Let me ask you this. I have made a list from the toxic exposures of the different manifestations of that. I have got bronchia asthma, which Ms. Picou was experiencing and your husband experienced. I think that is obviously one, chemical hypersensitivity which is causing the bronchial asthma or it may be interrelated is a second one.

Metabolic imbalances is a third.

Mrs. ZUSPANN. Yes.

Mr. BACHUS. And I guess that can cause cancer.

Mrs. ZUSPANN. Yes.

Mr. SILVESTER. Correct.

Mr. BACHUS. The fourth one which is, I guess, interrelated, toxics in the body which has been demonstrated by the study on the hair.

Mrs. ZUSPANN. Yes, sir. My husband has strontium in his blood elements, which is a nuclear waste byproduct. He also in his blood cell testing had 2-methylpentane, 3-methylpentane, trimethylbenzene, hexane, inhexane, benzene. He also had pentachlorophenol, which Colonel Ertmann also referred to in his testimony—I mean on the VA teleconference to their hospitals, that the military expressed concern about, you know, someone being exposed to that.

I have asked him what that is and why they were concerned. He has yet to answer that for me, has not had time. I asked him about it this morning. I do not know if I will get an answer or not, but I would like to know what that is and why it is in my husband's body.

Mr. BACHUS. Well, it is in there.

Mrs. ZUSPANN. It is there.

Mr. BACHUS. Another one, from reading the medical reports of all of these toxic exposures, cause brain and central nervous system damage.

Mr. SILVESTER. Right.

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Mr. BACHUS. So you have lung damage or you have sensitivity to chemicals. You have toxics in the body. You have maybe brain or central nervous system damage.

Mr. SILVESTER. You have slurred speech.

Mr. BACHUS. Which would be from the brain or the central nervous system damage.

Mrs. ZUSPANN. Cardio-pulmonary.

Mr. BACHUS. The imbalance could also be?

Mr. SILVESTER. Short term memory loss.

Mr. BACHUS. Right.

Mr. SILVESTER. That type of thing.

Mr. BACHUS. Other than these toxic exposures and these parasitic diseases, and exposure to hazardous material, the parasitic diseases or the field sanitation conditions, the pill and the shot, have you come up with any other possible causes, other than those four?

Mrs. ZUSPANN. Major Richard Haynes has done an extensive study of Desert Storm veterans over the last year.

Mr. BACHUS. Right. Now, I am categorizing all of that as toxic exposures.

Mrs. ZUSPANN. Toxic, all right.

Mr. BACHUS. Are there any others, other than damage—let's just say, damage to the body from toxic exposures.

Mrs. ZUSPANN. Okay.

Mr. BACHUS. And damage to the body from parasitic infections, and the damage from either the pill or the shot.

Mrs. ZUSPANN. And radiation.

Mr. ANGE. We have not identified anything else that we feel like is possible in our interviews, but, again, we have no medical expertise other than what we get from outside sources.

Mr. BACHUS. Okay. Thank you.

Mr. KENNEDY. Mr. Clement.

Mr. CLEMENT. Thank you, Mr. Chairman.

Mrs. Zuspann.

Mrs. ZUSPANN. Yes, sir.

Mr. CLEMENT. When you visited with my congressional office, you referred to a passage in the Americans with Disabilities Act which addresses multiple chemical sensitivity.

Mrs. ZUSPANN. Yes, sir.

Mr. CLEMENT. Can you review this for the committee and explain what impact you think this has on the Persian Gulf veterans?

Mrs. ZUSPANN. One of the things that we were concerned about after some of the Desert Storm veterans were being diagnosed by civilian physicians with multiple chemical sensitivity, we noticed that the Veterans' Affairs to base their refusal of health care and benefits started coming out and saying, well, there is a controversy in the medical community, and so we are not going to treat anybody. We are going to wait until all of this controversy is over, and this type of thing. It is even in my husband's VA chart, a memo by Dr. Susan Mather.

Under Title II of federal service's health care and otherwise, the Justice Department has a book, Americans for Disabilities Act Handbook, and they use multiple chemical sensitivity or environmental illness as an example of one of the allergies, that if it is so

debilitating as to, under the definition of disability, limit one or more major life activities, that you do have full protection under this act.

What I find is interesting is the fact that they specifically cite especially if you have the respiratory or neurological problems. Then you have full protection under this act, as well as any of the other acts.

So I was confused as to why these people who have chemical sensitivity are being denied care.

Mr. CLEMENT. Let me ask you also: what are your impressions of the Persian Gulf registry? And can you tell about your involvement with VA personnel requesting the registry?

Mrs. ZUSPANN. We have had Veterans Affairs employees call us. We have had persons call us saying that they were shoved in a room with a yellow tablet and a pencil, and they are the new Persian Gulf person for that hospital, and they would say, "We understand that you all know more about what is going on or will tell us things that we cannot get information on, and what do we do?"

We do have a draft of the protocol or whatever, and we say, "Well, we will mail it to you," or something because you are supposed to report these people on a monthly basis, and there is a time length.

So we have also had veterans who have been denied. My husband and four other veterans were denied in the Houston Persian Gulf Center. We requested before they were discharged that the form that is supposed to be filled out on every Persian Gulf veteran be filled out, and we were denied that right to do that.

Then after we got home, I said will my husband and these other veterans be put on the registry. Yes, they will. When we got home, we asked the American Legion in Washington to confirm that they were on the registry, and they did so, Mr. Steve Robertson.

A month ago I got a letter from the Houston VA saying, "Congratulations. Your husband is on our local registry," after being in their hospital for two and a half months, "and we are moving him to another hospital. So he is going to have to go back—we are moving his file up to Waco—so you are going to have to go back and start over," basically is what the letter said, and he is not on the national registry.

Mr. CLEMENT. Any of the others who would like to comment about that?

Mr. ANGE. In December of last year I called to attempt to make an appointment to get on the Persian Gulf registry by taking the physical at the Durham VA facility in Durham, NC. They scheduled me for an appointment in June of this year. They said that was the earliest time that was available.

I shopped around from VA facility to VA facility, and through contacts that I had established in the VA system, was finally able to get an appointment in late March of this year.

In order to complete my Persian Gulf physical, I had to take three days off work and spend three entire days at the VA facility in Fayetteville, NC, to complete the physical process. They would not do it all in one day. They made me come down one day and sit for five or six hours to get a few x rays and some blood taken, and I came back another day to do my interview. Then I came back

another day to do the actual physical exam, and this is commonplace. I have numerous calls from people on this line. It almost seems as though it is purposely set up to make it as difficult as possible to get into the system.

Mr. CLEMENT. Anyone else?

Mr. SILVESTER. Yes, it also seems to appear that the low man on the totem pole is the one that gets the job as far as being the Persian Gulf registry counselor. Like in Big Springs, TX, the young man that took that job over had been on the job for 30 days when a whole host of young folks showed up and said, "We want on the registry." All he had was a desk, a chair, and a filing cabinet and, as Mrs. Zuspann said, a yellow writing tablet, and that was it. That is all he had. He did not even know what the Persian Gulf registry was all about.

I have traveled both to Dallas, and San Antonio, spoken with North Dakota, and various veterans' facilities around the Nation personally, and I have also written to these folks, and it seems to be the same common denominator, that nobody has made an exact determination what the procedure should be. It is a local procedure, it appears to be. Each one that you talk to has a different protocol that they go through.

For almost a year nobody had a set guideline of questions on which to ask. Now, I went on the Big Springs VA Persian Gulf registry myself after four of my Desert Storm veterans had spent all day over there, had not been seen other than to go to the front desk, and had to leave before they could get finished because they had to come back 100 miles.

Now, I went back there four days later, and their names had not been submitted or even put on the list. So the same day that I went back, I put my name, walked up to the front, and stated that I am a Desert Storm vet. My son is a Desert Storm vet. So I put my name on. Two weeks later I went and talked to the scheduling clerk, who also does the computer work for the Desert Storm program, and my name was not on the list either because she had not got it.

So there is a wide discrepancy on what happens when a Desert Storm troop walks through the front door and what actually happens when the computer spits it out the other end.

Mr. CLEMENT. Thank you very much.

Mrs. ZUSPANN. We have letters, thousands of letters. This is just a few, people writing to us about how they are having problems with the VA.

Mr. CLEMENT. All right. Any of the rest of you have a comment on that?

(No response.)

Mr. CLEMENT. Okay. Thank you.

Mr. KENNEDY. Mr. Gutierrez.

Mr. GUTIERREZ. Thank you, Chairman Kennedy.

First I would like to acknowledge your work, Mr. Kennedy, for bringing this issue to the public attention. You and Mr. Evans have been vocal advocates for the Persian Gulf veterans, and I hope to add my voice and energy to your efforts.

I would like to ask Mrs. Zuspann some continuing questions just so that we all have it clear for the record.

How was your husband before going to the Persian Gulf?

Mrs. ZUSPANN. My husband was active duty Navy and had just passed a physical. My husband used to run five miles a day and was in top condition. He had never really had any problems at all.

Mr. GUTIERREZ. How soon after the Persian Gulf?

Mrs. ZUSPANN. He was being treated while he was or he was being seen; he was not being treated, but he was reporting to sick bay. He virtually fell off the plane when he came home, and I had him at the doctor the very next day.

Mr. GUTIERREZ. And to date, is the Department of Defense, VA accepting responsibility for the payment of your husband's illness and medical treatment?

Mrs. ZUSPANN. No, sir. I have $170,000 worth of medical bills, and that is ongoing on a weekly basis. My husband is in a reverse oscillation situation because he has severe allergic reactions which are life threatening due to chemically induced injuries from Desert Storm. He is on oxygen 24 hours a day.

Mr. GUTIERREZ. So you are currently accumulating continuing debt——

Mrs. ZUSPANN. Yes, sir.

Mr. SILVESTER. In order to provide for medical care for your husband?

Mrs. ZUSPANN. Yes, sir, I am.

Mr. GUTIERREZ. And the VA says what to your claim?

Mrs. ZUSPANN. Well, in writing here, a letter from Dr. Mather to the regional office is that this is a precedent setting issue, the diagnosis that my husband has, multiple chemical sensitivity and the toxic exposures that he had in the Gulf, although they do say in his adjudication of his claim that he was exposed to multiple toxic exposures, including the oil spill fires.

He is service-connected 70 percent, only 30 percent for bronchial asthma, but she stated in the memorandum, which you have a copy of, that because she does not believe in multiple chemical sensitivity, although that is what he would have if she believed in it, that giving depression instead. So he has 50 percent depression, 30 percent bronchial asthma, which we just appealed at 100 percent because he is bedridden and has to stay in this isolation type situation or safe room, if you will, on a 24 hour basis because he has reactions to just the environment now, perfumes and things like that.

Mr. GUTIERREZ. Who, if anyone, is helping you now?

Mrs. ZUSPANN. Pardon me?

Mr. GUTIERREZ. Who, if anyone, is helping you?

Mrs. ZUSPANN. We have four different civilian physicians that are helping my husband: Dr. William Ray, Dr. Albert Johnson, Dr. Fox, and another doctor from Canada out of Dallas. They have not asked me for a dime. They have never asked me for a dime.

The pharmacy where I get my husband's IVs that he has to have for his nutritional supplementation because he is allergic to everything but ten foods, all of the Vitamin C foods he cannot have. He has severe allergic reactions to those. So some of his nutritional supplementation he has to have by IV. The pharmacy has not really asked me for those funds. They send me an invoice.

I had to get a nurse to come show me how to administer those IVs because the VA refused home health to administer those IVs. If my husband were to die, I fear that I might be charged with some sort of charge for administering medication without a license. So I have that to deal with, but I am willing to take that chance and go to jail to save my husband.

We lost our home. The doctors also are seeing other veterans, but they are telling——

Mr. GUTIERREZ. You lost your home? How did you lose your home?

Mrs. ZUSPANN. We lost our home to foreclosure. My husband was in Walter Reed in the VA Hospital for six months doing what I call public relations testing, which the veterans seem to be going through. While the VA did diagnose my husband with multiple chemical sensitivity, they told me that they could not treat him for that because they had not been given permission to do so by Washington; that I would just have to take him home and wait.

I took him home and waited. A week later my husband was in a critical care unit in Dallas. He was in this condition. The doctors were so upset they took pictures of him and said that it was just outrageous that this man would come to them after seven months in a military hospital and the VA system and not received any other health care other than diagnosis for his illnesses.

Now, my husband was given asthmacort, proventolin, those types of things, but he is highly allergic to the chemicals in those. They made him worse. That is what the VA gave him.

Mr. GUTIERREZ. Mr. Silvester, your son went over to the Persian Gulf?

Mr. SILVESTER. That is correct.

Mr. GUTIERREZ. Then you have asked for your son's medical records?

Mr. SILVESTER. That is correct. We have been trying for almost three years to get his medical records.

Mr. GUTIERREZ. You have been trying for three years to get them?

Mr. SILVESTER. Almost three years, yes, sir.

Mr. GUTIERREZ. Do you have any explanation of why you have not been able to get your son's medical records for three years?

Mr. SILVESTER. Even Congressman Combest has made two attempts. His office has made two attempts to receive those records. We get different excuses every time around.

Mr. GUTIERREZ. For medical records for the last few years?

Mr. SILVESTER. For medical records, yes, sir.

Mr. GUTIERREZ. Thank you.

Ms. Ralph, as a fellow Illinois resident, I want to welcome you here today. I think your involvement in the issue is particularly important as a sign of how urgent the problem is. That is because you and members of your group have seen this kind of situation before as radiation exposure affected your own loved ones. Therefore, you can recognize perhaps more than others when a veteran is truly not being served well.

I also realize that your group continues to promote issues of its own that it wishes to see action on, such as processing of claims under Public Law 100–321. Therefore, I am even more impressed

and moved that you are taking time and effort to reach out and help other groups of veterans.

Can you explain to us what you think we can do with Public Law 100–321 as regards to this particular issue?

Ms. RALPH. I wish there was a simple solution. We have tried everything. I think the system is backed up. I have talked with different people, and they tell me the Court of Veterans Appeals is a good system. I have to disagree. Why in the last five years have they only passed or honored three percent of less than 12,000 claims? That is a good question.

The Court of Veterans Appeals constantly are remanded information. They go through the court, and it backs up. It continuously backs up.

The atomic widows, because women hate paper work, just give up, and that is too bad because there are a lot of atomic widows sitting out there.

I just cannot believe that young Gulf widows with children are going to have to go through what we have gone through in the many years that have passed by. I hope that does not happen.

Mr. GUTIERREZ. I am sure there are those that will have it happen if no action is taken, and I think, Chairman Evans, the testimony is so powerful, and I am going to wait until this afternoon to see what it is that the VA and others are going to be saying in response to this kind of just overwhelming evidence, and I think that Mr. Kennedy made a good point about seeing if we could have some of the people who are here so that when people say there is no problem, we can get some resolution and see if we cannot get at least some simple things like medical records that are three years old for a Desert Storm veteran so that he can get proper care if not from VA, at least leave it up, as Mrs. Zuspann has had to do, to their own resources to get people well while the bureaucracy tries to figure out how to take care of our veterans.

Thank you all very, very much for your testimony. It has been very enlightening and very powerful, much more powerful and enlightening, I will tell you, than even these bright lights that for the first time have come upon this veterans' room.

We have had many hearings here, and this is the first time we have had any lights like this, and so I hope that the light beams that are shed here are shed across the country and maybe enlighten the Department of Veterans Affairs later on this afternoon. I hope they do not turn them off when they get here.

Thank you very much.

Mrs. ZUSPANN. They will be due to depression, I am sure.

(Laughter.)

Mr. EVANS (presiding). Does anyone else have any other questions?

Mr. BACHUS. I would like to just comment to all of you and anyone who is listening out there that it is a felony violation to turn away a veteran from a veterans' facility who is in need of emergency care, and that is true whether or not it is service related.

Mrs. ZUSPANN. We are going to file charges on that, sir.

Mr. BACHUS. Thank you.

Mr. EVANS. Anyone else?

(No response.)

Mr. EVANS. Thank you very much for your testimony today. You are excused now.

Mrs. ZUSPANN. Thank you.

Mr. SILVESTER. Thank you, Mr. Chairman.

Mr. EVANS. The members of our next panel are Steve Robertson, Bob Manhan, accompanied by Dr. Turner Camp, and Gary Wall, accompanied by William Crandell.

Steve is a Gulf War veteran and serves as Director of National Legislative Commission of the American Legion. Bob is Assistant Director of the National Legislative Service, Veterans of Foreign Wars of the United States. He is accompanied today by Dr. Turner Camp. Gary is President of the New Jersey State Council of Vietnam Veterans of America, and also serves as Chairman of the VVA Special Committee on Desert Storm Veterans. He is accompanied today by William Crandell, a legislative advocate.

The chair requests that all private conversations cease at this time or be conducted outside of the hearing room. Steve, we will start with you.

STATEMENT OF STEVE A. ROBERTSON, DIRECTOR, NATIONAL LEGISLATIVE COMMISSION, THE AMERICAN LEGION; BOB MANHAN, ASSISTANT DIRECTOR, NATIONAL LEGISLATIVE SERVICE, VETERANS OF FOREIGN WARS OF THE U.S., ACCOMPANIED BY DR. TURNER CAMP; GARY C. WALL, PRESIDENT, NEW JERSEY VIETNAM VETERANS OF AMERICAN STATE COUNCIL, ACCOMPANIED BY WILLIAM F. CRANDELL, LEGISLATIVE ADVOCATE

STATEMENT OF STEVE A. ROBERTSON

Mr. ROBERTSON. Thank you, Mr. Chairman.

The American Legion appreciates the opportunity to testify before this subcommittee concerning the medical care being offered to veterans of the Persian Gulf War. We applaud the chairman's leadership on holding these hearings on such a sensitive issue.

On August 2, 1990, the American Legion and the Vietnam Veterans of America filed a lawsuit against the U.S. Government for failing to aggressively pursue research on Agent Orange. That same day Iraq invaded Kuwait. Ironically, much of the concerns centered around the fear that Iraq might use nuclear, chemical, or biological warfare.

In October 1990, then President Bush granted three Legionnaires permission to visit the troops in Saudi Arabia. After identifying some of the materialistic needs of those veterans, the Legion activated its family support network.

Due to this degree of involvement, the American Legion began to receive information about sick Persian Gulf veterans. Symptoms covered a wide range: fever, diarrheas, skin rashes, fatigue, aching joints, bleeding gums, short memory loss, hair loss, respiratory problems, and hacking coughs. The possible causes covered a broad spectrum to include, but not limited to, inoculations, crude oil, burning oil well fires, pesticides, smoke from the burning landfills, insect bites, poor sanitary conditions, diesel exhaust, and radiation exposure.

In July 1991, the Senate Veterans' Affairs Committee held a series of hearings concerning readjustment problems of returning Desert Storm veterans. In its testimony, the American Legion addressed several problems, to include the health care concerns of recently separated veterans, as well as those on active duty.

The VA began releasing information on the number of Desert Storm veterans being seen at VA medical facilities. The early indication showed that the vast majority are being treated for psychological adjustment problems. The American Legion's efforts on behalf of post-traumatic stress disorder is well documented. However, the Legion became very concerned that PTSD was becoming the catch-all diagnosis and the real physiological problems were not being addressed.

Shortly after the troops began returning to the United States, there was a ban placed on Persian Gulf veterans from donating blood due to a disease called leishmaniasis, a blood parasite transmitted by sand flea bites. Very little was known about this disease, and there were very few leishmaniasis experts in the United States.

Mr. Chairman, there is no test commercially available to accurately detect leishmaniasis. There is no test that can be economically conducted on a large number of veterans. The Legion finds it hard to believe that only a handful of cases have been detected from the over 500,000 troops deployed. It has been reported that Saudi Arabia normally has about 16,000 cases reported a year.

If so little is known about leishmaniasis and testing is so inaccurate, how can DOD and VA health care professionals rule out a disease on such a large scale?

I attended a meeting of the Armed Forces Epidemiological Board in October of 1992, where recommendations were made to lift the ban on blood donations by Persian Gulf veterans. The experts on leishmaniasis did not produce any hard, clear facts to prove leishmaniasis cannot be transmitted by transfusion or to justify lifting the ban.

In fact, one expert suggested that the ban be kept in place until tests could be perfected to accurately diagnosis leishmaniasis. That recommendation fell on deaf ears.

Many of the ill veterans have expressed their concern over the inoculations they received while in the Persian Gulf. Many soldiers received inoculations for anthrax and botulism. Yet no documentation of those annotations appeared in their medical records.

The smoke from the oil well fires is still etched in the minds of all those who saw them. Many of the veterans have deep concerns about the hydrocarbons and the other byproducts of such large scale burning.

Pesticides were used to combat insects, such as flies, ticks, fleas. In tent cities, food, clothes, drinking water, sleeping quarters were exposed to the bug spraying fog machines used to dispense pesticides.

The American Legion was pleased when the Department of Defense began the Persian Gulf registry to track those who were deployed to the Persian Gulf and where their units were located. However, this registry failed to record those veterans reporting medical problems.

To date, DOD does not have an accurate listing of how many active duty personnel have complained of medical problems that the veterans believe may have been connected to their service in the Persian Gulf. The only numbers that they report are the confirmed cases of leishmaniasis—to my knowledge, there are only 28—and the depleted uranium exposure, which we understand was 35 of the people we shot ourselves with friendly fire.

The Legion was pleased when the VA and Congress agreed that a second registry was needed for Persian Gulf veterans who were complaining of continuing health care problems.

An area of great concern to the Legion is the failure of DOD and VA health care professionals to consider findings of health care professionals outside government health care systems. Repeatedly DOD and VA spokespersons have said that they will do everything possible to discover the problems faced by veterans. The Legion recommends that VA and DOD should either prove these outside professionals wrong or use their techniques of diagnosis and treatment to help other veterans.

The Legion is pleased and honored to have a member of its professional staff as a member of the VA's blue ribbon panel to review the medical problems of Desert Storm veterans. The Legion hopes that the members of that panel will review the official proceedings of this hearing and thoroughly investigate the complaints that were lodged today.

Mr. Chairman, the American Legion applauds those private citizens who have joined its effort on behalf of the ill Desert Storm veterans. Their persistence, dedication, and determination have helped unite veterans who have felt lost, rejected, and forgotten into a coalition seeking military help, medical help, and justice. They, too, have seen veterans go into a serious debt seeking medical answers, while their family members had to watch their lives going into a financial tailspin.

Those veterans ask no more of their government than what their government asked of them: dedication and commitment.

That concludes my statement.

Mr. EVANS. Thank you, Mr. Robertson.

[The prepared statement of Mr. Robertson appears on p. 242.]

Mr. EVANS. Mr. Manhan, in about five minutes, we are going to have to suspend for a vote on the floor, but you can proceed now if you can complete your statement in about five minutes, we would appreciate it.

STATEMENT OF BOB MANHAN

Mr. MANHAN. Yes, Mr. Chairman.

It is my pleasure to appear here this afternoon on behalf of many thousands of the veterans from Operation Desert Shield/Desert Storm members of the VFW's 2,200,000 strong organization. Two of our national commanders have visited American combat troops in the Persian Gulf since 1990. We were one of the early veteran organizations to ask VA to recognize the implications for respiratory disorder illnesses that were coming out of the Gulf. We also asked VA to establish a Persian Gulf registry.

In 1992, subsequent legislation was passed, the Veterans Health Care Act, and both of our recommendations were incorporated into that law.

The VFW's medical consultant, Dr. Turner Camp, has accompanied me to the witness table today. He was a member of the VA's Persian Gulf expert scientific panel.

The remainder of our testimony is filled with all of the concerns and all of the issues that everyone who has already preceded me this morning has testified upon. I will only highlight two recommendations that we offer your committee to consider.

The first revolves around the fact that the Department of Defense maintains its own active duty Persian Gulf registry. We recommend that that registry be immediately integrated into Department of Veterans Affairs Persian Gulf registry so that when the active duty person reverts to veteran status, he will immediately get into the VA system, and we will not go through the usual drill about waiting for medical records.

The second issue that we are very concerned about is the Department of Veterans Affairs' budget request for fiscal year 1994, specifically as it focuses on the medical research program. It is very underfunded in the judgment of the VFW.

VA's Gulf medical people are involved in some medical research that is looking into all of the complex issues regarding multiple chemical sensitivities and the chronic fatigue syndromes that we have heard a lot about prior to this statement. Those studies should continue to be funded for fiscal year 1994, which starts in four months. At this time there are no research monies budgeted for this program.

If the money could be forthcoming, not only can the medical studies continue, but there will be a bonus effect for the VA in that they can maintain their medical liaison with many of Department of Defense's own medical experts.

This concludes our summary. Thank you very much, Mr. Chairman.

[The prepared statement of Mr. Manhan appears on p. 255.]

Mr. EVANS. Sorry to rush you in any way, but I appreciate your brevity.

We will stand adjourned now because of the pending floor vote and return, or in recess I should say, and will resume probably in 15 minutes.

[Recess.]

Mr. EVANS. We will resume the hearing and the chair regrets any inconvenience of the witnesses who have waited so long. Let's pick up where we left off with Mr. Wall and Mr. Crandell.

Mr. CRANDELL. Thank you, Mr. Chairman.

Mr. EVANS. Please pull that microphone closer to you.

STATEMENT OF GARY C. WALL

Mr. CRANDELL. Mr. Chairman and members of the committee, Vietnam Veterans of America wants to express its appreciation of your efforts to move this issue forward. Our concern as Vietnam vets is a very serious one in behalf of the Persian Gulf vets, not least of all because a significant number of Vietnam veterans, both

those who stayed on active duty and those who served in the Guard and in the Reserves, are also Gulf vets.

I would like to turn the microphone over to Gary Wall, the Chairman of our Special Committee on Desert Storm Veterans and their Families.

Mr. WALL. Mr. Chairman and members of the subcommittee, Vietnam Veterans of America is pleased to have the opportunity to present testimony regarding the experiences of Persian Gulf War veterans. Coupled with yesterday's testimony regarding the claims, we have taken the opportunity to discuss a full range of health issues concerning Desert Storm veterans and their resulting claims and benefits.

After today's testimony, it is very clear to realize that the parades and the pats on the back are ended. The harsh reality has set in for many Desert Storm veterans that they are mentally or physically incapacitated, and that feeling has replaced the euphoria of the victory celebrations.

Serious health problems exist among the returning veterans and their families. Many veterans are too sick to work. Some report their spouses as having miscarriages, kidney infections, hair loss, rashes complete with lesions, and all are afraid. They are afraid of their deteriorating health situation. They are afraid of the economic disaster that they have already experienced by paying for their medical diagnosis and treatment out of their own pockets. They are afraid that their disabilities will prevent them from gainful employment, and even if employed, that they will not be able to secure health or life insurance for their family or themselves due to preexisting conditions or exorbitant premium ratings.

VA has established some special hospitals, specialized hospitals, to take care of veterans reporting problems from Desert Storm. It is incumbent upon Congress to understand what happens when an individual reports to one of those facilities, and as an example, I would offer Mr. Nick Kresch.

Mr. Kresch has been suffering from fatigue, joint and muscle aches, rectal bleeding, and a plethora of other health problems. He was advised by the Hinds Medical Facility in Illinois to go to the West Los Angeles VA facility, a specialized care station.

Mr. Kresch is unable to work and is without funding. Upon arrival in Los Angeles, the VA denied knowledge of his coming. He was kept in the emergency room for over six hours. He eventually met with a panel in the hospital, at which time he was advised that he would have to stay in a domicile unit. He would be responsible for the cost of his own meals and for the privilege of staying, his job would be to wax and buff the floors in the domicile unit. This is after reporting to the VA in the hospital that he was incapable of working.

Is that the type of treatment that we should be exposing someone to who may be suffering from the effects of chemical exposure, to exploit them, to put them to work in a hospital to pay for their own way?

There are horror stories. You have heard many of them this morning. Some of what I have in front of me pales in comparison to the stories that you have heard, but it is understood and it must

be understood that diagnosis, research and treatment cannot be our only concern.

The inability of these affected veterans to secure gainful employment and the financial burden that has already been placed upon them are contributing to their plight. We strongly urge Congress to allow a partial reopening of some of the military installations that have been scheduled for closure, specifically those installations equipped with hospital facilities and base housing.

Equipping and modifying one of these hospitals to function as a facility for diagnosis and treatment of multiple chemical sensitivity, another for radiation exposure, et cetera, will reduce the cost of any program to the VA. The housing units could house the families of veterans who were involved in the program. This type of program would allow the family to exist as a unit and prevent the impending financial and emotional disasters that have already claimed many.

I might mention that if McDonald's can recognize the need to keep families together through the Ronald McDonald Houses, the government can surely do the same for those who have protected this Nation and served at their government's request.

The question is: should the men and women who defend our Nation, allowing our freedoms to exist and flourish, be denied the best treatment available?

Members of the committee, Mr. Chairman, the VA is out of their league in this issue. They are not equipped to research. They are not equipped to diagnose, and they are not equipped to treat the ailments being suffered by the Desert Storm veterans.

For purpose of illustration, a few examples are definitely in order. We would refer you to Mrs. Hester Adcock, whose son Michael, a Desert Storm Reservist, died of T-cell lymphoblastic lymphoma last year. Her son was not treated by the VA, but had to be put in a civilian hospital. The cost of his treatment financially was over $300,000 and borne by his commercial insurance carrier.

Nothing we can do can lessen the pain and anger that she feels towards the abandonment of her son by all but her family. What we can do, however, is that no other mother of a veteran will be forced to endure this same abandonment.

Mrs. Adcock is here today, and we strongly urge the subcommittee to discuss this issue directly with her.

Also consider the case of Karen May of New York. Her husband is also a Desert Storm veteran. His job was to transport ammunition for the field artillery of the 1st Cav. He was diagnosed after his discharge with squamous cell carcinoma of the nasal septum, paranasal sinus and nasal cavity. His nose, upper jaw, the roof of his mouth, and the clivus bone at the back of his face have been removed. It is malignant.

He has also been treated with radiation therapy and is now addicted to codeine. His family sent a letter to the VA requesting an appointment in June. Finally after no response from the VA, they walked into the VA in August. Her husband was diagnosed and treated for allergies. Had it not been for her persistence, the VA would have refused further treatment. We will be more than happy to put this committee in contact with Mrs. May.

Active duty military personnel report in anonymity that their concerns are not being legitimately handled. So great is their fear of reprisal that their wives are taking up the fight in order to preserve their military careers. Such is the case of Mrs. Terry Small, whose husband, an active duty Desert Storm veteran, became sick on his return. He lost over 45 pounds, suffered from chronic diarrhea, total body hair loss, extreme fatigue, aching muscles and joint pain. Their daughter, Alex, conceived after Desert Storm suffered from respiratory infections and urinary tract infections.

Mrs. Small has been bothered by kidney infections and recurring rash and a slight hair loss. Mrs. Small, as many of you know, has made repeated trips to Washington at her own mental and financial expense. The price that she has paid to gain attention to the plight of Desert Storm veterans and active duty Desert Storm veterans has been financial ruin and the destruction of her marriage.

Active duty military personnel and discharged veterans report that the documentation that is so desperately needed to support future claims presented in the VA is not being appropriately assembled. Congress must take on the responsibility of securing information with regard to the health, treatment and documentation of the sick active duty military personnel and their families. This must be done with protection of their confidentiality by Congress so that their voice may be heard without fear of reprisal.

The failure of the military to accurately report, document, diagnose and treat their ailments will result in more veterans being dumped into the VA system who will have nothing to look forward to but delayed and denied claims while they bear the burden of proof that their illness is the result of military service.

In conclusion these items are not new to those of us who have had a real concern for veterans and active duty military personnel. It has been exemplified in the DOD and VA treatment of those who were involved in nuclear testing, testing of LSD and other drugs, mustard gas testing, and exposure during World War II, Agent Orange exposure and now the Desert Storm disabilities.

While we are here again today on behalf of those who are sick and dying, history permits no optimism, only hope. It is apparently easier to give the Pentagon billions in unneeded funds than it is to put far fewer dollars into research, diagnosis and treatment of our veterans' population.

Finally, and in slight disagreement with the folks who testified earlier, as a veteran of the Vietnam era, a veteran's activist, and a parent who has seen first hand the VA's method of operation and the failure of the government to act decisively to rectify, recognize, diagnose, treat, and compensate illnesses associated with military services, I would ask you gentlemen to tell me something that would convince me to allow my son to serve this country in the U.S. military.

Mr. Chairman, this concludes our testimony.

[The prepared statement of Mr. Wall appears on p. 258.]

Mr. GUTIERREZ (presiding). Thank you very much for your testimony.

Your suggestion, Mr. Wall, that the subcommittee meet with Mrs. Adcock is appreciated, and Chairman Evans met with her ear-

lier today, and I think that we are going to have a lot of meetings as the hearing progresses and as the information arrives to us.

It seems to me, given the earlier testimony and the testimony of members of this current panel, that diagnosis seems to be a big part of the problem. Is the VA properly equipped—and any one of the members of this panel can answer these questions—to diagnose properly, and if not, who is equipped to properly diagnose?

Mr. WALL. This is a brand new area that we have entered into, a completely different arena than you have seen before. The field of multiple chemical sensitivity and the specialized industrial and occupational medicine fields are primarily where this type of work needs to be done.

The Department of Veterans Affairs nor the Department of Defense is geared up to handle that. They do not have the research staff available, and as a point in fact, the budget for research was just recently cut by some $26 million.

So the Dapartment of Veterans Affairs is not equipped to handle this. They do not have the staffing, nor do they have the doctors. In the interim while they are diagnosing these problems or misdiagnosing these problems, they are trying to teach and train their entire medical staff in each VA facility as to how to handle the problem.

That is totally unacceptable because what results from that is mistreatment or maltreatment of the veteran who goes into the hospital looking for assistance. This needs to be moved, and we have urged in our testimony that Congress push for legislation that would establish the use of hospital facilities and university facilities that specialize in the area of occupational and industrial medicine and allow both active duty military, veterans, and families, including children who were conceived after Desert Storm, to be taken to those hospitals at the government's expense and to have them tested, diagnosed and treated in that hospital.

Mr. ROBERTSON. Mr. Chairman, as mentioned in our testimony, we are very concerned about the tunnel vision that is being used as far as outside agencies, those doctors outside of the government arena. With Dr. Hyman in particular, I sent him two urine specimens which came back positive. I was also seeing a DOD doctor about my medical problems who used a lot of fancy talk and persuasion for me not to go down to receive the medical treatment from Dr. Hyman.

He all but called Dr. Hyman a quack, and when I asked Dr. Mather about Dr. Hyman, she related to me in a meeting that he was very uncooperative and was not willing to share what he had.

In personal contact with Dr. Hyman via telephone calls, I see him as a very open person, willing to discuss every aspect of what he was doing, and he repeatedly said that he was willing to share with the VA and DOD what he has, but that in telephone conversations he was being rejected by both agencies.

As a matter of fact, I was the person that referred Mr. Hollingsworth to see Dr. Hyman, and there are a lot of veterans. I know Carol made a comment about she had tried to contact Dr. Hyman. I am sure he will tell you later in his testimony that he was bombarded with telephone calls after he was publicly disclosed on one of the television networks. His phone just was bombarded with

phone calls of Desert Storm veterans and family members that were desperately trying to find any kind of a cure that would bring their spouses and loved ones back into a whole state.

I know personally it was a very tough battle within me to decide not to go down to see Dr. Hyman. I felt that it was incumbent upon me as a representative of a veterans' organization to use the system the way it is intended to do, to force VA and DOD to listen to what he has to say, and if I am going to go down there, I am going to be going as a veteran or as a military dependent, and I am going to use the system the way it is supposed to be used.

Now, it is costing me my health, but if that is what the price is, then that is what I am willing to pay.

Mr. CRANDELL. I would like to add one other comment about the diagnostic problems, and that is in terms of the VA and post-traumatic stress disorder. We have heard a number of stories, all of us at this point, of people with serious physical symptoms being told that what they have really got is post-traumatic stress disorder for which they are then given a very low rating.

Now, in fact, the VA has, as the subcommittee knows, a terrible history with PTSD. For Vietnam vets, for Korea vets, for World War II vets, it is very difficult to get a rating of any kind for post-traumatic stress disorder. I have a friend who was a recon Marine who is 100 percent disabled, and it took him 20 years to establish that claim.

To then have somebody with physical symptoms go into the VA and be told, "No problem. PTSD," shows that PTSD is still not taken seriously either, that it is being treated as a junk disease, and that is wrong.

Mr. GUTIERREZ. Do any of the members of the panel believe that some of the reluctancy or that there might be reluctancy of members of the Armed Forces who served in Desert Storm to go and use the outside medical facilities, outside of the VA, for fear that later on they might not be eligible?

Mr. ROBERTSON. Absolutely, sir. That was a major factor in my decision. My wife is an active duty captain in the Air Force. So I am entitled to DOD health care as a dependent. If I were to go down to see Dr. Hyman and the massive doses of antibiotics that he gave me, if I had an adverse reaction to them or in some way became worse because of his treatment, then DOD and VA would look at me and say, "Hey, we are not going to touch this with a ten foot pole. You made this decision on your own."

Mr. GUTIERREZ. So there is a duality to the problem. Obviously the testimony is that the Department of Veterans Affairs and Department of Defense do not adequately have people to diagnose, nor are they treating people properly, and then if you use outside sources, once we hopefully do resolve this and do come to some kind of conclusion, you might not be eligible.

I just have one last question. Does anyone on this panel—and it has been asked of other panelists—have any idea of how many Gulf War veterans have health problems related to Gulf service and what the basis of your answer might be?

Mr. ROBERTSON. Sir, there are 4,000 on the VA registry that we are aware of. As I mentioned in my testimony, DOD does not keep a running list of how many soldiers like SFC Picou, who came for-

ward today and acknowledged that she has fellow veterans that are also sick that are still on active duty. Their ability to account for their troops is nonexistent.

I have heard repeated stories from active duty people that call me, and I have a list of them that are willing to talk to anybody on this committee, to talk to any committee, whether it be Armed Services in either chamber, of a Marine that was throwing up ever since he has returned from the Persian Gulf. He was doing his Physical Training test. In the middle of his pull-ups, he started throwing up. He asked if he could finish his PT test, and they said, "No, you stopped. You flunk."

So what is going to happen to this guy? Is he going to be discharged because of his nonperformance of duty, not because of his medical problem. When he went to the medical system within the Marine Corps, and I do not think the Marine Corps has a medical system; it is the Navy's medical system, but they told him that he was suffering from PTSD, and that they do not treat PTSD on active duty, and that if he needed help, go out and get some health care insurance and get treated on his own. He will come here and testify to that.

And this soldier will not reenlist. He is completely disillusioned by the military and the way he has been treated, and he is right now receiving health treatment from a private source, and it is coming out of his pocket. He is going to a chemical sensitivity/environmental medicine expert while he is on active duty, and attempts that he had tried to bring those diagnoses, those test results and have them incorporated in his military, he is being told, "We did not send you there. They will not be included in your military records."

Mr. WALL. There is additional information with regard to that. Mrs. Small's husband was given a blood test by an outside testing facility. Her husband took the medical testing data back to the military hospital, and they refused to accept and admit that blood testing results into his medical record.

Mr. GUTIERREZ. Well, thank you very much.

We will continue with questioning from Mr. Buyer from Indiana.

Mr. BUYER. Thank you, Mr. Chairman.

Mr. Robertson, I am touched by your testimony, and we have had some conversations before. In your statement, you referred to the military as trying to label this the post-traumatic stress disorder, kind of as a catch-all. I think that is a fairly accurate statement.

And you made allusions to what occurred in Indiana with members of the 123rd RCOM and how that and other doctors began to pick up on it, rather than focusing on the exact problem, and, Mr. Wall, you went right at it.

Your statements, I read them all last night. I was up until 1:30 last night reading all of the statements of everyone so I could get a good feel and flavor, and, Mr. Wall, yours was perhaps the most harsh of everyone's statement probably because of your interpersonal feelings of what occurred to you and your comrades from the Vietnam era with Agent Orange, and that I could sense easily, and I respect your words.

I also have a son and also have this Gulf War illness, but I would not turn to my son and say, "Don't enlist in the United States

Army," or into the United States military. I do not look upon it as harshly as you do. It depends upon other issues of the present, gays in the military and those kinds of things, but let's not take that up today.

(Laughter.)

But what we are dealing with here is a great opportunity. I really think we have a great opportunity to move forward environmental science in America, and we have an opportunity because we have a segment of our population out there that has some multiple chemical sensitivities.

The VA is not on trial here. The Army medical or the military medical community is not on trial here. These are individuals who are trained, well trained, to have diagnosis upon certain symptoms in which they are trained to treat, and when you are talking about areas in which they do not have the education, background, we are talking about medical ignorance, not medical stupidity.

And I believe that the military medical community did a very good job in doing what they could on preventive medicine for Desert Shield and Desert Storm up front, trying to get us informed of all the many different things, but when you walk into an environment and are subjected to things of which you have no idea at the time and only later do you begin to have problems, the most important thing is the recognition that there is, in fact, a problem.

I agree with you, Mr. Wall, that the United States should take the up-front responsibilities of the funding, and I know, Mr. Robertson, in your particular statement, you kind of allude that it should be sort of an outside agency. Therein lies the thing about overall trust that makes it very difficult, and I understand that personally because I am not even on the VA registry and would not participate in that first study at Indianapolis because I knew they were going to call it post-traumatic stress disorder before it ever even came out. I knew exactly what they were going to do, and was completely disappointed when that, in fact, happened.

But I think that these hearings are a great process, and I applaud your advocacy on behalf of these veterans. You are speaking for many who do not have the courage to speak up yet and are still in the denial phase, and many of whom are caught up in a system right now which seeks and needs to be corrected. That is where I join the spirit of your testimony, and especially yours, Mr. Wall, because of how stringent and how harsh it was with the system, but I recognize the spirit from which it is being given.

Thank you, gentlemen.

Mr. ROBERTSON. Mr. Buyer, I would suggest if you call your VA facility and get your name on the list now, you will have your physical by the time the session ends.

(Laughter.)

Mr. BUYER. I will bet you are right, Mr. Robertson. You are probably absolutely right. No, I have had a lot of physicals and am under treatment at this point in time, but you are absolutely right.

Thank you, Mr. Chairman.

Mr. EVANS. Thank you.

And we want to thank this panel. We think it is very important for veterans' organizations that have been around for a great many years to help out for some of the new kids on the block, you might

say. They are not kids, but they certainly have served this country, and they need your organizational support, and it is very heartening to see it.

Thank you very much.

Mr. ROBERTSON. Thank you.

Mr. EVANS. We will now call forth our next panel, which is comprised of Richard Schneider, Bob Miller, Erik Johnson, and Robert Ensslin. These distinguished four individuals represent, respectively, the Non-Commissioned Officers Association, the Air Force Sergeants Association, the Association of the U.S. Army, and the National Guard Association of the United States. If they would come forward, we will get them seated and hear from them.

STATEMENTS OF RICHARD SCHNEIDER, DIRECTOR OF STATE/VETERANS AFFAIRS, NON-COMMISSIONED OFFICERS ASSOCIATION; CHIEF M. SGT. BOB MILLER, LEGISLATIVE AFFAIRS MANAGER, AIR FORCE SERGEANTS ASSOCIATION; COL. ERIK G. JOHNSON, JR., DIRECTOR, LEGISLATIVE AFFAIRS, ASSOCIATION OF THE U.S. ARMY; AND MAJ. GEN. ROBERT F. ENSSLIN, JR., EXECUTIVE DIRECTOR, NATIONAL GUARD ASSOCIATION OF THE U.S.

STATEMENT OF RICHARD SCHNEIDER

Mr. SCHNEIDER. Thank you very much, Mr. Chairman. I appreciate the opportunity to be here.

But more than that, I appreciate the opportunity that this committee is looking at this issue because now is the time.

I have a statement. It has been submitted for the record. It goes into the background. It goes into the war. It tells about the history. It tells about the smoke clouds that have risen, but we do not need to go into that now. We have heard that story.

I would like to go directly to the issue that we have as a Non-Commissioned Officers Association, and I would point out that the Marine Corps League also supports our positions and asked to be identified on the record as a part of this testimony.

What I would say to you today is not from a medical perspective, but it is from a perspective of a national veterans' service officer. It is from the perspective of an organization that serves both the active duty enlisted military of all branches of service, including the Guard and Reserve components. It includes the veterans and the retirees, the veterans of the Persian Gulf War.

What I would submit to you today is that we have a problem. I cannot define the problem for you, but there is a medical problem today. I cannot tell you the number of people. I can tell you I believe it is relatively small compared to the number of people that have gone to the Persian Gulf War.

I can tell you that our national service officers have reported their dialogues with veterans and, more importantly, people on active duty, and here is what they have to say.

They are concerned. They are concerned that they have a problem, that they go to their medical treatment facility and regrettably, the doctors there are not qualified in their judgment in this new area of environmental medicine of chemical sensitivities. We have people who are being given every test, and I do not doubt the

sincerity of the tests that are being given and the efforts that are being given on their behalf. They are being given every test, and you will hear the reports from the DOD doctors that say people come up clear. Yet people have inflamed joints. Yet people have aching. Yet people have the diarrhea. Yet people have all of the things that you have heard today.

And what does it mean? It means a person goes back to duty or it means a person is looked at very skeptically by a doctor. It means that a person may be subject to a lump sum disability separation payment because of a physical disability. He will be separated for a disability that is not diagnosed, that is not recognized, and to which he has not been adequately treated by his perception of the environment in which he is serving.

If the person is not separated because of that military disability, he will go back to the work place, and herein lies another problem because we have people who go back to the work place that do not have physical waivers, that there is, quote, nothing wrong with them, perhaps some stress, but they go back to the work place, and they are required to perform and to meet the standards or their grade and service experience. They are required to perform to those physical levels that is expected of all soldiers, sailors, airmen and Marines, Coasties, and they cannot pass the physical test.

So then they come up under a qualitative standard, and the qualitative standard says you do not meet the physical profile for retention in this military, and they are separated under administrative procedures. We believe that is atrocious.

One of our recommendations is that for Persian Gulf veterans being separated for failure to meet physical standards, that every one of those people's cases ought to be reviewed in relation to the medical record.

We believe for the people who are going to get a lump sum disability separation and be separated from the military service, that their records ought to be looked at, and that diagnosis ought to be looked at, and if there is no diagnosis, the question ought to be asked: what is wrong with this person and why are we separating?

And when we send them to the VA, are they going to be able to get treatment if there is nothing wrong with these people? We need to protect the people who are in service who because of whatever happened in the Gulf have reacted, and again, that number being small makes them more suspect.

If an entire organization or a military unit was laying behind us here, that is more palatable than to have one of 300, but the reality is the one of 300 may be sick. His allegation may be true, and we need to concern ourselves with that allegation.

I would like to point out to you that military medical care is suspect by people. If people go to the doctors, they realize that they are putting themselves possibly in jeopardy for a medical disability separation; that, secondly, if they go back to their unit and they fail their test, they are being looked at for an administrative separation; and there is a mistrust of the medical facility to look at them and treat them as individuals.

And, again, I would throw this out to you, ladies and gentlemen. The care for these people is the best that the military can give. I do not believe the doctors have been trained to take care of the

problems that exist today. The military service is not there to produce medical research, and I do not think we can fault the medical treatment facilities of the military services.

Likewise, the Department of Veterans Affairs is waiting and getting these veterans as they come across from active duty to the VA community. I would throw out to you that the VA has reacted very wisely and very logically in establishing their task force and establishing the parameters of research which they have established, but they are looking into the allegation and are willing to work that and do the research that is necessary.

I would throw out to you this fact. The credibility of both the military and the VA is going to be suspect if either organization says the conditions that the people have are not related to Persian Gulf War or related to chemical sensitivity. We as an organization respect both the DOD medical; we respect the VA intensely on their medical side. We realize there are shortcomings, but we will work with those shortcomings.

Our recommendation contained on the paper is that we go to a civilian task force, possibly led by NIH or some other group, and that we advocate that the leadership include dimensions of both the VA and the DOD, and that all through the process of research that the American citizens and, most importantly, the veterans and active duty people be kept informed of the progress.

I have a red light. I will stop.

Thank you.

[The prepared statement of Mr. Schneider appears on p. 269.]

Mr. EVANS. Thank you very much.

General Ensslin, pull that microphone directly in front of you, please.

STATEMENT OF MAJ. GEN. ROBERT F. ENSSLIN, JR.

General ENSSLIN. Thank you, Mr. Chairman.

The National Guard Association would like to express its appreciation to this committee and its members for all that you have done and continue to do to take care of the Guardsmen and Reservists who have been called to the service of their country.

Mr. Representative Kennedy's testimony this morning in regard to the 325th Maintenance Company really is close to home for me. During Desert Storm, I was the Adjutant General for the State of Florida, and responsible for the mobilization, deployment, and demobilization of the 325th. The 325th represents an example of how the system can break down.

Fortunately, the experience of the 325th was not a typical experience, but as was pointed out, they were assigned to do the painting with very toxic paint in Saudi Arabia. Word got back to our headquarters in St. Augustine, through the families, that this painting was taking place over there in the desert and that there were no protective masks and no protective clothing made available to the soldiers who were performing this task, although they registered their complaints, they were told to continue to march.

When we learned of this, we reported it through Inspector General channels, figuring that that would very quickly bring a focus on it and really wind this up. That did not take place. It was not until I took the issue to the 2nd Army Commander, Lieutenant

General Jim Kreisel, and he personally took it up with General Pagonis, the logistics guru of the desert, that this practice ended and protective equipment was acquired and the painting proceeded properly.

We had a concern about these soldiers when they returned, and we sought to follow up at the demobilization station, but there was such a crush and such an accelerated effort to get these guys off active duty and back into the communities that they did not 100 percent receive physical examinations.

It should be a requirement that everybody separated from active duty have a very thorough physical examination to provide a base line to track the further development of these various mystery diseases at a later period in time.

The follow-up is continuing. These soldiers were examined at their home stations after they got back. I talked to the Florida National Guard this week, and that unit has just completed annual training, and there was a 100 percent examination done of all their soldiers during that annual training period to further track their physical condition.

There are eight cases that are being evaluated at the present time in the Florida National Guard, and I believe that the bulk of them are with the 325th, but it is very important that the mobilized soldiers particularly have confidence that the leadership cares for them and that the leadership is interested in their welfare.

In this particular case, there was a breakdown. Fortunately across the whole system there was not a widespread breakdown, but even one exception is too many when we are talking about soldiers and their welfare.

So I would say that we would urge that greater attention and greater follow-up be provided when these forces that are mobilized in future operations are demobilized. I think that we have enough experience now to know that we can anticipate in the future other events of this sort, and we need to have the mechanism in place now to be able to deal with it when the time comes.

And, Mr. Chairman, we again thank you for the opportunity to be here and to participate.

Mr. EVANS. Thank you.

[The prepared statement of General Ensslin appears on p. 281.]

Mr. EVANS. General, before we go on to the next witness, I want you to know that this has been a problem even with post-Persian Gulf veterans. I found out in the course of a hearing on another topic here in this committee room that the Navy and Marine Corps at least are not now because of the downsizing offering any physicals in some cases.

So we have received some communication back from the Assistant Secretary of Defense for Force Management and Personnel indicating that they are reviewing this policy right now. So I wanted you to know that, of course, this is a problem that affected the Persian Gulf veterans, and it is affecting today's people who are being discharged, as well.

General ENSSLIN. As was said earlier, when you have been in the desert for eight months and somebody said you can waive your physical exam and go on home, because it may take us a couple of weeks to get around to giving you your physical examination,

you know what the soldier's decision is. He feels so damned good to be going home he just wants to get all the way home as quick as possible.

Mr. EVANS. We are told that a final uniformed separation physical policy is expected to be in place by October 1993, several months from now, but at least it has got their attention, and we appreciate you bringing it up.

Colonel Johnson.

STATEMENT OF COL. ERIK G. JOHNSON, JR.

Colonel JOHNSON. Thank you, Mr. Chairman.

The Association of the United States Army is very pleased to be here and to present testimony today, and on behalf of our membership, we want to encourage this committee to do exactly what it is doing.

It has been our observation that nothing invigorates government bureaucracy like a little congressional oversight, and this is what you are doing, and we are very pleased.

We also believe that there are some kudos that are due for the Army and, in particular, the Army Medical Department. I am just absolutely delighted that you will be hearing from, as I understand from the witness list, Dr. Blanck this afternoon because he has a very fine reputation as a very caring doctor in the Army, and it was his initiative, as we understand it, that got a lot of the programs going to recognize and identify these mysterious diseases that are affecting even some of the active duty folks.

And so we think that he deserves a kudo there, too, and I am glad that you are going to be hearing from him this afternoon.

We think there is a definite need to continue the scientific investigation into these various mysterious illnesses. We do not see either the VA or the Department of Defense having the resources to do that. What we would like to suggest is that you have the VA doing its thing; you have the Department of Defense doing its thing; and you have Persian Gulf War veterans who are out in the civilian communities going to civilian doctors. All three sectors are discovering things, and some of them may be very legitimate, but there is nobody putting it all together. Nobody is looking at all sides of it and saying, "Hey, this looks reasonable. Let's look into that a little more."

The Defense Department is pursuing it, and particularly the Army is the one I can speak for, within their capabilities, but they do not have the capability necessarily at the proper level to go out in the civilian community and find out what the veterans have been experiencing, or what civilian practioners are discovering.

And so we would urge you to do that, and once again, thank you for this opportunity to appear before you and to testify.

Thank you.

Mr. EVANS. Thank you.

[The prepared statement of Colonel Johnson appears on p. 277.]

Mr. EVANS. Mr. Miller.

STATEMENT OF CHIEF M. SGT. BOB MILLER

Sergeant MILLER. Thank you, Mr. Chairman and the committee members.

The Air Force Sergeants Association truly appreciates having this opportunity to present its views on behalf of our 167,000 members and all active duty, retired and veteran enlisted personnel, Air Force, Air Force Reserve, and Air National Guard. We sincerely thank each of you for the efforts that you have done on behalf of the Nation's veterans.

My oral remarks will be a summary of our views. My statement has been submitted to your staff for entry into the record.

As you are aware thousands of our brave veterans have suffered excessively over the years from unusual or mystifying ailments. For example, the VA recently announced that it has expanded the list of recognized long term effects of significant exposure to mustard gas. As a result, an estimated 4,000 World War II veterans who were subjected to high concentrations of mustard gas in full chamber and field testing may finally, after 50 years, be eligible for a VA disability compensation for health problems resulting from their exposure during those experiments.

Also included are veterans who were exposed during World War I.

Then in Vietnam we had the Agent Orange tragedy, and to this day over 20 years later, the casualties continue to mount from that exposure. Now to our dismay it is apparent that we are experiencing a similar tragedy among Persian Gulf War veterans. We have learned that thousands of Persian Gulf War veterans have service-connected ailments and hundreds have died. These veterans survived the normal hazards of battle only to die from other service related causes.

How many more will suffer before we can act on this problem?

It is our position that every sick veteran deserves to be quickly diagnosed and provided quality, state-of-the-art health care. These veterans are suffering from ailments with symptoms such as fatigue, skin rash, headache, memory loss, muscle and joint pain, shortness of breath, cough, diarrhea, suicidal tendencies, and chest pain. We believe the sources of these ailments may include chemical sensitivity, parasitic exposure, radiation from depleted uranium, investigational drugs that may have been used by the U.S. government, and post-traumatic stress disorder.

Some actions have been taken to assist affected veterans. With your help, a Gulf registry was established to track their health. The VA has assembled a panel of experts to examine the possible health effects of service in the Persian Gulf, and the VA established three referral centers to handle unusual symptoms in Persian Gulf War veterans.

In spite of these positive steps, many victims are still not diagnosed and await adequate care as they become gravely ill. During this hearing you have heard witnesses tell their personal stories about the facts surrounding extreme suffering of loved ones who served in the Persian Gulf. I urge your positive reaction to these reports.

This is not just a veteran problem. Approximately one-third of those suffering are active duty, including Guard and Reserve. Within this group, a smaller problem seems to have been identified among Air Force members. VA and DOD health care professionals

do not seem to have the expertise necessary to properly diagnose and treat these suffering veterans.

Conversely, we have learned that there may be as many as 600 certified experts within the private sector that could assist if the framework, coordination and funding transfer capabilities existed.

AFSA offers the following suggestions as the committee continues to investigate and react to this critical issue on behalf of the heroes of Desert Storm:

(1) We must insure immediate diagnosis and treatment is provided for the gravely ill members. (2) Action must be taken to insure medical records are available to assist in the diagnostic process. (3) We must require direct coordination and transfer of knowledge and expertise between DOD, the VA, each of the military services, and certified private sector experts. (4) We need to establish a suicide hotline. (5) Insure that long-term research continues. (6) Establish regional centers to provide temporary housing, daily medical treatment, and vocational training until the patient is well and self-sufficient. (You might consider current facilities on projected base closure sites for this purpose.) (7) Issue a general health warning to Persian Gulf War veterans and their family members on the variety of possible conditions that may occur, including the extent and gravity of those conditions. (8) Provide a means to Persian Gulf War veterans for contacting and paying for services of health care providers who are certified in this area of expertise. (9) Compile and disseminate to Persian Gulf War veterans periodically updated summaries of advances in diagnostic and treatment techniques.

Mr. Chairman, this committee's role is invaluable to the well-being of our Persian Gulf veterans who are ailing. AFSA is confident that you will leave no stone unturned to overcome this problem before you today.

Thank you for hearing our views, sir.

Mr. EVANS. Thank you all very much.

[The prepared statement Sergeant Miller appears on p. 273.]

Mr. EVANS. It is also great to see all of the established groups representing the Reserves and the non-commissioned officers and the Association of the Army joining in this effort to help the Persian Gulf veterans. So we thank you very much.

Does the gentleman from Indiana have any questions?

Mr. BUYER. Yes. Thank you, Mr. Chairman.

To the General, my specific question is: isn't chemical safety equipment part of the TO&E for the maintenance unit?

General ENSSLIN. I cannot answer that, but I can sure find out, and I will let you know. I am not sure it is. We had it. We do a lot of this painting in the maintenance of our equipment. So we have it on hand state-side, and had it been part of the TO&E, it would have gone with them.

I rather think that—well, I cannot really answer the question, but I will find out for you.

(Subsequently, General Ennslin provided the following information:)

The chemical painting safety equipment is not a part of the maintenance units TO&E. Therefore it was not readily available to the 325th Maintenance Company when they were mobilized and deployed to Saudia Arabia.

Mr. BUYER. A lot of that painting was done at the port in Dharan, was it not?

General ENSSLIN. Yes, it was, and of course, the 325th caught the painting twice. They were painting a lot of the 7th Corps vehicles desert tan, and then as they returned to Germany, they were painting them back in the green color. So a tremendous amount of the painting took place after the hostilities were over, when it was not really an emergency kind of situation.

And someone probably in the leadership chain did not understand the danger of that particular proposition or somebody would have shut it down quickly.

Mr. BUYER. I can recall being at the port during unloading. You mentioned Pagonis. I was one of Pagonis' lawyers, and I remember driving by the port and seeing a spraying operation. I remember seeing some protective gear. I know they had big booms for their spray, and also the exigencies of the circumstances of the environment to get everything out the tanks to the front line, and swap out tanks. All of this, as you are fully aware, was extremely important.

If, in fact, safety was let down, that is a tremendous responsibility that we, I think, have to take. So I am real curious. If you could let me know?

General ENSSLIN. I will.

Mr. BUYER. Thank you.

Mr. Schneider, you are a very articulate gentleman. When you recommended the appointment of a civilian health task force, are you recommending that this be taken out of supervision of the VA and out of the military medical community's supervision and NIH should fund some separate research into this and not allow participation?

Mr. SCHNEIDER. Oh, no, no. I did not say not allow participation. VA and DOD have to be full players, and they have to be a part of the leadership of the organization, but as we put together many composite groups to work on task groups, I think the leadership should be outside of the sphere of the VA or the DOD, and again, credibility is the question.

The VA is going to be suspect, as they have been for 25 years on Agent Orange. The military service is going to be very suspect, as they have been to troops who have come in and said, "I have a problem," and what we are attempting to do is to put both the military health people, the VA health people, with civilian researchers, and allow them collectively to develop the review process. What dimensions? Who should do what to whom? What records need to be available? And proceed from there, and ultimately issue the final edict of the research task force.

Mr. BUYER. Well, that, Mr. Chairman, is part of what Colonel Johnson is talking about. We have so many people out there going down certain avenues and the questions is how do we put it all together in a collective thought to the betterment of everyone?

And I am glad that, in fact, is your answer because when you are talking about the trust of the VA or the medical military community, you are not enhancing the trust if you separate them out from any task force in moving forward because they have to be active players in that process.

Mr. SCHNEIDER. If you would not mind, I would just like to make a comment. It is very hard for people who want to give quality health care not to have the resources and the knowledge to provide the health care, and that is the problem right now within the military, within the VA. We have got quality, dedicated people ready to serve their patients.

Mr. BUYER. They just do not know.

Mr. SCHNEIDER. How? That is the question.

Mr. BUYER. Right, right. Thank you very much.

Thank you, Mr. Chairman.

Mr. EVANS. Sergeant Miller, you indicated that we should perhaps look toward certified private practitioners. Do you know who certifies them? Is there an agency that actually certifies them at this point or who should certify them?

Sergeant MILLER. I do not. I must tell you that until recently, our association was not aware of the magnitude of this problem, and we have done a lot of research recently and obtained as much information as we could, and it was during that research that we came across this information.

I could possibly find more specifics for you on that, but I do not have it now.

Mr. EVANS. That would be helpful if you can.

Mr. BUYER. Mr. Chairman.

Mr. EVANS. The gentleman from Indiana.

Mr. BUYER. I just have one more if I may to the General.

Are your members of the National Guard getting access to the VA or finding they have any problems?

General ENSSLIN. I am not aware of problems of getting access to the VA. They have not been reported to the association. I will be glad to——

Mr. BUYER. Would you look into that for me?

General ENSSLIN (continuing). Pose a few questions and let you know the answers.

(Subsequently, General Ensslin provided the following information:)

Inquiries made through our own National Guard Association medical task force and other sources indicate that there are no reported problems at this time in members of the National Guard who are Gulf War veterans gaining access to the VA.

Mr. BUYER. Because as we move forward in the downsizing, we have placed more emphasis upon the one force structure and the total force concept. I also serve on the Armed Services Committee, and have great respect for the National Guard and the Reserves. They are going to play a part in that, especially now, to meet second contingencies.

General ENSSLIN. Right.

Mr. BUYER. And if it is total force concept during time of war, it is also total force concept during time of peace, and that also means in treatment. So I want to make sure the National Guard is also being included and taken care of.

Thank you.

General ENSSLIN. Yes, sir.

Mr. EVANS. Thank you very much. We want to thank this panel again for their work and waiting for so long to get to testify today. Thank you very much. We appreciate it.

Members of our next panel are Dr. Claudia Miller, Dr. William Johnson, Dr. Charles Hinshaw, Dr. William Rea, Dr. Edward Hyman, Dr. Victor Gordan. If they would come forward at this time, we'd appreciate it.

Dr. Miller is a physician, researcher and an assistant professor in environmental and occupational medicine, Department of Family Practice, University of Texas Health Science Center at San Antonio, TX.

Dr. William Johnson is a physician and recently retired from the Army. He currently resides in Augusta, GA. The subcommittee, of course, particularly appreciates his participation in this hearing at this time.

Dr. Hinshaw is president of the American Academy of Environmental Medicine.

Dr. Rea is president, Environmental Health Center, Dallas, TX.

Dr. Hyman is a physician in private practice in New Orleans, LA.

Dr. Gordan is a physician at the VA Medical Center in Manchester, NH, and he will be presenting his personal and professional opinions today.

I want to thank all these doctors for waiting so long to testify. I don't think we've had so much talent at our witness table at one time and we're sorry to hold you up so long.

Dr. Miller, we will start with you. And, of course, we're going to include your entire statements in the record so if you could summarize and try to keep within five minutes, we would appreciate it.

Dr. Miller.

STATEMENTS OF DR. CLAUDIA S. MILLER, ENVIRONMENTAL AND OCCUPATIONAL MEDICINE, DEPARTMENT OF FAMILY PRACTICE, UNIVERSITY OF TEXAS HEALTH SCIENCE CENTER, SAN ANTONIO, TX; DR. WILLIAM JOHNSON; DR. CHARLES T. HINSHAW, JR., PRESIDENT, AMERICAN ACADEMY OF ENVIRONMENTAL MEDICINE; DR. WILLIAM J. REA, PRESIDENT, ENVIRONMENTAL HEALTH CENTER, DALLAS, TX; DR. EDWARD S. HYMAN; DR. VICTOR GORDAN, PHYSICIAN, VA MEDICAL CENTER, MANCHESTER, NH

STATEMENT OF DR. CLAUDIA S. MILLER

Dr. MILLER. I want, first of all, to thank the subcommittee for inviting me and please bear with me on some of these portions which may seem somewhat didactic, but it provides some important background information, I hope.

My name is Claudia Miller. I'm a physician, researcher and consultant to the Department of Veterans Affairs and also an assistant professor in environmental and occupational medicine at University of Texas.

A gentleman from MIT, Dr. Ashford and I co-authored a report for the New Jersey Department of Health on chemical sensitivity and a subsequent book on this subject.

Recently I served on Secretary Brown's Blue Ribbon Panel on the Gulf veterans' health problems.

During today's presentation I will highlight three issues. First, growing numbers of physicians like myself are becoming concerned

that we may be seeing a new medical problem, one that is being called chemical sensitivity. The origin and nature of this problem is the subject of intense debate among physicians and researchers. And finally, a specially designed hospital facility, an environmental medial unit is needed in order to diagnose whether or not veterans' health complaints are the result of chemical exposures.

Physicians are seeing growing numbers of patients who report symptoms such as we've heard today following exposure to solvents, pesticides, combustion products and buildings with poor indoor air quality. These patients include industrial workers, office workers, school children, persons living near Super Fund waste sites and most recently Gulf War veterans. They report a wide range of symptoms that wax and wain over time in a seemingly unpredictable manner and may see ten or more physicians, undergo costly and invasive testing and may be sent to psychiatrists as a last resort.

Some patients discover that common exposures such as perfume, fresh paint or traffic exhaust trigger symptoms. Although many patients report being allergic to these substances, usual allergic mechanisms do not appear to be involved.

Some physicians believe that low level exposures could not cause such severe symptoms. But many patients disagree and their views are supported by a growing number of professionals who suspect that extremely low levels of chemicals may cause disabling symptoms in some individuals.

One hypothesis supported by animal studies is that exposure to certain chemicals may sensitize the limbic system. The limbic system is the brain region that is most closely connected to our environment via the olfactory nerves in the nose. The limbic system profoundly affects our emotions. It is esssential for laying down new memories and it influences hormone production and involuntary nervous system function. Thus, for example, if exposure to a solvent sensitized the limbic system thereafter even tiny amounts of that solvent or other unrelated chemicals might cause erratic signaling disrupting not only mood and memory, but also digestive, respiratory and other vital functions.

To illustrate, one 45 year old mechanic whom I saw had worked with solvents most of his life without difficulty. He had been in good health when he was deployed to the Gulf where he continued to work as a mechanic. One day a Saudi truck drove through fogging his work area, probably with pesticides. He became dizzy, nauseated, short of breath, experienced chest tightness and developed a rash. He was hospitalized and a suspected heart attack was ruled out. He returned to his unit but a week later another truck came thorough fogging and he developed the same symptoms again. He recovered and was sent back to the United States for medical reasons.

Soon after his return he was playing volleyball when someone came by to clean a piece of exercise equipment with lacquer thinner. He experienced similar symptoms as before and again went to the hospital. He recovered and returned to his job as a mechanic only to find that now he became ill around solvents and paints he had worked with for years. He visited a physician's office that had

recently been carpeted and, again, became ill. He could not tolerate perfume or cleaning agents that were used at home.

This gentleman is, perhaps, somewhat unusual. Other veterans have not sorted out the relationship between their symptoms and exposures in such detail. But, growing numbers are reporting fatigue, numbness, dizziness, headaches and other symptoms we have heard about which they link to common chemical exposures.

Urgently needed is a clinical tool for determining whether or not chemical sensitization is at the root of these patients' problems. There's a growing consensuses among experts, even the doubters, that these questions cannot be answered without an environmental medical unit—a super clean hospital environment in which chemical exposures have been reduced to the lowest levels possible via special filtration of the air and special furnishings that don't release chemicals into the air. There, applying scientific protocols, patients can be removed from their usual home and work place exposures to see if they improve, and if they do, be reexposed to very low levels of common chemicals to see whether their symptoms recur.

The National Institute of Environmental Health Sciences has described this concept as the single most important way to develop a reliable clinical approach for the diagnosis and evaluation of chemical sensitivities. This approach has also been endorsed by physicians and researchers attending two national workshops on chemical sensitivity—one sponsored by the National Academy of Sciences and the other by the Agency for Toxic Substances and Disease Registry, ATSDR.

The National Academy of Sciences participants agreed that the use of an environmental medical unit to test for the presence or absence of chemical sensitivities should have the highest priority in any research agenda.

Today, almost two years since these meetings, no facility for scientific inquiry exists. Without it, there is little hope of finding a solution. Just as the invention of the microscope enabled physicians to identify bacteria and control infections, so an environmental medical unit now is needed to enable us to diagnose and treat the health problems of the veterans and other Americans whose health may be at risk from environmental exposures.

Hopefully, the military and the VA could do a great service to the public as a whole by advancing the science in this area and help the health of the veterans at the same time by funding such an investigation.

Thank you for this opportunity.

[The prepared statement of Dr. Miller appears on p. 285.]

Mr. EVANS. Thank you, Dr. Miller.

Dr. Rea, if you could go next, we'd appreciate it.

A vote is pending and we'd like to try to accommodate two more people, including you, before we break. So if you could summarize your statement in about five minutes, we'd appreciate it.

Dr. REA. All right.

STATEMENT OF DR. WILLIAM J. REA

Dr. REA. Environmental Health Center in Dallas is a multispecialty medical surgical clinic with several research sci-

entists. I'm not only the chief surgeon and medical director of the center, but I'm also the first world professor of environmental medicine at the Robens Institute, University of Surrey in England.

Our clinical labs in Dallas and basic research labs in England are dedicated to studying basic ways that toxic chemicals impede optimum health. The effects seen in the Desert Storm patients are similar to those seen in other chemically sensitive patients. We have been interested in Desert Storm veterans before the Iraq war stated. In fact, we contacted the U.S. military six months before the war suggesting that military personnel might be effected by the pollution and develop chemical sensitivity. We were basically told that they had everything under control and didn't need our advice.

The Saudi government suggested that we come over the day before the bombings started. And we felt this was a little too late to institute the program there for the Saudi citizens.

Over the past 20 years my colleagues and I at the Environmental Health Center have seen over 20,000 chemically sensitive patients. Our treatment has been quite successful in the majority. In fact, I have written a book on our experience with 20,000 of these patients and explained the scientific and clinical basis of chemical sensitivity.

About ten months ago we were approached by some veterans with chronic recurring problems that hadn't been solved by their other physicians. The one patient you heard was Gary Zuspann and at that time we saw Gary, he was totally incapacitated, bedfast. In fact, I had to call a friend in Temple, TX, to get him to put him on oxygen so he could make it up to Dallas because we couldn't get the VA doctors to do it at that time.

He had lost 30 pounds and was unable to eat any foods and was having difficulty breathing and could hardly stand up. We placed him in our environmentally controlled unit at the Environmental Health Center, similar to what Dr. Miller is asking for at the Veterans Hospital. We had to give him intravenous nutrition, feed him totally by threading a catheter down toward his heart and just feeding him that way for several days. Then he gradually gained strength and by the time he left the hospital, we had him riding a bicycle. And he also got so he could eat foods.

We basically used the protocol for the American Academy of Environmental Medicine, the physicians have developed this over the last 20 years and Dr. Hinshaw will go into this a little more. But, basically, the principal is one of massive avoidance of toxics in food, air and water, supplementation with the nutrients that are needed to fuel the detoxification systems and also build an environmentally controlled room for the patient at home, such as we did with Mr. Zuspann so that he could live in a less polluted environment until his system recovered.

Now the second cases—there are two cases that I wanted to talk about a little bit—these veterans were the father and son team that were in Desert Storm. They were in the mechanical pool. They were exposed to just a myriad of substances. Besides the fire, they were also exposed to spraying, they were exposed to the motor pool fumes, from the kerosene heaters. A lot of times they stood for five minutes hooking up a trailer while the exhaust was blowing in

their face. So they had what we call a massive total environmental level.

And both of them started feeling somewhat bad, however they just went on. And when they came home the father got to the point where he was going to be knocked out of the National Guard unit because his health was so bad he couldn't do his mechanic's job. And it's sort of a typical story that we've heard, also and you've heard several times here today.

He had many of the characteristics which we have seen in the veterans such as headaches, hoarseness and muscle pain, joint pain, unable to work; the usual sensitivity phenomena we've seen in the other 20,000 chemically sensitive patients, including odor sensitivity. But one of the things that was so important is it's easy to diagnose if you have the brain dysfunction that Dr. Miller was talking about. If they can't stand on their toes with their eyes closed, you have a potential diagnosis of neurotoxic brain. This veteran couldn't. He went home and told his son, junior, who also had been in dessert storm and who was a karate expert and had always been nimble and quick on his toes. He said this a baloney, he said nothing to it. He goes up on his toes and he crashed. He was in our office the next day. We have treated both of them now and they've done extremely well.

We have done the spec brain scans on these patients. This is an old technology that's now been melded with a new technology that Dr. Simons has developed in Dallas. He was unable to be here today but he did put in his testimony on this technique.

Basically you have three cameras and you do a brain scan on them and you can measure both cerebral flow and function. These Desert Storm patients that we have seen have been able to do this type scan on and who have clinical brain dysfunction of the type that you heard about today also have the neuropathy. They have a distinct pattern that's unique in the radiological world and can be diagnosed as neurotoxicity. I think this is a modality that perhaps the military and the veterans might want to take up that would help them in diagnosing this problem.

The other thing is we have blood levels on all these patients and there is somewhat of a pattern that you heard about from Mrs. Zuspann about the methyl pentanes and the trimethyl benzenes and so on.

In addition to that we've been able to do challenge tests on these patients. If you get them away from the toxic substances, as Dr. Miller was talking about, for three or four days and then challenge them with them, you can actually scientifically prove cause and effect.

So, since I see my time's up, I would like to say that our center would offer to the military and the veterans any of our facilities we have to immediately treat veterans until the veterans hospitals could gear up. It takes about a year to build a proper environmental unit and make it decontaminated. I don't think these patients should wait that long to get treatment.

The other thing is, I think cost-effectively in many physicians' offices around the country, many outpatients of military and the VA, could be treated as outpatients at a very low maintenance cost once they're taught how to assess the effects of environmental pollutants

upon their body. We'd be certainly willing to offer our clinic service to teach them how to handle these problems.

[The prepared statement of Dr. Rea appears on p. 299.]

Mr. EVANS. Thank you, doctor. Because of the time, I think we're going to have to recess now, but I hope it will be a short recess.

Congressman Kennedy will assume the chair when he returns and will continue the hearing.

Thank you.

[Recess.]

Mr. KENNEDY (presiding). The subcommittee will come to order.

Our next witness will be Dr. Charles Hinshaw, who is with the American Academy of Environmental Medicine. Please proceed, Dr. Hinshaw.

STATEMENT OF CHARLES T. HINSHAW, JR.

Dr. HINSHAW. Mr. Chairman, Committee members, ladies and gentlemen, thank you for this opportunity to address your House Veterans' Affairs Committee.

In preparing my testimony I was reminded of a story about the actor Cary Grant. It seems that a particularly obnoxious reporter wanted to know his age. And while on set one day the telegram came to Mr. Grant, "How old Cary Grant?" In a twinkle his reply was, "Old Cary Grant fine. How you?"

I think that's what we're talking about today. We're asking the Persian Gulf veterans how are you and unfortunately not all of them can answer fine. The mysterious illness afflicting the Persian Gulf veterans is multiple chemical sensitivity. I repeat, the mysterious illness afflicting the Persian Gulf veterans is multiple chemical sensitivity.

To expand and clarify what I mean by the diagnoses of multiple chemical sensitivity, let me explain that in this instance I refer to an illness that has been induced or triggered by exposure to hydrocarbon compounds derived from petrochemicals. We have all heard today of the sources of all the various petrochemicals and of their combustion.

I'm also not trying to belittle the other environmental exposures that occurred because I think they're important. Dr. Rea alluded to this when he spoke of the total exposure and how it effects our physiology.

I am appearing before you today as President of the American Academy of Environmental Medicine. The Academy of Environmental Medicine was founded in 1965 and currently has 575 members. A majority of these members are doctors of medicine and osteopathy. A smaller number of paramedical professionals and Ph.Ds are also Academy members.

The Academy of Environmental Medicine has been studying and teaching about chemical sensitivity for 28 years. One of the current and active members of our Academy you've just heard from, Dr. William Rea. He has literally written the book on chemical sensitivity.

Approximately one year from the date of the Persian Gulf War reports of a mysterious illness effecting some of the Persian Gulf veterans began to surface in the medical community. In the summer of 1992 following a description of this illness on the television

program 20/20, I was motivated as President of the Academy of Environmental Medicine to form a committee for the study of this illness. I was struck by the reported lack of identifiable abnormalities in the veterans either from conventional medical or from conventional psychiatric testing.

A six member panel of physicians with particular interests and expertise in the field of environmentally triggered multiple chemical sensitivities was formed. This committee, which we call the Desert Storm Committee, developed a study protocol with the objective of answering the question either positively or negatively, do the Desert Storm veterans have multiple chemical sensitivities which have been triggered by environmental exposures in the Persian Gulf to hydrocarbons or other environmental factors unique to the Persian Gulf War?

The Desert Storm protocol as developed is an extensive study of each Desert Storm veteran including a detailed environmental history, physical examination and tests for metal and chemical exposures, tests in evaluating the immune response to environmental exposures, tests for routine inhalant and food allergies and challenge tests for response to exposures to specific hydrocarbon type chemicals.

All participating physicians were asked to waive any fees which were not reimbursed by insurance and all participating laboratories furnished their services at no charge or at their cost. In spite of this, the total cost for testing recommended in the protocol is $725. Frankly, with the invaluable cooperation of Major Richard Haines, and that would be in recruiting patients, I expected that our goal of examining 100 exposed veterans and, hopefully, 100 nonexposed veterans, would be easily reached. However, this has not proved to be the case.

The report of our findings to date, which I believe to be representative and to reflect an accurate picture of Desert Storm problems, nevertheless covers only 25 patients. The number of protocols which have been totally completed to date numbers only six.

The findings of our, admittedly, incomplete study are as follows. First, I would say the physical findings are much as have been discussed today. The most common symptoms have been fatigue, symptoms related to the bones and joints and muscles, loss of short term memory, headache and skin rash.

The positive laboratory findings have also been alluded by previous speakers and have, again, been remarkably sparse. Inhalant and food allergies have been identified in five of the veterans, increased chlorinated and aromatic hydrocarbons in one veteran, positive antinuclear antibodies in one veteran, changes in the immune system in one veteran and increased liver enzymes suggestive of liver toxicity in one veteran, increased colonization of the intestines by Candida albicans, a yeast, in one veteran and increased levels of 2 methyl pentane and 3 methyl pentane in two veterans.

Significantly, testing for chemical sensitivity within the physician's offices has been much more informative. I am going to have to skip some because of the red light, but I would say that every veteran tested in our study, tested by challenge testing for chemical sensitivity, has had a positive result. That's 100 percent.

I know of another study in which 26 of 27 veterans so tested were positive. This puts the number in the high 90 percents. That's almost as good as a pregnancy test, so that's considered a very accurate test.

How do you treat chemical sensitivities? We've already talked about it to some degree. Avoidance of chemical exposures is the main thing. This is environmental control—very important; another thing would be nutritional supplementation.

And one study I do want to mention has been conducted by Dr. Andrew Brown of Alabama. He treated four of his patients with an antifungal agent called Sporanox. Their degree of improvement, this means return to normal, he rated as 80, 90, 95 and 100 percent.

Another veteran received Sporanox plus a broad spectrum antibiotic and that patient had about 90 percent recovery.

A third patient on a antibiotic alone had about 85 percent recovery.

If you'd like later, I'll be glad to discuss the relationship between yeast and the immune system and chemical sensitivity.

These findings are preliminary. We hope to obtain enough numbers in our study to obtain statistical significance, which I believe we're approaching now. The current plan is to present the results of these studies at our annual meeting in October and at that time the results will be released to the rest of the scientific community and to the press.

Thank you.

[The prepared statement of Mr. Hinshaw appears on p. 294.]

Mr. KENNEDY. Thank you.

Our next witness is Dr. Edward Hyman who has drawn a great deal of attention to this issue. I personally am looking forward to your testimony, Dr. Hyman, and I hope in your testimony you'd have an opportunity to address some of the attacks that have taken place on your practice as well as some of the fees that the VA cites when talking about some of your work. But, as we've heard earlier, your testimony has indicated—the results have indicated by many of your patients that they feel you're taking good care of them. So I'm very much looking forward to what you have to tell us. Please proceed.

STATEMENT OF DR. EDWARD S. HYMAN

Dr. HYMAN. Thank you, Congressman Kennedy.

I am pleased to be one of the very few full time solo privately practicing physicians ever invited to bring his views on medicine to the Congress. Let me start off with what you suggest.

Since the subject has already come up, and Secretary Brown has condemned me in public in Tuskegee, AL, let me first clear a few points.

All of my services have been *pro bono* publico. This includes professional services, accumulated expertise, laboratory work into the night and the expense of the laboratory supplies.

Congressman Bachus of Alabama suggested that patients after I treat them, should be reexamined at Walter Reed. In the past this has not been very constructive. Many of them have been drawn back to the veterans hospitals where they have been reexamined

extensively and the Veterans sent them a bill for it. I think that's fascinating.

Congressman Bachus, please don't confuse my work with leishmaniasis. It's totally unrelated. And the nurse who is afflicted and evidently didn't make contact, I apologize to her personally. I think it's important that to mention that my office was grid locked with phone calls after this information leaked out. I'm a solo practitioner and I had a little bit too much heat in the office on that occasion.

Let me continue with my own essay. Following my father and uncle, medicine has been my life. I entered college at 15 already committed for medicine and I had my baccalaureate in chemistry and my M.D. from Johns Hopkins at six weeks after my 21st birthday. I've had considerable post-graduate training, Mr. Kennedy, including at Harvard.

Although the veterans' illness is the government's problem, I could not sit idly by and let those veterans suffer from some mysterious illness when I'd successfully treated a similar illness in civilian life and I thought I could help them. After the rebutts from official channels, I finally got to the problem by way of a CNN broadcast.

Thousands of Desert Storm victims have consulted hundreds of doctors and no specific diagnoses has been made. No code number, and here's the code book, no code number has been assigned, and there are no guidelines to follow. The illness is not in the current text and it's not in the unfortunate cook book, yet it exists.

The illness I find is a bacterial infection that causes bacteria to appear in the urine. The bacteria in urine serve as a marker for the disease. Unfortunately, these bacteria are not found by the routine hospital laboratory and I want to explain why. The reason hinges on the word "significant." And I've graphed it for you.

In the graph on significant bacteria in urine (pointing to the graph which is the same as in the formal presentation), the vertical heavy black line starts in 1876 when Louis Pasteur first mentioned bacteria in urine to the Academy of Sciences in Paris, and it extends to 1956 when it took a big red detour due to the misinterpretation of the work of someone from Boston. During that time a lot of investigators found a lot of diseases in which the bacteria would appear in the urine, for example, typhoid, tuberculosis, brucellosis, scarlet fever and many other diseases.

This becomes very important in the next round. In 1956 a very excellent investigator at the Boston City Hospital, studying a different problem, postulated that the only significant bacteria in urine are those that grow freely in urine, and thus they achieve very high counts in the bladder because the bladder is an incubator. So he made a very clean and decisive "cut off" point. If they appear in urine in high numbers (above 100,000 per milliliter), they're significant; and if they don't appear in high numbers, they're not significant.

Now due to the misinterpretation of his thesis, all the works of those excellent investigators listed here who had studied bacteria in urine, were then swept away. I studied under some of those doctors. After three international conferences this high bacterial count standard became the laboratory surrogate for "significant" bacteria in the urine, or for kidney disease, or for kidney infections, or

whatever you want to call it. This surrogate is used today, and in the laboratories in the best of hospitals in the United States and in the government hospitals, it's written in stone. The bacteria of tuberculosis, typhoid, brucella, and scarlet fever, if found in the urine are not significant anymore.

Well, there are those of us who started into the problem of bacteria in urine long before that detour to the right. We learned to look at bacteria in the urine and I learned to grow bacteria, even the fastidious ones, in the 1940's, we grew them the way the old timers did it. Pasteur was not studying bacteria in urine beyond his initial remark, (referring to the chart), but starting in the 1910–1920 range. Others were I learned from one of the excellent bacteriologists who was Chairman of Medicine at Washington University and later Chairman in Microbiology in Johns Hopkins, Dr. Barry Wood. I grew the brucellae for his study. I learned a lot.

Many of us never believed that this detour was very important so we went straight ahead. All I want to point out to you today is that the Persian Gulf problem is right there on the straight line.

But how do you explain this detour to the new generation of doctors who have graduated since 1956, who have been taught that this detour is the golden rule, and that there can be none other. That includes the professor who taught them and the editors of journals? That difference between the detour and the straight line is a real problem.

Next, how do you treat the illness I find? Well, you can grow them out, but that is a slow procedure. Rosenow did it in 1910, Brewer did at Columbia University in 1911. Young at Johns Hopkins, Seidman at Hopkins and so forth. Longcope at Hopkins was my professor. They grew the fastidious germs out, but it's a tedious procedure. The next thing you learn is that the sensitivities in the laboratory are not necessarily appropriate in vivo. It's in the human that you're concerned, not whether you can eliminate the germ in beef broth.

So you revert to another well known scientists called Paul Ehrlich. He's the one who created the term the "magic bullets." He also created a term chemotherapy. He synthesized arsenicals. He saw the spirochete of syphilis under the microscope. You still can't grow these bacteria today. He gave his arsenicals (his antibacterial agent) by vein and the bacteria disappeared. He had destroyed the germ of syphillis in the human, and he cured syphillis. The analogy is perfectly simple. If a hunter hunting birds shoots his rifle and the bird falls, he hit the bird. If the bird flies on, the odds are he missed it. He can try again. You hit bacteria analogously.

Paul Ehrlich gave his antibacterial agents and the bacteria disappeared, as witnesses under the microscope. He had hit it. We had our first real treatment for syphilis. He got the Nobel Prize in 1908, that's not recent. His method is still the bedrock of medicine. Let's dismiss this term "experimental" that has been applied to my giving antibacteria to eliminate bacteria that I see under the microscope. It has no meaning there.

Mr. KENNEDY. Dr. Hyman, we would just like you to know that we're—you're well over the five minutes but maybe you could have a minute or so to try to wrap it up.

Dr. HYMAN. Please, I had to start off by entering—all right.

With this approach I've treated well over 100 patients without a single significant adverse effect. The clinical results are rewarding, I still do all the urine examinations. I follow each patient carefully. I'm pleased to state that three veterans are essentially well of the five I've treated. One wife is also well. One of the veterans not quite well is the Marine captain who testified today, and he's almost well now. He's improved considerably in the past 24 hours. One veteran has had incomplete recovery, but he was deep in trouble and had lost his job over a year ago.

When I return to New Orleans I have four more of them scheduled for admission to the hospital.

I examine all the urines myself and I've seen lots of urines of persons who had this syndrome and who are scattered throughout this country, those urines are "positive" also. They have bacteria greatly in excess of what I consider normal after 45,000 urine analysis.

At this point I think it's fair to ask that the government to help those who have gone to battle. In my experience the illness is chronic. Under treatment it fades slowly and it's apt to relapse. You must track it. It will not go away by itself. It is likely to be progressive. Some, as you've heard, have lost their brains physically. Rumor has it there have even been deaths.

Finally, gentlemen, the Vice President has declared that the solo privately practicing physician will become extinct. Thus, I hereby ask for federal protection under the Endangered Species Act. Thank you.

[The prepared statement of Dr. Hyman appears on p. 303.]

Mr. KENNEDY. You look like you've got a ways to go there, Doc. Next is Dr. William Johnson of Augusta, GA.

STATEMENT OF DR. WILLIAM JOHNSON

Dr. JOHNSON. I'd like to thank the subcommittee members for inviting me here today and for the privilege of addressing this body.

I am a board certified specialist in pulmonary diseases, internal medicine, occupational medicine and general——

Mr. KENNEDY. Doctor, could you slip that microphone a little closer, please?

Dr. JOHNSON. I'm a board certified specialist in pulmonary diseases, internal medicine, occupational medicine and general preventative medicine. For the last 12-plus years I have been a pulmonary disease specialist at the Eisenhower Army Medical Center at Fort Gordon, GA. I am now a retired Colonel. I made a decision not to sign a contract with a bonus and presently in the middle of obtaining a job with another federal agency for professional reasons.

Approximately 180 individuals from the 325th maintenance company, a National Guard unit based in Lake Wales, GA, were involved in the spray application of paint on military vehicles in Saudi Arabia from November 1990 until May 1991. Green military vehicles were painted a dessert sand color. After Desert Storm these vehicles were repainted green prior to leaving Saudi Arabia. Chemical agent resisting coating or CARC paints which contained hexamethylene dissocyanate or HDI in addition to solvents and pigments were used in these operations which were basically indus-

trial operations under primitive conditions. HDI is a recognized pulmonary hazard and has been associated with asthma, bronchitis and chemical pneumonitis. Non specific bronchial reactivity or asthma can occur following cessation of exposure.

As early as 1976 NIOSH, the National Institute for Occupational Safety and Health, published a recommended standard for these diisocyanates including the HDI. Basically NIOSH recognized the degree of the hazard and called for very low levels of exposures and calls for the use, essentially, of supplied air respirators.

In 1987 the U.S. Army Environmental Hygiene Agency issued guidelines for controlling health hazards in painting operations. The Army adopted the 1976 NIOSH recommended exposure limits. The Army additionally required the use of supplied air respirators in these paint spraying operations unless one could document extremely low levels by air sampling. And, of course, one cannot demonstrate low levels in these types of operations.

And what I mean by an air supply respirator is actually having tubing with compressed air going directly to your respirator. The air isn't filtered, but you are supposed to be provided fresh air. And it's a lot safer than a filter or an organic cartridge respirator.

Spray painting operations were conducted in a limited number of maintenance tents with two open ends; one for the entry and one for the exit of vehicles. Initially, the workers were reportedly not provided respirators. Eventually they were provided organic vapor cartridge respirators, which does not go by the standard. And finally, they were provided supplied air respirators.

Compressed air made up of outside and in air was used both for respirators and for spray painting. Back flash containing paint were encountered by workers through their supplied air respirators when a fellow worker sharing the same compressed air source turned off his or her spray painting equipment. Also, the compressed air which supplied the respirator were made up from ambient air adjacent to the tents which was contaminated with paint.

In addition to spray painting many individuals were involved in mixing paint. Between 140 and 220 vehicles a day were painted. Personnel initially worked at least 12 hours a day in the spray painting operations. Many individuals coughed up paint. One individual estimated that 25 to 30 percent of the unit personnel experienced breathing problems and that 80 percent experienced symptoms of intoxication, which included dizziness, lightheadedness and headaches which can be associated with exposure to paint solvents.

Questions have been raised about behavioral problems of National Guard unit members well in Saudi Arabia. One soldier died in a motor vehicle accident after falling asleep. Five individuals were court martialed after burning down an observation tower. Two of the five have previously sought psychiatric help and one soldier attempted suicide. The question is whether this is related to solvent exposures or even to sleep deprivation.

Three women became pregnant and were returned to the United States. This may be a behavioral problem but it raises the question about whether pregnant women in this type of unit were, in fact, exposed to toxic chemicals.

Many unit members reportedly have not worked since returning home to Florida.

An Army unit reportedly refused to take over the spray painting operations because of the recognized hazard of the CARC paint, the inadequate respiratory protection and overall concerns about health and safety. Regular drivers of military vehicles reportedly refused to drive their vehicles in and out of the maintenance tents and left these duties to the National Guard unit.

Three individuals have been evaluated by me at Eisenhower Army Medical Center. The first individual was evaluated after referral from Fort Stuart. He had evidence of asthma, he had been coughing blood streaked sputum in Saudi Arabia. He underwent a medical board, was medically disabled eight months after he returned from Saudi Arabia. He's currently having more problems and he's on multiple medications including steroids.

I've seen two additional patients, one in particular, a 52 year old male with multiple symptoms in addition to asthmatic problems. In view of the severity of his dysfunctional behavior, he underwent neuropsychological testing which at least raised the questions of whether he had a toxic exposure central nervous system problem. He did not entirely complete his evaluation and he has subsequentially had additional problems and had to quit his civilian job. And he's being encouraged to have further neurological evaluations.

Mr. KENNEDY. Dr. Johnson, if you might just summarize. We'd be happy to take your written statement for the record, but if you could just summarize, we'd just appreciate it.

Dr. JOHNSON. Okay, thank you.

Mr. KENNEDY. Thank you.

Dr. JOHNSON. The wives of these three individuals are concerned about personality changes. Decreased energy level, generalized fatigue, change in athletic activity and so on. The question is whether this is related to the solvents and whether they might in fact have chronic central nervous system problems.

Any individual with dysfunctional behavior changes or chronic fatigue need comprehensive evaluation, including neuropsychological testing, psychiatric interviews and neurological testing. All individuals who were in the National Guard unit in Saudi Arabia should be designed a well designed questionnaire to assess health status. The control group could be those that were not exposed to the CARC paint.

The toxicology of the CARC paint needs to be looked at in more detail. For example, high silica concentrations are documented in the data sheets for the Desert Storm paint. This raises additional questions.

I believe this research work should be conducted in Florida near where these people live by a nonmilitary group with scientific and medical credentials. I also recommend a formal review of these spray painting operations which were conducted in violation of Army standards.

I'd also like to point out that I found out after I prepared this statement that during their recent summer camp, as alluded to by one of the previous speakers, these individuals were given physical examinations and were administered a questionnaire. I would like to point out that it's my understanding that only about a half of

that unit has maintained their association with the National Guard, about half have left.

Thank you.

[The prepared statement of Dr. Johnson appears on p. 291.]

Mr. KENNEDY. Thank you very much, Dr. Johnson.

Finally, our last witness for this panel is Dr. Victor Gordan. Dr. Gordan was good enough to testify at our hearing up in Boston many months ago on this same subject. He was willing to come forward despite the fact that at the time the VA was not acknowledging that this was any kind of significant issue and at some risk came forward and provided us with excellent testimony.

I'm glad to see you back, Dr. Gordan. We're looking forward to your testimony. Please proceed.

STATEMENT OF DR. VICTOR GORDAN

Dr. GORDAN. Mr. Chairman, I have interviewed and evaluated 87 Persian Gulf veterans between November 1991 to date. Seventy-eight veterans were found with symptoms considered to be related to exposure to chemicals in Persian Gulf environment. These veterans have serious concerns for their health, for their future and families and society. Many cannot hold a job because of the severity of their symptoms. They feel strongly that their illnesses are not psychiatric in nature, such as PTSD. Their frustrations stem from unsatisfactory answers to their medical and social needs and from being denied VA benefits. The pattern of their symptoms, the consistent history of exposure to chemicals and their excellent health status before their deployment to the Persian Gulf for military duties make for me strong circumstantial evidence for the multichemical sensitivities condition they acquired from the Persian Gulf environment. The treatment which I currently offer consists of medication for alleviation of their symptoms. The results of this treatment are very discouraging.

If one believes that their symptoms are the result of multichemical sensitivities, then the correct treatment would be chemical detoxification. What should be done? Start referring veterans to environmental specialists for necessary evaluation and treatment. The VA should recognize the multichemical sensitivities syndrome as a codifiable medical diagnosis so that the entitled veterans will be awarded benefits.

Regional clinics should be set up for evaluation and follow up of those who symptoms suggest radiation from DU material. I saw few veterans whose symptoms suggests radiation.

The need for proper scientific research on the Persian Gulf health issue is long overdue. I conclude with statements which reflect my personal views on Persian Gulf veterans' health problem.

In the majority of cases, the symptoms are not caused by PTSD. The symptoms are caused by something else which we have to discover. In my opinion, multichemical sensitivities emerge as a very likely cause. The medical stories of these veterans break my heart, if I have one, make me cry if I have a soul and open my mind if I want to listen.

Thank you.

[The prepared statement of Dr. Gordan appears on p. 312.]

Mr. KENNEDY. Thank you, Dr. Gordan.

I want to thank particularly Dr. Gordan who, because he works at the VA as I mentioned in our initial hearing that followed up the hearing that was held in this room, that where we only heard from officials of the government where this problem was absolutely minimized, Dr. Gordan, as he pointed out, saw dozens and dozens of Persian Gulf veterans, all of whom complained of roughly the same types of illnesses and came forward, as I mentioned, at some risk to himself to let the country know of the significant problems that he was seeing up in New Hampshire and became an individual that many Persian Gulf veterans look to for direction on this issue.

I want to just respond. I think it was interesting that Dr. Hyman started his chart with Louis Pasteur because it seems if you look at Mr. Pasteur's history, he was absolutely condemned by the medical profession of his time for the work that he did.

Now, I don't know, it's very difficult for Members of Congress to sit up here and listen to Dr. Miller indicate that there is nothing to this, basically. Dr. Ray and Mr. Hinshaw indicate that this is an illness that they can determine. Dr. Hyman basically says he can grow it in a test tube or he can certainly have the bacteria grown in urine. And trying to determine what the medical scientific relationship ought to be is not necessarily something that is appropriate for the Veterans' Affairs Committee.

I do think that it is entirely appropriate for us to investigate the relationship between the various chemical contaminants that men and women serving in the Persian Gulf were exposed to and the kinds of symptoms that certain individuals that served on the battlefield are now experiencing. One of the things that we looked into was talking with some of the experts at Harvard and MIT that have done extensive work simply on the relationship between chemical contamination and illness. There is a very direct relationship between certain kinds of chemical contaminants, exposure to the human body and symptoms. Those symptoms without having the benefit of everybody's medical background, from a layperson's perspective, would indicate that there ought to be a presumption by our government that if you have the symptoms and you were exposed to the chemicals, that the two are probably related.

So to me this can be a very complicated situation or it can be a fairly simple situation. I believe strongly that in every other case that we have viewed on this committee since I have been on the committee, we have always presumed that there was a sense that if a veteran were feeling an illness, having a sickness that there was a direct notion that that was related to his service in the military, then it would in fact be viewed as directly related to his military service and therefore covered by both the financial commitment of the government as well as the medical commitment by the government.

This and Agent Orange are the only two experiences that I've seen where that presumption has not been made. And I believe that we in this committee have got to do—take this issue now ourselves and begin to explore the relationship between the chemical contaminants and the illnesses that these individuals are feeling.

So I am in the process of drafting legislation which would focus on the areas of research, including multiple chemical sensitivities,

bacterial exposure and neurotoxic effects related to Persian Gulf service. I would like to provide you with that legislation and have your comments on those relationships.

As I say, I don't think that we're solve here this afternoon whether Dr. Miller's approach or Rea or Hinshaw or Hyman or anybody else's approach is, in fact, the sanctioned approach of the government. But it does seem to me, and this is really for the benefit of the next panel coming from the government, that if we have many doctors that have seen literally amongst them hundreds of patients and there is a conclusion by these doctors that there is a direct relationship between the chemical exposure and the symptoms that these individuals are suffering, it's a pretty straight forward process here. And that's what I think has provided the anxiety on behalf of the veterans.

None of these veterans are coming in looking to sue the government. I have yet to hear from one single veteran that's come into my office that has their hat in hand looking for money. That's not what we're talking about. What we're talking about is having a basic, decent response by the government that says, "Look, your service in the military, the exposures to all these modern chemicals probably had some relationship and so isn't PTSD, it isn't something that's wrong with your head, it isn't something that makes you malinger, malcontent, somebody that couldn't handle the service." We have heard testimony today from people that were in excellent physical condition, have excellent service records and yet basically feel that their own public service is somewhat under a cloud because they're feeling sick.

So I want to thank you for your testimony this morning—this afternoon. It's gone from morning to afternoon. But I also would like you to just comment briefly on what I have suggested is in fact the proper way for this committee to proceed.

Do any of you have a comment that you would like to make? Dr. Miller?

Dr. MILLER. I'm afraid my views may have been misunderstood by you, Mr. Kennedy. My view is that there is something that looks like it's going on here. The difficulty that the VA has faced is trying to understand whether this is physically induced or induced by some psychological kind of phenomenon. And there are an awful lot of people out there in the medical community that feel like this is stress related.

In order to determine whether the origin of such symptoms is physiological or psychological in origin, the kind of protocol that we were suggesting—using in the environmental unit—is what is needed to rule it in or out. And that allows you then to publish scientifically results of those kinds of tests and determine for once and for all, settle these arguments for once and for all. These arguments have been going on for the last 30 or 40 years.

And my own feeling is that there is something that looks like it's going on and we do need to look at it. If I didn't think there wasn't something to this, I wouldn't want to even do research on it. But, you know, I'm certainly not of the philosophy that this is stress related.

Mr. KENNEDY. Oh, okay. Well, first of all, it would be difficult for me to say that. I only heard that from staff because I wasn't here

for your testimony. But even in your short description what you seem to suggest is that there is at least as great a likelihood that this is stress related as it is physically related. And I guess that's where I think that there's at least some confusion. Is that incorrect?

Dr. MILLER. I think that the difficulty is that there's been a mainstream group of physicians in medicine, the academic physicians in medicine, many of whom are in VA hospitals, who have felt for years that chemical sensitivity did not exist. And so that is what the VA faces in terms of trying to do something for these veterans.

If they support some of these therapies that have been described today, they run the risk of creating antagonism among a lot of academic physicians. If they don't support it, then the veterans, obviously, are going to be upset.

I think there is something going on.

Mr. KENNEDY. It's a probability—excuse me, Dr. Miller, but it seems to me that it really is a problem of diagnoses. And so certainly you can get into a lengthy debate as to whether or not the ultimate cause of these—I don't know. I mean, it seems to me, just being a layperson, that ours is the first—somebody said earlier in the testimony today that, you know, they felt like a guinea pig. Well, the fact is that our whole generation is a generation of guinea pigs. Look at the chart. Nobody throughout the history of the world has ever been exposed to the kind of chemical contaminants of our generation. And so it is a very different set of sciences. And I think that what we're talking about is whether or not there is a presumption. I think you've probably stated the problem correctly. It is a problem of perception on the VA's behalf. And it's not just the VA, it's also the government. It's also the military.

I think that what we're trying to suggest is that the presumption should be on the other foot. The presumption should be on the military to disprove it, on the VA to disprove it because there is enough scientific evidence. If you just look, if you remember at Professor Tool or Dual or whatever the guy's name was up at MIT, the fact is that he gave us an extremely concise bit of information about the kinds of chemical contaminants that they have studied at MIT for a decade. What symptoms and illnesses would be expected if a human being were exposed to those kind of contaminants and they were exactly the kinds of symptoms that Dr. Gordan was hearing from his patients. And yet somehow the VA says, "Oh, no, no, we don't have evidence that the two are related." Well, that is just, it seems to me, that is kind of silliness. And that's where I think that it's time for us to presume that there is a relationship. If the body of knowledge exists and if it doesn't, then let's leave it to the military or to others to disapprove.

There isn't going to be—I don't think you're going to ever find a direct A equals B and B equals C relationship in these kinds of chemical contaminants. It just doesn't seem to me to make a lot of sense. And given all these different chemicals that, you know, I mean we got the spray can here, it's got all sorts of stuff in it.

I don't know. I mean, maybe at some point by the year 2500 they're going to be able to tell us all that. I don't think they're

probably going to be able to tell us in the lifetime of the veterans that served in the Persian Gulf.

Yes, ma'am.

Dr. MILLER. I think in terms of compensating veterans currently your approach has a lot of merit. In terms of convincing academic physicians that, yes, low levels, very low levels of chemicals can induce these very protean symptoms, that's where the research is needed. So I think there's really a two pronged approach. One is to address the current needs of the veterans who are afflicted and maybe make the presumptions you are stating because you can't wait for all the research data to be collected. And at the same time undertake the research that's needed to really understand this.

Mr. KENNEDY. Thank you.

Mr. Bachus.

Mr. BACHUS. Thank you, Mr. Chairman.

Dr. Hinshaw, what would be the role of say predictive screening if we had another conflict to determine which soldiers were more susceptible to these exposures or would that have any value?

Dr. HINSHAW. I don't think I could separate those who would get it from those who wouldn't if they were all normal.

Dr. Rea referred to that also. Bill, what do you think about that?

Dr. REA. I think there would be a small group you could screen out. But as we thought of before the war started, there was going to be a certain amount of people in danger of developing chemical sensitivity. A lot of this might well have been prevented had we been able to school the military in the things to look out for and minimize their exposure. However, these were a couple of unavoidable ones, mainly the fires and the shells.

But, for example, kerosene heaters and pesticides, the bottle water of plastic and so on. Those things could have been avoided and perhaps kept the total load down enough that these people might not have developed the chemical sensitivity. I think more of it would be an education phenomena where we can be thinking of ways how to keep the total load down so when these things do happen. They obviously have to be exposed to some things—their bodies can take it in some instances and not in others.

The other thing is, there was a lot of talk about drug therapy but I didn't hear any talk about nutritional therapy which enhances the liver to detoxify chemicals. It seems to me that's where I would want to go on the troops. If you had a next war, which we hope we never do, that you'd want to boost their system that they could detox these things.

Mr. BACHUS. All right. Let me ask you this, we've heard testimony today and read testimony from people who are suffering from some condition. And earlier, I think Dr. Hyman made reference to it, I said that I'd sort of categorized them into two or three possibilities. One was bacterial or parasitic diseases or conditions. And leishmaniases, that type of situation, whether it's a germ or a bacteria or a foreign body, has been introduced. And the other was just toxic exposures.

Did you ever treat someone for leishmaniases? Did you find bacterial?

Dr. REA. I never treated for leishmaniases, but I did find bacteria just like Dr. Hyman had, and we did go ahead and treat for. I

think Gary Zuspann had that. But it wasn't the whole answer. In other words, it seemed to me a more of a total load. They would get better a little bit and go on.

I think Dr. Hyman's experience is tremendous and I think it's compatible with what we're saying. I don't see any incompatibility at all.

Mr. BACHUS. So, let me ask you this, if you've got a—let's say bronchitis. You talked about bronchitis, asthma, loss of lung function, lung capacity. Now, normally don't you treat that with bronchial dilatators and with steroids?

Dr. REA. Not at the Environmental Health Center, we try not to.

Mr. BACHUS. What?

Dr. REA. We try not to at the Environmental Health Center. In fact, we spend our life taking people off of those.

Yes, that is symptomatic treatment which does help a person over the acute spell. But it doesn't remove the cause.

Mr. BACHUS. No, I know. But if you don't treat them with that, they could die before you decide on another treatment.

Dr. REA. We had no problem with that at all. That would be the first line. But at the same time, you would be finding the cause and getting them away from the things that trigger it.

Mr. BACHUS. Do you mean like through these stick tests?

Dr. REA. Well, for example, 80 percent of the chemically sensitive patients we've seen of the 20,000 they develop secondary sensitivities. For example, they'll become sensitive to foods, they'll become sensitive to molds, dust and so on.

Mr. BACHUS. Sure.

Dr. REA. And those then become primary at times, even though the original trigger agent is gone. And so, if you don't handle those, then you don't get the proper results you would like. So, yes, you might have to——

Mr. BACHUS. Of course, I understand that dust mites, cat hair, that sort of thing, half the population is allergic to. Let me ask you this, from your investigation, do you think the cause is toxic exposure?

Dr. REA. Yes, I think it was total load exposure. Not just one toxic, but multiples. And I think you heard that recited today.

Mr. BACHUS. Is there any thought in your mind that a bacteria or some disease over in the Gulf causes this?

Dr. REA. Yes, we did think about that. We did consider it. We didn't feel we could prove it. We felt the bacterial thing was a secondary phenomena. But you have to remember that any environmental incitant whether it be toxic or bacteria or a parasite can do the same thing. They can trigger this whole syndrome.

Mr. BACHUS. Well here's what I'm saying, Dr. Hyman said that you treat this through antibiotics. And if it is, in fact, toxic exposure, that would not cause the rapid recovery that he's evidencing, would it?

Dr. REA. Well, in those cases it may be pure bacteria or it may be that that bacteria was enough to increase the load on the whole immune system with the toxics, you see, that once you got that under control, the rest of things just sort of righted themselves. The body has a great righting mechanism. And so you can have

anything get out of whack, you get it back in order and then it rights itself. And so it's not incompatible at all.

Mr. BACHUS. Do you mena the body gets desensitized?

Dr. REA. That's right.

Mr. BACHUS. Well, in asthmatic, and bronchitis and allergies and toxic exposures, that's not the therapy presently, is it? I guess what I'm saying is if this is toxic exposure or if it's bacterial exposure, do you think the answer may be massive doses of antibiotics?

Dr. REA. You asking me for my opinion of that?

Mr. BACHUS. Yes.

Dr. REA. Not for everybody. I think that the point is is that this is going to be multifactoral and for some of them massive doses of antibiotics are going to be the answers. For others, you're going to have to decrease the load, give them heat treatments, sauna, sweat it out of them, give them nutritional treatment. I think there'll be a myriad of different things you see, at least that's what we've seen in the last 20,000 patients. And so there's some that respond to bacterial treatments, some that responds to fungal treatments, some that respond to reducing the total pollutant load.

Mr. BACHUS. And it really doesn't matter what causes it initially?

Dr. REA. The initial trigger is not always important once it's really going and chronic. And that's why in my opinion there's some urgency to treat these veterans because they get what we call the spreading phenomena and they get worse and worse and worse and get more chronic and more chronic and then it's harder and harder to pull them out of it. The earlier you treat these people, the faster you can reverse them. And this is what I think happened to Dr. Hyman, and it's wonderful.

Mr. BACHUS. You know, if we're treating our soldiers who have been desensitized through some bacterial or toxic exposure, which is what you may be saying, why didn't that happen in Vietnam?

Dr. REA. Well, we learned this on Vietnam veterans who couldn't get treated in veteran system. We treated several of them. We've learned that that's exactly what they needed to have, yes.

Mr. BACHUS. How does this compare with, say, black lung?

Dr. REA. Well, it's similar.

Mr. BACHUS. It's similar?

Dr. REA. Similar in the fact that it's total load. Okay? Black lung is where you inhale a lot of coal dust and that damaged your lung. Here the particulates are not big, they're smaller and they may not accumulate in the lung visibly on x ray, but they will damage the lung and cause it to be hypersensitive.

Mr. BACHUS. So really this is nothing new?

Dr. REA. In my opinion it is not. As a matter of fact, if you go back and look at Alice Hamilton's writing in 1923 of the veterans who got gased in World War I, they describe a similar finding.

Mr. BACHUS. All right.

Mr. KENNEDY. Chairman Evans.

Mr. EVANS. Thank you.

Several people have suggested that the health care problems of Persian Gulf veterans really aren't a mystery, but that DOD and VA simply don't know how to diagnose these problems correctly.

Would you agree or disagree with that statement? I'm asking the entire panel.

Dr. HINSHAW. I basically would agree. There are two identifiable physician servicemen that we know have been through the Academy of Environmental Medicine programs and two in the VA system. On the so called Blue Ribbon panel to investigate this illness, there's Dr. Miller and another person I can identify as knowledgeable in this field and all the rest aren't. I don't know them all, but I know in terms of training with us, they haven't been there.

Mr. EVANS. Is that correct, Dr. Miller? Would you have a comment about that? Is that——

Dr. MILLER. Well, I think there are some serious questions among physicians. If you polled physicians out there in the world, there are some who feel—as many people on this panel feel—that these things are chemically related and it's clear to them that they are and they see patients and observe these things over and over again, as I have observed it also. These are accumulating observations that are impossible to ignore. But you will not find a consensus currently in the medical community on the existence of this problem. That's just the way it is, unfortunately.

Mr. EVANS. Well, are there specific diagnostic tools and methods are unique and proprietary that aren't widely used?

Dr. HINSHAW. No, they're not proprietary at all. Dr. Rea mentioned, we'd be glad to teach people about this if they want to come and listen.

Dr. REA. This has been taught for 25 years in the American Academy of Environmental Medicine courses. There are standard tests out there now that have been developed by certain people that are nonproprietary and they're available.

Mr. EVANS. Has the VA contacted you all or anybody from the Department of Defense to learn?

Dr. REA. No.

Dr. HINSHAW. No.

Dr. REA. As a matter of fact, when Gary Zuspann was having so much trouble and we were trying to get him some VA care to supplement what we had done, I called down and talked to them and they said they would be interested. But I never heard from them.

Mr. EVANS. Okay.

Dr. REA. I think one of your people have come to our meetings. Now, we shouldn't say that because Dr. Gordan has and his people have. So, yes, there has been one group that has.

Mr. EVANS. But that's the only——

Dr. REA. That's the only one we know of, yes.

Dr. MILLER. What you're dealing with here, if I may, is conflicting paradigms. The traditional approach to symptoms like asthma and headaches and GI complaints is symptomatic treatment. And what the panel here is saying is perhaps there are causes, chemical causes for these conditions. And that's not an approach that most of medicine currently recognizes, but it's a very important etiology to test and to try to understand, because if it is the case, then this may be what is affecting Persian Gulf veterans, affecting people like the EPA workers who are ill from the indoor pollution in their building and people living around Super Fund waste sites.

Low level chemical exposure is an emerging problem and a tremendous problem in terms of costs, litigation, medical care costs and yet we have very little handle on this scientifically.

The kinds of approaches that we're suggesting about testing people for sensitivities to very low levels of chemicals induced by higher levels of exposures are, I think, agreed upon by everyone at this panel. And, in fact, national meetings on the subject where you bring together people who think it's completely psychiatric and people who think it's completely caused by chemicals, nevertheless those scientists will agree that you've got to test that. And the way to test it is by challenge testing people in a controlled environment. And there's a unanimity about the approach to resolving these disputes. And I think that's a trajectory that one can take that will get us out of this quagmire.

Mr. EVANS. Doctor, any other——

Dr. HYMAN. Yes. If I may make a few comments from what I've heard.

First, let me make one comment about this stress syndrome. After World War II, I separated hundreds of Marines who had hit the beaches at Iwo Jima, Tarawa, Okinawa, et cetera and had been in hand-to-hand bayonet fighting. That's stress. When they got back to be separated, they had two things in mind and the second one was going home. Not a one of them had all this "stress" business. I never heard one of the hundreds of them say I have arthritis, I have memory loss, I have skin rashes, and all the other stuff. I have no faith in that stress theory.

Second, if you're going to be terribly concerned about hexamethylene diisocyanate, HDI, bear in mind that anytime you use a urethane paint it's a necessary ingredient. Its alternate is toluene diisocyanate. Now, we have a plant up the river from New Orleans that has had a string of persons with exposure to diisocyanates. And I've looked into that problem. There are 24 cases in the world's literature of a diisocyanate causing pneumonitis. Now, I've tracked all 24, I've pulled all references on that.

Diisocyanate are a necessary ingredient in common urethane paints, and I think if you're going to get into that, the first thing to study is the degree of exposure, how much they've inhaled, and then refer to the 24 cases. Otherwise, for less than massive exposures, you'll have to ban urethane paints altogether because it's a necessary monomer in forming the polymer known as urethane.

Next, I think you ought to limit a little bit more. If you're talking about two methyl or three methyl pentane, an inclusive word for that is the isohexanes. These are low fractions of petroleum. Don't go to the gasoline station ever again because they'll have some of these fractions in your gasoline. Two steps up is octane or isooctane, which is also a branched hexane. These have been, in the past, used in dark alley for anesthetics.

Finally, there's only one other remark to make. I couldn't agree more that there's a need for an educational effort and it's not going to be immediate. There has been the terrible problem in communicating the problem of bacteria in urine to experts in medical schools, insurance companies, et cetera. Each one of them has a code "cut-in-stone." Then the next thing you find is that you're talking to some infectious disease expert. But when you ask him

a simple question, "have you read the basic references on which you're basing your entire thesis?" They've never heard of it. You give them the reference and you never hear from them again. You don't know if they've ever looked it up. Maybe they just went ahead and said there's something wrong with this guy, he reads.

If you go back, there's more to this problem and I urge this panel to allow me to speak in private to one or two of you, because there's one hell of a lot more to this bacterial possibility. You can "teach" bacteria to cause this.

Mr. EVANS. My time is up. I will have numerous questions in writing for the panel as a whole and some of the individuals separately.

Mr. KENNEDY. We want to make sure that everyone is aware that they can ask additional questions in writing. I have a couple myself.

Jack Quinn.

Mr. QUINN. Thank you, sir.

And thank you all for your testimony today. I was here earlier this morning. I don't know how many of you were here.

Dr. Hyman, there are some people at that table that sang your praises pretty highly. I don't know if you were in the room this morning, were you?

And in saying that, I have a sense that there is some agreement here in different pockets of academia and veterans and the Congress. I hope there is. And I hope that under the direction of the chairman and Mr. Kennedy and others we're going to get to the bottom of this soon, sooner rather than later.

Dr. Hyman, forgive me, but the isos and the hexos and whatever else you're talking about is wasted on me, at least at this moment.

Dr. HYMAN. If I may say, I have a degree in chemistry and I spent 20 years on NIH grants in basic biological chemistry.

Mr. QUINN. Of course you may say that. I have a degree in education and taught for 10 years, a Masters degree and finished my Ph.D. work as well.

Dr. HYMAN. I am learning, yes.

Mr. QUINN. So I may say that. My point is this, this morning I asked the panel of veterans what it is we can do in this committee, subcommittee and in the Congress to help them. And I'd ask you the same question, or the panel. Maybe you have a spokesperson or two.

If I go back to Buffalo, NY, and I work at getting people on that registry, veterans, and we talk about this matter some more, what is it I can tell them that you've found, in layman's terms?

Dr. HYMAN. That is a difficult question. I will try and answer it.

First, there may be a whole branch of medicine that has been overlooked or swept under the rug a whole generation ago. And perhaps it is overlooked for many more reasons than just the Persian Gulf syndrome. And I am getting that together for publication. As a matter of fact, I hope it will be published before long.

But the only reason I came out of the closet to look at these people was I thought I had seen every single manifestation that has been described, whether it be the memory loss, the brain disorder, the skin rash, the diarrhea. You name it. I have seen every bit of

it. And I have resolution of these persons and they are back at full force in New Orleans with their regular activity.

The first thing I think ought to be done is to extend my information to other military units. My study has been mostly among one Seabee unit that is centered at Huntsville, AL. Now I have four more coming from other places as soon as I get back to New Orleans. We postponed their hospitalization until I get back from this session.

We are terribly limited. There are not that many veterans that still have hospitalization. Many of them, as you heard, have lost their jobs. And really, my receptionist who answered these hundreds of phone calls was in tears half the time listening to the stories. I can't fail to believe 99 percent of them. There is too much in common.

What I would like to see happen is the government make a real effort to allow me to get a good cross-section of the entire problem. And let's see if I can restore these people to pretty good health, so they can go out in the community to work, and not be responsive to the various provocative agents that they inhale or they are exposed to. Restore them as I have restored the two that were here this morning. That I think is the prime thing to be done.

Then if I have to spend much more of my time—there is only 24 hours in the day, unless you can extend that. This has really gridlocked my practice of medicine. I cannot go on pro bono publico after this much demonstration or maybe a few more. But I will.

If the government wants to get to it quickly, they should enhance this and I should be allowed to get some revenue out of it to keep going. I think it is only fair.

If then we get a significant group in which we can get a significant number of remissions, whether they call it a placebo effect, as I heard—then let's give everybody placebos then I think we have the next task of unlearning a whole generation of doctors who are out on this red detour path (referring to the graph), unlearn them back to point zero and teach them this.

Now I have tried dozens of times to do this on the telephone in conversations lasting over an hour. A total failure. I turned down an invitation to lecture at the Veterans Hospitals for the same reason. That would be a total waste of time. I don't have that much time.

I would better spend my time first doing as I said: step one, is this pertinent, is this relevant to the majority of the persons involved; and two, if that is the case, can we form some mechanism in which we can unlearn and learn again where we failed.

I think that is the only thing I can suggest at this point. There is one thing I would like to do. I would be most interested in applying some of the basic science that we have learned, to go back and study these bacteria.

I think there is an awful lot more to this story. I was a little bit surprised. When I read that they had studied air samples over in Saudi Arabia, and they did not look for bacteria.

Now you may know, in the 1950's or thereabouts, some branch of our government service carried out an experiment off the coast of San Francisco. I knew the two investigators who broke that one. They were both at Stanford. One was two classes behind me at

Hopkins. They found the germ—I think the germ was serratia. It can be done. You can teach the germ to become pathogenic. I will let the rest to your imagination.

I would like to pursue that possibility. I have saved some of these samples at minus 80 degrees Centigrade with my own technology, my own laboratory.

Mr. QUINN. Thank you very much. Thank you, Mr. Chairman.

Mr. KENNEDY. Thank you, Mr. Quinn. Mr. Gutierrez.

Mr. GUTIERREZ. Thank you, Mr. Chairman.

Well, I think that, number one, I am very happy that the distinguished panel of doctors are here, since we have heard so much of the testimony from the veterans and those that are suffering from the illness.

It seems to me that the reason we have to deal with stress, Dr. Hyman, is because that is what people are going to say. I mean, that is the argument that they are making. And that is why we have to deal with it. And it seems to me that we are going to have to conquer that and you are going to have to help us conquer that. Because if you are saying it is not, I have a funny feeling that I understand a little bit about government, having been in government for seven years, and that is the government always wants to save money. And we are in a very frugal time.

We are into deficit reduction. And deficit reduction means you reduce it wherever, whether it is for senior citizens and Medicare and Social Security. They want to cap everything. And that is the way government is these days.

I can only imagine that I can see the VA and the Department of Defense, and they might be in some denial and need some psychiatric help here because of that denial, and maybe not the veterans.

(Laughter.)

But I have a funny feeling I know who is in denial during this process. And so we have to deal with that by confronting them with scientific evidence.

Having said all of that, not to be funny but to get to the case, you see, we are going to have to—I need to know from the doctors here: can we, can you, is there a procedure where without a question, without a question, we can say with scientific certainty that when a veteran—and they are going to say, well, you know, we want to treat the good ones, the ones that really feel bad physically. But it is those malingerers who are going to try to get in here, they have heard about this and now they want to get their pension and they want—because that is what they are thinking.

Can we devise a method so that the VA can readily know that they can screen out the malingerers and those that just want to get a free ride from government, so we can deal and get these truly ill people, who I know all of them are, and then just cut that argument to shred, into pieces?

Dr. REA. Yes.

Dr. HINSHAW. Yes.

Mr. GUTIERREZ. Very good. Then we should have that from you. We should have that from you in a manner—and I am certainly going to ask the VA, if we have doctors here, that we make sure—maybe we will call some security here, we won't leave you out of

the room, and they can just talk to you. Because I have a funny feeling that that is precisely the case and is precisely what we need to deal with here today, because I have a funny feeling that is what they are going to come later on.

Let me just add by saying, since we have that very unequivocal yes, that if I felt ill, Dr. Hyman, if I felt ill and I went to a doctor and he said nothing was wrong with me, and I went back home and I still felt ill and I went to another doctor, and he told me nothing because he didn't find anything physically wrong, and I still felt that physical illness, I bet you I would need some psychiatric care after a while. I bet I would. And I bet I would feel real stressful, because no one was able to find something that I truly felt.

So maybe as a secondary item, what we are dealing with here is not the stress of combat but the stress of the American government turning its back on American military service people after they got back here from military service.

(Applause.)

That would cause me a lot of stress, to know that my country rooted me on, gave me fine parades when I got back, but said I was a little bit crazy when I said I am not feeling too well, ladies and gentlemen.

So I just wanted to say that and I want to thank Chairman Kennedy and Lane for bringing this forward, because we are going to have to deal with this. Because, you know, there is always going to be a next conflict. And we had better start learning how to prepare ourselves for these conflicts.

Thank you very much.

Mr. KENNEDY. I just would like both Dr. Rea and Dr. Hinshaw, if you might submit a little more detailed answer to the question for the record. We would very much appreciate knowing how we would go about such an answer. And if you would provide that, we would appreciate it.

Mr. Buyer.

Mr. BUYER. Thank you, Mr. Kennedy.

One thing that really concerned me is when the chairman asked a question of the panel, whether or not any of you had been in touch with anyone from the VA or the DOD, and nobody responded, some said no.

And, Dr. Miller, I don't know why you would sit there and not say anything. That concerns me. Because we have got an advocate right here about multiple chemical sensitivity. And I am aware of the proposal that has been submitted to the military.

Would you want to comment on that? Why would you sit there and not answer?

Dr. MILLER. I am sorry. I must not have heard the question. That we have been in contact with the VA? Certainly I have. I said in my testimony, in the introduction, that I have served as a consultant to the VA and have seen a number of veterans on referral from the Houston VA.

In addition, I have asked the social workers where we are in San Antonio, who go all over the state, to compile some information about the Persian Gulf veterans they have seen.

Just for the record, they have collected data from the medical centers, the VA medical centers in Houston, Dallas, San Antonio, and the outpatient clinics in Corpus Christi, McAllen, Laredo and Victoria. And out of a total of about 700 Persian Gulf veterans that have had at least psycho-social assessments, psychological evaluations, psychiatric intakes and/or the Persian Gulf medical exam, they find that at least 70 percent continue to have physiological conditions that are not attributable solely to psychological distress.

So they are finding symptoms that have been described here today, the fatigue, joint pain and other kinds of symptoms, in 70 percent of 700 veterans that they cannot explain by psychological kinds of illnesses. And so they are deeply concerned that there is a physiological problem.

Yes, I am in very direct communication with the VA on these issues. I served on the Persian Gulf Blue Ribbon Panel, which I mentioned in my testimony. And, in addition, I have been out to the VA in Washington and lectured to the staff there about this problem of chemical sensitivity.

Mr. BUYER. You can take ten individuals and you can subject all ten of them to one specific chemical, and you are going to get varied reactions and symptoms from them, based upon their own chemistry and body make-up of each individual person. Is that correct?

Dr. MILLER. That is correct.

Mr. BUYER. Isn't that part of the problem, an ignorance among some of the medical community on how to treat some of these symptoms?

Dr. MILLER. Originally, patients thought that what they had was allergies, because they would get around tobacco smoke or perfume and they would have very striking symptoms. But as they got to see allergists, the allergists found that there were no antibodies present. That is what allergists base their diagnosis on. And so they tended to dismiss this as a real problem.

But over time we have seen so many of these kinds of cases that I think all of us are becoming convinced something is going on and we need to get a handle on what the mechanism really is.

Mr. BUYER. Earlier when I finally made a public statement that not only did the war affect me and change my life, but it changed my body, I spoke for many, many veterans, when I made that statement.

Many of us go to the family doctor and he treats us for the flu. Well, he can treat you for the flu four or five times and then all of sudden you find out that you have prostetitis, you have a kidney infection. I personally have had pneumonia twice. Now I find out that I have allergies and asthma. So I start taking all these kinds of medicines.

And I say, wait a minute, am I crazy? Am I crazy? Am I not crazy? That is real. That is very, very real.

Now you in fact are part of a proposal that has been submitted, are you not?

Dr. MILLER. That is correct.

Mr. BUYER. With a cost breakdown, when you mention about an environmental unit.

Dr. MILLER. Correct.

Mr. BUYER. Are you part of this, too, Dr. Rea?

Dr. REA. I told them I would help them design it. I have my own environmental unit that has been going for 19 years. And as I said before in my paper, we offer that to the veterans until they can get one started in the veterans system, because it will take a good year to get one started properly, if you start it today.

Mr. BUYER. And in your proposal, Dr. Rea, it is an environmental unit which you would like to set up. It is not one that is in place. Is that correct?

Dr. REA. In hers.

Mr. BUYER. Yes. I am sorry, Dr. Miller.

Dr. REA. She wants to set hers up.

Dr. MILLER. Yes, that is correct. Currently there is none in a research setting. There are clinically operated facilities like Dr. Rea's.

The need is to perform challenge studies and very carefully document what is going on, so that one can publish this in the scientific literature.

Until that happens, I am afraid that veterans are going to continue to face skepticism among physicians that they see, who are on academic kinds of appointments and who serve many of the VA's around the country.

So that the need here is to build up a scientific literature whether yes or no, you know, do these kinds of exposures trigger symptoms in people who are so exposed.

Mr. BUYER. If by means, perhaps through legislation, the chairman has even mentioned, whether it comes out of the VA or if it comes out of NIH, or somewhere, that there is direction for specific funds for a specific, particular purpose, and that is for the research, do you have any problems allowing someone from the DOD or the VA to participate in that process, whether you want to take the lead or not, but to work in partnership?

Dr. REA. I think that is the most important thing, is that they work in partnership. We have got the clinical expertise. And as Claudia says, we would like to substantiate it. We have done 30,000 inhale double blind challenges. So in our mind we know that it is right. Okay? But we would like to have other people work in conjunction with us, so they would learn the techniques properly, so they can do reproducible studies.

Mr. BUYER. All right. Thank you.

Dr. MILLER. Let me comment that the proposal we initiated, which will be, I think, discussed later, actually had input from the military and the VA, and also from NEIHS. All of them have seen the proposal and have been interested in it. NEIHS in fact has written a letter saying they think this is the most important way to sort out this issue. And they have an interest, that they have expressed, in terms of supporting ongoing clinical studies using such a facility.

Building a unit like this is not inexpensive. However, the utility of it is not limited to just looking at the veterans either. This is a tool for looking at people with exposures to tight buildings, people with other kinds of environmental exposures around Superfund sites and a variety of other kinds of low level chemical or higher level chemical exposures.

Mr. BUYER. Mr. Chairman, it is very difficult to do all this in five minutes and I didn't get a chance to get to Dr. Hyman. But I know there are many of us who, when we talk about the research, don't know the name of the germ and what your antibiotics are and how you cure the illness. I have many, many forms of questions. And I am sure that when you make applications for a grant and funding, a lot of our questions will have to be answered.

But they are some of the same questions I asked them, Mr. Chairman. If I could just finish by asking Dr. Hyman: Would you also be willing to share your research, and work in cooperation with someone from the DOD or the VA for the benefit of our society?

Dr. HYMAN. That, sir, I think is the second step. The first step is to see how relevant this is to the major portion.

I suspect it is going to be relevant to an awfully great proportion of those who are suffering. Tom Lane has, I understand, been environmentally positive even after I treated him and he was back at full time. But he is back at full time, sustaining whatever injury that was inflicted by environmental substances.

I am not exactly—let's put it this way: I am reasonably familiar with most of these chemicals they are talking about. And as a biophysicist, I think I know significantly about the methods of going at them and measuring them. However, what I am involved in here I think is bigger than I am. And I will try and get the thing out.

The immediate problem with respect to what you are concerned about is: how does this apply to a large sampling of Desert Storm victims? There is no question in my mind, that the first step is to find out what percentage of victims this is relevant to.

My own suspicion, from the dozens of urines I have examined after the hundreds of phone calls, is that there is a pretty good speckling of this all over the crowd. And I wouldn't be surprised if there are an awful lot of them.

Second, I think that there ought to be a research arm to research the germs, because, as I pointed out, in 1902 this scientist told the world how to create such germs. Now think about that.

And then, yes, once we see that my approach is relevant, I think we should form a team to coach or to teach other directors, to expand by cloning of sorts, the same as I learned as a resident how to examine sick people, to spread the thing to everyone who wants to be involved. That includes both Army, Navy, Air Force, and Veterans Department.

However, in the early step, it would be a tremendous burden to have these people in the way. I would like to select those who are initially involved. I would include in particular one gentleman who worked with me in 1949 and we have been close ever since. He has followed my work at the Einstein in New York, the Einstein College of Medicine. He came down here today to see what is going on.

Mr. BUYER. We don't have two competing approaches here? I am not sure, Mr. Chairman, whether we do or not.

Mr. KENNEDY. I think that my understanding is that, you know, there have been attempts to have Dr. Hyman work with the VA. I am not exactly certain how those attempts broke down in the past.

Dr. HYMAN. May I?

Mr. KENNEDY. Sure.

Dr. HYMAN. I approached them about a year ago. I had my first correspondence in August of 1992. Let me summarize it by saying I couldn't get urine from them. I mean in a bottle. I have had no cooperation since and I have been thoroughly condemned. I don't appreciate it.

In New Orleans, I got communication from the Veterans Hospital there, where they had turned the entire problem over to a Ph.D. in psychology. That is inappropriate for clinical study of an organic disease. I could not work under her. That would be more a burden than necessary.

I think a direct approach should be had. And I would urge you to do it immediately. And I would urge you to start storing the bacteria for further study. There are scientists who know a hell of a lot more about this and they are available right now.

Mr. KENNEDY. I appreciate it, Doctor. Mr. Bachus has one or two additional questions that I want to provide him an opportunity to ask. I do have just a quick comment to Dr. Miller.

I would very much look forward to working with you, Dr. Miller, in trying to develop legislation that would allow us to get a handle on this particular phenomena. It seems that given the complexity, that until we get the sort of imprimatur of the larger scientific community or medical community, as you point out, it will continue to be difficult to have this treated with the kind of substance that I think it deserves. And so I look forward to working with you to develop that criteria.

I hope that we can work closely with people like Dr. Rea and Dr. Hinshaw, and others, that have done extensive work in this area and draw from them in trying to provide that initial body of knowledge that would then give this multiple chemical sensitivity or low level chemical contamination, or however you want to describe it, the kind of verification that will then, I think provide the soldiers and others, as you point out, indoor air and a whole range of other low level chemical exposures that take place every day in the United States and throughout the world.

I do think that that should not excuse us from developing either what Dr. Hyman has sort of obliquely referred to, which is—I assume what you are suggesting is that there was chemical warfare that took place in the Persian Gulf. That is what you sort of hinted at several times.

Dr. HYMAN. If that is a question, I would be happy to answer it. I would like to describe it more fully in private. Let me just say, put yourself in the other guy's shoes for a few minutes and see what he faces, and maybe he can make you sorry you ever came.

Mr. KENNEDY. Okay. Well, if you want to discuss it privately, that is fine. I think if you told me, if you gave me any evidence that suggested that that did take place, I think I would probably make it public pretty quickly.

Dr. HYMAN. I gave you one evidence. I gave you one evidence of an experiment in the 1950's of putting a germ called Serratia into the atmosphere off the coast of San Francisco, with a west-to-east breeze. And they had a small outbreak of Serratia infections in San Francisco. And I know who detected it and it was reported.

Mr. KENNEDY. Yes, sir. No, I am familiar with the incident that you are referring to. I am just hearing what you are having to say this afternoon. That is all.

Dr. HYMAN. You would need a laboratory as big as the men's room.

Mr. KENNEDY. As a men's room?

Dr. HYMAN. It is not necessary to get one bigger than that to create this kind of problem.

Mr. KENNEDY. Okay. Thank you very much. I think at this point I would again like to thank all of our witnesses and turn the final questions over to Mr. Bachus.

Mr. BACHUS. Dr. Hyman, you have described this as a germ or a bacterial infection that you have isolated in the urine of these Desert Storm veterans. Is that correct?

Dr. HYMAN. Congressman Bachus, yes, let me identify that just a little bit further. The big detour here was a fellow who was trying to describe a laboratory counterpart of a kidney infection, a one-for-one test. It has failed since. And recently I had a paper accepted for publication in an international journal showing that this is terribly incomplete.

Amongst the incompletions, and very important ones, are the systemic illnesses. For example, if the scarlet fever germ is floating around in your blood, it will likely come out in your urine. You can pick it off in urine in a few minutes, or 90 minutes, according to the microscopic method I have developed. It will not be found by today's hospital laboratory. It may take two weeks to get it out in an old fashioned culture. I have done both. Not that I need the extra work on the Desert Storm victims, and I think it is important to do it.

In those terms, yes, it is a bacterial invasion of the body. And it is not specific, to any one species of germ by the current classification. Let me give you another analogy, since you are not a bacteriologist, but you will catch the analogy.

If you look at the dogs that sniff out narcotics in an airport, not all of them are the same species. Some are retrievers, some are Labrador Retrievers, some are Golden Retrievers, German Shepherds, Beagles, and so forth. The one characteristic in common is that they are taught to smell narcotics and identify them. You can do the same with bacteria.

Mr. BACHUS. All right. Let me ask you this about this bacteria. It is hard to describe. Is it contagious?

Dr. HYMAN. Any time you are dealing with a bacterium, you have got to entertain the possibility of a contagion. And as I mentioned, I have successfully treated the wife of one of these five veterans, and she is fully restored. She was not anywhere near as deeply involved as was her veteran husband, who was short of breath. He had been given all sorts of psychiatric medicines for his shortness of breath. But no one bothered to measure the oxygen in his blood. It was critically low.

Mr. BACHUS. So a veteran's wife contracted this bacteria. So it was contagious or it was transmitted to her?

Dr. HYMAN. You can't prove it in one case. But you sure can suspect it. And unless you suspect it, you will never prove it.

Mr. BACHUS. So you suspect that it is contagious and can be transmitted.

Dr. HYMAN. I suspect that it is contagious not only to wives but to other people living in the same household.

Mr. BACHUS. And you have isolated it?

Dr. HYMAN. I have isolated many of the germs.

Mr. BACHUS. Can you give us a detailed description of this bacterial infection? I mean for the record, would you be willing to do that?

Dr. HYMAN. It would take a long time to do it. Can I discuss that with you at some length in private? Because I think it is immensely important and I think you have put your finger on a very important point.

Mr. BACHUS. All right.

Dr. HYMAN. Yes, it can be done. It is tedious to do. You have got to avoid the "shortcut" methods that are used in the "guidebook," or the same "shortcut" methods demanded by these people who "manage health care" these days. You have got to go back to the old methods of doing it.

It can be done. I have done it, following their technology. It is perfectly valid.

There is an awful lot I think must be done there, in my opinion. There are people who know more about it than I do. I would love to get them involved in it, because I think the country ought to know about it.

Mr. BACHUS. You, in your testimony, talked about your research protocol.

Dr. HYMAN. My suggestion is two steps. The first step is to see if it is relevant to a large percentage of these persons. The second step is to disseminate the know how to care for all involved, and the only way I know to nail it down is to look for the bacteria there, they don't belong there, if you get rid of them does it get rid of this problem, like the two you heard this morning. Tom Lane is fully restored and Hollingsworth is almost fully restored.

Mr. BACHUS. Yes, I understand that. What I am saying, Doctor, is if you would submit a research protocol.

Dr. HYMAN. An investigation? Put that in formal terms, you mean?

Mr. BACHUS. Yes. And ask for approval and an award of money.

Dr. HYMAN. I would be happy to that. I am not prepared to do it now. I would like to work with somebody, an accountant that is perhaps somewhere connected with the government or with your committee, preferably with your committee, since this is the first opening I have seen.

Mr. BACHUS. We don't have a procedure where, if you submit a research request, it can be approved and an award of funding can be made. We don't have that.

Let me ask this final one. What antibiotics are you using to treat this bacteria?

Dr. HYMAN. A beautiful question. Any available antibiotic. I do it exactly like Paul Erlich did in 1908 or before 1908. If you do the culture methods and use the standard protocol that is used today, it is worthless. You can take a guess and do better.

I am limited only to those that are available at the drug store or in a hospital pharmacy. And most of them are long out of patent. And there is another opportunity.

I would love to get some major drug house involved, to say maybe we can play Paul Erlich again in 1908 and tailor a molecule to do a better job. The ones we have that are not that effective.

That is why you have to push the dose beyond the "guidelines" of the FDA. And I have been to the FDA on this.

I use any one on the board, mostly ones that I think will be effective against the streptococcus and the staphylococcus, because those I believe are the biggest offenders.

And by the way, Lowell Rantz in 1942—I knew Lowell Rantz well, and my good friend, Dr. Deming, who is sitting back there, knew Lowell Rantz very well. I found exactly the same thing as Rantz did. But Rantz didn't have any antibiotics to use. I do. I have the advantage of not only his teaching, and not only a faster method of finding them, but I have antibiotics and he didn't.

Mr. BACHUS. Give us just the most effective antibiotic? Could we have that?

Mr. KENNEDY. For the record, you can have it. For the record.

Dr. HYMAN. If I had to pick a single one, it would be clindamycin.

Mr. BACHUS. All right.

Dr. HYMAN. But there are many others that are useful and no one antibiotic's a cure-all.

Mr. KENNEDY. I want to thank the panel for your excellent testimony this afternoon. We very much appreciate your efforts and look forward to working with you in developing further answers to this complicated question. Thank you.

I would like the members of our next panel to come forward, Major General Blanck, Dr. Holsinger, as well as other representatives of the VA. Please come forward to the witness table at this time and be seated.

General, please proceed.

STATEMENTS OF MAJ. GEN. RONALD R. BLANCK, COMMANDING GENERAL, WALTER REED ARMY MEDICAL CENTER, DEPARTMENT OF DEFENSE; AND DR. JAMES W. HOLSINGER, JR., UNDER SECRETARY FOR HEALTH, VETERANS HEALTH ADMINISTRATION, DEPARTMENT OF VETERANS AFFAIRS; ACCOMPANIED BY DR. SUSAN MATHER, ASSISTANT CHIEF MEDICAL DIRECTOR FOR ENVIRONMENTAL MEDICINE AND PUBLIC HEALTH; CHARLES FLORA, ASSOCIATE DIRECTOR, READJUSTMENT COUNSELING SERVICE; MELANIE GRISHMAN, CHIEF, PROGRAM MANAGEMENT DIVISION, SOCIAL WORK SERVICE; DR. JESSICA WOLFE, DIRECTOR, WOMEN'S HEALTH SCIENCES DIVISION, NATIONAL CENTER FOR PTSD; AND QUENTIN KINDERMAN, ASSISTANT DIRECTOR FOR POLICY AND PLANNING, COMPENSATION AND PENSION SERVICE, VETERANS BENEFITS ADMINISTRATION

STATEMENT OF MAJ. GEN. RONALD R. BLANCK

General BLANCK. Thank you, sir. It is my pleasure to appear before the committee and I very much appreciate this opportunity.

I am not going to go over my testimony. You have it in front of you and it speaks to the points I would like to make. So instead, I will flesh it out and give some details.

First of all, I am very pleased that I am here as a DOD representative. And this truly is a tri-service effort in dealing with the issue that we are here to discuss.

I am also very pleased with the VA-Public Health Service cooperation that we have had. And we have done this in a very, very joint sense.

Operation Desert Storm and Shield, as has been stated before, was a medical success, far exceeding our expectations.

However, war is not friendly to one's health. It is not because of exposures not only to combat actions but also to other diseases and agents, infections and environmental agents.

Early on the Department of Defense, in cooperation with other agencies, was concerned about such areas of interest as infectious processes, malaria and leishmaniasis, and we know about those. We looked into and continue to study the long term effects of the oil fire smoke, petrochemicals, depleted uranium, and other kinds of agents.

We now are faced and have been faced with an illness manifested by nonspecific symptoms of fatigue, weight loss, abdominal pain, in some cases with skin rash, low grade fever, and so forth.

And the first point I would like to make is we recognize this as a specific, distinct entity that is due to some cause and that is more than stress. Stress is not the explanation for this illness in these affected individuals. It is serious.

Second of all, we have, since previous testimony, been building a registry in the VA and in the military services of those individuals so affected, so that we now have enough cases that I believe we are able to take it one step further and begin putting together a series of distinct criteria to diagnose the disease or to find out who fits in it or who does not.

That is not to say those that don't fit in it would be necessarily excluded, but at least to begin looking, do cohort studies on units in Desert Shield/Storm versus those that weren't, and that kind of thing.

Finally, we need to evaluate additional diagnostic and therapeutic modalities. To that end, I will say that traditional medicine, medicine in which I was trained, has not come up with an answer for what this very real illness is. And I think we must look at other kinds of perhaps more controversial but I think as real disease entities.

And I speak specifically of two disease entities: one, chronic fatigue syndrome; the other, multiple chemical sensitivity. And the Department of Defense certainly supports further research in that.

In that regard, Mr. Chairman, if I may, I would like to submit a proposal that I have received, and we reviewed at a recent panel of the VA and DOD, from the University of Texas at San Antonio for a center to be established to do research on multiple chemical sensitivity. And this is from Dr. Claudia Miller. I don't know if she has testified here today. She was supposed to.

Mr. KENNEDY. Yes.

General BLANCK. And I would like to enter this as an addendum to my testimony.

Finally, we have asked some individuals to also look at the work that Dr. Hyman has already alluded to, because that may be something that is playing a role in all of this.

I think chronic fatigue syndrome and multiple chemical sensitivities may be the same kind of thing, perhaps on different points in a spectrum. They are certainly worthy of serious consideration and we must do more in this area.

I believe we have made a beginning in doing this and I would ask your consideration for this center.

That concludes my statement.

[The prepared statement of General Blanck appears on p. 314.]

Mr. KENNEDY. Thank you very much, General Blanck. Dr. Holsinger.

STATEMENT OF DR. JAMES W. HOLSINGER, JR.

Dr. HOLSINGER. Good afternoon, Mr. Chairman and members of the subcommittee. Thank you for the opportunity to report on the VA's efforts to meet the health care needs of Persian Gulf War veterans.

With me today are Dr. Susan Mather, Assistant Chief Medical Director for Environmental Medicine and Public Health; Mr. Charles Flora, Associate Director, Readjustment Counseling Service; Ms. Melanie Grishman, who heads our Persian Gulf Family Support Program; Mr. Quentin Kinderman, Assistant Director for Policy, Compensation and Pension Service; and Dr. Jessica Wolfe, the Director of the Women's Health Sciences Division of the National Center for Post Traumatic Stress Disorder.

In the audience, we also have with us Dr. Gary Roselle, the VA Director for Infectious Diseases; and Dr. Larry Lehman, the VA Director for Psychiatry Services.

Mr. Chairman, the VA has moved aggressively to respond to the health concerns of Persian Gulf veterans.

In 1991 we initiated readjustment counseling services and took special initiatives to treat the psychological problems of returning Guard and Reserve units. Through May 1993, our vet centers have seen approximately 35,000 Persian Gulf War veterans.

Ongoing studies by both the Readjustment Counseling Service and the VA's National Center for PTSD lead us to conclude that approximately ten percent of Persian Gulf veterans that we have surveyed experience some level of PTSD syndrome.

We are seeing encouraging data that indicates declining problems with PTSD in Persian Gulf veterans who seek VA treatment due to our early detection and treatment efforts.

When difficult to diagnose medical problems began appearing, we began development of a health registry to capture baseline data and provide continuing surveillance of these patients. With congressional approval of authorizing legislation, the registry was officially initiated in late 1992.

As of March 31, over 3,900 veterans have received examinations and were entered in the registry, having come to us specifically for registry examinations. We have a total of nearly 80,000 veterans

that we have seen from the Persian Gulf whose names are also included in that registry.

A recent review of the first 1,404 registry participants show that common complaints were fatigue, skin rash, headache, loss of memory, muscle and joint pain, shortness of breath, cough, diarrhea and chest pain. A wide range of medical conditions have been diagnosed among the participants.

In September of 1992 we also began providing priority access to VA health services for veterans of the Persian Gulf War who believe that their health problems are related to their service. I directed this to assure that needed health care would be provided promptly, without the need to first determine causation or possibly entitlement to compensation.

As of March 31, 1993, VA had provided outpatient treatment to nearly 73,000 Persian Gulf theater veterans and provided inpatient services to over 4,500 theater veterans.

Mr. Chairman, because some Persian Gulf veterans were having medical problems for which there appeared to be no logical or scientific explanation, in 1992 we established special referral centers at our Los Angeles, Houston and Washington, DC medical centers.

As of May 31, 26 veterans have been admitted to the referral centers for diagnostic work-up. Examination of these veterans by the referral center staff has indicated no common pattern of conditions that presented. Twenty-six additional cases are currently being considered for referral.

In October, 1992, Congress authorized and provided funding to support the provision of marriage and family counseling to Persian Gulf veterans, their spouses and children. In the early months of this program we have undertaken extensive outreach to community groups, such as Guard and Reserve units, churches, schools, veterans organizations and local media. In fact, only last weekend we had a large team present with the National Guard unit in Florida.

As of May 1, 627 Persian Gulf veterans had received family counseling services through the Persian Gulf Family Support Program. This is the first time that we have, in the history of the VA, been able to provide these types of services to the families of veterans.

Because of continuing concerns about the possible health effects of military service in the Persian Gulf, on March 30 the Secretary established a Persian Gulf Expert Scientific Panel to review health issues related to the diagnosis, treatment and research of Persian Gulf-related health conditions.

At the conclusion of its May 7 meeting, the panel members individually concluded that additional review and analysis of research, education and clinical issues are essential in view of the complex scientific and medical variables associated with these conditions. The VA is currently working to establish a formal advisory committee to follow through on these issues.

We are also working with the Department of Defense to jointly contract with the National Academy of Sciences medical follow-up agency, the Institute of Medicine, for a review of existing scientific, medical and other information on the possible health consequence of Persian Gulf service. We are hopeful that that contract will be signed and work begun in the immediate future.

Mr. Chairman, the vast majority of Persian Gulf veterans that we treat have conditions that are readily diagnosable and treatable. However, there are a small number of cases for which there are no readily available answers. These cases present complex health issues, some of which appear to defy our best efforts to define them, issues which will undoubtedly require further review and analysis in the years to come.

Mr. Chairman, VA is committed to ensuring that the health care needs of Persian Gulf veterans are being met consistent with accepted medical practice and procedure. Those who need care receive care.

We are also committed to finding the causes of and appropriate treatments for the illnesses and conditions that have evaded our diagnosis thus far.

Mr. Chairman, I am prepared to answer any questions that you or members of the subcommittee may have on the VA's Persian Gulf-related efforts. Thank you.

[The prepared statement of Dr. Holsinger appears on p. 339.]

Mr. KENNEDY. Thank you very much, Dr. Holsinger.

Well, first and foremost, I am somewhat taken aback by your notion of moving aggressively, Dr. Holsinger. I think that when we look—I know that you just stated somehow you got 80,000 in there, that you slipped 80,000 in, in terms of the registry.

In your own testimony, as I look, it says as of March 31, 1993 more than 3,970 individuals have been examined for the registry.

What is the difference between the 3,970 and the 80,000?

Dr. HOLSINGER. There is a ready answer for that, Mr. Chairman. We have had almost 4,000 individuals as of March 31 who have presented solely to be examined under the registry provisions.

We have seen nearly 80,000 veterans in total who go into that registry when they come into our hospital for outpatient care or inpatient care.

We have those individuals, 73,000, that are outpatients, nearly 5,000 that have been inpatients. There may be some overlap in that group. But an additional 4,000 as of March 31 had come solely for the purpose of having a registry exam.

Mr. KENNEDY. The 80,000 people that you are referring to fully answered all the questions and have completed all the requirements of the registry?

Dr. HOLSINGER. The way you phrased the question is not exactly the way I would answer it. But I will try and do both.

The situation is that if they have come to us as an inpatient, they are ill——

Mr. KENNEDY. Yes, I got that part of the answer. I understood that.

Dr. HOLSINGER. Then we do a full history and physical on them, the same sort of thing that we would do if they were coming in for a registry exam.

What we have tried to do is to bring individuals who are not necessarily sick, who may not necessarily have symptoms, who don't need treatment, to come in and have a registry exam.

Mr. KENNEDY. I appreciate that. I just asked a simple question, which was: the 80,000 that you referred to, have they been through all the questions that are necessary to——

Dr. HOLSINGER. The answer to that question is no, they would not have answered all those questions.

Mr. KENNEDY. Okay. So what you have said is that you tried—I mean, what happens here is that you give an impression that you have gotten a lot done. And then there is a concern that perhaps not as much has been done.

We are under the impression on this committee, by a lot of people that have testified throughout the day today, that about 4,000 soldiers, out of 600-and some odd thousand that served in the Gulf, have completed the requirements for the registry.

Dr. MATHER. Examination.

Mr. KENNEDY. Examination, yes.

Dr. HOLSINGER. Right.

Dr. MATHER. The law says, though, that we must register everyone who applies for benefits. So everyone who files for compensation or pension is registered.

Mr. KENNEDY. No, I understand they are registered. But the question is not whether or not you are registered. The question is whether or not you have answered the questions that allow us to draw conclusions about the types of service that you are involved with.

If you recall, the purpose of this registry was to make determinations as to what chemicals these soldiers were exposed to, what kinds of service they were involved with, so that we wouldn't have a repeat of the Agent Orange fiasco.

So if that is true, then what I am trying to get to is, I think, something fairly simple, which is whether or not the 80,000 people that you just mentioned have completed the requirements. Not why they came into the VA. I don't really care why they came into the VA. I am just asking you something fairly simple. Did they complete all the questions that are necessary for the registry?

Dr. MATHER. The registry is voluntary. They have not. The answer is no, they have not.

Mr. KENNEDY. We understand that. We understand that the registry is voluntary. That has nothing to do with the answer to my question. The answer to my question is yes or no.

Dr. MATHER. No.

Mr. KENNEDY. Yes, we did in fact complete all the questions, the 80,000 people that came in. How many did you—if you didn't do the 80,000, how many have you done?

Dr. MATHER. The 4,000 have been registered in the automated database.

Mr. KENNEDY. So you have done 4,000. You haven't done 80,000.

Dr. MATHER. We have seen 80,000. There are 80,000 names in the registry. There are 4,000 examinations that have been completed and entered into the automated database.

Mr. KENNEDY. So you mean 80,000 people have sort of knocked on the door, in one way or another, of the VA since their service in the Persian Gulf, but only 4,000 have really completed the registry.

Dr. MATHER. The registry examination.

Mr. KENNEDY. But you want to claim the 80,000.

Dr. MATHER. Some of these——

Mr. KENNEDY. Well, let me ask a different question. Did 76,000 people say they didn't want to complete their registry questions?

Dr. HOLSINGER. No. Seventy-six thousand people came to us for treatment and we cared for them.

Mr. KENNEDY. I appreciate that.

Dr. HOLSINGER. I mean, many of them were too sick at the time. They had a heart attack or whatever. They were too sick to fill out a registry questionnaire.

The point being that we have registers and we have the names and addresses which we are able to maintain in the register of approximately, Mr. Chairman, 30 percent of the individuals that are veterans, that are in veteran status. You have to remember that half or so of the individuals are still on active duty.

Mr. KENNEDY. I understand that.

Dr. HOLSINGER. So we are dealing with a lesser number than 658,000 individuals.

Mr. KENNEDY. Okay. Well, let's call it—what do you want to call it, 300,000? Okay, fine.

Dr. HOLSINGER. The point being that 80,000 people have come to see us, out of 300,000. That is a pretty impressive number.

Mr. KENNEDY. Okay. Let me get to a second set of questions. You are saying that you have had 26 veterans that have been admitted to the referral centers. Now do you think it is—you were here for most of the testimony today, correct?

Dr. HOLSINGER. I have been here for all the testimony.

Mr. KENNEDY. Okay. Now we heard one of the panelists indicate—the fellow from Texas, his name is Mr. Sylvester—indicated that his organization had supplied an 800 number. And shortly after the 800 number was established, he received 6,000 separate inquiries indicating soldiers who had felt some kind of Persian Gulf syndrome sicknesses.

Do you think that it is strange that you have only had 26 and that he has had 6,000?

Dr. HOLSINGER. I think you are comparing apples and oranges, Mr. Chairman. The 26 individuals are individuals that have problems that our local facilities have been unable to diagnose and which have been sent on to a special referral center where we have additional types of care.

Mr. KENNEDY. I think the problem is that you think that my question is a problem.

Dr. HOLSINGER. Well, we have had 80,000 people come, compared to his 6,000.

Mr. KENNEDY. Dr. Holsinger, what I am trying to get across to you is something fairly simple, which is that there are 6,000 out there that don't feel that they are getting the proper service from the VA. There are 6,000 Persian Gulf veterans that feel not that they call the VA when they are feeling sick, but they feel they call an 800 number, because they don't feel that the VA is going to provide them with the care.

Now, you know, you can say, well, you are doing all these things. You know, you said in your testimony that, first of all, you are moving aggressively. And you also then talked about your NAS agreement.

But didn't you miss your May, 1993, deadline with your NAS agreement, your National Academy of Sciences agreement?

Dr. HOLSINGER. Well, the NAS agreement requires, under the congressional legislation, that it be a VA and DOD activity. I have signed the agreement. It is at DOD. We expect it to be signed by DOD shortly. But we have already started all the negotiations with NAS in order to have it in place.

Mr. KENNEDY. It is a funny answer because what you are saying is, look, I did my job. And it is a bureaucratic answer and I suppose that means the VA is doing its portion.

But the question isn't whether or not we are trying to cover our tails with the Congress. The question is whether or not we are getting and creating an environment through which Persian Gulf veterans that are feeling these illnesses feel that they can come forward.

Now I just want to go on for a second here. You know, I sat through testimony last year where General Blanck testified. And, you know, it is nice to see that you have changed some of the opinions of the panel.

I mean, we have got the reports of the panel's initial responses last year which, you know, just said there is no good reason at this time to believe these symptoms are related to petroleum products, said the statement prepared by the Army Surgeon General's Office. You know, the nine member panel include experts from the petroleum industry.

Researchers concluded that stress was the likely cause of similar complaints amongst the groups of reservists from Indiana.

So what happens is, you create an atmosphere. You have the same people that do the Agent Orange study that conduct this study. Then what happens is you say that you have created—that you are moving aggressively, we missed the deadline because of some bureaucratic snafu. I am sure if I asked the General why he missed the deadline, he will come up with a reason, as well.

But what will happen is, from the Persian Gulf veterans' perspective, they are not getting the service that they need. And there is, I think, a general sense that this is looked on with real skepticism and it is not being pursued aggressively.

You shake your head, doctor. But I have just given you some examples as to why they feel that way. You know, you claim, you sort of slip in 80,000 when the reality is that you have done 4,000. The fact is that you missed the National Academy of Sciences deadline. There have only been 26 veterans that you say have been put into this special category because you cannot solve what their illnesses are at the local level.

But we have just heard lots of testimony. We have heard from one of your doctors in the New England region who says he has seen up to 80—97, I think—87 veterans where there was no direct conclusion. And he was saying that he was having all sorts of problems in linking the sicknesses that these veterans feel with any direct illness—excuse me, with any direct cause from their experience in the Persian Gulf other than multiple chemical sensitivity.

So what happens is, you have got the situation where you are saying we are doing everything that is possible, but there is a whole panel of experts that have just come in saying that what is

necessary is a whole body of knowledge that has to be developed with regard to multiple chemical sensitivity.

And so I don't believe—my conclusion is not everything is being done, that you are not coming forward testifying today as to what is needed, you are coming forward today and telling us everything that you have done well. And it is not going well for those veterans.

Let me just shift gears briefly here. General Blanck, your testimony indicates—let me quote—"careful analysis of these atypical"—now we are talking about depleted uranium here. "Careful analysis of these atypical exposures to depleted uranium suggest that there will be no significant increased risk to health either in the short or long term."

Yet I also have a document that has been prepared for the Department of Defense by the Army Surgeon General's Office which indicates that depleted uranium can be toxic to the kidneys, may increase the risk of cancer, and can be absorbed into the body through exposure to tanks that have been penetrated.

Now could you explain the difference between your testimony and the evidence that has been collected by the Surgeon General?

General BLANCK. Both of what you have just alluded to I would agree with wholeheartedly. That is, depleted uranium clearly is both a radioactive substance—however low the level, it is still radioactive—and, as a toxic heavy metal similar to lead, has the potential to cause both short and long term effects. Absolutely no question.

The first bit of testimony that you read, in which so far, I would say, we conclude that we don't have any evidence that there are these kinds of health problems—at least we have not seen them now—is based on our analysis of members of the National Guard unit exposed to contaminated dust as they were clearing Bradley Fighting Vehicles and some tanks that had depleted uranium in them, and from an analysis and follow up of 22 soldiers hit by friendly fire who actually have depleted uranium fragments in their bodies, and it is so small and scattered that we can't get it out.

We have looked at those folks and continue to follow them.

Mr. KENNEDY. But what you just said is a little bit different than what your testimony says. Your testimony says careful analysis, not the data that we have thus far collected. It says careful analysis of these atypical exposures to depleted uranium suggests that there will be no significant increase in risk to health either in the short or long term.

That is a little different than what you have just said right now, which is that in the studies that have been completed to date, that are still not completed, that you haven't seen direct cause and effect between the depleted uranium and the potential illnesses that these fellows feel.

General BLANCK. I see exactly what you are saying and I would agree, and would change it to reflect that careful analysis of the data we have to date would lead us at this point to that conclusion.

In medicine there is an old saying, never say never, never say always. And so this is something that clearly we need to follow, and we have done it.

The exposures in those individuals to which I alluded are low. And both the Nuclear Regulatory Commission as well as the Army have been involved, and the VA, in studying this.

Mr. KENNEDY. Certainly. And I read further in this report that under certain circumstances there wouldn't—the Surgeon General's Office suggests that there wouldn't be—that the body would not absorb depleted uranium if it has been eaten or inhaled if it has been burned in a fire.

So I assume, you know, that there is some evidence that would suggest that there are certain circumstances where it can be harmful. I don't know as I would want to eat a mouthful of this stuff under any circumstances. But on the other hand, there are other circumstances where it could be harmful.

General BLANCK. Right.

Mr. KENNEDY. Again, I think what it does is it creates an atmosphere which I think, as I recall your testimony last year, you were somewhat sensitive to.

And I think, as I recall, after questioning you, there was a recognition on your part that by hiring the same fellow who did the Agent Orange report was probably a mistake by the Army, that this is a very complicated, potentially very harmful set of illnesses that people are feeling.

And there should be, I think, a general sense, which I hope that you can communicate today, that the Army is going to do everything in its power to work with Dr. Miller, I would hope with Dr. Hyman, and with the other set of panelists that were here prior to this panel that have done, as we understood, at Denver over 30,000 studies of chemical contamination, that we would take those into account, and that there would be a general presumption that these illnesses are probably related to the veterans' service in the Persian Gulf, that we will do everything we can to provide them with service-connected disabilities as well as with fundamental health care, and that we will then on a separate track be doing these studies to help draw the further sort of scientific and medical requirements that will designate whether or not these illnesses can be in fact documented to the satisfaction of the medical and scientific community.

General BLANCK. I do give you that assurance. And we are, the services as well as the VA, working very closely with at least some members of the community involved with multiple chemical sensitivity. I have alluded to that and you will have this proposal for a study research center at San Antonio.

It could be done other places, not saying that is the only place it should be done. And, of course, as well with Dr. Hyman.

Mr. KENNEDY. Just two quick, brief questions. How long have you been aware of the potential health effects of depleted uranium?

General BLANCK. We have been aware of the potential effects since it has been placed into munitions and armor.

Mr. KENNEDY. So you knew, obviously, prior to the deployment of these weapons in the Persian Gulf?

General BLANCK. Yes, sir.

Mr. KENNEDY. Was there any attempt to let our troops know of the potential harmful effects?

General BLANCK. There are both regulations regarding that and certainly attempts were made to do that.

As you may know from a GAO report done in 1991, I think, I believe we failed in that, did not do it very well.

In fact, the National Guard unit to which I referred that was exposed to the contamination cleaning vehicles and such, were not informed until they had done this for three weeks. That is our fault and we take that responsibility, and are putting fixes into place.

Now I think our obligation is to follow that unit, do the appropriate studies, and so forth.

Mr. KENNEDY. Fine. Thank you, General.

Dr. Holsinger, I just would suggest that the—I have heard many, many reports from Persian Gulf veterans that have contacted my office that indicate that they, when they go to a local VA, do not get referred to either the center that you have talked about in your testimony, that they are not referred to the registry, that they make complaints about the suffering of diarrhea, of hair loss, of disorientation, of stomach cramps, and they have continued to be told of situations that would cause this being related to post traumatic stress and other head-related kinds of indications.

So whether you are getting that message or not, I am trying to let you know that that is certainly the information that is coming through loud and clear to my office.

And I would suggest that if there are only 26 people that, given the overwhelming body of evidence that we have heard today that would suggest how difficult it is to directly relate someone's service in the Persian Gulf to chemical contamination, that I am very surprised that only 26 people have been referred to the center.

If the testimony today were, look, every case that comes in, there is a presumption, we look up what their record is, we know where they served, we know what kinds of chemicals they were contaminated with, and therefore we presume that there is a direct relationship, I would say, hey, well, maybe it is only 26 that fall outside of that category.

But that has not been what we have been hearing. What we have been hearing is that there is a presumption that there isn't a direct relationship.

And so when you tell me that there isn't a direct relationship and yet there have only been 26 veterans that have been referred, it seems kind of incredible. You know, it doesn't seem to make a lot of sense.

Dr. HOLSINGER. Well, first of all, Mr. Chairman, let me tell you that I really appreciate the feedback from you, from what you are receiving in your office. I think that is helpful to us, to know that we may have a glitch in our system as far as getting information out to our people.

We take this problem exquisitely seriously. This is the reason why—this is the reason why last fall I made a determination that we would provide veterans with this problem a presumptive priority for care, which I have no legal authority to do.

It would greatly alleviate the problem we have today, for example, in this arena if legislation similar to that of the Vietnam Agent Orange priority were enacted by Congress.

Mr. KENNEDY. Well, that is what we tried to do. That is what Lane Evans worked his tail off all last year trying to do.

One final question and then I will turn it over to Mr. Bachus.

Of the 76,000 veterans that the VA included in the registry, how many have been encouraged by the VA to complete the registry exam?

Dr. HOLSINGER. Well, I would say that we would encourage any that we have the opportunity to. I can't give you——

Mr. KENNEDY. Are you going to claim the 76,000?

Dr. HOLSINGER. No, I can't do that. I can't give you a number, because I would have to go back to each individual station and ask them whether they encouraged people to do this.

Mr. KENNEDY. Okay. Dr. Holsinger, let me just conclude by saying the following: Look, last year when you were testifying, when General Blanck was here and I assume probably some of the rest of you, I remember we had these hearings and people were looking at me saying, listen, Joe, there are only 200 people out there. Somebody else was saying there were 150.

Now there were reporters—I remember there was a fellow from the Boston Herald who had heard personally of hundreds of cases.

We have gone in the last six months from hundreds to thousands. And yet we have not increased the level of participation by either the VA—I get the sense that the Army is starting to get it. I know that Secretary Brown has indicated that he gets it.

But I will tell you, General, I don't know what it is like in the active military forces. I am concerned that veterans that are active military feel very nervous about coming forward with these kinds of illnesses, for the exact reason that Mr. Boyer went through in his eloquent statement earlier today.

And I am very concerned, Dr. Holsinger, that it takes a hearing like this for the VA to kind of begin to get it. You know, it just shouldn't take this. There should be an easier relationship between our veterans and the VA, when you have got literally thousands of them coming forward with these kinds of illnesses.

Dr. HOLSINGER. Mr. Kennedy, let me just say that I agree with you. And I think, though, that one of the things that also takes place, having served 32 years in the Army Reserve and only retiring a year ago, numbered, all these individuals that were reservists and guardsmen that were called up, that want to stay in the Reserve and Guard, have the same sort of problem that our friends and colleagues in the active duty have, in that they don't want to be coming up and being not allowed, having a bar to reenlistment or being boarded out of the Reserve or Guard also.

So the fact that they don't necessarily come forward to us and they are in civilian status but are also guardsmen or reservists is also real.

Mr. KENNEDY. But, doctor, you don't need to hear from a congressman about this issue. Golly, you know, you just don't. You have got to be in better touch with your patients than, you know, waiting for a bunch of congressmen to bring it to your attention. Golly. It doesn't make sense.

Dr. HOLSINGER. We hear that from our patients. We hear that from our patients every day across the system. And we are con-

cerned about it and we will continue to be concerned about it until we get it worked out.

We are like General Blanck. We are very interested in the research aspects of this thing.

I would love to have a proposal, for example, a research proposal that I can put before a human studies committee and to consider funding, have it peer reviewed, by Dr. Hyman. We have not received that but we would love to have it. We would take it today and put it out for review.

Mr. KENNEDY. Thank you very much.

Dr. HOLSINGER. So if we can get those, we will be happy to go with them.

Mr. KENNEDY. Thank you, doctor. Mr. Bachus.

Mr. BACHUS. General Blanck, Dr. Claudia Miller in her testimony called for establishing an environmental medical unit to diagnose and evaluate chemical exposures. Do you agree with that request? I think you may have indicated so, but not in your written testimony.

General BLANCK. It is not in my written testimony. But I would add this to my testimony, if I may. And it is the proposal that I have received from the University of Texas at San Antonio, authored by her, to set up such a unit.

With it, incidentally, I have a supporting letter from the Environmental Sciences Section of the National Institutes of Health, supporting the same thing.

And I have discussed this with Dr. Mather, with Dr. Holsinger, and I know they are supportive as well.

Mr. BACHUS. When do you think that environmental medical unit could be established?

General BLANCK. I believe with the proper funding—and I have spoken to folks down there—we are talking a matter of months.

Mr. BACHUS. All right. I would urge you to go forward with that. And I commend you for your position.

General BLANCK. Thank you.

Mr. BACHUS. Let me ask you a question just from your testimony. You mentioned 22 Desert Storm veterans who were hit by friendly fire, which had depleted uranium exposure.

General BLANCK. Yes.

Mr. BACHUS. I guess that wasn't on the fronts of our tanks, so I guess that was from projectiles. Was that from the slugs?

General BLANCK. I have read this, so let's see if I can get it right. There were 35 soldiers—to the best of my knowledge, there were no Marines, no sailors and no airmen in this status—who were in Bradleys or in perhaps one case an Abrams, that were hit by munitions that had depleted uranium in them—by definition, since the Iraqis, to the best of our knowledge, did not have this, that is ours—that were thus exposed to the combustion products, the products of oxidation of depleted uranium.

Twenty-two of those 35 actually have depleted uranium fragments. The remainder, the difference between 35 and 22, had wounds and so forth that potentially would have been contaminated by depleted uranium dust. And these are the ones that, in cooperation with the VA, we have entered into a separate registry and follow.

Mr. BACHUS. Are they manifesting any symptoms?

General BLANCK. No, they are not. And I asked that question as recently as this morning, and I think there may be one exception to that. But the vast majority are not, even those with the depleted uranium fragments, in particular those.

And we have looked at two things, as I alluded to before. One is the effect of the metal toxicity on kidneys and bone marrow, and so forth. And there is some uranium in the urine. That means that there is some toxicity, of course. It is below the accepted levels for that, what is considered normal, if you can consider anything of that sort normal.

Lead would be more of a worry. And then they have evidenced no signs of increased radioactivity, as we can measure.

Mr. BACHUS. All right. Thank you.

Dr. Holsinger, would you comment on the testimony of Dr. Hyman? Do you believe it is important for the VA to undertake a research project, as suggested by Dr. Hyman, with 25 to 30 Desert Storm veterans?

Dr. HOLSINGER. No, I think the way that he has said that would not be the way to go about it.

We believe that there ought to be a full research proposal prepared in which we have appropriate controls and reviews. Such a proposal would be reviewed by a human studies subcommittee at one of our facilities that Dr. Hyman would work with to review ethical problems that always come up when you deal with using humans as experimental subjects. We would do a full research protocol right from the very beginning to determine this.

As I said earlier, we would be happy to receive from him such a protocol. To date we have not been able to obtain one. We would love to have one and we would love to be able to put it through the normal research process and look at the funding of such a project.

We will not be able to determine the scientific merit of what he is talking about until we have a chance to review such a proposal.

Mr. BACHUS. Let me ask you this: If he submits a research protocol, would you insist that he utilize a VA facility, knowing his hostility based on his past experience?

Dr. HOLSINGER. Well, I can't determine that, without having a better understanding of exactly what he is doing. I have not been able to read any of the papers that he has indicated that he has written and has prepared for publication, nor have I had a chance to read a research proposal to understand what would be so different about what he would do that we couldn't duplicate in one of our major medical centers, such as the one in New Orleans, as an example. I just don't know until I see such.

Mr. BACHUS. I understand a certain amount of skepticism. But there are five veterans who say that he has cured them of their serious condition.

Dr. HOLSINGER. Well, this is particularly the reason why we believe that a follow up and doing a study in this arena would be worthwhile.

I would not be willing to commit the taxpayers' money to a research project if I didn't think there was the possibility of merit to it. And that is why we would—like I said, we would love to have

a proposal. We would love to have a proposal that we could take through the full process and consider funding.

Mr. BACHUS. I think he said publicly that he is not going to agree to such a research project at a VA facility. And that is why I am asking you, if he submits this research protocol, would you insist that it be done at a VA facility? Or would you allow him to do it based on his proposal?

Dr. HOLSINGER. I don't think that we would quibble over the exact location where it is done. Our concern is that we have a proposal that represents good science, that would give us the answers that we would be hoping would come forth from such a proposal.

As I said, I can't make that kind of a decision until such time as we have an opportunity to put it before a merit review panel and have the scientific merit of such a proposal reviewed.

Mr. BACHUS. Tom Lane went to a VA facility, is that correct? The veteran that testified this morning.

Dr. HOLSINGER. I am trying to remember his testimony. I can't remember whether he said he did or not.

Mr. BACHUS. I just wonder what his diagnosis was.

Dr. HOLSINGER. I honestly don't know.

Mr. BACHUS. Or whether he was not one of these 26 people that was not diagnosed as having any sort of special condition.

Dr. HOLSINGER. We would have to do several things. One would be to make sure that he would allow us to release that information, since it would be in his medical record. But we would have to look at it to know exactly what we said.

Mr. BACHUS. What is VA's response to the possible need to diagnose and treat veterans who may be showing a reaction to endemic diseases?

Dr. HOLSINGER. You are talking about things like leishmaniasis, for example?

Mr. BACHUS. Yes.

Dr. HOLSINGER. Well, obviously leishmaniasis is a clearcut diagnostic entity. And we would, obviously, treat anyone with leishmaniasis. The same with any other vector borne disease, and so on.

Mr. BACHUS. How many leishmaniasis patients do we have in the veterans facilities?

Dr. HOLSINGER. We have three.

Mr. BACHUS. Three?

Dr. HOLSINGER. In our facilities at this point.

Mr. BACHUS. How about in DOD?

General BLANCK. There have been 31 diagnosed.

Mr. BACHUS. Thirty-one?

General BLANCK. Yes, sir.

Mr. BACHUS. These are active duty personnel?

General BLANCK. The 31 is a total. And to the best of my knowledge, the three that the VA is caring for are included in that number.

Mr. BACHUS. Are there any other bacterial infections similar to the condition that Dr. Hyman was describing, other than the leishmaniasis patients?

Dr. HOLSINGER. Well, we had cases of diseases endemic to that area of, oh, everything from malaria to—more common seen here in the States even is meningococcal meningitis. We had two or

three cases of that. I think we had one case of Q fever. A variety of infections, less than we expected. But certainly we had them.

I think that is different, though, than what Dr. Hyman is postulating, which is a more generalized kind of infectious nature, difficult for medicine to recognize for a variety of reasons. And certainly it occurs here in the States as well as may have occurred over in the Persian Gulf area.

Mr. BACHUS. General Blanck, you have come across individuals who are manifesting the condition that Dr. Hyman has treated?

General BLANCK. Yes.

Mr. BACHUS. Have you been successful in treating them?

General BLANCK. Now we are talking about what I would term chronic fatigue syndrome. Although I have talked with Dr. Hyman and I think much of what he says makes sense, I have not evaluated his methods or treatment, and so forth.

So I would say that the success medicine has had in dealing with chronic fatigue syndrome has at best been limited. We have not been very successful in either being able to diagnose it routinely or to treat it effectively.

Mr. BACHUS. Did you hear Mr. Hollingsworth's and Mr. Lane's testimony?

General BLANCK. I did not, but I am aware of them.

Mr. BACHUS. From what you are aware of, would you diagnose that as chronic fatigue syndrome?

General BLANCK. Yes, I think it would fit in there. Now the CDC, Centers for Disease Control, have come up with some specific criteria for chronic fatigue. And I don't know if their cases fit into that criteria.

Whether they do or not, I think certainly that would be a diagnosis that I would use pretty readily.

Mr. BACHUS. That would be your best judgment as to what they are manifesting?

General BLANCK. Yes. Either that or the multiple chemical sensitivity. Something of that nature, yes.

Mr. BACHUS. How would that be service-related?

General BLANCK. Two ways. One is that it was acquired or developed incident to service. For example, if someone develops asthma when they are in the military, no history of it before——

Mr. BACHUS. Through an exposure to a toxic substance?

General BLANCK. Well, not even necessarily with any toxic exposure. They just developed it. I never had asthma before I was in the military for about ten years. But I have it now. If it were severe enough that I had to retire with it as a diagnosis, it would be considered incident to military service and thus service-connected, number one.

Number two is anything specifically to do with the military, from combat injuries to clearly the leishmaniasis, would be service connected.

And that is about the extent of my knowledge on that. I would defer to the VA.

Dr. HOLSINGER. Well, I think that one of the interesting things—and I think this was clear from the panel of experts—is that we are looking at a range of possibilities of disease entities.

It was clear from the panel that one group of physicians felt that they had treated 100 percent of their patients appropriately one way with similar symptoms to those that another group treated somewhere between 90 and 100 percent successfully. We have seen that same sort of thing as we have looked at other types of entities, as well.

So I think that part of the conundrum that we are faced with is that we have a variety of disease entities which are presenting with many of the same symptoms.

For example, out of the 73,000 veterans that we have treated as inpatients, when we have looked at two matched cohorts, 4,000 that went to the Persian Gulf, 4,000 that didn't, we find that their symptomatology is almost identical.

There is a difference in readjustment kinds of problems in those that went to the Gulf versus those that didn't. But it is not an easy task to tease all this apart, as I think came fairly clear from listening to the expert panel.

Mr. KENNEDY. The gentleman's time has expired. Mr. Evans.

Mr. EVANS. Thank you. General, on Nightline last night you stated that the possible health consequences for exposure to depleted uranium are unknown. Isn't this the best argument for giving veterans and active duty personnel the benefit of the doubt, that we don't know what the potential consequences are?

General BLANCK. Oh, absolutely. Yes, I would agree with that.

Mr. EVANS. All right. Public Law 102–585 mandated that the VA and DOD allocate $250,000 each and contract with the National Academy of Sciences for a review of the health consequences of service in the Gulf.

This contract was supposed to be signed in May but to date no such contract has been signed, I understand. Is that correct?

Dr. HOLSINGER. No contract has yet been signed with the National Academy of Sciences. Both the VA and DOD have been working for some several months now negotiating a contract with NAS.

We have a memorandum of understanding between VA and DOD for the joint contract, the development of that contract that has been signed by the VA and is at DOD to be signed.

We expect to be able to complete the process fairly expeditiously at this point.

Mr. EVANS. Do you have a memorandum between the DOD and the VA?

Dr. HOLSINGER. I am sorry?

Mr. EVANS. You have a memorandum of understanding between the VA and the DOD concerning this contract?

Dr. HOLSINGER. We can provide you with a copy of it. We are waiting for the final signatures from DOD right now.

Mr. EVANS. General, if a veteran inhaled or ingested small amounts of depleted uranium, would they register radiation levels above background?

General BLANCK. If they ingested or inhaled enough, yes. If they didn't, they would not necessarily.

If it was in them in the amounts that would be above the NRC levels—and again, I emphasize any amount is potentially dan-

gerous. Anything above zero. Nonetheless—so the NRC has set certain levels and we see if it's above that.

The individuals with the depleted uranium fragments do not register above background.

Mr. EVANS. What would be the potential health effects of inhalation or ingestion or do you put it at the NRC limits or below?

General BLANCK. The two would be toxicity from the metal itself, depending what form it was in. And, of course, the radioactivity can cause the kinds of things that occurs from that. We're talking about cellular damage, mutations, bone marrow suppression and so forth. The worst or most apparent consequences have to do as dosage would increase.

Mr. EVANS. This is directed to the VA. We have heard from several witnesses today that they sought care from private physicians. That strikes all of us, I think, on this committee as wrong as we have a responsibility to these veterans, particularly when we have these doubts about the problems at the Persian Gulf and the other health consequences might be of their exposure to the oil fires and to investigational drugs and so forth. If veterans do not receive a firm diagnosis will they be service-connected and/or receive the medical care necessary to treat their conditions if they have disabilities which are undiagnosable in terms of what their disorder is?

Dr. HOLSINGER. Let me split the questions into two parts and I'll answer the health care part and ask the folks from Veterans Benefits Administration to answer the benefits side of.

We are committed to taking care of any Persian Gulf veteran that comes to see us, irrespective of whether the problem they have ends up being service-connected or not. But we have some legal problems that we work around, one of which is the fact that if they make more than a certain income, then we're required to bill them under current legislation.

As I indicated earlier, some of the problems we have right now with treating individuals who have environmental hazard exposure from the Persian Gulf could be alleviated if we could have legislation similar that that was enacted some years ago for the Vietnam Agent Orange exposure issue.

Mr. EVANS. Do people have to work in VA hospitals when they're ill? There was an allegation one or two witnesses raised that we have veterans that have gone to a referral center that actually have to mop floors and wax floors.

Dr. MATHER. We heard that testimony yesterday, Mr. Evans, and were appalled by it and did call West Los Angeles. And, in fact, Mr. Kresh did arrive unscheduled. He was scheduled to come but not at 5 o'clock on the day in which he did arrive. He did have to wait in the emergency room while they began the workup. He had been referred. It was decided at that point that he was well enough to be worked up, at least initially, as an outpatient and he was referred to the domiciliary to stay that evening. As a part of his orientation to the domiciliary he was instructed that people in the domiciliary were expected to keep their rooms clean and was shown how they did that. However, when he said that he felt too weak to clean his room, they said that they would make arrangements

to have his room cleaned. And he did not have to pay for his meals, which was reported.

He was not in the hospital, he was in a domiciliary following his arrival at West Los Angeles.

Mr. EVANS. General, in the area of downsizing, I think we all are concerned that service men and women consider health problems as a possible black mark on their career. In fact, I know from my own experience with Vietnam veterans that even if they have post-traumatic stress disorder, if they're active duty servicemen and women, they're very reluctant to come forward.

What actions has the DOD taken so that individuals can come forward without jeopardizing their career, particularly as there's more competition, you might say, within the ranks?

General BLANCK. It's of great concern to us. We have taken a number of actions. I'm not sure they've been totally successful. In fact, I'm sure they haven't. I think there's large numbers of individuals out there who continue to have this kind of concern.

Specifically, however, in reference to this problem we in the mid 1991 or 1992—1991 sent a message out alerting our hospital commanders and every reserve guard and active commander at post camps and stations telling them of this problem and emphasizing the need to have the soldier evaluated so that we could learn more about it, look at what they had been exposed to and all of that kind of thing. That was partially due to us looking for leishmaniases, but also in dealing with this whole spectrum of symptoms.

We followed that up with subsequent messages. I have personally talked to every hospital commander, might be one or two I've missed, but I don't think so, in the Army asking them about this, emphasizing the need to go out and market with their communities; that this can't be considered a mark against a soldier for reporting a health concern, for heaven's sakes. That's ridiculous.

Now, have we been successful in that? Probably not. I think with our best efforts there are soldiers out there with downsizing and everything that are still very concerned. And I would bet that there still some commanders out there who use this. And we continue to work this.

I know General Sullivan on down, this is an absolute commitment that we will not penalize people for being sick.

Mr. EVANS. I have many other questions which I would like to submit in writing to this panel.

Mr. KENNEDY. Thank you very much, Chairman Evans.

Mr. Buyer.

Mr. BUYER. Thank you, Mr. Chairman.

General, I have a question for you. At the top of the information paper, what is SGPS-PSP? What's that for?

General BLANCK. SGPS—that's the office symbol for the Professional Services Directorate in the Surgeon General's Office.

Mr. BUYER. Okay.

General BLANCK. I don't know what the acronyms are or the initials.

Mr. BUYER. Well, that's fine. I just wanted to know what particular office because I've been reading a lot of the information papers that go back and forth within your medical community. And when I read statements in there, like here's an information paper dated

14 August, 1992 that says, "To date there is no objective evidence that a single soldier, sailor, airmen, or Marine has an illness that can be linked with petroleum exposure from the Persian Gulf experience." Wow!

I mean, we just had a panel of experts talk about multiple chemical sensitivities and petroleum exposures and things like that. I sincerely believe, and I made the statement earlier, there's a difference between medical ignorance and medical stupidity.

It's medical ignorance if there's something out there in which you don't have expertise or you don't have the training for and you seek other avenues to gain a greater intelligence and a greater understanding. It's medical stupidity if you turn your back on it.

Now, of all the statements I read last night, two of them I got tremendous reaction from. One of them is a gentlemen that testified earlier, Mr. Wall, from the Vietnam veterans, and yours. Because I think your testimony probably is the reason that I was compelled to even make comments here today. I don't think you wrote all of your statement.

General BLANCK. No, I did not.

Mr. BUYER. I know you did not. Part of it you did. I can tell what part you wrote, because you let your personal feelings come through in it because I think you want to choose and recognize the medical ignorance side and you want to reach out for the greater understanding.

General BLANCK. That's true. I think we——

Mr. BUYER. And I can see that. I can see that, General, in your statement. And then I could also tell in your statement, though, you're a general, you salute. And in here you've made the complete documentation of what happened from the 123rd ARCOM and the post-traumatic stress and saluted that off. That's what really upset me the most because when you said the documental medical and dental problems and illness found by that group were typical of that that would be expected from the general population. Wow! Because that doesn't really even go into and talk about that which searches for the greater understanding.

Now, absent from this written statement, though, what really concerned me, and I don't know why you left it out, was the proposal that we talked about for a clinical investigation. And Dr. John Howell had been in touch with you and submitted that proposal to you back in February.

Tell me where that stands right now and why you didn't address that in here. And I am really touched by why Dr. Miller didn't even bring it up until I had to ask her questions about it.

General BLANCK. I'm sorry. It's because—no, here it is. And at the beginning of my testimony I refer to it and have submitted it as an addendum to my testimony.

Mr. BUYER. Okay. I didn't get the addendum from the testimony. Thank you.

General BLANCK. I beg your pardon? So it's there, it's on the table with copies and all that kind of stuff and a supporting letter from National Institutes of Health. VA, DOD, I think all of us are in favor of this kind of an approach, as well as doing some of the other kinds of things that we've already spoken of.

Mr. BUYER. You had also sent a letter to the Surgeon General back in February 16, 1993 recommending that an expert panel be conveyed similar to the one on chemical exposure. What's happened?

General BLANCK. That panel was, in fact, convened by the VA and that was the one that——

Mr. BUYER. Well, okay. I didn't know if there was one that you particularly had, not the VA. This was, in fact, that panel.

General BLANCK. Again, working together we came up and the VA took that, yes, and a very successful one.

Mr. BUYER. Okay. Now, try to keep everybody on the same ball park here in my mind.

Then on page 12 of your testimony when you talked about that compared to a large number of military service personnel deployed to Southwest Asia, over 600,000, only a relative small number reported chronically ill defined symptoms which are difficult to diagnose or to treat. And then you said that when you sent out the message into the active world, you got 67 reported. Then those who are out there who have gotten off active duty, Reservists or National Guard or those who have been separated voluntarily or involuntarily, now we have 76,000; Seventy-six thousand who have come to the VA system?

Dr. HOLSINGER. 76,000 people have sought care from us. Some of those are for heart attacks, broken legs, all types of illness. Just because they served in the Persian Gulf doesn't mean they don't get other kinds of illness than the ones we've been talking about.

Mr. BUYER. Right. Therein lies part of the problem. If I'd go to the VA and say I've got a bladder infection, that's all the record is going to show—the bladder infection. Or that they went there because they had pneumonia. Or they only went to get a snapshot, you get only a snapshot of the symptom of the problem.

Dr. HOLSINGER. Right.

Mr. BUYER. See what I mean? So out of that 76,000 right now we don't know how many of those 76,000 have many of these different problems. Would that be very accurate, doctor?

General BLANCK. Absolutely. And, in fact, you didn't ask the question, but if I can continue with that line of thought, one of the enormous problems that we have had is we continually compare apples, oranges, grapes and whatever. We talk numbers and we throw them out as though they really meant something, and I suspect they do but I'm not sure that all of us have the same meaning for them.

One of the initiatives that we now have enough cases to, I think, take on is to say, "Okay, here this is, a distinct entity may have multiple causes, whatever, but a distinct real entity, what are the diagnostic criteria for it similar to that that the CDC has done for chronic fatigue syndrome?" And now once we have those, and part of that is that other things that we do know about are excluded, now we have a basis for talking about the same thing and comparing the same thing, doing cohort studies which at the panel that we talked about, I think the American Legion also had recommended and try to get on top of this. Try to get an accurate determination of how many we're talking about.

Mr. BUYER. Of those on active duty, and we're talking about the 67 that came forward, when you're being treated in the U.S. military, don't your records get flagged?

General BLANCK. No.

Mr. BUYER. Isn't there a flagging process of a record under medical treatment for nondeployment?

General BLANCK. Only if they're—if they're nondeployable or if they're some kind of a profile status, if they're under current care for some kind of a disease process that would be viewed serious enough to prevent that, yes.

Mr. BUYER. Would an active duty soldier that comes forward and is being treated for any of these Desert Storm related illnesses, would his or her records be flagged?

General BLANCK. For some of those—are you talking about this illness that we've not come to diagnose?

Mr. BUYER. Right. Right.

General BLANCK. Yes. If they are—there's a soldier in Hawaii, for example, whose records would be flagged as nondeployable because he is, even though we've not figured out what it is that he has.

Mr. BUYER. Right.

General BLANCK. So in some cases, yes. In other cases the complaints may be such and the disability such that the soldier is still considered to be deployable and so in that case the records would not necessarily be flagged.

Mr. BUYER. And if a soldier is nondepolyable, he could be barred to reenlistment?

General BLANCK. Yes.

Mr. BUYER. And there in lies part of the problem within the system. You can't get these soldiers to come forward. You can't get these Marines to come forward if they've only got two or three years or four years left upon their enlistments. How are you going to get them to step forward if we're going to flag them in the process? They've got fears of administrative discharge from the military from the downsizing of the ranks of the military. They've given tremendous amounts of time, energy, and sacrifice for their country at a time when we're throwing them out? Sorry, I get a little emotional about this.

Well, one last question if I may, Mr. Chairman, about one of the information papers I'd read about. Let's talk about our allies for a moment, our friends, the Canadians, the French, the British. We have British that live about 100 yards from my tent prisoner of war camp. I couldn't tell you where the Canadians were, but I know where the French were located. But I've read some statements where they've not come forward for these types of illnesses. Are you aware of that?

General BLANCK. We had, in fact, been asked at previous testimony to provide information, formal information in response to questioning of the British, the French and the Canadians. I've reviewed the response from the Canadians which formally said they've identified three individuals. I've reviewed the formal response from the British as recently—and talked to the British liaison as recently as last week, and he stated that they were not aware of any.

I've also, however, talked to some individuals from BCC who said they sort of hear about some, but it's very circumspect and no hard data. We've asked them to go back and recheck.

The French, I think, have yet to really formally respond. But, anyway, they claim they know of none either.

Mr. BUYER. If I may, Mr. Chairman, on the issue of multiple chemical sensitivity, I mean on this particular issue right here, do our friends across the ocean, the French or the British or even our partners to the north, the Canadians, in their science, do they recognize multiple chemical sensitivities and environmental science in those countries?

General BLANCK. I would defer to Dr. Miller and others more expert on that. My sense of it and I lived four years in Germany, is that by in and large Europeans do not recognize it. It's not as much of a controversy as even it is here.

Mr. BUYER. Okay.

General BLANCK. There is more recognition here.

Mr. BUYER. But that depends on whether or not we've got our allies out there. They could have similar problems, but aren't coming forward. We don't know what their collection data process is.

General BLANCK. Oh, absolutely correct. Absolutely correct.

Mr. BUYER. Okay. So when there's a written statement in a record that says soldiers, sailors or airmen who are Canadian, or are either Italian or French or British, that they don't have these symptoms, therefore it's only isolated to Americans, that really would be a false conclusion?

General BLANCK. Oh, all I can say is that, and I think you're exactly right, that they report none and we've asked. But that doesn't say that there aren't any, just like we know in our own forces.

Mr. BUYER. All right. In a spirit of cooperation, taking one step forward from the coalition of effort, if we come forward in any process of legislation to bring together the DOD and the VA into this process working along with the environmental sciences, if that in fact is going to happen, is there a willingness to turn to our allies if they in fact recognize that they might have some problems within their countries to bring them into the process or either in cost sharing or in the investigation of the science?

General BLANCK. Certainly.

Mr. BUYER. Thank you so very much.

Thank you, Mr. Chairman.

Mr. EVANS (presiding). General, you've endorsed, in effect, a study of the possible health and consequences of MCS, is that correct?

General BLANCK. Very strongly.

Mr. EVANS. Would DOD be willing to fund that?

General BLANCK. I'm afraid I couldn't answer that. We would ask this committee's support, the support of Congress in funding that. This is something clearly that we both want to do, but will take resources above what is normally budgeted to us.

Mr. EVANS. In your opening remarks you testified that you recognize there is something beyond stress at this point.

General BLANCK. Absolutely.

Mr. EVANS. How does the Department of Defense determine which individuals have this unknown something?

General BLANCK. Well, it gets back to, at this point by in large, a diagnoses of exclusion. If we can't find anything through the commonly used tests and methods of diagnosing folks who are clearly sick, we're not talking about a real question here, clearly sick; then they fit into this category. I think that's pretty unsatisfactory because we've already seen some controversy as far as numbers and comparing what to what. And I think now we're at a point where we must develop some kind of standard criteria both inclusionary that symptom and exclusionary, that is we've looked for other causes of these kinds of things and haven't found them. And DOD is, by the way, in the process of doing that and VA is not, but we will be involved in that because we'll review some of the cases.

Mr. EVANS. Review some of the criteria in that regard?

General BLANCK. That's correct.

Mr. EVANS. What happens now, though, when a serviceman or woman is medically discharged on a disability but the cause of that disability is unknown?

General BLANCK. We call it chronic fatigue. Well, that's chronic fatigue syndrome, that's a recognized diagnoses and we'll document the service and all of that kind of thing.

Mr. EVANS. Your recommendation to the Armed Forces on exit physicals from the military would be that they should be conducted on all members of at least the Persian Gulf War?

General BLANCK. Oh, yes, certainly.

Mr. EVANS. A recent article—I want to ask the VA and, General, you also about this question. The recent article in the New England Journal of Medicine, May 13, 1993 describes the systemic illness which the authors call, if I can get this right, viscerotropic leishmaniasis.

General BLANCK. leishmaniasis.

Mr. EVANS. To distinguish it from the visceral form of that same illness. The authors report the natural history of this illness is not yet defined and that the prevalence of infection among Gulf War veterans is unknown. They also recommend including this disorder in the differential diagnoses of unexplained systemic illnesses in patients who have returned from areas of the world where this illness is endemic. What is both your reactions to this report?

General BLANCK. We were the first to describe, I think, the vast majority of the patients with this form of disease. So my reaction to the article is that it's correct. We have, of course, now evaluated literally thousands of patients more for the presence of viscerotropic leishmaniasis. We have a blood test, a screening test for it that since it's not automated is both expensive and not widely available, but certainly everyone that we know of who fits in this unknown category, that is the disorder we're discussing, has been tested for the presence of leishmaniasis. In many cases, they've actually had a bone marrow examination, which is sort of the gold standard, the way that we absolutely determine its presence or absence.

Mr. EVANS. Doctor.

Dr. HOLSINGER. Yes, we would agree with General Blanck.

Mr. EVANS. Mr. Bachus

Mr. BACHUS. I just got one follow-up question. I would also like permission to submit additional questions.

Mr. EVANS. Without objection. Additional questions and the reponses to them will be made part of the record.

Mr. BACHUS. Well, I just want a clarification, maybe with Representative Buyer, is the clinical study that we're talking about the environmental medical unit? There's not an additional study to that, is there?

General BLANCK. No, this is the study submitted from University of Texas at San Antonio that we've talked about, in fact discussed at great length at the VA sponsored panel a couple of week ago. And what it does, if I can just add a little bit to it, is set up an environmentally isolated unit so that you can add to or take away various environmental agents that would be atmosphere and in food and such and then actually determine what response the patient has to both providing and taking away those agents.

Mr. BACHUS. Now, I think Chairman Evans asked you if DOD was willing to fund it? If we're going forward with it, do you know who would be funding it because you had indicated we might have it on line in say six months?

General BLANCK. Well, we could have it on line probably in talking with the Texas folks sooner than that if funding is made available. The request is specifically from myself from DOD and presumably from the VA to ask for support from you, from Congress, for the initial funding of this and you'll see in the accompanying letter that NIH has certainly suggested that they would be willing to then provide grant money, and I suppose VA and other groups would as well, to carry out this work.

It's the initial setting up that's the hurdle. And, in fact, there's actually someone who is willing to fund half of it in a challenge grant if Texas can come up with the other half of the money.

It's $900,000 to set it up. We're not talking huge numbers.

Mr. BACHUS. So $450,000 in public funding with someone willing to match?

General BLANCK. Yes. Yes.

Mr. BACHUS. Well, would it be at the University of Texas?

General BLANCK. It's my understanding it would be in San Antonio at UTSA. That's correct.

Mr. BACHUS. Okay. Well, thank you.

Mr. EVANS. The gentleman from Indiana.

Mr. BUYER. Thank you, Mr. Chairman.

I appreciate the chairman when he brought up the issue about the characterization of this illness that is unknown as being characterized as chronic fatigue. That really hits me right in the stomach, how we're characterize it, doctor, these good troops. It really does. And if there can be another process by which to do that or characterize, it should be done.

General BLANCK. Well, your point is right. And, in fact, it sort of struck me when I said it.

We don't know what to call it because we don't know what it is. You've heard that a lot of times, I know. And we give it that term because then the disability folks look at it analogous to chronic fatigue syndrome and some of the other diseases we do know a little bit more about. And this may be part of that, I don't know. But you're exactly right, it lends a discredibility, I think.

Mr. BUYER. Absolutely.

General BLANCK. And I will tell you right now no bureaucratic answer, we'll change the name. Easy.

Mr. BUYER. Well, I appreciate that. I mean, the only chronic fatigue that I suffer from for the moment is the frustration of bureaucracy and the narrow focus of diagnoses of the medical community. And that's why I'm happy to expand it to other avenues.

You know, I saw you raise your eyebrows. I didn't mean to insult you if that, in fact, did.

General BLANCK. I was agreeing with you.

Mr. BUYER. Oh, okay. Well, I appreciate that.

I mean, earlier I shared with everyone that I only know enough about medicine to be dangerous. And I was also a legal advisor to a military hospital. So I can understand the narrow focus that can exist at times and this is not one of those times to try to defend your area of education, because we're not insulting anybody's medical expertise. You're trained in certain areas and you're supposed to send up the flag when you reach an area in which you lack the expertise. That's why we have specialists.

And that's why of all the testimony I've seen, General, I compliment you. I do because you want to expand it into other areas. Sure, I'm not satisfied on the time line. I wish this thing could have been done seven months ago, and I understand the bureaucracy of that and what you have to fight within your own medical community of the U.S. Army, let alone the other Surgeon Generals. But keep the courage, stay the course and maybe we can all come together.

Thank you, Mr. Chairman. I also compliment you, Mr. Chairman, and we're not finished with this issue. I compliment you.

Mr. EVANS. Thank you.

One final—Doctor, did you want——

Dr. HOLSINGER. Mr. Evans, either now or after you ask—I have one thing I wanted to raise if I could.

Mr. EVANS. Doctor, please proceed.

Dr. HOLSINGER. Obviously, this hearing for a lot of reasons has been troubling to us. We're concerned. This is something that we have a great deal of concern about. We're concerned about America's veterans.

There's one thing, though, that has really concerned me kind of in a funny way that I really feel compelled to raise. I have great respect, as you know, for you and for the full membership of this subcommittee, but I've been concerned today about how we have in a sense almost stigmatized PTSD. We have a lot of people in this country, women who have been raped, veterans of Vietnam who have suffered for years from post traumatic stress disorder. We see it in firefighters. We see it in police officers when they have to clean up after an airline crash. It is a real, real thing in the lives of a lot of people. And I'd like to take, if we could, just have one minute for Dr. Jessica Wolfe to kind of give you some idea of what she has been involved with in dealing with this in a very small number, but a very defined group of Persian Gulf veterans who do suffer from PTSD. I think it would be important for a full look at this problem.

Mr. EVANS. She's been waiting all day. We'd be glad to yield to her as much time as she might need.

Dr. WOLFE. Thank you for the opportunity and as Dr. Holsinger mentioned, I was a little concerned, very, very concerned with the health of Persian Gulf veterans. And, in fact, it first came to my attention in a survey I was doing on them on their readjustment involving 3,000 veterans from the northeast who, ironically, we were following for psychological readjustment and in fact a subset of whom came forward to us and announced that they had physical health concerns. And I was a tiny bit concerned in the hearings today that PTSD not become stigmatized as a psychiatric disorder that is not worthy of attention because I think, in particular, this committee over the years, yourself in particular, has made great strides in supporting us and our work with PTSD in the veteran and civilian sector of the country where it is quite rampant from many causes.

I did want to add that I think the issue of having post-traumatic stress or a physical health disorder should not be considered as mutually exclusive both in the veteran and the civil sector. It's extremely likely that some individuals may have PTSD, other individuals may have a physical health disorder from a toxic or chemical exposure. And it's possible that some subset of individuals have both experiences.

Dr. Miller and I have been talking. It's possible that there are similar common pathways that allow the expressions of these symptoms, and I would not want one or the other to be written off at the expense of either problem.

So, simply, I guess, to reenforce that both issues need attention. Certainly the PTSD levels from the Gulf War are lower than what we have seen in Vietnam and other prior conflicts where there was fiercer and more protracted fighting, but they are none the less still appreciable and I would not want those to go undetected.

And I would add, in addition, that in my sample the people who are expressing the highest level of health complaints are some of the individuals with post-traumatic stress symptomatology. That does not mean that they're physical health complaints are not real, bona fide or have a separate etiology which requires active and innovative diagnoses and treatment. And I would hope that as we go forward in pursuing the issue, whether it's at the University of Texas or whatever, that we really continue to treat the veteran in the whole sense, the veteran and his or her family, and not somehow now shift exclusively to one domain in that people who are physically handicapped or impaired also have considerable psychological stress as evidenced in AIDS victims, women with breast cancer, other types of people. And that applies to veterans, too.

Thank you.

Mr. EVANS. Thank you, Doctor. I think these points are well taken.

First of all, the military did a better job in this war of trying to help with family support networks with better counseling when people were in country, from what I've been told. We never had that in place in Vietnam.

We have certainly learned a lot through the many years of struggle here dealing with this particular illness, post-traumatic stress disorder. About treating it, we know that anyone that goes through

a very stressful combat situation or a natural disaster, can be a likely victim of PTSD.

We are concerned, however, that that's become the label of a person with a problem coming out of the Persian Gulf War.

Dr. HOLSINGER. We would agree with you. That should not be the label.

Dr. WOLFE. That should not be the label.

Mr. EVANS. Correct. So we have a careful balancing act, I think, to carry out here.

We salute the work of the Forsythe Center on PTSD studies and any information you may be able to give to us in that regard would be included in the record.

Dr. WOLFE. Thank you.

Mr. EVANS. I did have one final question. I know it's been a long day, but we have about four hours before the Bulls tip off, so if need be we'll go a little bit longer. Veterans who have come forward and who have no diagnosable disorder, would be able to obtain treatment through the VA. Will they able to obtain compensation from the VA?

Mr. KINDERMAN. Thank you, Mr. Evans. I thought that that would go by and I wouldn't get an opportunity to speak at all.

Service connection requires a diagnosis. It requires also a finding of chronicity, in other words it has to be a condition that is there when you examine the veteran. And a finding that the condition had its origins either coincident with or casually related to service. Without a diagnosis, that's very difficult.

Mr. EVANS. Would you recommend changes in the regulations that would allow compensation without diagnosable disorder?

Mr. KINDERMAN. My personal view, I think would be I would rather see a diagnosis. I would rather see things move forward and medical science come up with a diagnosable entity here.

Mr. EVANS. What if that takes years to come up with a way of diagnosing the problems? You heard the General indicate that there's something beyond just stress. They don't know what that something is. They are discharging people who have served this country for many years and then the VA may treat them, but then they may be left to deal with their disabilities without any compensation as we can't put a label on it.

Mr. KINDERMAN. I agree with that. I think there's always a problem when you can't put a label on something with how narrowly or how broadly you define what you're going to compensate someone for.

I would hope that it wouldn't be years. I would defer, perhaps, to Dr. Mather or General Blanck on the prognoses on a diagnosis.

General BLANCK. I think once we develop the diagnostic criteria we'll be able to call it whatever we come up with and that doesn't necessarily imply that the research will be completed or that we'll have all the work done. That will take years. The point that I couldn't agree more on, we need to move out. And even if we don't know what it is, at least making sure that there's the appropriate disability rating and all of that kind of thing.

Mr. KINDERMAN. I think our experience right now is we're seeing a good many Persian Gulf veterans come in, file claims out of concern that they were harmed by smoke. We are, in fact, not granting

a lot of those claims because, quite frankly, when we do an examination for compensation purposes, we don't find conditions that are present because the major reason for disallowance is not found on examination.

Mr. EVANS. But in many cases are you finding conditions which maybe are not diagnosable?

Mr. KINDERMAN. Well, when we find conditions such as asthma, they are service-connected. They're related back to service.

Mr. EVANS. But the Secretary has the discretion, does he not, to rely on private doctors for diagnosing these disorders? The Secretary of Veterans Affairs?

Mr. KINDERMAN. The Secretary of Veterans Affairs has the discretion to accept any evidence.

Dr. HOLSINGER. I think, Mr. Evans, the key point that you're making there is, is that in the case of dealing with a claim for compensation we would not only provide a compensation and pension examination at the request of the Veterans Benefits Administration, but the adjudication division of the regional office in Veterans Benefits Administration would accept all evidence, that includes affidavits and information from private practitioners and so on. That all goes into the adjudication process.

Mr. EVANS. Yield to the gentleman.

Mr. BUYER. As I understand it, we're going to be moving out forward from today. The DOD and the VA will be working together in a research product with the Academy of Environmental Sciences to come up with a diagnostic criteria, no? Tell me what it's going to take to come up a diagnostic criteria that the chairman is asking about.

General BLANCK. Yes. I testified to that. And we've already begun in the Office of The Surgeon General the work to come up with that. And specifically there's a civilian head who will review with other members of a panel the cases that we know about trying to come up with both the inclusionary and exclusionary criteria.

Mr. BUYER. And your time line for that decision is when?

General BLANCK. Oh, I think certainly in this summer. I mean, good grief, by the end of this summer.

Mr. BUYER. Okay. When the chairman asked earlier about what we should do legislatively or make corrections to regulations, Dr. Holsinger, you mentioned that you've got a veteran that comes in and if he doesn't have the service-connected disability, he gets billed out of his own pocket. But if he came in because he has an upper respiratory problem and you don't know whether or not it's going to meet the criteria, he's still paying for all of this out of his own pocket?

Dr. HOLSINGER. Well, let me caveat that and make sure you clearly understand.

The individual that comes in, they're fresh, they're not service-connected, they come in with whatever the problem is. If they make less than approximately $20,000, then they are not billed at all. That is under the current legislation. If they make more than approximately $20,000, which is often the case for reservists and guardsmen who are working in the private community, we have established, without legislative support at this point in time, a process that allows their bill to be deferred. In other words, we do not

bill them, we defer their billing until such time as we get an adjudication of their claim for compensation as a service-connected veteran. If they're service-connected, they wouldn't be billed. It's only if they are not found to be service-connected from the problem which they present with that we then at sometime in the future would be billing them.

I tried to do this originally by waiving the billing completely for an individual who claimed environmental exposure, hazard exposure in the Persian Gulf, just as we do under Agent Orange exposure for Vietnam era vets. Same identical kind of thing.

Mr. BUYER. Do you have that authority?

Dr. HOLSINGER. I think I had the authority. I think I was doing the right thing. I think I was looking after veterans from the Persian Gulf. And what I ended up being told was I didn't have the legal authority to waive the billing. So what we did was to—we're in the process of finalizing and rewriting a rule that our general counsel is working on which will allow us to codify what I've been doing, which is not sending them a bill until we determine whether it's service compensable.

As I said, the problem could be alleviated immediately by legislation that would simply allow us to treat Persian Gulf era veterans claiming environmental hazard exposure with the same kind of priority that we treat Vietnam era veterans claiming Agent Orange exposure. To be honest about it, personally, that's what I'd like to do. That would make the process immensely simpler, both for us and for our veterans. It would be seemless for the veterans. They'd be able to come in and say, look, I served in the Persian Gulf, I think I got bite by a whatever, I was involved with uranian, whatever they come in with, if it's an environmental hazard out of the Persian Gulf, then we would be able to treat them and not bill them, no matter what their income level might be.

Personally, I think that's what we ought to be doing, and that's what I tried to do back last fall. And we've done it the best we could without legislation.

Mr. BUYER. Thank you.

Mr. EVANS. Well, that's it. Thank you so much for your testimony and waiting for the opportunity to testify. We appreciate it very much.

Dr. HOLSINGER. Thank you again, Mr. Chairman, for a last hearing.

Mr. EVANS. For your last hearing. I think you understand we have bipartisan concern here and it's reflected national—that the people of this country don't want the Persian Gulf veterans left behind.

Thank you very much.

I want to thank all of the members who participated all day, and the Minority and Majority staffs for their hard work.

This hearing is concluded.

[Whereupon, at 4:59 p.m., the subcommittee was adjourned.]

APPENDIX

Statement of

Honorable Lane Evans, Chairman

Subcommittee on Oversight and Investigations

Health Care Problems and Concerns of Persian Gulf War Theatre Veterans and Related Issues

June 9, 1993

Good morning. Today the Subcommittee on Oversight and Investigations is meeting to learn more about the health care problems and concerns of Persian Gulf theatre veterans. In addition, the Subcommittee will examine the medical treatment rendered to Desert Storm veterans by the Department of Veterans Affairs, the Department of Defense and other providers.

No one wants the mistakes of the past to be repeated. For too many years, health care problems reported by Vietnam veterans were ignored.

We cannot allow this history to be repeated; we cannot allow this legacy of Vietnam to become a legacy shared by the veterans of Desert Storm. If action is indicated, our purpose is to see that action is taken.

Each and every Member of this Committee is concerned about the health problems of Persian Gulf veterans, but two Members in particular, Joe Kennedy and Bob Clement, have been at the forefront in recognizing and responding to the problems of Gulf War veterans. Joe Kennedy and Bob Clement have also provided strong support and encouragement for this hearing. Their commitment, assistance and cooperation are particularly appreciated.

Numerous news media have reported on the health problems encountered by some Gulf War veterans. Today we hope to gain a better understanding of the health problems and concerns of the Desert Storm veteran community.

We do not presume this hearing will provide final answers to all questions. We are hopeful, however, this hearing will shed much needed light on existing problems and possible avenues of action.

In recent weeks, many individuals, including some Persian Gulf theatre veterans, have contacted the Subcommittee and volunteered to testify today. We appreciate the willingness of those individuals to come forward and make their story known. Unfortunately, however, not everyone could be accommodated in person today. In some cases, individuals have been invited to submit written testimony for possible inclusion in the printed hearing record. We look forward to receiving these views. Only individuals who have been formally invited in writing by the Subcommittee to testify will be called today by the chair to present their views.

A very large number of witnesses are scheduled to testify today. Witnesses who are recognized to present an oral statement today are again requested to limit their presentation to five minutes. Without objection, the complete written statement submitted by each of these witnesses will be included in the hearing record.

Our many visitors today are also welcome. I remind all in attendance this is a formal Congressional hearing. Courtesy and proper order are to be maintained at all times. Comments, questions or expressions of approval or disapproval, such as applause, from the gallery are to be withheld.

PAT WILLIAMS
MONTANA

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JUN 29 1993

Congress of the United States
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NATIONAL PARKS AND PUBLIC LANDS
NATIVE AMERICAN AFFAIRS

Honorable Lane Evans
335 Cannon HOB
Washington, DC 20515-6336

Dear Lane:

I'm sending to you the enclosed statement from my constituent, 1LT Dennis Swanson. Dennis is a member of the 82nd Airborne Division, and a veteran of Desert Shield/Storm.

I would greatly appreciate your inclusion of this soldier's plight in your ongoing investigation of illnesses from which many Desert Shield/Storm veterans are now suffering. Please include the enclosed statement as testimony to the Subcommittee on Oversight and Investigations.

I am glad to be of any assistance in your effort to ensure that the health problems our veterans are experiencing are recognized and treated. If you have any questions, or would like further information on 1LT Swanson, please don't hesitate to contact me.

Best regards.

Sincerely,

Pat

Pat Williams

enclosure

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STATEMENT

1LT DENNIS ROBERT SWANSON 517-94-6342

I am concerned with the state of my health problems that have occurred since my deployment to Saudi Arabia in August 1990, as a member of the 82nd Airborne Division.

While in Saudi Arabia I lost large patches of hair on my head, which I in turn shaved my head because I did not present the proper military appearance, also I lost all the hair on my arms, legs and chest. The serve headaches also started and would last any where between 10 to 15 days straight.

In December of 1991 a gland in my left leg swelled up while in Montana on leave, upon my return to FT Bragg in Jan 1992 I went to 3 different doctors before they decided to remove the gland on or about 25 Jan.. I was released from the hospital on 27 Jan., the on Thursday of that week I was readmitted to the hospital in a coma like state by my wife. The last thing a remember about the Thursday that I went into the coma like state is eating a peanut butter sandwich and the next thing I remember is talking to a friend on the following Monday, about 4 days with no memory. I stayed in the hospital for about 12-14 days, during that time I had numerous tests ran on me and the doctors could not figure out what was wrong with me and all my test were negative. Also, they did 4 spinal tabs in a 2 week period. There are still nights that I have to take aspirin and sleep on my stomach to get to sleep, and then I usually don't sleep the whole night without getting up 2 or 3 times during the night.

I have also some short/long term memory problems since I was in the coma like state. I still have on the average of 15 headaches a month. On 13 May 93 I finally got an appointment with Neurology, the doctor prescribed two drugs for my headaches, and I have been scheduled for a EEG and neurological testing for my memory.

My concern is that the Army is going to put me out of the Army without fixing or telling what my health problems are. Especially, since my out processing physical is not scheduled until 22 June 93 and I am suppose to be out of the Army no later than 1 July 93.

My medical records do not contain a large history on my headaches or back problems, for the reason that as a officer it is not proper for a officer to go on sick call every time you have a head or back ache. All I want is to get what I deserve, so that if these problems arise when I am out of the military, I can go to the VA and get the treatment to fix the problems.

Dennis R. Swanson

Dennis R. Swanson
1LT,INF
Dragon Brigade 83 Air
W 919-396-2955/2350
H919-960-0657

PAT WILLIAMS
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May 21, 1993

LTC William O. Butler, III
Congressional Coordinator
1600 Army Pentagon
Washington DC 20310-1600

Dear LTC Butler:

Enclosed is a statement from my constituent, 1LT Dennis R. Swanson, 517-94-6342. Attached please find a copy of his signed release form.

1LT Swanson has contacted my office because he is concerned that the medical problems he has experienced since his deployment to Saudi Arabia in August of 1990 will not be taken into account before his upcoming discharge on 1 July 93.

You will note that 1LT Swanson still experiences headaches and memory loss. In the past month he has had appointments with Neurology to evaluate his problem, but has no diagnosis yet.

From my contact with 1LT Swanson it seems to me that his case has been handled fairly, and I have assured him that his chain of command will ensure his out processing physical reflect any existing physical disability. Still, he is concerned that he will be discharged without the Army diagnosing or fixing his health problems.

I appreciate your review of 1LT Swanson's concerns. Please send your response to my office at P.O. Box 1681, Helena, Montana 59624.

Best regards.

Sincerely,

Pat Williams

Enclosures

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ANDREW M. BROWN, M.D.

June 21, 1993

GENERAL OTOLARYNGOLOGY
OTOLOGIC SURGERY
FACIAL PLASTIC SURGERY

ALLERGY

Representative Lane Evans
Chairman
Subcommittee on Oversight and Investigations
U. S. House of Representatives
335 Cannon House Office Building
Washington, D.C. 20515

Re: Desert Storm Syndrome

Dear Representative Evans:

This is a summary of the findings of the patients seen in this office who were involved with Desert Storm, in one way or the other. Six of these saw action in Desert Storm. One of these is a mechanic who worked on the Abrams tanks. All of these patients, except one, have had complaints of excessive headaches, fatigue, weakness, aching of their joints, and they all have been shown to be highly sensitive to chemicals. All but one manifested rashes or skin problems in some manner. Two have had hair loss. Three have had ringing tinnitus. Three complained of memory loss. Three have had insomnia. Five have had some form of sinus problems. Five of these have had marked nervousness at the onset, but have improved with either time or therapy. One of the seven was treated by me for chemical and other inhalant allergies, but was not on any other program by me, but was seen by Dr. Hyman in New Orleans and showed marked improvement on his regimen. Four of the six that I treated have shown marked improvement by receiving both the inhalant antigens, and either an anti-fungal or an antibiotic compound (in one of these cases, both the anti-fungal and antibiotic agents were administered). Of the two that did not show marked improvement, one of these discontinued his inhalant regimen while taking an anti-fungal agent. The other one is working from 7:30 a.m. until 10:30 p.m. trying to make ends meet because he lost his former job due to the illnesses he associated with the Desert Storm Syndrome. It is difficult to evaluate this man since he has such a heavy work schedule.

All of these men are emotionally stable hard workers who have, or had, good jobs when they returned from Saudi Arabia.

Sincerely,

Andrew M. Brown, M.D., F.A.C.S.

AMB/sb

FAMILY PRACTICE CENTER OF METAMORA

205 South Engelwood Drive
Metamora, Illinois 61548
(309) 367-2321
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Stephen K. Elsasser, D.O., FACAM
Physician and Surgeon
Board Certified in General Practice
Board Certified in Environmental Medicine

June 17, 1993

The Honorable Lane Evans
Chairman
Subcommittee on Oversight and Investigations
U.S. House of Representatives
Committee on Veterans Affairs
335 Cannon House Office Building
Washington, D.C. 20515

Dear Congressman Evans:

I am writing with regard to the Persian Gulf War veterans who have returned with illnesses that have been misdiagnosed and treated inappropriately.

I have had the opportunity to evaluate and treat two Persian Gulf War veterans who have returned with symptoms of bowel problems, such as, diarrhea, loss of appetite, indigestion, headaches with generalized muscle aches, fatigue, worsening of previous allergies and sensitivities and in one case where there were no previous allergies and sensitivities, many new ones had developed.

A thorough environmental and medical evaluation revealed that these two people had been exposed to petro fuels where they had literally "lived" in a fuel environment. Fuel was used to settle the dust on the ground, create bonfires for heat and warm tents with small space heaters. Some of these heaters were even contaminated with gasoline. Medical evaluation revealed increased levels of petro-fuel metabolites in their blood and skin test sensitivity to these fuels were positive. They had also developed significant allergies which were not previously present. A treatment plan was recommended, but unfortunately both veterans were transferred out of the area and have been unable to follow up with this treatment plan.

Both of these veterans have sought a solution to their problem with the health care facilities at military bases and in some instances have sought care by outside treating physicians. Recommendations by these health care providers were that this was due to a psychiatric disorder resulting from "stress" in the Persian Gulf War. It appears to me that there is a significant lack of understanding and an inability to take a decent history in order to associate cause and effect and then follow through with appropriate diagnostic testing to prove or disprove this suspicion. Most health care providers do not have a very good understanding of environmental exposures and how this can impact the human body resulting in disease. Since I and many of my colleagues have taken special interest in environmental medicine, becoming board certified, we can appreciate how the environment impacts human physiology and can cause many of these symptomatologies. It seems reasonable to me that involving physicians who have expertise in this particular area would help sort out the problems and help reach a more satisfactory solution at a much faster pace. The American Academy of Environmental Medicine can certainly provide the resources for this type of undertaking.

The Honorable Lane Evans
Chairman
Page 2

This is the second time in recent history that the Veterans Administration has failed to recognize an environmental issue involving members of the armed forces. The first being the "dioxin" fiasco in Vietnam. I would think that the Veterans Administration would learn and be willing to explore more avenues after that mistake.

If these Persian Gulf War veterans do not seek proper help for their problems, including detoxification, their condition will quite likely linger on and there will be a result in long term disability, if not more serious disease, i.e., leukemia and possibly other cancers may develop. I urge you and your committee to be open minded and explorative regarding this issue allowing those physicians and health care providers which have expertise in environmental issues to formulate a health care policy with regard to environmental exposures. Thank you for this opportunity, trusting that a favorable decision will be forthcoming.

Very truly yours,

Stephen K. Elsasser, D.O., FACAM
Board Certified in Environmental Medicine
Board Certified in General Practice

SKE:csr

STATEMENT OF CONGRESSMAN MIKE KREIDLER
VA Oversight and Investigations Subcommittee
Hearing on Health Concerns of Persian Gulf War Veterans
June 9, 1993

Thank you, Mr. Chairman.

Just last week I had dinner with a friend. Both he and his brother had served in Vietnam. His brother had been exposed to Agent Orange during his duty, and last month he died. I do not know if his illness and death were directly related to his exposure to Agent Orange, but his family thinks so. How many other Vietnam veterans have also died from illnesses connected to Agent Orange? We will never know.

And one reason we will never know is because our government refused to recognize this threat to veterans' health for too long. Our government denied the effects of Agent Orange, it ignored the problem, it minimized the complaints of those suffering, it dismissed data that might have been helpful, and most of all, it neglected to protect the very people who had been willing to give their lives to protect us all.

When a government neglects its obligation to its citizens, it fosters mistrust, cynicism, and alienation. Veterans who fought for their nation with the promise that they would receive not only appropriate medical care but the attention and concern of the nation they defended are right to feel betrayed if that does not happen.

Each war seems to bring new threats to the health of those who serve. We have seen the effects of poisonous gas in World War I, atomic radiation in World War II, and dioxin in Vietnam. Now, some of those who served so ably in the Persian Gulf face illnesses for which there is no agreement on the cause. What are the effects of inhaling smoke from oil-well fires, of being exposed to depleted uranium, endemic parasites and diseases, environmental and combat stresses? These are some of the questions we must answer, starting today.

As an optometrist in an U.S. Army Reserve Hospital Unit, I was called to active duty during Desert Shield/Storm and assigned to an army hospital in Washington State to process troops going to and coming from the Middle East. I know that medicine is not an exact science. There are some new disorders and illnesses that we face today about which we know very little. No one can promise cures in today's world. But what we can promise is to listen to our patients, to take their complaints seriously, and to investigate, to the best of our ability, the causes of their symptoms.

I do not know the details of the medical problems our witnesses are suffering. But I look forward to hearing from them and from our other witnesses to determine what in fact we do know about these conditions and what we can do to treat them.

I am grateful to the Chairman for holding this hearing and I hope that we can extract from today a course of action that will resolve this issue. The men and women who went to the Persian Gulf deserve our support, as much now as they did then. We must recognize our responsibility to resolve these questions and rebuild the trust between the veterans and the government.

Opening Statement of Congresswoman Maxine Waters

Subcommittee on Oversight and Investigations

"Health Concerns of Persian Gulf War Veterans"

June 9, 1993

Good morning, Mr. Chairman. I am delighted to be here this morning to participate in these very important discussions. I want to commend you on bringing forth this hearing.

We have heard for some months now from Persian Gulf war veterans who have these unexplained debilitating illnesses. Initially, we were told by scientists, researchers, physicians and military personnel that these illnesses were symptomatic of emotional stress. Later we were told that these illnesses could be the result of some exposure to some environmental toxins. And finally, we've reached the conclusion that we really don't know the cause of these illnesses.

One thing that we do know for sure is that the pain suffering and anguish that these Persian Gulf war veterans are experiencing is very real. I am glad to see this committee take the lead in opening up dialogue so that we can begin to try to figure out what's really happening to these once healthy men and women. And I am hopeful that from these hearings we will develop some real strategies to deal with the concerns of our Persian Gulf War Veterans.

To our witnesses this morning, I want you to know that I am looking forward to your testimony and working with you to address your concerns.

Thank you.

Remarks of the Honorable Bob Clement
Before the Subcommittee on Oversight and Investigation
Hearing on Mysterious Illness of Persian Gulf
June 9, 1993

Mr. Chairman, as you know, I have a keen interest in the subject matter before us today. Since the hearings in September, I have studied the various issues related to this subject and have been in contact with many affected veterans and their families. I felt it was important to bring those who were experiencing this mysterious illness before the Committee and I commend you for holding this hearing. In addition, I appreciate your willingness to allow me to participate. Although I am not a member of this subcommittee, you have always been accommodating and for that I am grateful.

In studying this issue, I discovered that most of the reports about those affected by the mysterious illness were anecdotal and there was an absence of hard data. I have begun an effort to collect such data on 70 individual cases. There are other veterans out there with a story to tell. This sampling is little more than a drop in the bucket but an important beginning, nonetheless.

Based on my research, I have three areas of concern. First, there are veterans experiencing common symptoms which have yet to be diagnosed. These individuals are genuinely sick and some are gravely ill. I am very concerned that there are indications that these symptoms are no longer simply limited to the actual soldiers but also include some spouses and their children. These veterans are continuing to suffer and their conditions are becoming debilitating.

Second, the question is not whether the soldiers are being seen at the VA and DOD facilities but whether or not they are truly being treated. Some veterans tell me they have merely been asked a few questions, given a cursory exam, told their illness is not related to the Gulf and sent home, while veterans who have received treatment are being treated for each individual symptom. Though this approach provides some temporary relief, the individual's condition does not improve. I feel there should be a more comprehensive approach to analysis and treatment of those reporting symptoms.

Lastly, there are obvious discrepancies between the numbers of affected individuals linked to service reported by service organizations and advocacy groups and those presented by the VA and the individual branches of the armed forces. I feel this discrepancy can largely be attributed to the physician-verified requirement. In light of the lack of a comprehensive approach to analysis and treatment of the veterans, there cannot possibly be a link if you only look at each symptom and each soldiers complaint independently. Thus, it seems highly unlikely the physician-verification criteria can be met. As a result, numerous individuals which should be referred for special care and follow-up are not. Consequently, as a result of not being referred, they are not scored or counted by VA or the services as an affected individual.

I am particularly intrigued by the connection with multiple chemical sensitivity and the impact this may have on a possible explanation for this phenomena. I am pleased that we have leading experts in this field with us today and look forward to hearing their assessment of the problem and learning more about their work with affected veterans.

Mr. Chairman, no one disputes the fact that we have sick veterans with an undetermined illness. It makes no difference whether the number of affected veterans is 26, or 260, or even

2,600. The bottom line is that this nation has a commitment to provide these veterans with access to the best care available. If this means stepping out of traditional medicine and trying something new, then I say why not. So far there has been no success within the VA or DOD in diagnosing and treating these veterans. I believe we owe it to the military men and women and their families to pursue every possibility, provided it does not place their life or health in jeopardy.

There is already a high degree of uncertainty and unrest within the military ranks due to the reduction in force and proposed changes in policies and procedures. You better believe that the current members of the armed forces and those considering it as a future career are watching closely. They want assurances that their service is valued and that they are not expendable. We must demonstrate that we have learned the lessons of agent orange, mustard gas, and atomic radiation and will take decisive action to ensure that it does not happen again.

Mr. Chairman, I have been pleased by recent statements by Secretary Brown indicating his willingness to look into all areas including multiple chemical sensitivity and reaffirming his commitment to provide access to the best available resources. In fact, recent movement within the VA appears to indicate that the tide is slowly turning. I have been further encouraged in that the VA appears to be moving away from the solely PTSD or general population diagnosis and is now considering other causes and means of treatment.

On the other hand, it is my opinion that the active-duty forces are behind the times since there continues to be a general misconception that aside from a very few cases there is no problem.

The evidence I have seen, the 70 cases I have investigated, leads me to believe that there is a direct correlation between these individuals who are sick and their service in the Persian Gulf War.

To this point all the government studies and research addressing exposure have focused on the oil well fires and leishmaniasis. I believe there efforts in this area have been exhaustive and I commend them for this. But I believe that we must pursue every possible explanation leaving no stone unturned. Therefore, every possible exposure such as reactions to inoculations, affects of depleted uranium, contaminated water supply, and pesticides must be scrutinized in the same manner. The burden of proof should not fall upon the soldiers. They are ill and there is no question about it. The burden of proof should fall on those discounting this mysterious illness. The dissenters should prove that it is not linked by eliminating every possibility.

Again, Mr. Chairman, thank you for providing this opportunity for the Committee to hear first-hand from those affected by the mysterious illness and key individuals which have been involved in the treatment and/or study of this mysterious illness. I am hopeful that this hearing will draw attention to a continuing problem and result in a better understanding of the situation.

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STATEMENT

OF

THE HONORABLE MATTHEW G. MARTINEZ

MEMBER OF CONGRESS

BEFORE

THE HOUSE COMMITTEE ON VETERANS' AFFAIRS

SUBCOMMITTEE ON OVERSIGHT AND INVESTIGATIONS

WEDNESDAY, JUNE 9, 1993

334 CANNON HOUSE OFFICE BUILDING

WASHINGTON, D.C.

CHAIRMAN EVANS AND MEMBERS OF THE SUBCOMMITTEE, I WOULD LIKE TO COMMEND YOU FOR HOLDING THIS IMPORTANT HEARING ON HEALTH CONCERNS OF PERSIAN GULF WAR VETERANS. I WOULD ALSO LIKE TO TAKE THIS OPPORTUNITY TO THANK YOU FOR ALLOWING ME TO SUBMIT TESTIMONY FOR THE RECORD.

THE ISSUE OF HOW WE TREAT OUR MILITARY VETERANS GOES TO THE HEART OF THIS NATION'S MORAL FIBER AND CREDIBILITY. PERSIAN GULF VETERANS WHO HAVE BEEN STRICKEN BY DEBILITATING HEALTH PROBLEMS RELATING TO THEIR SERVICE IN OPERATION DESERT STORM, DESERVE MORE THAN A BUREAUCRATIC COLD SHOULDER FROM THEIR GOVERNMENT. THESE VALIANT MEN AND WOMEN ANSWERED OUR COUNTRY'S CALL TO ARMS AND HAVE EARNED THE RESPECT AND ADMIRATION OF THE AMERICAN PEOPLE. HOWEVER, THE DEPARTMENT OF DEFENSE AND THE DEPARTMENT OF VETERANS AFFAIRS ARE FAILING TO MAKE GOOD ON THE COMMITMENT TO CARE FOR THOSE SERVICEMEN AND WOMEN WHO SERVED IN THE PERSIAN GULF.

MR. CHAIRMAN, I WOULD LIKE TO HIGHLIGHT THE CASE OF RUBEN NEGRETE, A PERSIAN GULF VETERAN WHO IS ABOUT TO BE DISCHARGED FROM THE NAVY. PETTY OFFICER NEGRETE'S STRUGGLE TO OBTAIN ADEQUATE DISABILITY BENEFITS FROM THE NAVY HAS PROVEN TO BE A MONUMENTAL TASK. I WOULD LIKE TO FOCUS ON MR. NEGRETE'S CASE BECAUSE I BELIEVE THAT THE STRUGGLE HE HAS FACED IS, UNFORTUNATELY, NOT THE EXCEPTION BUT THE RULE FOR VETERANS OF OPERATION DESERT STORM.

AS A PROUD VETERAN OF THE U.S. MARINE CORPS AND AS A MEMBER OF CONGRESS, IT SADDENS ME AND ANGERS ME TO SEE HOW THE NAVY IS DEALING WITH RUBEN NEGRETE. FROM JANUARY 8TH TO APRIL 24TH, 1991, PETTY OFFICER FIRST CLASS NEGRETE WAS DEPLOYED TO THE PERSIAN GULF, ASSIGNED TO FLEET HOSPITAL 6 AS PART OF A CONSTRUCTION BATTALION IN BAHRAIN. DURING HIS NORMAL COURSE OF DUTY IN THE GULF, RUBEN NEGRETE WAS EXPOSED TO LARGE QUANTITIES OF OIL SMOKE, GENERATOR EXHAUST FUMES, MICROWAVE RADIATION, AND ALL TYPES OF CHEMICAL AGENTS. WHILE PERFORMING UNDER STRENUOUS ENVIRONMENTAL CONDITIONS, RUBEN NEGRETE DIDN'T THINK TWICE ABOUT THE DANGERS POSED BY HIS EXPOSURE TO CHEMICAL TOXINS--HE SIMPLY AND PROFESSIONALLY CARRIED HIS ASSIGNED DUTIES.

IMMEDIATELY AFTER COMING BACK TO THE UNITED STATES FROM OPERATION DESERT STORM, RUBEN NEGRETE'S PHYSICAL CONDITION BEGAN TO RAPIDLY DETERIORATE TO THE POINT THAT HE IS NOW OF NO MORE USE TO THE NAVY; NO MORE USE TO THE MILITARY INSTITUTION HE HAS SERVED WITH SUCH UNSTINTING LOYALTY AND DISTINCTION; NO MORE USE TO THE COUNTRY HE WAS CALLED TO DEFEND. PETTY OFFICER NEGRETE, A MAN WHO INVESTED 14 YEARS OF HIS LIFE IN THE MILITARY SERVICE, A MAN WHO WAS BUILDING A PROMISING CAREER IN THE NAVY, IS BEING CUT LOOSE TO FEND FOR HIMSELF.

PRIOR TO BEING DEPLOYED TO THE PERSIAN GULF, RUBEN NEGRETE WAS A HEALTHY YOUNG MAN. THE NAVY EVEN GAVE RUBEN A CLEAN BILL OF HEALTH DURING A PHYSICAL BEFORE HE LEFT FOR THE GULF. SINCE HIS RETURN TO THE STATES, HOWEVER, RUBEN HAS BEEN IN AND OUT OF NAVAL DISPENSARIES AND HAS BEEN AN INPATIENT AT THE SAN DIEGO NAVAL HOSPITAL FOR THE LAST YEAR. RUBEN HAS SUFFERED FROM MEMORY LOSS, CHRONIC FATIGUE, HAIR LOSS AND SEVERE ARTHRITIS. IN FACT, RUBEN NEGRETE'S AILMENTS ARE SO SEVERE THAT HE HAS GREAT DIFFICULTY WALKING A STREET BLOCK AND SUFFERS CONSTANT MUSCLE AND JOINT PAIN THROUGHOUT HIS BODY. IN THE WORDS OF RUBEN'S MOTHER, WHO HAS PAINFULLY WATCHED THE PHYSICAL DETERIORATION OF HER SON, RUBEN HAS BECOME AN IMMOBILE SHADOW OF HIS FORMER SELF.

AND HOW DOES THE NAVY TREAT THIS WOUNDED WARRIOR? IT DETERMINES THAT HE IS UNFIT FOR DUTY AND OFFERS HIM 10 PERCENT DISABILITY. ONLY AFTER TWO APPEALS DID THE NAVY RAISE RUBEN'S DISABILITY RATING FROM 10 PERCENT TO 40 PERCENT AND FINALLY SETTLING ON 60 PERCENT. RUBEN IS A MAN WHO HAS TREMENDOUS DIFFICULTY PERFORMING AND SUSTAINING THE MOST BASIC PHYSICAL TASKS. A DISABILITY RATING OF 60 PERCENT DOES NOT REFLECT RUBEN NEGRETE'S DEBILITATING PHYSICAL CONDITION.

MR. CHAIRMAN, I SIMPLY CANNOT UNDERSTAND HOW THE NAVY CAN REALISTICALLY EXPECT RUBEN NEGRETE, WHO HAS BEEN AN INPATIENT FOR THE PAST YEAR AND WHOSE MEDICAL CONDITION HASN'T IMPROVED ONE SCINTILLA, TO FIND AND MAINTAIN GAINFUL EMPLOYMENT UPON DISCHARGE? HOW CAN THE NAVY EXPECT RUBEN NEGRETE TO SUPPORT AND CARE FOR HIS FAMILY, WHEN HE IS NOTHING MORE THAN THE SHELL OF HIS FORMER SELF? HOW CAN THE NAVY EXPECT RUBEN NEGRETE TO SET OUT ON A NEW CAREER PATH WHEN HE IS PHYSICALLY INCAPACITATED BY CHRONIC FATIGUE AND PAIN?

LIKE SO MANY OTHER DESERT STORM VETERANS, RUBEN NEGRETE AND HIS FAMILY MUST LIVE DAILY WITH THE WOUNDS AND SCARS OF THE CONFLICT IN THE PERSIAN GULF. DURING OPERATION DESERT STORM, PETTY OFFICER NEGRETE PUT HIS LIFE IN HARMS WAY IN DEFENSE OF AMERICA'S NATIONAL INTERESTS. THE U.S. GOVERNMENT HAS A SOLEMN RESPONSIBILITY AND MORAL OBLIGATION TO TAKE CARE OF THE MEN AND WOMEN WHO FOUGHT SO VALIANTLY IN OUR NATION'S DEFENSE. MR. NEGRETE IS A MAN WHO IS PHYSICALLY INCAPACITATED BY HIS AILMENTS AND SHOULD BE ENTITLED TO DISABILITY BENEFITS WHICH ACCURATELY REFLECT HIS CRITICAL CONDITION. BY MAKING RUBEN NEGRETE FIGHT FOR EVERY INCH OF SUPPORT, THE NAVY IS SHOWING THAT IT IS REALLY MORE INTERESTED IN SAVING ITSELF MONEY THAN SQUARELY DEALING WITH ITS OBLIGATION TO TAKE CARE OF ITS OWN. RUBEN NEGRETE DOESN'T DESERVE TO HAVE HIS LIFE BRUSHED UNDER THE RUG. HE DESERVES AND HAS EARNED A SQUARE DEAL FROM THE NAVY.

MR. CHAIRMAN, RUBEN NEGRETE LEFT THE UNITED STATES AS A HEALTHY MAN AND RETURNED FROM OPERATION DESERT STORM A CRIPPLE. THE NAVY AND THE U.S. GOVERNMENT MUST LIVE UP TO THE INVIOLABLE CONTRACT THAT COMMITS THIS NATION TO CARE FOR INDIVIDUALS LIKE RUBEN NEGRETE WHO HAVE HONORABLY SERVED IN ITS DEFENSE. IT IS A MATTER OF HONOR, PRINCIPLE AND CREDIBILITY.

THE HONORABLE CHARLES T. CANADY
of Florida

before the
HOUSE COMMITTEE ON VETERANS' AFFAIRS
SUBCOMMITTEE ON OVERSIGHT AND INVESTIGATIONS

June 9, 1993

Thank you Mr. Chairman. I appreciate the opportunity to appear before the subcommittee as you address the health problems experienced by veterans of the Persian Gulf War.

Today, I bring to the attention of the subcommittee health problems being experienced by members of the 325th Maintenance Company in the Lake Wales division of the Florida National Guard. There is strong evidence that these problems are a direct result of service in the Persian Gulf during Operation Desert Storm.

The 325th was responsible for painting almost 8,000 vehicles with a toxic, chemical-warfare resistant paint in 1990 and 1991. Members of the unit report conditions were primitive, safety equipment was virtually non-existent, and their protests to commanders in the Army and National Guard were ignored. According to guard members, the paint operations were shut down after the Army's 7th brigade refused to take over the job in 1991 because of safety concerns.

Dozens of members of the Lake Wales guard unit report a variety and range of respiratory problems and other symptoms which experts say result from exposure to toxic agents. The guard members are in the process of seeking treatment of these problems through Army and VA medical facilities.

As a result of the concerns expressed to me by members of the 325th, I have written to the Secretaries of Defense, Veterans Affairs, and Army, the National Guard, the Army National Guard. I have urged their cooperation in making sure that the problems of the 325th Maintenance Company are addressed in a careful and timely manner.

The Army and National Guard have assured me that they will conduct investigations into the possibility that members of the 325th were improperly exposed to dangerous chemicals. However, active members of the 325th must receive care through the National Guard, unless the Guard makes arrangements for care at other military connected facilities.

Members of the 325th who have separated from the Guard since Operation Desert Storm are entitled to have their medical problems addressed by the VA. However, members of the 325th have reported to me that they are encountering difficulty in obtaining the necessary examinations and treatment.

Though the VA has set up a Persian Gulf War Registry to document medical problems arising from the Persian Gulf War, the delay in receiving a medical examination following application to the registry is over 6 months. Furthermore, the VA does not recognize the injuries suffered by the 325th during their service in Operation Desert Storm as a medical problem.

The complaints by veterans have been widespread and are not limited to the members of the 325th. Many veterans of the Gulf War have complained of ailments such as fatigue, skin rashes, breathing problems, memory loss and other problems.

These complaints have been characterized by the VA as symptoms of psychological stress or fatigue from the physical discomfort of serving in a desert war. However, many in the

medical community believe that the evidence shows that the problems are a result of exposure to petrochemicals from burning oil wells, diesel fuel and the type of paint the 325th used to paint vehicles during Operation Desert Storm.

While the VA and medical community debate this issue, thousands of veterans nation-wide are suffering from problems associated with their service in the Gulf War. In many cases, the veterans have been referred to psychiatrists with the suggestion that their problems are imagined. That suggestion has been shown to be false and has only delayed treatment of real physical ailments. I believe that it is time that some positive steps are taken to address these problems.

In order to properly address the problems being experienced by former members of the 325th and other units which served in the Persian Gulf, I believe that two changes must take place.

1. **The VA needs to acknowledge and medically address the problems arising from Operation Desert Storm.** The VA does not officially recognize the kind of problems associated with multiple chemical sensitivity and has no experts in the area of chemically based problems. The VA needs to develop an area of expertise on the problems associated with long-term, frequent exposure to chemicals such as those contained in the paint applied by the 325th during Desert Storm.

2. **The VA should expedite the process for getting veterans examined for possible health consequences as a result of the Persian Gulf War.** Presently, once a veteran has applied for a medical exam through the Persian Gulf War Registry, the waiting period for an examination is more that 6 months in some cases.

Many veterans are suffering from symptoms so serious that they are not able to work. If we are going to address the problems of our veterans in a timely and meaningful manner, the speed in processing of their applications for medical examination and treatment must be increased.

I come before this Subcommittee today to urge that action be taken in regard to the veterans of the Persian Gulf War who meet the standard eligibility requirements for care and treatment by the VA. Though all veterans of the Persian Gulf War are eligible to receive treatment in VA facilities I urge that all possible action be taken to expedite the handling of registered veterans (active or separated) and the treatment of chemically related injuries suffered during the Gulf War conflict.

The VA has been slow to react to Desert Storm ailments and has denied responsibility for many of the health problems suffered by veterans of the Persian Gulf War. While many veterans await treatment, the problems of these soldiers who sacrificed their personal and family lives in order to serve in the our armed forces must be addressed in a timely and careful manner.

Mr. Chairman, we need to ensure that the process by which America's service veterans are provided medical attention is efficient and complete. These men and women served our country. The least we can do is provide them the medical care they deserve for any injuries that may have been sustained during Operation Desert Storm.

It took the VA 40 years to recognize the problems of exposure to radiation after WW II and 25 years to recognize the problems associated with Agent Orange following Vietnam. We should not ignore the problems already manifesting themselves following Operation Desert Storm until it is too late to prevent great damage from being done.

Again, I appreciate the opportunity to testify before the subcommittee today and stand ready to provide any assistance necessary to ensure the problems being experienced by the 325th are adequately addressed.

CHARLES T. CANADY
12TH DISTRICT, FLORIDA

COMMITTEE ON AGRICULTURE
DEPARTMENT OPERATIONS AND NUTRITION
FOREIGN AGRICULTURE AND HUNGER

COMMITTEE ON THE JUDICIARY
CIVIL AND CONSTITUTIONAL RIGHTS
ECONOMIC AND COMMERCIAL LAW
INTERNATIONAL LAW, IMMIGRATION,
AND REFUGEES

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June 9, 1993

The Honorable Les Aspin
Secretary of Defense
Room 3E 880
The Pentagon
Washington, D.C. 20301

Dear Mr. Secretary:

I have been contacted by members of the 325th Maintenance Company in the Lake Wales division of the Florida National Guard regarding health problems which they believe are a direct result of service in the Persian Gulf during Operation Desert Storm.

The 325th had responsibility for painting almost 8,000 vehicles with a toxic, chemical-warfare resistant paint in 1990 and 1991. Members of the unit report conditions were primitive, safety equipment was virtually non-existent, and their protests to commanders in the Army and National Guard were ignored. According to guard members, the paint operations were shut down after the Army's 7th brigade refused to take over the job in 1991 because of health concerns.

Almost two dozen members of the Lake Wales guard unit report a variety and range of respiratory problems and other symptons which match exposure to toxic agents. While some members of the guard have received treatment, others fear their careers will be ended or other punishment will be levied on them for expressing their concerns.

Many of the guardsmen and women who have talked with my office believe the Army and National Guard have a financial or political stake in avoiding the health problems of the unit.

I believe there may be confusion or miscommunication among the various groups on how to handle the situation, or perhaps a failure to recognize that serious medical problems may have developed because of the 325th's exposure to toxic elements.

As former chairman of the House Armed Services Committee, I know you share my concern for our citizen-soldiers in the guard and I am asking for your assistance in obtaining answers to questions brought to my office.

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The Honorable Les Aspin
April 27, 1993
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Among the questions guardsmen have asked are:

1. Did the Army's 7th Brigade, stationed in Germany, refuse to take over the paint operations based on safety concerns? If so, were these concerns expressed to commanders of the 325th and their regular Army supervisors.

2. Has the Army recalled units in Pennsylvania and Indiana, or others, back to active duty to provide medical treatment as a result of health problems incurred during service in Operation Desert Storm?

3. The Veterans Administration has begun medical evaluations of all those who served in Desert Storm. Are these evaluations a result of medical doctors determining that veterans of Desert Storm were exposed to potential toxic agents which could involve future health risks?

4. Does the U.S. Army have a medical or military reason for requiring members of the 325th to travel to Fort Stewart, Georgia, instead of allowing members to obtain medical treatment at military facilities in Florida? It would appear that if treatment could be provided in Florida, families would experience fewer problems and the Army could save travel costs.

5. Why won't either the National Guard or U.S. Army take responsibility for the future treatment or disability of guardsmen, whose health was adversely affected in Desert Storm? It would appear that because the guardsmen were on active duty, they would be entitled to all benefits and services Army regulars receive.

6. The guardsmen are concerned that the military forces regard their service as less important and their health problems inconsequential. Can we assure them that they will receive the same counseling, medical treatment, severance benefits and disability consideration received by those members of the regular service who experienced injuries?

I would appreciate your efforts to contact the appropriate service leadership for their assistance in assuring my constituents that their service in Desert Storm will not be forgotten and they will be receive proper care.

The Honorable Les Aspin
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Thank you for your efforts on behalf of the 325th Maintenance Company. I am available to discuss this problem with you at any time or to have my staff answer questions regarding the 325th.

Sincerely yours,

Chas. T. Canady

Charles T. Canady
Member of Congress

CTC:ws

cc: Jesse Brown, Secretary of Veterans Affairs
John W. Shannon, Acting Secretary of Army
Lt. Gen John B. Conway, Cheif National Guard
Brig. Gen. John R. D'Araujo, Director Army National Guard
Ronald V. Dellums, Chairman House Armed Services Committee
Floyd Spence, Ranking Member House Armed Services

TESTIMONY OF DESERT STORM ILLNESS

of

Thomas Luther Lane
EOC USNR
408-96-6527

Before

House Veterans' Affairs Subcommittee on Oversight and Investigations
ONE HUNDRED THIRD CONGRESS
U.S. HOUSE OF REPRESENTATIVES

June 09, 1993

I am Chief Lane of the U.S. Navy Seabee's. A reservist activated for Desert Storm Dec. 11, 1990 to April 26, 1991. I am one of those serving in Saudi Arabia, who came back with problems associated with being over there.

Immediately upon my return I noticed problems with my health. Over a period of time from April 26, 1991, to the present day, I have experienced the following: watery bowels, loss of appetite, sleeplisness, short term memory loss, depression, fatigue, extreme pain in my joints, night sweats, increased pulse rate (from a normal 65 increasing up to 85 and 90 beats per minute), body weight swings in short periods of time, uncontroled emotional outbursts, lack of drive, strange bumps that come and go, tremors or shakes, unusually itchy scalp, sore throat for long periods of times, problems urinating, and disorientation.

The first problem I had was in the area of watery bowel movement. Three to four days straight every three to four weeks I would have watery bowels. I thought after being home for a short period of time, about a couple of months, it would straighten itself out. But it didn't, it continued from May of 1991 to August, 1992.

I had a loss of appetite. I went from 170 to 147 in a couple of months. Then between June and December of 1992, my weight would go from 147 to 160 in as short a time period as a few days. Or it would go from 160 back to 150 in a few short days. My weight would not remain constant.

I had problem with my sleep. It was like the nerves in my body were out of control. At about the point of going to sleep at night I would jerk awake. And continued to jerk awake all night long. This continued until about March of 1992. At that time I began taking Ativan's at bedtime to help me sleep.

Prior to going to Saudi Arabia, Dec 11, 1990, thru 26 April, 1991, I could work from morning to night with plenty of energy to spare. Soon after returning I lacked the energy to do anything except work my regular job with TVA, then come home and rest. I would neglect the things that needed to be done around home. Even doing small chores were tiresome. I had no drive, I felt tired all the time. I only had enough energy to survive.

The fatigue got worse so that by September, 1992, I was spending more time in bed. It took a lot more rest to keep me going. Up until then I had never spent more than 12 hours in bed unless I was very sick. By this point in time I started spending at least one day each week in bed 24 hours. It took sleeping around the clock just to keep going. By the first of October it took more and more rest. A week of almost total rest would keep me going for about two weeks. My health remained like this until I was treated by Dr. Hyman, on December, 1992.

On June 13, 1992, I saw the first signs of bumps on my body. It was a cluster of small bumps (seven in an area small enough you could cover it with a half dollar), on the inside of my left leg just above the ankle about six inches. These bumps appeared for about three to four days then formed a white head for a few more days, then started disappearing. After that point the bumps started showing up periodically on various parts of my body. They would come for about a total of seven to eight days then start disappearing. When they were gone they would leave a small dark scar.

I started having problems with short term memory and disorientation at around July, 1992. Almost constantly I would leave the room to go get something or do something and boom I not only didn't remember what I'd went to do or get, but I sometimes failed to realize where I had been at. I would sit down for a short period of time and eventually it would all come back to me.

On several different occasions I would be driving in an area of Chattanooga, very familiar to me in the past, and not know where I was at. It got so bad on a couple of occasions I had to stop the car on the side of the road, and spend a lot of time re-orienting myself.

I also had problems with the shakes or tremors. These came in early July and lasted up to about November to December, 1992. The shakes were so bad it affected my writing. The combination of the shakes and memory problems caused problems in my job at work.

I also had problems with urination. It took a lot of pressure on my part to get my bladder to relieve itself.

In early July 1992, I started having sweats at night. Occasionally, the sweats would be so bad, my shirt would get so wet you could wring a lot of water out of it.

My scalp would stay itchy all the time, even immediately after taking a shower. The itching would be worse around the base of my head around the back and sides.

I also had unusual problems with my throat. It started around the end of August, 1992, and stayed with me until I was treated by Dr. Hyman, December 15, 1992. My throat would be so sore in the mornings I just barely could talk. It would take until about mid afternoon to loosen up enough to talk regular. It bothered me almost constantly.

I experienced joint pains throughout this whole time period. But none as severe as those I experienced in my left hip. On August 7, 1992, I noticed pain in my left hip. The pain was severe and almost constant. The pain in my hip lasted for three weeks and then went away. Then November 16, 1992, the pain came back in my left hip. The pain was very severe and constant all the time. It started getting worse as time went by. The pain stayed until after I was treated by Dr. Hyman. Two weeks after getting out of the hospital it went away completely and has not returned since.

I had filed a claim with the V.A. on my problems in June, 1992. In February, 1993, I was sent to the regional office in Atlanta for a physical examination by the V.A. The trip to the Atlanta V.A. center turned out to be a fiasco. The doctor brought me in looked at me, had blood, and urine test, and chest x-ray done. Ignored the paperwork from the Navy admitting I had the sickness from Saudi Arabia, ignored Dr. Hyman's paperwork on the treatment and opinion on my problem, and failed to recognize the complaint I had on previous problems of my left hip. To even get this in my records that was sent to the V.A. board, I had to raise cane with the administrator. I received the results back from the V.A.. They denied I had any problems relating to Desert Storm, and refuted my claim.

I first attempted to go to the V.A. in Chattanooga in September, 1991, to see what was causing my bowel problems and sleeping problems. When I found out it was going to cost me money to see the Doctor, I decided to leave.

By January, 1992, I knew something was wrong with me so I sought help from a private physician, Dr. Greer. The reason I went to Dr. Greer was to try to do something about my fatigue, depression, and sleeplisness. He prescribed medicine and monitored me on and bi-weekly basis.

I didn't go back to the V.A. until June, 1992. I had gotten a strange cluster of bumps to come up on the inside of my left leg. There were about seven bumps in an area so small you could cover the whole area with a half a dollar.

I went to Murfreesboro V.A. this time. I arrived early in the morning. I thought being able to go in, see the doctor, and be treated or tested for something, would be easy and simple. Not so, even though I was a Desert Storm Veteran and having problems possibly from over there, I wasn't getting nowheres with the V.A. With no appointment I could not see the Doctor. It took a phone call to an active duty corpman in Atlanta to finally be seen. By late afternoon I was finally seen by a doctor. They took blood, urine, and stool samples. And had x-rays of my chest made. Then they set up an appointment to see the infectous disease doctor two weeks later.

To make a long story short. My experience with the V.A. has not been that good. Over a period of time from the first of June, 1992, to the end of November, 1992, I went to the V.A. at least 12 different times with my problems. My health was deteriorating the whole time and the V.A. wasn't getting any closer to finding out my problems. During this time period I saw at least five different V.A. doctors, who had about five different answers as to what was wrong with me. The problems to them stemmed from being in my head to hygene to spinal problems. None of which were the right answers.

It didn't seem like the doctors were even listening or paying attention to what you were telling them. For instance, I was having trouble with my memory. So I tried to write more stuff down on paper. I kept a notebook diary on the problems I was experiencing. So when the doctor was asking about the different medical problems, I couldn't remember the exact dates and so forth so I constantly referred to my notebook. After writing all the problems I was experiencing down on the medical records, the doctor turns to me and says I don't see anything wrong with your memory etc...

When the bumps were active, the V.A. sent me to the Nashville V.A. center to have a biopsy done on them. While there the doctor looked at my bumps for about five seconds and gaffed it off as being a hygene problem. He didn't take the time to listen to me explain the mysteriousness of the bumps. How that they would come and go and reappear at various parts of the body. Even after the biopsy results came back showing up as a not so common fungus, no follow up study was done. Not even was there an attempt to grow a culture on these bumps.

These doctors seemed to be trying to pacify and discourage us as much as possible. All but one was like that. Dr. Ukwa was different. She was an infectous disease doctor at Murfreesboro V.A. She took a lot of care and concern on trying to get to the bottom of the problems. I started seeing her in late July, 1992. She had special blood, urine, and stool tests done on me. She even had blood work of mine sent to Walter Reed Hospital. Later as the disease started settling into my left hip she would work even harder at trying to find the answer to what was going on. Strangely thats where it quit. By August 17, 1992, Dr. Ukwa no longer worked for the V.A. at Murfreesboro.

Nothing was heard of, about the blood work sent to Walter Reed Hospital. It mysteriously disappeared.

I continued to go to the V.A. with no satisfatory results. Until right after Thanksgiving. On November 16, 1992, an excruciating pain settled in my left hip. The pain was constant and got worse as the days went by. So much so that on December 2, 1992, I went to the V.A. in Murfreesboro, for help. More blood tests, etc... were done. The doctor I saw did almost a total physical examine. He had a chest x-ray done. When finished with me he said he thought maybe one of the vertebra in my spine was swelled causing the problem in my hip. He said I could go see the physical therapist if I preferred. So I went to the therapist. He had hip x-rays made, did theraphy, and taught me how to walk with a cane. A week later the x-rays showed a form of arthritus or deposit forming in the pocket of my left hip.

In the mean time Dr. Hyman saw a few of my Navy workers and myself on CNN. We were exhibiting problems similar to those in some of his patients. He had worked wonders for them and felt he could do the same for us. He tested our urine to see if we might have what he was looking for. He found it present in all of us he tested. By the time he got the second positive sample from me I was having problems with my hip.

Because I could not afford to lose my job and because the V.A. and the Navy were getting nowhere in solving the strange illness, I decided to let Dr. Hyman treat me. Let me make it very clear, my health was deteriorating very fast at this point. My hip hurt and bothered me to the point of having to use a cane. I could not stand in one place longer than a minute. I could not walk more than a hundred feet. I could not get comfortable in any position, whether sitting, or laying down. Constant pain twenty-four hours a day.

Dr. Hyman placed me in Touro Infermery December 15, 1992. The treatment was for 12 days. During that time he was able to identify the bumps and treat them. He grew cultures on the bacteria creating my problem. He got rid of the pain in my hip. I started sleeping without having to take ativan. I got my appitite back. I started gaining my weight back. And biggest of all I got my stamina and strength back.

I now am able to work with more energy since coming back from Saudi Arabia on 26 April, 1991. A good example of this is when I pulled 18 days of training duty at Camp Lejune, N. C., March 09 - 27, 1993. I worked 14 to 16 hour days, moving constantly. I was averaging only about 5 hours sleep per night. The amazing thing about this time period is the fact that I came through this without getting run down.

I do have to take medication to be able to maintain my good health. Dr. Hyman has me on Clindamycin. I am presently taking 8-10 per day. The pills are not free. They cost about 75 cents a piece. This comes to about 225 dollars per month. Plus I am taking a pill called Nystatin. It too is not free. It cost about 45 dollars per month.

It has cost me to get back to where I can live again. Over the past year and a half, I have spent quiet a bit of money, and have quiet a bit of bills to take care of relating to this sickness I have. I still owe Dr. Greer for his services. I owe Touro Infermery over a $1,000. The V.A. has sent me bills to pay them for services rendered. I have used over 250 sick hours from work on this problem. I still have to take medication by mouth for the sickness. as mentioned above at a total cost of about $270 per month.

It has also cost me at work. I work for a federal agency called Tennessee Valley Authority. During the month of July and August, 1992, I had bad problems with my memory, tremors etc... This caused paperwork problems and discrepensies. I notified my immediate supervisor of the problem and suggested substituting another worker to do this particular job until my problem subsided. He told me to work through it. The paperwork problems continued. I received a letter of reprimand and a day off without pay from my supervisor and his supervisor. The work places have not been too sensitive to the medical problems experienced by Desert Storm Veterans. Several are without jobs because of the medical problems experienced from Desert Storm.

Of the 735 men serving with Naval Mobile Construction Battalion Twenty-Four, a little over one hundred men have been afflicted with this mysterious illness from Saudi Arabia. It has been nothing less than a nightmare for many of them. Mose Elliott, Chief Perry, and Gene Trucks have been not been able to work since returning from Desert Storm. Roger Flinn and Jerry Jones have not work for about a year due to this same problem. They experienced the same medical problems I described above, except in some, to a much worse case than mine. All have been to the V.A. to the point of living on its doorsteps, but to no avail. Mose Elliott, and Jerry Jones spent considerable time at Bethesda Hospital. Neither the V.A. nor the Navy have even come close to finding the answer to this mystery.

It is sad that of these few people mentioned over half have lost almost all they have. All but a few have had to file bankruptcy. Even their wives have tested positive to the bacteria present in their bodies.

Another sad fact is the treatment of the Navy Reserves to those afflicted with the illness. Roger Flinn, Jerry Jones, Gene Trucks, Lester Hallman, and Sterling Sims have be placed and not physically qualified status. Their careers in the reserves has stopped. Some of these are lucky enough to have their 20 years in. But for a few that is not so. One has about 12 years, and the other has about 18 years. I am sure there have been more to be placed in a not physically qualified status.

Many Navy, Army, and other armed forces personnel who were in Desert Storm have had similar or worse ordeals with the V.A., the military health facilities, and with their employers. I have had calls from other active duty and reserve personnel involved in Desert Storm, who have been afflicted. It doesn't exist only with NMCB24 personnel. It has afflicted a wide spectrum of military personnel. For these personnel it also has been a battle to get the health care needed. The cost has been great. Those who have the monetary means and the insurance, have been able to get help. Those who don't still suffer.

In summary, I would like to highlight a few points. The problems for those who served in Desert Storm are real. We have the problem of identifying the mysterious illness. Out of that problem exists the problem of identifying who is actually suffering from the illness and who isn't. Then comes the nightmare of those who have suffered tremendous financial setbacks because of this illness. Who will repay them for what they have lost. Then there's the health of the family involved. Because it has shown up in the spouses, who's to say it hasn't shown up in the children. Who will take care of them? Of all the money, time, and efforts spent up to now how close are we to finding out what is really going on? The military and the V.A. are no closer today in finding an answer than they were when they started. The only breakthrough has been from the treatments given by Dr. Hyman. I do not know the details of his study. I only know that he has identified a type of bacteria, and has given treatment for it, with somewhat measured success.

In a time when our country needed us we left our family, our friends, and our jobs and responded to the call. That call was not without a price. So far that price has been and is still being payed for by those who gladly served. I hope you will not turn your back on the men who need you now. Take care of them, they took care of you.

TESTIMONY BEFORE THE HOUSE VETERAN'S AFFAIRS SUBCOMMITTEE ON OVERSIGHT AND INVESTIGATIONS

By SFC Carol H. Picou, USA
127 Dagama Dr., Universal City, TX
(210) 658-7870

Submitted June 4, 1993

By request of Lane Evans, Chairman, Subcommittee on Oversight and Investigations

Contributing material by Dr. Thomas Callender, Med-Health, Ltd. Lafayette, La.; Patricia Axelrod, scientific writer and independent researcher; Cathy Hinds, Director, Military Toxics Project; Grace Bukowski, Director, Rural Alliance for Military Accountability; Damacio Lopez, Director, Progressive Alliance for Community Empowerment and Vic Silvester, President, Operation Desert Shield / Storm Association

Dear Members:

I am a 37 year old female. 14 years of active duty have taken me to South Korea, West Germany, South Africa and Southwest Asia. As a civilian trained LPN I have held the position of NCOIC of numerous clinics to include my tour in Southwest Asia. Awards earned include 3 ARCOM, 3 Army Achievement, 4 Good Conduct Medals, 2 Overseas Ribbons, National Defense Ribbon and Southwest Asia Ribbon. Prior to my tour in Southwest Asia I enjoyed good health both physical and mental. I am married and have one child.

While in Southwest Asia, from 23 Nov 90 to 23 April 91, I was assigned to the 41st Combat Support Hospital. My main responsibility was chief ward master of one of the surgical wards, but also drove 5 ton trucks, stood guard duty, worked on sandbag details and whatever else was neccesary to maintain a healthy enviroment in and around our encampment.

During these 5 months I received many combinations of drugs. In December 90 while on a sandbag detail I re-aggravated my lower back, which I had suffered with on and off, prior to deployment. I was prescribed Motrin, Valium, Naprosyn and Flexaril for pain. During this period I also suffered two asthmatic attacks. I was given inhalers to help me breath. I suffered from an ear infection in January 91, for this I was given Ceproflexin, Tylenol 3 and Motrin. I began to have increased frequency of urination and it was at this time I also noticed black tarry stools in my bowel movements. The doctors on duty told me these conditions were probably due to the change of enviroment. In a latter consultation with Dr. Callender, an internist specializing in enviromental and occupational toxicology, he informed me that it was most likely I had suffered from "internal hemmoraging due to the combination of drug ingestion which in turn was tearing up the inside of my stomach". He felt the best thing the doctors could have done, at that time, was to take me off the drugs, I was not.

The Anthrax vaccine and Botulism vaccine were both administered to me during Jan 91. We were told that the threat of biological warfare, by Iraq, was evident and these drugs were to help protect us against any such attacks. Both of these drugs are surrounded by a cloud of uncertainty. They are being studied at the Ft. Detrick U. S. Army Medical Research Institute of Infectious Disease. How many soldiers received these drugs remains unclear due to the fact that records were not updated or were lost. In regards to the Anthrax vaccine, "some military medical personnel did however warn people given the drug not to have children for 3-4 years. The origin of the decision to issue this warning is uncertain. It seems this vaccine was selectively administered", states Ms Axelrod. I also began to take a series of malaria medications during this period.

In Feb 91 part of our hospital moved into Iraq to support the 24th Infantry Division. It was at this time we were ordered to take the drug Pyridostigmine to protect us against chemical attack. Within 1 hour of taking the drug I began to experience severe side affects such as uncontrollabe twitching eyes, runny nose, excessive frothing from the mouth, neck and shoulder pain and constant sneezing. When I reported this to the doctor on duty his reply was, " you have proven the effects of the drug and to cut the dosage in half". Through the research of Ms Axelrod these symptoms show evidence of overdose. "This drug is unproven. The use of this drug in a healthy person can lead to a mixed variety of inhibitory and stimulatory responses in the central nervous system which tend to mime myasthenia gravis, the disease which this drug has been prescribed for since 1955". Further research, by Ms Axelrod, shows that "persons exposed to heat are to use caution while taking this drug as heat may increase sweating and weakness. Exposure to enviromental chemicals such as pesticides and insecticides should be avoided as this can accentuate the potential toxicity of this drug. The intense heat and regular use of pesticides and insecticides during Operation Desert Shield / Storm heightens the possibility of these synergistic effects."

Upon entering Iraq, we traveled down a highway in the direction of Basra. Evidence of intense bombing and artillery hits were everywhere. Various types vehicles on the side of the road were still on fire or smoldering as we passed. Charred bodies were strewn all over the road. Because of the large amount of debris in the path of our convoy, we were delayed for up to an hour at a time until the roads could be made passable. After 3 nights of sleeping in our vehicles, we set up our hospital off the side of the road, on the sand. Our mission was to care for any allied casualties and to administer aid to any Iraqi POW's. Sanitary conditions were less than desireable, due to the lack of sufficient quantity of water to wash with. The Nucleur Biological Chemical (NBC) alarms which were set at the perimeter of the camp would go off during the day and throughout the night. The general response of the NBC team

members were that the alarms were probably being triggered by the wind,"nothing to be alarmed about". It was not until I became associated with members of the Rural Alliance for Military Accountability, National Toxics Campaign and the Progressive Alliance for Community Empowerment that I was made aware of the use of Depleted Uranium (DU) in munitions fired by allied aircraft and tanks. At no time while in Iraq or otherwise were we warned of the possibility of coming into contact with radioactive materials or the residuals thereof. Therefore no precautionary meassures were taken. Much research has been done on uranium and its by-products. Why the military neglected to brief its troops, in the field of battle, on the use of DU penetrators is beyond my comprehension. In a letter from Les Aspin, dated 13 May 91, to a Mr. Dietz, he supplies Mr. Dietz with a report prepared by Dr. Joe Osterman, director of the DOD office of Enviromental and Health Sciences. Air Force records on DU expenditure during Desert Storm by A-10 aircraft is classified. In the report Dr. Osterman states that, "the expenditure of depleted rounds is known, the area distribution is generally unknown, but could be partially derived from A-10 sortie records, if they exist". Information on distribution as well as number of impacts with armored targets are required in order to evaluate the enviromental as well as health impact of DU usage in the target area. The reason for this information is that when DU strikes a hard target, many uranium particulates are formed during the physical breakup and vigorous oxidation which occurs. When ingested, uranium concentrates in the bone. Within the bone it increases the probability of bone cancer, or, in the bone marrow, leukemia. Uranium also resides in soft tissue, including the gonads, increasing the probability of genetic health effects, including birth defects and spontaneous abortions. Also in a report by the GAO dated January 93 it clearly states the Army was not adequately prepared to deal with DU contamination. In a meeting I attended in Senator Cohen's office in March 93 his aid is quoted as saying," the DU penetrators were not designed for the purpose of harming people by releasing radiation". The fact remains, DU is harmful to people that come in contact with it, in the various stages of residuals we were exposed to, if in fact we were in areas DU was used.

Once back in Saudi Arabia, April 1991, I began to experience urinary and bowel incontinence. The response of the doctors was that the problem was mechanical and to have it checked out once I returned to the U.S. Prior to redeployment to the U.S. we were briefed on challenges we may face upon returning to our loved ones. The subject of precautionary meassures concerning sexual intercoure and impregnating were also brought up. Reason for this concern was due to the drugs that we had taken.

My problem with bladder and bowel incontinence followed me back to the U.S. In May 91 my lower back pain resurfaced along with numbness in my left leg. This was the beginning of approximately 15 months of military medical evaluations. Tests were conducted in numerous clinics. I received injections, in my lower back, for pain for a period of about 5 months, but there was little relief. Outside of the injections, the only treatment I've received is to catheterize myself 5 times daily. I take laxatives to aid me in my bouts of constipation. In March 92 it was recommended that I be medically boarded.

By this time my work enviroment was limited to sitting at a desk. The bladder and bowel incontinence prevented me from performing my normal duties. In April 1992 an MRI was done to rule out Multiple Sclirosis. Rectal EMG's were done in June 1992. The results showed absent rectal sphincter muscle's although the nerves leading to the area seemed allright. The bladder and bowel incontinence had worsened to the point that I had to wear sanitary products to protect my clothing from frequent uncontrolled bladder voiding and bowel movements. In July 92 I was put on home duty status.

The next round of tests were to be conducted by the Psychiatry Clinic. This was in August. The findings of the psychiatrist showed loss of short term memory within a superior I.Q. range. No somatic or psychosomatic disorders were found. The suggestions from the psychiatrist was for me to see a pharmacist to study the effects of the combinations of the numerous drugs I had taken while in Saudi Arabia. He also recommended my seeing an enviromental health officer.
The doctor in charge of handling my medical board decided not to pursue these recommendations and sent my medical board to the Physical Evaluation Board (PEB) for them to make a decision on the findings. This was in November 92. By now my list of afflictions had grown to unexplained rashes, hair loss, fatigue, head pressure, dizziness, nausea and the slow healing of minor cuts.

I contacted the research center, at Walter Reed, set up to investigate leishmaniasis. The doctor I spoke to felt I was not suffering from the disease and the testing was not considered. I also contacted the Houston VA in response to the publicity it had received as being one of the 4 hospitals set up to work with Desert Storm soldiers. I was told the program was for veterans only. It was at this time I decided to contact a civilian specialist. After completing a lengthy survey, Dr. Callender agreed to see me. In the meantime the results of the informal board came back with a 20% rating.

It was on 23 Dec 92 I visited Dr. Callender at his office. After talking to him for awhile he ordered a SPECT scan of the brain to be done at the local hospital. The preliminary results showed lack of blood flow to the left thalymus of the brain. EEG's were run later that afternoon. On 24 Dec 92 I returned to his office and had tests run to evaluate whether any damage had been done to my mechanisms related to my balance. These tests showed impairment to the middle ear. Complete medical findings by Dr. Callender are available upon request. This doctor showed such concern for my well being that he cancelled all appointments during both days. At the same time he informed us that he would not make any premature statements regarding my health nor the causes until he had enough factual evidence to support such a claim. Because of the complex nature of the case much research would have to be conducted.

The decision to appeal the findings of the PEB had been made by me. The formal board was to convene on 20 Jan 93. I chose to use the services of the Disabled American Veterans (DAV) to represent me as legal consul. I was given an appointment, one day prior to the date of my hearing, to meet with my appointed consul. I questioned this process because of the short period of time allowed for consul to review my case. The feeling of the response was that this was the rule followed, possibly because of the large case load being worked out of that office. On the day of my hearing, I was the fifth case heard by the board members. All of the preceeding cases were represented by the same individual from the DAV. Within 10 minutes of the closing arguements a decision was made by the board president. A finding of 70% TDRL was given to my case. Copies of both the informal and formal findings are available if neccesary. It is my personal opinion that a decision had been made, concerning my future, prior to my setting foot in the chambers of that hearing. The question of the statements submitted by physicians concerning my health concerns and leadership abilities, while in Southwest Asia, seemed more of a priority than did the results of tests run and recommendations by Dr. Callender.

In mid January 93 my husband filed an I.G. complaint against the hospital. On 13 Jan 93 I was sent to a military doctor who had been designated to establish a registry of soldiers suffering from mysterious illnesses connected to the Persian Gulf. Not much could be done by him at this time and he suggested my continueing to seek the care of the civilian physician. On 1 Feb 93 I decided to appeal the findings of the formal board. The DAV consul assigned to me for the hearing of the formal board did not agree with my decision. He was so strong on his opinion that he wished me luck and abruptly hung up. I have not heard from him since. I question the true concern for any soldier being represented by this office.

The I.G.'s office contacted me the first week of Feb 93 to inform me that the military would not accept the financial responsibility of outside medical evaluations. It was recommended that I stop seeing all civilian doctors concerning my case. Any additional tests would be conducted by the military. I had future appointments scheduled with Dr. Callender when I was informed of this decision. It was by my judgement, alone, that I decided to keep these appointments. It was these series of appointments that elevated levels of antibodies were found in my blood. I was not contacted by any military doctors for further testing until 20 April 93.

At this time my second appeal had been ruled out and the findings of the formal board were fowarded to the Disability Agency in Washington D.C. for final consideration. The letter to the Disability Agency from the president of the PEB was dated 8 Feb 93. I did not receive a copy of this letter until 30 Mar 93. Orders for my retirement were cut on 30 Mar 93 and the official date of seperation from active duty was set for 28 April 93. No changes to the findings of the formal board were considered by the Disability Agency. I question the manner of the handling of this matter by the local PEB. It leads me to believe that the goal was to get me out of active duty status as quickly as possible. Through my sheer determination and belief that questions were being left unanswered, I began the process of stopping my retirement. Word came down from Washington, one day prior to my retirement, that my orders were being held until further tests could be run.

On 6 May I began to have blood work done by the military. These same tests were recommended by Dr. Callender 3 months earlier. I am now in the process of working with the Reumotology clinic. Another psychiatric work-up is scheduled also. I still have not been seen by a pharmacist to study the combinations of the drugs I had taken. Nor have I been sent to an enviromental specialist. Why the military does not want to expand into other fields of testing, such as the two mentioned above, leads me to believe more is known of what is ailing me than is being admitted.

Questions have been asked as to the validity of the series of tests run by Dr. Callender. I question the validity of the tests or lack thereof, being run by the military. A common ground must be reached by the government and civilian specialists. This seems to be the only way that answers to these illnesses will be arrived upon. At the same time many legal questions arise as to the methods of dispersal of some of these vaccines during the conflict. It is my understanding, through research done by Mr. Silvester, that a military member cannot be forced to take any type of drug without his or her approval. Our being ordered by the Commander to take one of these drugs does not concur with the findings of Mr. Silvester. Also documented evidence shows that some of these vaccines are to be monitored during periods of ingestion. I can tell you that this was not the case in respect to my situation. Just how many civil liberties does a soldier loose when he makes the decision to serve in the protection of his Country and the laws of which it was built.

The government has taken a strong position concerning the causes of these mysterious illnesses. It is my opinion that our government knows much more than what they are willing to admit. Soldiers from World War II are just now discovering they were used in secret tests in the use of mustard gas. Documentation of the true effects of exposure to Agent Orange were replaced with false files. This was discovered just recently. You would think we would learn from past mistakes. In the past money and pride have always gotten in the way of the truth being told. Our Nation is now moving in the direction of a medical catastrophe considering all the evidence being gathered. If there are classified documents that will assist in helping our soldiers then they should be released. The government must begin to treat the soldiers and civilian personnel who are suffering and treat those who will undoubtably fall to ill effects in the future. The responsibility does not stop with treatment. We must find ways to bring these people back into the workforce. Assurance's must be given that they will be able to return to live somewhat of a lifestyle that they were accustomed to prior to the Persian Gulf.

Following are names of active duty soldiers who served in the Persian Gulf and are suffering. Also dependents who feel they are affected. A short description of their symptoms follows. These soldiers have asked that their names be mentioned. Written testimonies by each of these people are available.

Active Duty

1) SPC Mark Chapman - Diagnosed with Tuberculosis, night sweats,difficulty urinating, memory problems, abdominal distension

2) CW 2 Ronald Mathews - Severe joint pain, testicular cyst, abdominal distension. He was offered 20% on his formal board.

3) SPC Thomas Broddnax - History of bilateral ulnar neuropathies, myotonic syndrome of uncertain etiology. Offered 10%, then formal dropped to 0% because condition existed prior to service.

4) SPC Karen Srch - Chronic pelvic pain, while in Saudi, unknown organic etiology. Total abdominal hysterectomy. Recurrent ovarian cysts, joint pain, headaches.

5) SGT Mark Slota - Testicular cysts, chronic epidemitis, left oorphorectomy, joint pains weight gain, abdominal distension.

Discharged Desert Storm Veterans

1) SPC Linda Hughes - Chronic costochondritis, numbness and tingling in hands, severe headaches, insomnia, memory loss, weight gain. Pending VA disability. Opted for early out program, due to downsizing. Appointments with VA are strung out all the way to Dec 93.

2) SGT Judith Howlett - Flu like symptoms, persistant cough, anemic, diagnosed with Hodgekins lymphone. Spleen removed. Placed on TDRL at 100%. After one year she went into remmission of the lymph cancer. Military asked her to back active duty, she requested to get out for reasons she felt she could not perform as required. Present rating by VA is less than 10% Depression and fatigue still persist.

3) CPT Victor Tubbs - Constipation, bloating, weight maintainence, fatigue, joint pains, mood swings. Now serving in reserve unit.

Dependents

1) Cedrick Miller - Son of SGT Miller. SGT Miller served in Saudi Arabia until Jan 91.Child conceived May 91 born Mar 92. Born with Hydrocepholus chromosomal disorder. Born without left eye, left ear and part of left jawbone. Muscles in thumbs not developed. Heart on right side.Ocular Auriculo Vertebral (OAV) Syndrome.

2) Hayden Shock - Son of CPT Shock. Born Nov 92. Born with no right ear, right jaw bone, right lip muscle missing. Extra digit on right hand, spinal anomolies, hearing loss, OAV Syndrome.

In closing, I trust that the right decisions will be made concerning these men, women and children. Our government has got to look to the future of our Country. If these types of illnesses go on untreated, one can only guess where this Nation will be in 20 years. It is frightening to even think of the consequences.

Thank you for giving me this opportunity. I trust that GOD will lead the Nation in the right direction.

Sincerely,

Carol H. Picou
SFC, USA

U.S. House of Representatives
Veterans' Affairs
Subcommittee on Oversight and Investigations
Testimony of Kimo S. Hollingsworth

On January 1, 1991 I was deployed to the Persian Gulf with I Battery, 3RD Battalion, 10TH Marines, 2ND Marine Division. My occupation through Desert Shield/Storm was that of Artillery Platoon Commander. As such, I was responsible for 72 Marines, 4 M198 155mm howitzers, 8 5-ton trucks, 6 HMMWV's, various crew served weapons systems and communications equipment.

Prior to this deployment and during the duration of this deployment, my physical health was excellent. Upon my units arrival in Jubayl, Saudi Arabia we resided in Camp 15 for three days. There we adjusted to the envirornment and gathered our gear from the port facilities. From January of 1991 until May of 1991, our movements are as follows:

- North to an area known as the training triangle.
- North on the coastal highway and then west into the Al-Wafra oil fields.
- On Febuary 12, 1991 we conducted an artillery raid 3 km south of the Kuwaiti border at the Al-Wafra oil fields.
- West to the Um-Gadair oil fields where we positioned for the assault into Kuwait.
- We then assaulted into Kuwait to the Al-Jabar airfield.
- North from the airfield to an area known as the Kuwaiti agriculture center along the 6TH Motor Ringway.
- We remained there until our return to Jabayl, Saudi Arabia in mid May of 1991.

Upon my return from the Persian Gulf, I was assigned as the Executive Officer for H Battery, Battalion Landing Team 1/8, 22ND Marine Expeditionary Unit (22 MEU). 22 MEU returned to the Persian Gulf via ship as the Central Command Landing Force. My second tour in the gulf was from October of 1991 - Febuary 1992

Prior to and during this deployment my health was once again in excellent condition. The highlights of this deployment are as follows:

- An amphibious landing into Kuwait and a live fire exercise 25 km south of the Iraqi border in the vicinity of Doha Army base.
- An amphibious landing into northern Saudi Arabia along the coastal highway.
- An amphibious landing into Oman vicinity of Al-Hamra.
- Port visits in Baharain, United Arab Emerites, Egypt and and Israel.
- Return to The United States.

Upon my return to The United States, I prepared for my release from active duty. My final physical was conducted and my physical health was in excellent condition. In July of 1992 I accepted a position with a major wall street brokerage firm as a Financial Consultant. My health was excellent when in November of 1992 I came down with the flu. I recovered from the flu and in mid December my illness began. The symptoms are as follows:

- Constant headaches.
- Severe muscle and joint aches.
- Constant Fatigue.
- Pain in my center chest bone and coughing up dark sputnum.
- Frequent urination (I would wake 3-4 times a night to urinate).
- Periodic blurred vision.
- Plain lack of motivation.

By the begining of January the symptoms had not passed and I sought medical attention from a local doctor. My doctor could not diagnose my problem and was going to refer me to another doctor.

In Febuary and March my condition worsened. By April of 1993 I contacted the Veterans Administration to register with the Persian Gulf registry. I was told of the registry through a contact at The American Legion. My contact had also informed me of a Doctor Edward Hyman who was working with veterans in New Orleans. I went to the Veterans Hospital in Washington DC and received a full physical. The doctor told me I was in excellent physical condition and said the coughing of sputnum and the pain in my chest was natural in some persons. Before I left the hospital, I was directed to a social worker. She informed me that many veterans were suffering from Post Tramautic Stress Syndrome and that I may also have the syndrome. She gave me a brochure that described counseling available to the Persian Gulf Veterans.

After my encounter with the Veterans Hospital, I decided to pursue the treatment prescribed by Doctor Hyman in New Orleans. By this time, my manager had pulled me in for a talk in his office. He informed me that my performance was falling from an acceptable level. He was aware of my condition and provided me the opportunity to seek treatment in New Orleans with Doctor Hyman. I went through Doctor Hyman's treatment in New Orleans from May 10 - May 23 1993. Since my return, my symptoms have vanished. My stamina is not near my previous levels of 6 months earlier. Sometimes I still tire easily. However, my mental edge and motivational level have returned. Physically I feel better than I have felt for the last 6 months. Doctor Hyman should be taken seriously. On behalf of all veterans, I strongly recommend his findings be given careful consideration. The Veterans Administration did not help, Doctor Hyman did!

TESTIMONY

BETTY ZUSPANN
NATIONAL DIRECTOR, DESERT STORM VETERANS COALITION
WIFE OF WOUNDED DESERT STORM VETERAN GARY ZUSPANN

for

HOUSE VETERANS' AFFAIRS SUBCOMMITTEE ON OVERSIGHT AND INVESTIGATIONS
JUNE 9, 1993

MR. CHAIRMAN,

I AM BETTY ZUSPANN, WIFE OF DISABLED DESERT STORM VETERAN, NAVY PETTY OFFICER, GARY ZUSPANN.

I AM CURRENTLY SERVING IN A VOLUNTEER CAPACITY AS THE NATIONAL DIRECTOR OF THE DESERT STORM VETERANS COALITION.

WE WOULD LIKE TO THANK YOU FOR ALLOWING OUR COALITION TO GIVE OUR VIEWS REGARDING THE ISSUES AT HAND, PERTAINING TO THE DESERT STORM ILLNESSES, AND OTHER ISSUES.

FIRST, WE ARE SUBMITTING FOR YOUR REVIEW, RESEARCH WORK ASSEMBLED BY MS. CLETA PHILLIPS, WIFE OF A PHYSICALLY ILL DESERT STORM VETERAN AND A MEMBER OF THE DESERT STORM VETERANS COALITION INFORMATION RESEARCH TEAM. (EXHIBIT #1, FOR COMMITTEE FILE)

A REPORT FROM MAJOR RICHARD HAINES, UNITED STATES ARMY RESERVE, REPORT TO NATIONAL ACADEMY OF SCIENCES ON ONE YEAR OF RESEARCH OF ONE HUNDRED DESERT STORMERS.(EXHIBIT # 2,FOR COMMITTEE FILE) WE FEEL THESE TWO WORKS PRESENT VALUABLE RELEVANT INFORMATION TO THE ISSUE.

A WOUND IS DEFINED AS, "INJURY TO THE BODY TISSUE." IN OTHER WORDS, YOU DON'T HAVE TO BE SHOT WITH A BULLET TO BLEED.

THOUSAND OF DESERT STORMERS ACROSS THIS COUNTRY, BOTH ACTIVE DUTY, AS WELL AS, VETERANS ARE SUFFERING FROM CHEMICALLY INDUCED INJURIES, (CHEMICAL WOUNDS, IF YOU WILL) AS A RESULT OF COMBINED TOXIC EXPOSURES, INCLUDING RADIATION, WHICH RESULTS IN TOXIC OVERLOADING AND EXTENSIVE DAMAGE TO DIFFERENT PARTS OF THE BODY.

DESERT STORMERS ACROSS THIS COUNTRY HAVE SHOWN IN CIVILIAN MEDICAL TESTING, DAMAGE TO ALL PARTS OF THE BODY INCLUDING, BRAIN, IMMUNE SYSTEM, CENTRAL NERVOUS SYSTEM, AMINO ACID AND RED BLOOD CELL DEPLETION. ANALYSIS SHOWS RADIOACTIVE ISOTOPE DERIVATIVES AS WELL. (EXHIBIT #3,FOR COMMITTEE FILE)

OIL IS FULL OF RADIATION, SO IS DEPLETED URANIUM. WE HAVE REAMS OF DOCUMENTS, BOTH MILITARY AND CIVILIAN ON THESE ISSUES. THE AIR FORCE "RED FLAG MANUAL" DATED 1981, REFERS TO ALL OF THESE SYMPTOMS, THAT THE DESERT STORMERS HAVE ...IN THEIR CHEMICAL AND RADIATION SECTIONS OF THE MEDICAL TRAINING MANUAL.(EXHIBIT #4, FOR COMMITTEE FILE)

THE NAVY REPORT ON "RESULTS OF A WORKSHOP ON HEALTH EFFECTS OF CRUDE OIL EXPOSURES RELATED TO OPERATION DESERT STORM" 1991, GIVES EXPLICIT EXPOSURES AND SYMPTOMS TROOPS WOULD BE HAVING, EVEN CITES STUDIES, LONG TERM HEALTH EFFECTS AND SYMPTOMS. (EXHIBIT # 5, FOR COMMITTEE FILE)

OIL COMPANY REPORTS STATE THERE IS RADIATION PROBLEMS WITH RAW CRUDE OIL, OUR TROOPS WERE NOT PROTECTED FROM THESE DANGERS. (EXHIBIT #6, #7(FOR COMMITTEE FILE ONLY)

(page 2,testimony BETTY ZUSPANN)

YOU HAVE THE EXPOSURES TO THE HYDROGEN SULFIDE GAS WHICH ACCORDING TO ARCO OIL COMPANY, IS DANGEROUS IN LOW EXPOSURES AND LIES LOW TO THE GROUND, AND EMITS TOXIC FUMES EVEN AT OR BELOW AMBIENT AIR STANDARDS. (SEE EXHIBIT #6)
EVEN THE ARMY'S OWN "LEADER SAFETY GUIDE" STATES THE HYDROGEN SULFIDE IS PROMINENT IN THAT AREA AND IS ESPECIALLY DANGEROUS IN THE RECESSES OF SHIPS. EVEN GENERAL H. NORMAN SCHWARZKOPF STATED "HYDROGEN SULFIDE, SULFUR DIOXIDE, NITRIC OXIDES" TO BE PRESENT.."THIS IS NOT TO SAY THERE IS NO RISK"..

(EXHIBIT #9, CORRESPONDENCE BETWEEN HIS AIDE ON HIS BEHALF TO RESPOND TO A LETTER FROM NATALIE GOLOS ON APRIL 4, 1991.(MS. GOLOS IS A MEMBER OF THE CHEMICAL SENSITIVITY ALERT COMMITTEE IN WASHINGTON D.C.)

THE CORRESPONDENCE GOES ON TO SAY, THAT THE BEST THING WOULD BE TO GET THE TROOPS OUT AS QUICKLY AS POSSIBLE.

THE GAS MASKS OUR TROOPS WERE ISSUED WERE NOT EFFECTIVE WITH THESE GASES, ACCORDING TO THE NAVY REPORT OF FEBRUARY 1991. (SEE EXHIBIT #5)

THEN YOU HAVE THE LAX IN SAFETY MEASURES BY COMMANDS, IF YOU REVIEW MR. HAINES REPORT. (EXHIBIT # 2)

MY OWN HUSBAND WAS WOUNDED WHEN A CHEMICAL ATTACK WAS LAUNCHED ON THE TROOPS, THROUGH THE AUSPICES OF AN OIL SPILL, AS WELL AS, MAJOR OIL FIRES. IN MOST AREAS THE GULF IS ONLY ONE HUNDRED FEET DEEP. WE CAN ONLY IMAGINE THE AMOUNT OF TOXINS THAT WERE RUN THROUGHT THE DESALINIZATION PLANTS OF THE SHIPS AND INGESTED BY THE NAVY AND MARINE PERSONNEL. (ONE GALLON OF OIL CAN CONTAMINATE 750,000 GALLONS OF WATER...(FROM: FIFTY THINGS YOU CAN DO TO SAVE THE EARTH: WORKSHOP PRESS.)
MY HUSBAND NOW SUFFERS FROM CHEMICALLY INDUCED BRONCHIAL ASTHMA, AND AN EXTREME LIFE THREATENING SERIES OF ALLERGIES, ALSO KNOWN AS MULTIPLE CHEMICAL SENSITIVITY. (MULTIPLE CHEMICAL SENSITIVITY IS ADDRESSES AS PROTECTED UNDER THE AMERICANS FOR DISABILITIES ACT. YOU WILL FIND IT DICUSSED UNDER TITLE II, PAGES 21, 22 IN THE ADA HANDBOOK FROM THE JUSTICE DEPARTMENT, AND THE EQUAL EMPLOYMENT OPPORTUNITY COMMISSION. ALSO THE SOCIAL SECURITY ADMINISTRATION GIVES BENEFITS FOR M.C.S., AS WELL AS H.U.D. RECOGNIZES M.C.S., AS WELL AS THE DEPARTMENT OF EDUCATION, AND SEVERAL KEY STATE GOVERNMENTS.)

WE HAVE LIVED THE NIGHTMARE OF TRYING TO GET HEALTH CARE FOR MY WOUNDED HUSBAND. OUR STORY IS COMMMON TO MOST DESERT STORMERS. MY HUSBAND ALMOST DIED LAST YEAR, AND HE WOULD HAVE, IF IT HAD NOT BEEN FOR THE CIVILIAN PHYSICIANS WHO ARE CURRENTLY TREATING HIM. HE WAS IN THE GRASP OF THE WALTER REED ARMY MEDICAL CENTER AND THE V.A. PERSIAN GULF CENTER IN HOUSTON FOR NEARLY SIX MONTHS. HOUSTON, AFTER MUCH DEBATE, FINALLY BROUGHT IN A CONSULTANT, WHO DID DIAGNOSE MY HUSBAND WITH CHEMICAL EXPOSURE. THEY TOLD ME THEY COULD NOT TREAT MY HUSBAND, THEY HAD NOT BENN GIVEN PERMISSION TO, ONLY TO DIAGNOSE HIM. I HAD TO TAKE HIM FOR CIVILIAN TREATMENT, OR HE WOULD HAVE DIED. THERE HAVE BEEN MANY FAMILIES IN THIS POSITION. MY HUSBAND IS VERY ILL, AS A RESULT OF HIS INJURIES FROM DESERT STORM. WE LOST OUR HOME TO FORECLOSURE, WE HAVE $170,000.00 IN MEDICAL BILL, AND THIS FIGURE IS CONSTANTLY RISING. FOR MY HUSBAND TO SURVIE, HE REQUIRES DAILY SHOTS, NUTRITIONAL SUPPORT THREE TIMES A WEEK BY INTRAVENOUS FEEDING, AND MUST LIVE IN AN ALLERGY FREE ROOM.

AS A DISABLED VETERAN OF DESERT STORM, MY HUSBAND'S PROSTHESIS IS NOT AN ARM OR A LEG, BUT OXYGEN FOR HIS LUNGS, NUTRITIONAL SUPPORT FOR HIS DEPLETED BODY, AND IMMUNE SYSTEM, AND AN ALLERGY FREE, CHEMICALLY FREE, ENVIRONMENT, MUCH LIKE A PROSTHETIC WOMB. REMEMBER THE BUBBLE BOY IN HOUSTON, TEXAS.

(page 3, testimony BETTY ZUSPANN)

NOT ONLY IS HE A PRISONER OF HIS INJURIES, HE IS A PRISONER OF A SYSTEM THAT REFUSES TO TAKE RESPONSIBILITY FOR ITS ACTIONS. (EXHIBIT# 10, V.A. MEMO REFERRING TO THE OFFICE OF MANAGEMENT AND BUDGET.)

HOW MANY DESERT STORM VETERANS HAVE BEEN SEEN BY THE VA MEDICAL FACILITIES? ACCORDING TO A V.A. DOCUMENT, IN EXCESS OF 54,000 HAVE ALREADY BEEN SERVICE CONNECTED. THIS DOES NOT INCLUDE THOSE WHO HAVE BEEN SEEN AND PLACED ON THE PERSIAN GULF REGISTRY.

ARE THOISE PENDING SERVICE CONNECTED RATING BEEN TREATED? NO, THEY ARE BEING TOLD THEY CANNOT BE TREATED UNTIL SERVICE CONNECTION IS OBTAINED.

HAVE ANY DIED? YES, ACCORDING TO THIS SAME DOCUMENT OVER 1600 HAVE DIED. FROM WHAT?

ARE THE PERSIAN GULF REFERRAL CENTERS BENEFITING SICK VETERANS? NO, THEY ARE SENDING THE SICK VETERANS HOME WITH NO TREATMENT.

THERE IS NOT ONE TEST TO DETERMINE CHEMICAL SENSITIVITY, BUT SEVERAL SPECIFIC TESTS. MY HUSBAND AND MANY OTHER DESERT STORM VETERANS HAVE HAD THIS TESTING AND IT CONCLUSIVELY EXHIBITS THE PRESENCE OF M.C.S.

THERE IS NO CURE FOR MULTIPLE CHEMICAL SENSITIVITY, BUT THERE IS SYMPTOMATIC TREATMENT. WHICH IN THIS COUNTRY IS STANDARD OF CARE, COMPASSIONATE CARE AND RELIEF THROUGH ALLERGY SHOTS, ORAL AND INTRAVENOUS NUTRITIONAL SUPPORT, NOT UNLIKE WHAT PATIENTS OF AIDES, OR SENIOR CITIZENS RECEIVE, WHEN THEY HAVE A SEVERE NUTRITIONAL DEFICIENCY DURING A ILLNESS.
IT DOES NOT CURE THE ILLNESS, DUE TO INJURIES, BUT IT DOES AFFORD THE PATIENT SOME COMPASSIONATE CARE AND RELIEF FROM SUFFERING.

DESERT STORM VETERANS AND THEIR FAMILIES ASK YOU TO PROVIDE THE NECESSARY MEDICAL CARE NOW. LENGTHY STUDIES ARE JUST ANOTHER WASTE, AND STALL. THERE ARE PLENTY OF STUDIES DOCUMENTING WHAT CHEMICAL EXPOSURES DO TO THE BODY BOTH SHORT TERM AND LONG TERM.

STANDARDS OF MEDICAL CARE FOR THESE DESERT STORMERS IS SEVERLY DEFICIENT.

AS A WIFE OF A DESERT STORM VET, I CAN TELL YOU HE FEELS HIS COUNTRY HAS DESERTED HIM, AS HIS WIFE I AM HEARTBROKEN AND DEVASTATED, AS AN AMERICAN, I FIND THIS PAST TWO YEARS TO BE DISGRACEFUL.
WOUNDED IN THE LINE OF DUTY, UNDER HOSTIL FIRE.
GIVE DESERT STORMERS THE HEALTH CARE THEY SO DESPARATELY NEED AND HAVE SO UNSELFISHLY EARNED. GIVE THEM BACK THEIR DIGNITY.

THEY DESERVE NOTHING LESS.

MAJOR RICHARD H. HAINES
UNITED STATES ARMY RESERVE
4247 VALLEY TERRACE
NEW ALBANY, INDIANA 47150
24 HOUR--TELE 812 948-9366

May 5, 1993

National Academy of Sciences
2101 Constitution Avenue, N.W.
Washington, D.C. 20418

ATTENTION: Diane Mundt, Project Director

PURPOSE AND DISSEMINATION.-- This report summarizes recent findings and test results of veterans contaminated from the "machines of war" in the Persian Gulf. This summary is drawn from the results of some 100 soldiers that had some measure of relevant testing for toxicity and metabolic imbalance. This report is being forwarded also to the President, the Veterans Affairs Committees, and the whole of Congress. It is being sent to the Secretary of Defense, Health Affairs; the Office of Technology Assessment and the Veterans Administration.

SEGMENTS OF REPORT.-- As advisors to the VA Gulf War Registry, you have previously indicated interest in my survey results, and I therefore commend to your attention this report, which has three main parts: 1) a Summary of Toxic Exposures; 2) Medical Test Results of Afflicted Vets; and 3) A summary of Appropriate Testing for chemically damaged victims. The report, and the statistics derived therefrom, do not assume an academic research standard. Rather, the purpose is to gain public recognition to the range and type of issues and questions to which the national leadership should attend to properly address the medical neglect to which these Vets are currently held victim. The new 16-member panel empowered by VA to more fully investigate these illnesses may benefit from these informal surveys and will be forwarded to them.

This report is part of a one-year endeavor encouraging appropriate testing for afflicted Gulf Vets, not as part of any military assignment or charge, but as a private volunteer effort. As I have reiterated publicly, I've not served in the Gulf. This report does not necessarily reflect the views of any other group, nor soldier segment, nor professional physician or laboratory group, but are my own. If therefore, any parties are in need of a name for it, it would appropriately be called, "The Haines Report." It is a successor document to my initial six-page memorandum to the 123rd Army Reserve Command over a year ago, which documented the nature of this illness, where to go for technical knowhow, and the normal treatment. Because that memorandum, and all those since, have been ignored by the military medical command, you may detect an element of anger in this report--it is indicative of the outrage now felt by American families around the world against VA's blatant resistance to the obvious.

PART 1) THE SUMMARY OF TOXIC EXPOSURES. --With eighty respondents reporting via written or telephone questionnaires, an average of 6.8 exposures to toxics were reported, excluding inhalation of oil well fire smoke. The latter category was excluded because the purpose of this research was to document exposures, over twenty- five in number, to which the Gulf Vets were vulnerable, because the Veterans Administration has failed to do so. Since that survey design, the number of toxic exposures has increased to over fifty (See pages 1 & 2 of Exhibit A).

The range of these surveyed exposures are alarming, not just because they have been discounted, if not altogether ignored, by medical spokepersons, but because they were largely preventable and reveal gross carelessness on the part of junior grade commanders overseeing military behavior, especially in the use and application of leaded fuels and the commandments of basic safety. The exigencies of war is an insufficient argument for the exposures that have caused these illnesses, inasmuch as much of this carelessness (ignorance of the long term health affects of toxics) continues in present peacetime training. My data base research indicates that the screaming objections to these conditions were replete throughout the Gulf war process, but were brushed off by unthinking commanders who failed to duly consider them, or to show even a modicum of concern for enlisted personnel subject to these exposures. If the war were to

recommence at this moment, the same errors would be repeated--a fact to which the American public has a right to know.

The exposure report is presented in three segments: a) a vertical bar graph visually presenting the exposures in a frequency depiction (page one of Exhibit B); b) a narrative listing and the specific frequencies reported (see page two of Exhibit B); c) a discussion summary that addresses circumstances and conditions of each exposure (see Exhibit C).

Our national institutions and leadership have been mislead, except for some admissions on radiation exposure, that the environmental hazards were entirely comprised of the oil well fire smoke and soot. This report confirms that the exposures were more of a far more mundane, yet preventable nature, and include such incidences as standing for long periods for repeated weeks in the leaded exhaust of Abrams tanks to get warm on cold desert mornings, sleeping in Army sleeping bags that had been exhaust-dried from tracked vehicles using leaded fuels; and applying CARC paint on tanks, trucks, and equipment without benefit of respiratory and protective wear. The 325th Maintenance Co's. (Florida) afflictions are now publicly documented, along with many soldiers around the country are sick because they repeated drove these tanks away while this high-performance urethane was still wet. The producer of CARC, Hentzen Coatings in Milwaukee, spoke to me recently and was totally appalled that the military had troops in and around this coating, and it's attendant fumes, unprotected.

One Florida mother, Mrs. Hester Adcock of Ocala, Florida, witnessed the death of her son, Michael from numerous metabolic imbalances and cancer a year ago this month, after he had been assigned to burn the paint containers that contained this CARC paint in the Gulf, and I can assure you, Congress will be hearing more from her, before she is finished. Also, many enlisted troops were required to high-pressure wash the equipment for final cleanup using filtered sewage water and it appears that most of these soldiers subsequently acquired hepatitis.

Another interesting exposure were those chronically inhaling diesel exhaust while driving trucks and tanks in and out of the lower ship holds while at port: some soldiers were reportedly being so overcome with the carbon monoxide and related diesel toxics, that they had to be physically pulled from the vehicles and resuscitated. Even this condition failed to alert junior commanders overseeing this work, exhibiting an element and an attitude that I shall more amply discuss towards the end of this report, because it explains the context in which a large variety of omissions occurred.

All these exposures should have been conveyed by DoD to it's Army and Navy medical corps so that it's own staff, and that of VA, could more appreciate that these health affects were environmental in nature--yet they failed to do this. And this failure is part of the general misconception that no other toxics than that of the oil well fires were involved.

Above all, bear in mind that with an average of 7 exposures per afflicted soldier, excluding the oil well fires, not to mention the affects of the anthrax shot (CIPROFLOXACIN --Army Serial 6505 01 272 2385), the injestion of the investigative nerve agent pill PRYRIDOSTIGNMINE BROMIDE, Army Serial No. 6505 01 178 7903), as well as the botulinum toxoid vaccine, that it is the cumulative affect that is at issue here, the affect of a "toxic cocktail", a total toxic loading of ALL the leaded fuel and exhaust inhalation, the pesticides, the anti-fungus treated produce from Israel, along with the change of climate, the exposure to virus and bacteria inherent in a part of the world to which their systems were little adjusted, that their functional liver capacity against this total toxic loading was overwhelmed. The unmetabolized toxics then spilled over into their blood, and became stored in their fat cells, to cause metabolic imbalance through successive windows of time. These toxics disrupt and scar mucous linings, knock out neuro pathways in the brain, and create discordant, ongoing imbalances in one's central controller, the hypothalamic system. It is these toxics together that impose inordinate demand upon one's nutrient system, in the process of metabolizing the toxics, that deprive the nutrient maintenance system of it's vitals. A shortage, for example, of zinc and magnesium, affects the central nervous system.

PART 2) TEST RESULTS OF AFFLICTED VETS.-- Sample sizes of some of the following medical tests were hardly adequate to attest to an academic research standard, but again, the results are so riveting that the American public's right to know would be compromised, if they were withheld.

a) Brain damage: Of six Veterans tested, all six demonstrated brain damage via SPECT scan, the premier technology for diagnosing mental impairment due to damage from chemicals. Two private institutions testing three soldiers each have documented this condition. This test cannot be labeled cursory nor anecdotal by VA, because VA itself operates it's own SPECT scan equipment in Los Angeles and employs it for official use on a regular basis. If asked, I believe any of the six soldiers would open these medical files to NAS, or to Congress, if inquired. This soldier group included four active duty, and two Reservists. The medical clues to which VA should have been (and should be) more cognizant of the need for pilot testing of some of the Vets included affected concentration and attention span, short term memory problems, abnormal headaches, increased irritability, mood changes, and flashes of rage.

No one has suggested that DoD do SPECT scans on all afflicted Reserve and active duty Vets, but the brass would be hard put to defend why they haven't at least initiated testing a pilot group. This is the crux of it, pinpointing VA's failure of leadership to combine central analysis with cluster analysis of tests types. They have failed to provide intensive, ongoing, testing and learning from a management viewpoint. Instead their random collections of routine tests, have provided no meaningful analysis of data already within domain, such as the epidemic liver damage amongst this group.

b) Central Nervous System Damage: Of thirteen tested, all thirteen showed central nervous damage via Current Perception Threshold and other tests. In ten of the thirteen incidences tested, the Farnsworth D-15 Hue vision test ruled that the condition was not genetic. This is a conventional, longstanding neurology test. Had VA been less cursory in it's review of symptoms, the clues to neuro deficiency were replete in the widespread incidence of vision problems, deteriorated night vision, finger and toe numbness and tingling, muscle tremors, diminished hand strength, heart palpitations, sensitivity to cold, newfound sensitivity to cold to teeth, stuttering and stammering, vertigo problems, decreased peripheral vision, deteriorated memory test performance, changes in taste and crawling sensations.

c) Damage to Vision: Of ten soldiers tested, all ten showed deficient vision performance via the Farnsworth D-15 Hue test. My 250+ soldier data base shows high frequency of prescription problems with eyeglasses over the previous year. This physiological damage is showing up in the reported symptoms of the Vets in the form of double vision, irritated eyes, eye redness, reduced contrast and deteriorated night vision, the latter of which is a major combat training essential, affecting the safety of other soldiers, as well as the afflicted him/herself.

d) Chemical Hypersensitivity-- Twenty-seven of twenty-eight soldiers tested showed adverse and immediate allergic reactions to petrochemical incitants usually including, but not limited to, diesel fuel, solvents, ethanol, natural gas, phenol, and formaldehyde. For thousands, these victims now they face changes of occupation/livelihood, changes of home heating systems, and potential, wholesale substitution of household paneling, fabrics, carpeting, etc.

These chemically hypersensitive victims are also subject to the "expanding phenomena", whereby the chemical allergies spreads to include food allergies including dairy, soy, corn, sugars, and grains, components of most processed/prepared foods throughout our society. Evidence to VA that this condition exists has been amply demonstrated, yet unpursued, in the soldiers' increased intolerance to cigarette smoke, diesel and car exhaust, and sometimes, perfumes, deodorants, and fabric softeners. And here, once again, these are medical inquiries never pursued by the medical community because they are untrained in the long term health affects of toxics and did not know what questions to ask.

e) Bacterial, Viral, and Fungal Infection.-- Noted University Researcher Edward Hyman treated three Naval Reservists in New Orleans for rare bacteria and after treatment, their symptoms virtually disappeared. One of these three also showed chemical hypersensitivity. Dr. John Doyles of Dayton, Ohio found external fungus in eight soldiers, of eight examined (see enclosed

letter from Dr. Boyles entitled, Interim Report on Desert Storm Vets", Exhibit C). Candida Albicans overgrowth has been discovered in most of an unspecified number of soldiers, tested. Symptom indicators of this condition include the inordinate flu, colds, and persistent cough category. CNN TV from Atlanta found significant frequencies of spousal flu-like symptoms and reported these nationally. VA had more than ample opportunity to identify symptomatic clues, what with the repeated incidence of coated tongue, mushy bleeding gums, thick phlegm and saliva, hardness of swallowing, stomach cramps, nausea, vomiting, diarrhea. The widespread occurrence of foot fungus, jock itch, and fungal dandruff observed by private physicians underscores again VA's maligned focus on this entire medical crisis.

f) Toxics in Hair.-- Of forty-six afflicted Vets tested for hair mineral analysis, forty-three showed total heavy metal toxics that exceed the second deviation off norm, established by Doctor's Data Labs, Inc. of Chicago. From a sample of those forty six, 18 had individual heavy metals exceed the second deviation level. These metals included (see enclosed pie chart) nickel in 29 percent of this latter sample, cadmium 25.8%; lead, 22.6% and aluminum, 22.6% (see Exhibit D, "Elevated Heavy Metals Discovered"). Tetraethyl lead is contained in all Saudi fuels and subsequent exhaust and cadmium, aluminum, and nickel is found in Saudi crude.

g) Toxics in Urine.-- Of nine tested for heavy metals in urine, eight showed elevated levels, as performed by Doctor's Data Labs, Inc., with aluminum in 41.2%, lead in 23.5%; nickel in 11.8%; vanadium in 5.9%; cadmium in 5.9%, barium in 5.9%, cobalt in 5.9%; and Beryllium with 0.0 %. of the soldiers tested (See Exhibit E, Urine Tests).

A lot of heavy metals become airborne when bombs detonate, spraying its particulates in airborne fashion. The nickel coatings of projectiles dissipate due to shear against the surface of the fast-moving projectile, dissipating it's coating as airborne particulates. The air currents of the Saudi region often tend to be circular, turning a complete 360 degrees with the warm days and cool desert nights and the affects from the Persian Gulf itself. Some of the more alert soldiers noticed how individual blades of grass, bent over to the desert sand, marked a complete circle, rendered fresh daily.

DoD has been curiously silent on the subject of heavy metals injested from the war, even though it is an expert on the subject, and has for decades treated military members for heavy metal contamination, as for example, with naval personnel in Colorado in the 1950's. Large numbers of these sailors were treated for lead contamination from painting ships and they were all treated with chelation therapy, which the service medical corps and AMA now brandish as experimental and which insurance carriers refuse to reimburse. Much of the lead, for example, becomes deposited in the bones of these victims, the body handling it as if it were iron. The "half-life" of this material is twenty years, and so will give these victims "bone-crunch" the rest of their lives.

Other major concerns not documented with this report, but still undisclosed by VA, include an epidemic number of miscarriages, inordinate polyps and growths, numerous tooth abscesses and gum problems, widespread liver damage, polyp growths in the colon, intestinal dysfunction, and more recently, cancer.

PART 3) APPROPRIATE TESTS FOR CHEMICALLY DAMAGED GULF VETS-- By VA's own admission, their simple blood test, chest X-ray, and basic physical (Interview with Preview Media in Louisville April, 24, 1993) will not denote environmental illness, also known as multiple chemical sensitivity. So even though the March 12, 1993 VA Memo # 116 states that when a local VA facility feels the Veteran patient would benefit from a more comprehensive workup, "that Vet will be referred to one of three national referral centers." VA's impasse is obvious--none of the basic screening tests currently implemented by VA, by their own admission, would ever denote environmental illness, even if the soldier were to actually have it.

What are the tests for chemical damage and what is denoted by them?

a) SPECTscans can assess brain damage;
b) Current perception threshold tests can assess nerve conductivity;
c) Chemical allergy testing can assess newfound hypersensitivities;

d) Immunology testing can assess damaged immune systems;
e) Chemical antibodies leave a "medical footprint" of previous/present compound presence;
f) Special cell counts, not only raw counts of specific cells, but their percentages to one another denote immunodeficiency;
g) Cell function studies can denote metabolic imbalance;
h) Nutritional assays can denote extra-absorption of mineral nutrients used in metabolizing toxic molecules in the body;
i) Rotational chair and other tests can denote vertigo problems;
j) Certain blood tests can denote Candida Albicans overgrowth;
k) QEEG brainmapping studies, according to Gunnar Heuser, M.D., Ph.D, F.A.C.P., can denote abnormal brain functioning;
l) Pulminary Function Tests detect chest and throat restrictions, many of which have been diagnosed by VA's esteemed physician in New Hampshire, Victor Gordon, M.D.
m) 24 Hour Holter testing can assess fatigue;
n) Allergen Humphrey Visual Field Analysis can detect decreased peripheral vision fields;
o) The California Verbal Learning Test (memory) can detect standard deviation levels for short term memory deficiency;
p) The 15 Hue Lanthony Color Discrimination can detect acquired dyschromatopsia.
q) Hair mineral, provocative urine, blood and fat tissue tests can show the existence of toxics.

The abovementioned tests include, but are not limited to screening tests that VA should be employing, even if in a pilot mode. They are not. By virtue of their aim and design, VA enforces a limiting medical statistical picture. VA insiders of their hospital groups have confided to us that their limited tests, by design, are purposed to preempt a diagnosis for environmental illness, whether the soldiers have it or not. Periodic policy meetings in individual VA hospital units have been held, insiders confide, to train the physician attendants to flank requests for environmental testing.

I am aware of DoD's blood and related tests on a sample of troops from the 11th Armored Cavalry Regiment. My response to DoD's claims that these results showed no abnormalities if that if they employed the same tests that VA now employs to Registry soldiers, there is little possibility that the biomarkers of environmental illness could ever be disclosed. Their tests medically skirt the physiological damage done to these victims, damage such as brain damage, immune damage, central nervous damage, etc.

SHORTFALLS IN THE VA'S GULF REGISTRY-- Isn't it interesting that the central focus, the air that hangs on every question of the VA Social Work Service questionnaire, plays directly into the post traumatic stress formula (difficulty concentrating/increased anger/problems talking with family/ feeling isolated/sleep disturbances, etc. While coyly avoiding that some of these symptoms are the direct result of disturbances of the limbic brain system, which chemicals are known to affect, their social work questionnaires are are an unadulterated attempt to sidestep physical damage and to sidetrack the vital statistics of this national crisis.

And isn't it interesting that the symptom questions on this "Persian Gulf Screening" social work service survey form avoid measurable symptoms of brain functioning, central nervous functioning, immunodeficiency. and vision impairments? The Registry author lists but (only) six exposures ("I was in a smokey area, but not enveloped", plus three similar questions, for example) which are all focused on the oil well fires, clearly a minor factor in the total exposure picture. While this registry was being designed, the petroleum industry had already undergirded it's position, oftquoting it's position that "The gulf fires have been redeemed of all fault in the causes of any illness."

And I especially love VA's March 1, 1993 "Persian Gulf Family Support Program Newsletter" where where Douglas Murphy, Ph.D. and Lee Rathbone-McCuan, Ph.D., parade their recent statistics from their testing with the Multi-Problem Screening Inventory: 73% above range on Aggression; 71% above range on personal stress; 67% above range for phobias. This and simliar efforts are being employed currently at taxpayer expense nationwide at active duty installations to write

off this physical damage to Post Traumatic Stress Syndrome. They always have millions to spend on their statistical Franckenstein's, and none for environmental testing and treatment! There is an element of comic in the Persian Gulf Registry Code Sheet, the offspring of the Vietnam Agent Orange Registry, which VA itself labeled as medically unscientific. The Agent Orange registry, a minute late and a buck short, is the precursor to the Gulf War Registry. DoD has designed it to be medically useless, they have intended it scientifically baseless, they have public rendered it a public mockery of medical inquiry. These compilations will be amassed at the Austin Automation Center providing "smoke and mirror" data for future use against Vets.

To add to the medical charlatanism, the titling of "environmental physician" to physicians with no respectable training in the field is VA's popular charade. It's called musical chairs and when we were all little and played it, we had as much expertise in environmental medicine as VA's designates. A staffer of Senator DeConcini probed the qualifications of the VA physician of Marine, there, and found them groundless. The main claim of the "environmental physician" at Walter Reed Medical Center appears to be that he saw a two hour movie on the oil well fire analysis and told patient Sergeant Gregory Wolf that "he couldn't possibly be sick from the Gulf War", all the time that Sgt. Wolf demonstrated chemical hypersensitivity to petrochemicals and was never thoroughly questioned about his exact exposures. The Louisville VA "environmental physician", hungry for our materials on environmental medicine and testing, confided to the patient soldier they were the first he had seen on it.

Who is it that is being duped by this charade? It is not the soldiers, nor the families of the soldiers--there is little question to them that the illness is real. It is the American public that is being duped--when told exposures are being registered, and soldiers' are being given quality medical workups, they are duped that the appropriate testing is being conducted, testing mandated by the U.S. Congress and the will of the American people. They have been duped, for example, by VA Deputy Secretary Anthony J. Principi, who in his Sept. 16, 1992 statements before the Subcommittee on Hospitals and Health Care of the House Committee on Veterans Affairs, that, "We are treating Persian Gulf veterans who are currently ill." How could VA treat this large group of afflicted service members if they self-admittedly do not even have a diagnosis???

So while VA doctors play God with the health, the futures and the lives of Reserve and guard members, the active duty soldiers are likewise victims of this medical gestapo. Unable to break away for testing, or to risk their primary source of livelihood, and being younger and more easily intimidated, they are being forced to stay sick, because "showing you are ill can hurt your chances for extension of enlistment, promotion, and schooling".

Not included in my report to the National Academy of Sciences is the following special note to the Congress. Previous military authors have taken note that after the Vietnam war that the Army officer corps veered more towards a short term focus, towards self-aggrandizement, and self-interest in terms of their military career. This is evidenced by the lack of real communication of the officer corps with it's subordinates, by the lack of sensitivity to the rough edges of real soldier life, and by a lack of genuine empathy for, and with, those upon whom the unit mission and the organizational success depend. One soldier, Mathew Day of Ypsilanti, Michigan refused to use fuel oil to burn a large quantity of lithium batteries labeled "do not burn" and was given an Article 15. It is well that he refused, inasmuch as he is environmentally ill from his accumulated toxics, excluding the lithium battery fumes.

In large part, the U.S. military mirrors our civilian sector and the general social fabric of American society, where we are also witness to treatment of workers as if they were a commodity. Instead of asking our workers how to enhance product quality, instead of inspiring them to take risks for innovation, we focus only on short term cost, and as a result, help drive the American worker down a cheap labor spiral with poorer quality and uncompetitive value for the consumer.

Very truly yours,

Richard H. Haines
MAJOR USAR

Gulf War Toxic Exposures

Frequency of Exposures of Afflicted Soldiers

Description	Exposures
Downwind from large petroleum plants	6
Sleeping bag in leaded exhaust to dry	6
Inhaled battery acid fumes	7
Herman Nelson heaters	9
Petroleum in ship desalinization	10
In-vehicular heater w/leaded fuel	11
Quartered near toxic landfills	13
Fuel-doused sand buckets as heaters	13
Leaded fuel in M-2 mess stove	14
Around mysteriously dead livestock	16
Refueled truck tankers from topside	16
Drove vehicles in/out of ship holds	17
Radiation from bombed tracked vehicles	19
Washed equip. w/filtered sewage water	21
Fogged with pesticides	22
Stood in vehicular exhaust to get warm	24
Burned human waste with fuel oil	28
Contact w/weapons cleaner (CLP)	29
Sustained oily/sooty clothing	30
Contact/inhalation of CARC paint	31
Fuel in shower water	33
Army tent stoves with leaded fuels	36
Fuel spills & sprays	42
On ground soaked with fuel	43
Kerosene heaters with leaded fuels	46

Reported frequencies of toxic exposures as reported by 80 afflicted Gulf veterans with an average of 6.8 exposures per victim

MATERIAL SAFETY DATA SHEET

CRUDE OIL

MSDS No. [illegible]

Rev. Date 08/27/87

ARCO OIL AND GAS COMPANY
DIVISION OF ATLANTIC RICHFIELD COMPANY
1601 BRYAN ST.
DALLAS, TEXAS 75201

PRB-135

I. General

Trade Name: CRUDE OIL	Telephone Numbers EMERGENCY 214/880-4688 COMPANY 800/424-9300 CHEMTREC
Other Names: PETROLEUM, EARTH OIL, SENECA OIL	
Chemical Family: PETROLEUM HYDROCARBON	DOT Hazardous Materials Proper Shipping Name: PETROLEUM CRUDE OIL
Generic Name: CRUDE OIL	DOT Hazard Class: FLAMMABLE LIQUID
CAS No. 8002-05-9	Company ID No. 0000000001
UN/NA ID No. UN 1267	

II. DANGER — Summary of Hazards

EXTREMELY FLAMMABLE! OSHA/NFPA CLASS-1A FLAMMABLE LIQUID. KEEP AWAY FROM HEAT, SPARKS, AND OPEN FLAME. MAY CONTAIN TOXIC HYDROGEN SULFIDE GAS.
MAY CAUSE IRRITATION TO EYES, SKIN, AND RESPIRATORY SYSTEM!
AVOID LIQUID, MIST, AND VAPOR CONTACT. WASH THOROUGHLY AFTER HANDLING.
MAY BE HARMFUL IF INHALED OR ABSORBED THROUGH SKIN!
AVOID BREATHING VAPORS OR MIST. USE ONLY WITH ADEQUATE VENTILATION. HYDROGEN SULFIDE (H2S), A FLAMMABLE & IRRITATING AND HIGHLY TOXIC GAS MAY BE PRESENT. ODOR IS NOT AN ADEQUATE WARNING OF POTENTIAL HAZARDOUS CONCENTRATIONS IN AIR. VAPORS OR LIQUID PENETRATION OF SKIN CAN CAUSE CENTRAL NERVOUS SYSTEM DEPRESSION AND/OR SYSTEMIC EFFECTS.
HARMFUL OR FATAL IF SWALLOWED! CONTAINS PETROLEUM DISTILLATES!
IF SWALLOWED, DO NOT INDUCE VOMITING SINCE ASPIRATION INTO THE LUNGS WILL CAUSE CHEMICAL PNEUMONIA. OBTAIN PROMPT MEDICAL ATTENTION.
KEEP OUT OF REACH OF CHILDREN!

III. Fire and Explosion

Flash Point Method	Autoignition Temperature Method	Flammable Limits % Vol. in Air At Normal Atmospheric Temperature and Pressure
AP 20° TO 90° F	N/DA	Lower 0.8 Upper 7.0

Fire and Explosion Hazards: EXTREMELY FLAMMABLE! THIS MATERIAL RELEASES VAPORS AT OR BELOW AMBIENT TEMPERATURES. WHEN MIXED WITH AIR IN CERTAIN PROPORTIONS AND EXPOSED TO AN IGNITION SOURCE, THESE VAPORS CAN BURN IN THE OPEN OR EXPLODE IN CONFINED SPACES. BEING HEAVIER THAN AIR, FLAMMABLE VAPORS MAY TRAVEL LONG DISTANCES ALONG THE GROUND BEFORE REACHING A POINT OF IGNITION AND FLASHING BACK.

Extinguishing Media: FOAM, HALON, DRY CHEMICAL, CO2, WATER FOG OR SPRAY MAY BE INEFFECTIVE WHEN USED ALONE

HAZARD RATING: 4 - Extreme; 3 - High; 2 - Moderate; 1 - Slight; 0 - Insignificant

Special Firefighting Procedures: FOR FIRES INVOLVING THIS MATERIAL, DO NOT ENTER ANY ENCLOSED OR CONFINED FIRE SPACE WITHOUT PROPER RESPIRATORY PROTECTION, SUCH AS SELF-CONTAINED BREATHING APPARATUS. USE WATER SPRAY TO KEEP CONTAINERS/VESSELS COOL. IF SPILL/LEAK HAS NOT IGNITED, USE WATER SPRAY TO DISPERSE VAPORS AND PROTECT PERSONNEL ATTEMPTING TO STOP LEAK. WATER SPRAY MAY BE USED TO FLUSH SPILLS AWAY FROM EXPOSURES AND DILUTE SPILLS TO NON-FLAMMABLE LEVELS.

IV. Health Hazards

Summary of Acute Hazards	EYE, NOSE, THROAT AND LUNG IRRITATION FROM H2S GAS. EXPOSURE TO H2S GAS ABOVE 500 PPM MAY BE FATAL

ROUTE OF EXPOSURE	SIGNS AND SYMPTOMS	Primary Routes
Inhalation	H2S GAS CAN CAUSE NOSE, THROAT, AND LUNG IRRITATION, AND SYSTEMIC TOXICITY AND RAPID DEATH DUE TO RESPIRATORY PARALYSIS. (PROLONGED EXPOSURE TO CRUDE OIL VAPORS CAN CAUSE CENTRAL NERVOUS SYSTEM DEPRESSION.)	☒
Eye Contact	H2S GAS CAN CAUSE EYE IRRITATION LEADING TO LIGHT SENSITIVITY. TESTS ON SIMILAR MATERIALS SUGGEST THAT CRUDE OIL IS A SLIGHT EYE IRRITANT.	☐
Skin Absorption	H2S GAS (CAN BE ABSORBED THROUGH THE SKIN AND PRODUCE TOXIC EFFECTS)	☐
Skin Irritation	SHORT-TERM EXPOSURE MAY PRODUCE MILD SKIN IRRITATION. PROLONGED AND/OR REPEATED CONTACT CAN LEAD TO IRRITATION OR MORE SERIOUS SKIN DISORDERS. (SEE SUMMARY OF CHRONIC HAZARDS, BELOW)	☒
Ingestion	INGESTION OF LARGE QUANTITIES OF CRUDE OIL MAY PRODUCE H2S TOXICITY, AND MAY IRRITATE THE MOUTH, THROAT, AND STOMACH LEADING TO NAUSEA, VOMITING, AND DIARRHEA. ASPIRATION INTO LUNGS CAN PRODUCE CHEMICAL PNEUMONIA	☐
Summary of Chronic Hazards and Special Health Effects	PROLONGED AND/OR REPEATED SKIN CONTACT WITH SOME CRUDE OILS HAS PRODUCED SKIN TUMORS ON MICE. MAY CONTAIN (BENZENE, WHICH IN HUMANS IS ASSOCIATED WITH BLOOD DISORDERS SUCH AS ANEMIA, AND LEUKEMIA. (SEE SECTION XI). SIGNS AND SYMPTOMS OF CENTRAL NERVOUS SYSTEM DEPRESSION PRODUCED BY PROLONGED INHALATION OF CRUDE OIL VAPORS MAY INCLUDE HEADACHE, DROWSINESS, NAUSEA, INCOORDINATION, CONVULSIONS, UNCONSCIOUSNESS, AND DEATH)	

V. Protective Equipment and Other Control Measures

Respiratory	AN APPROVED SUPPLIED-AIR RESPIRATOR OR SELF-CONTAINED BREATHING APPARATUS (SCBA) MUST BE USED WHEN VAPOR CONCENTRATION EXCEEDS THE EXPOSURE LIMITS SHOWN IN SECTION VI.
Eye	EYE PROTECTION SHOULD BE WORN WHENEVER THERE IS A LIKELIHOOD OF SPLASHING OR SPRAYING LIQUID. CONTACT LENSES SHOULD NOT BE WORN. SUITABLE EYE WASH WATER SHOULD BE AVAILABLE.
Skin	PREVENT POTENTIAL SKIN CONTACT WITH COLD LIQUID/SOLID/VAPORS. USE INSULATED, IMPERVIOUS PLASTIC OR NEOPRENE-COATED CANVAS GLOVES AND PROTECTIVE GEAR (APRON, FACE SHIELD, ETC.) TO PROTECT HANDS AND OTHER SKIN AREAS.
Engineering Controls	NO SMOKING OR OPEN LIGHTS. VENTILATE AREA TO AVOID ACCUMULATION OF EXPLOSIVE VAPORS, AND TO CONTROL CHEMICAL EXPOSURES WITHIN APPROPRIATE OCCUPATIONAL EXPOSURE LIMITS.
Other Hygienic and Work Practices	USE GOOD PERSONAL HYGIENE PRACTICES. (IN CASE OF SKIN CONTACT, WASH WITH MILD SOAP AND WATER OR A WATERLESS HAND CLEANER.) IMMEDIATELY REMOVE SOAKED CLOTHING AND WASH THOROUGHLY BEFORE REUSE. DISCARD HYDROCARBON-SOAKED SHOES.

VI. Occupational Exposure Limits

Substance	Source	Date	Type	Value/Units	Time
HYDROGEN SULFIDE	OSHA	1985	CEILING	20 PPM	
			PEAK	50 PPM	10 MIN
	ACGIH	1986	TWA	10 PPM	8 HRS
			STEL	15 PPM	15 MIN
PARTICULATE PAH (PPAH)	ACGIH	1986	TWA	0.2 MG/M3	8 HRS
HYDROGEN SULFIDE	NIOSH	1984	CEILING	15 MG/M3	

CRUDE OIL

MSDS No. [illegible]
Rev. Date 03/27/87

VII. Emergency and First Aid

Inhalation	IMMEDIATELY REMOVE FROM CONTAMINATED AREA TO FRESH AIR. FOR RESPIRATORY DISTRESS, GIVE AIR, OXYGEN, AND/OR ADMINISTER CARDIOPULMONARY RESUSITATION. PATIENTS SHOULD BE KEPT QUIET AND WARM UNTIL MEDICAL CARE IS OBTAINED.
Eye Contact	FLUSH WITH CLEAN LOW-PRESSURE WATER FOR AT LEAST 15 MINUTES. IF IRRITATION PERSISTS, OBTAIN MEDICAL ATTENTION.
Skin Contact	THOROUGHLY WASH AFFECTED SKIN WITH SOAP AND WATER. IF IRRITATION PERSISTS, SEEK MEDICAL ATTENTION. WASH CLOTHING THOROUGHLY BEFORE REUSE, BUT DISCARD CONTAMINATED LEATHER GOODS.
Ingestion	DO NOT INDUCE VOMITING, SINCE ASPIRATION INTO THE LUNGS MAY CAUSE CHEMICAL PNEUMONIA. IF ASPIRATION OCCURS, PROMPTLY OBTAIN MEDICAL ATTENTION.
Emergency Medical Treatment Procedures	SEE ABOVE PROCEDURES.

VIII. Spill and Disposal

Precautions if Material is Spilled or Released	NOTIFY SAFETY PERSONNEL, FIRE AUTHORITY AND/OR U.S.COAST GUARD IMMEDIATELY. REMOVE ALL POTENTIAL SOURCES OF IGNITION. STOP FLOW AND CONTAIN SPILL. VENTILATE CONFINED SPACES. KEEP OUT OF SEWERS & DENY ENTRY TO WATER BODIES IF POSSIBLE. FOR LAND OR WATER SPILLS IN NATURAL ENVIRONMENTS, USE PHYSICAL SORBENTS, MECHANICAL TECHNIQUES OR OTHER MEASURES WHICH MINIMIZE HABITAT DAMAGE. SEEK ADVICE FROM EXPERIENCED ECOLOGISTS. INSURE CLEAN-UP CREW WEARS PROPER PROTECTIVE EQUIPMENT. SPILLS MAY NEED TO BE REPORTED TO THE NATIONAL RESPONSE CENTER (800/424-8802).
Waste Disposal Methods	MAXIMIZE PRODUCT RECOVERY FOR REUSE OR RECYCLING. UNUSED LIQUID PRODUCT IS LIKELY AN EPA "IGNITABLE HAZARDOUS WASTE" (D001). USE APPROVED TREATMENT, TRANSPORTERS, AND DISPOSAL SITES IN COMPLIANCE WITH ALL APPLICABLE LAWS. IF SPILL IS INTRODUCED INTO A WASTEWATER SYSTEM, THE CHEMICAL AND BIOLOGICAL OXYGEN DEMAND WILL LIKELY INCREASE. SPILL MATERIAL IS BIODEGRADABLE IF GRADUALLY EXPOSED TO MICROORGANISMS. POTENTIAL DISPOSAL METHODS INCLUDE INCINERATION AND LAND DISPOSAL, IF PERMITTED

IX. Components

(This may not be a complete list of components) SEE SUPPLEMENT BEGINNING ON PAGE 5

Component Name	CAS No.	Carcinogen**		Composition amount (Vol.) (See Qualification on Page 4)
BENZENE	71-43-2	1,2, ,4	LT	2.0 PERCENT
HYDROGEN SULFIDE	7783-06-4	N/AP	LT	0.01 PERCENT
COAL TAR PITCH VOLATILES, AS BENZENE SOLUBLES	8007-45-2	1, ,3,	AP	5 TO 10 PERCENT

Compositions given are typical values, not specifications.

**Listed By: 1 = NTP, 2 = IARC, 3 = OSHA, 4 = Other

SEQ. 2

X. Physical and Chemical Data

Boiling Point AP 85° TO 1000°F	Viscosity Units, Temp. (Method) N/DA		Dry Point N/AP
Freezing Point N/DA	Vapor Pressure (REID-PSIA AT 100°F) AP 0.8 TO 2.6		Volatile Characteristics APPRECIABLE
Specific Gravity (H₂O = 1 at 39.2°F) AP 0.74 TO 0.99	Vapor Sp. Gr. (Air = 1.0 at 60° - 80°F) N/DA	Solubility in Water NEGLIGIBLE	pH N/DA
Hazardous Polymerization NOT EXPECTED TO OCCUR	Other Chemical Reactivity N/P		Stability STABLE

Other Physical and Chemical Properties: VARIES WITH SOURCE OF CRUDE.

Appearance and Odor: ODOR THRESHOLD 0.1 TO 0.9 PPM. THICK, DARK YELLOW TO BROWN OR GREENISH-BLACK. PETROLEUM ODOR.

Conditions to Avoid: HEAT, SPARKS, AND OPEN FLAME.

Materials to Avoid: STRONG OXIDANTS. LIKE LIQUID CHLORINE, CONCENTRATED OXYGEN, SODIUM OR CALCIUM HYPOCHLORITE.

Hazardous Decomposition Products: BURNING OR EXCESSIVE HEATING MAY RESULT IN EMISSION OF TOXIC FUMES (I.E., CO, SO2, SO3).

XI. Additional Precautions

SEE SUPPLEMENT BEGINNING ON PAGE 5

Handling, Storage and Decontamination Procedures:

KEEP CONTAINER TIGHTLY CLOSED.
KEEP AWAY FROM HEAT, OPEN FLAME, OR OTHER SOURCES OF IGNITION.
NO SMOKING OR OPEN LIGHTING.
DO NOT MIX OR STORE WITH STRONG OXIDANTS.
PROPER RESPIRATORY EQUIPMENT SHOULD BE USED WHENEVER OPENING CONTAINERS DUE TO PROBABILITY OF HYDROGEN SULFIDE GAS BEING RELEASED.

General Comments:

(MAY CONTAIN BENZENE, WHICH IS ASSOCIATED WITH ANEMIAS AND LEUKEMIA IN HUMANS, AND POLYNUCLEAR AROMA COMPOUNDS (PNA'S) WHICH HAVE BEEN SHOWN TO PRODUCE SKIN TUMORS ON LABORATORY ANIMALS AFTER PROLONGED AND REPEATED SKIN CONTACT. THE RISK OF BENZENE OR PNA-INDUCED CANCER FROM SHORT-TERM CONTACT WITH THIS MATERIAL IS NOT KNOWN,BUT BELIEVED TO BE MINIMAL. AVOID PROLONGED AND REPEATED CONTACT. CRUDE OIL PRODUCED ADVERSE EFFECTS IN MALLARD DUCK EGGS BUT THE RELEVANCE OF THIS FINDING FOR HUMAN HEALTH EFFECTS IS UNKNOWN. PERSONNEL WITH PRE-EXISTING CENTRAL NERVOUS SYSTEM DISEASE, SKIN DISORDER CHRONIC RESPIRATORY DISEASES, OR IMPAIRED LIVER OR KIDNEY FUNCTION SHOULD AVOID EXPOSURES TO THIS MATERIAL)
THIS MATERIAL IS A MIX OF MANY SUBSTANCES. OSHA STANDARDS AND ACGIH TLV GUIDELINES SHOULD BE CONSULTED FOR OTHER SPECIFIC CHEMICAL OCCUPATIONAL EXPOSURE LIMITS. SOME INFORMATION PRESENTED AND CONCLUSIONS DRAWN HEREIN ARE FROM SOURCES OTHER THAN DIRECT TEST DATA ON THE MIXTURE ITSELF.

- - - Note - - - Qualifications:

EQ = Equal	AP = Approximately	N/P = No Applicable Information Found
LT = Less Than	UK = Unknown	N/AP = Not Applicable
GT = Greater Than	TR = Trace	N/DA = No Data Available

Disclaimer of Liability

The information in this MSDS was obtained from sources which we believe are reliable. HOWEVER, THE INFORMATION IS PROVIDED WITHOUT ANY WARRANTY, EXPRESS OR IMPLIED, REGARDING ITS CORRECTNESS.

The conditions or methods of handling, storage, use and disposal of the product are beyond our control and may be beyond our knowledge. FOR THIS AND OTHER REASONS, WE DO NOT ASSUME RESPONSIBILITY AND EXPRESSLY DISCLAIM LIABILITY FOR LOSS, DAMAGE OR EXPENSE ARISING OUT OF OR IN ANY WAY CONNECTED WITH THE HANDLING, STORAGE, USE OR DISPOSAL OF THE PRODUCT.

This MSDS was prepared and is to be used only for this product. If the product is used as a component in another product, this MSDS information may not be applicable.

CRUDE OIL

MSDS No. E-0021
Rev. Date 05/26/87

XII. Supplement

INDUSTRY EXPERIENCE HAS SHOWN THAT THIS MATERIAL MAY CONTAIN SMALL AMOUNTS OF RADON, A NATURALLY OCCURING RADIOACTIVE GAS, AND ITS PARTICULATE DECAY PRODUCTS, SOME OF WHICH MAY BE RETAINED IN PROCESS EQUIPMENT. GAMMA RADIATION ABOVE BACKGROUND LEVELS, EMITTED FROM SHORT HALF-LIFE DECAY PRODUCTS, MAY BE DETECTED EXTERNALLY AT THAT EQUIPMENT DURING OPERATIONS BUT WILL DECAY TO BACKGROUND LEVELS WITHIN 4 HOURS AFTER CESSATION OF FLOW. EQUIPMENT EMITTING GAMMA RADIATION SHOULD BE PRESUMED TO BE INTERNALLY CONTAMINATED WITH THE LONGER-LIFE DECAY PRODUCTS THAT EMIT ALPHA RADIATION, WHICH MAY BE A HAZARD IF INHALED.
IF YOUR ASSESSMENT INDICATES THE PRESENCE OF GAMMA RADIATION, EMPLOYEE EXPOSURE POTENTIAL SHOULD BE MINIMIZED BY LIMITING ACCESS NEAR THAT EQUIPMENT PRIOR TO MAINTENANCE ON THOSE EQUIPMENT INTERNALS. STOP FLOW AND ALLOW FOR 4-HOUR DELAY PRIOR TO OPENING. MAINTENANCE PERSONNEL SHOULD WEAR APPROPRIATE PROTECTIVE EQUIPMENT TO PREVENT SKIN CONTAMINATION OR INHALATION OF ANY RESIDUE CONTAINING ALPHA RADIATION.

USE GOOD PERSONAL HYGIENE PRACTICES. WASH HANDS BEFORE EATING, DRINKING, SMOKING, OR USE OF TOILET FACILITIES. TAKE A SHOWER AFTER WORK USING SOAP AND WATER. IN CASE OF SKIN CONTACT, WASH WITH PLENTY OF SOAP AND WATER. AVOID USE OF SOLVENTS (GASOLINE, KEROSENE, ETC.) AND HARSH ABRASIVE SKIN CLEANERS. OIL-SOAKED CLOTHING SHOULD BE PROMPTLY REMOVED AND LAUNDERED BEFORE REUSE. DISCARD CONTAMINATED LEATHER BOOTS AND GLOVES. SINCE CRUDE OIL IS A MIX OF MANY SUBSTANCES, OSHA STANDARDS AND ACGIH TLV GUIDELINES SHOULD BE CONSULTED FOR OTHER SPECIFIC CHEMICAL OCCUPATIONAL EXPOSURE LIMITS.

SOME OF THE INFORMATION PRESENTED AND CONCLUSIONS DRAWN HEREIN ARE FROM SOURCES OTHER THAN DIRECT TEST DATA ON THE MIXTURE ITSELF

are poisonous snakes in the region (e.g., Cobra and Desert Horned Viper), but bites from nonpoisonous snakes can be just as harmful because of infection. Snakes will burrow under the sand and seek shade during the day and heat at night. Anyone bitten should seek medical help immediately. Do not treat snakebites with the cut/suck method.

Scorpions, centipedes, assassin bugs, black widow spiders, flies, mosquitoes, and sand fleas can cause illness and infectious wounds. Tell your soldiers to shake out their clothing before dressing and to check boots, etc., before putting them on. Where possible, boots should be placed off the ground or inside a waterproof bag or other container.

Use insect repellent religiously. Deet repellent lotion is recommended (NSN 6840-01-284-3982). Also available is Permetrin clothing repellent (NSN 6840-01-278-1336).

Hydrogen sulfide

Hydrogen sulfide is a gas emitted from petroleum-based products. It has the characteristic "rotten egg" odor. It is a systemic poison that can be fatal.

- Expect to encounter the gas around oil well heads, drilling platforms, oil storage tanks, and pumping stations. Locally produced diesel fuel contains hydrogen sulfide.
- The gas is heavier than air; therefore, it will concentrate in low areas (depressions) and confined areas such as cargo areas of ships.
- Handle diesel fuels in well-ventilated areas.
- If you smell the "rotten egg" odor, notify your chain of command. Medical personnel should check the toxic level to determine if it is lethal.

Caution: The odor may go away. However, that does not mean the gas is not still present. Hydrogen sulfide gas may cause olfactory fatigue (i.e., your brain ceases to recognize the smell).

EXHIBIT #8

P.O. Box 5624
Derwood, MD 20855
(301) 948-1116
April 4, 1991

General H. Norman Schwarzkopf
U.S. Central Command
APO New York 09852

Dear General Schwarzkopf:

Nothing about the war in the Gulf impressed me as much as the statement you made to David Frost that you grieve for every one of the servicemen who gave their lives. The feeling with which you said this made the sincerity of your statement ring true. I am writing to you because, much as I grieve for those who have fallen in battle, I grieve more for those who are overseas inhaling the smoke and pollution from the burning oil wells. Because of my personal experience of several years of disability as a result of pollution, I have some idea of the problems they will face from exposure to these toxins.

Over the years I have learned of hundreds of thousands of persons like myself who have become disabled in varying degrees as a result of exposure to pollution similar to that which our servicemen now face. I have written six books about environmental illnesses and have been a consultant to hospitals and physicians in many countries.

More than ten years ago, when consulted by a department head at EPA about some of the staff who were becoming ill, I predicted that if there were no changes to improve the air quality there would be an epidemic of sick people in the EPA headquarters at the Waterside Mall. Unfortunately, my warning went unheeded and so many people are now sick and unable to work in that building, a situation which has had extensive media coverage. A similar situation occurred when I learned about the Vietnam soldiers who were only able to eat exotic foods like wild game. My doctor and I realized that they were having difficulty with their food because their immune system had been damaged by toxins. Although we contacted Walter Reed Hospital, here again no one paid attention and many of these Vietnam veterans are now very sick.

Taking care of the problem our servicemen face will be costly. However, if this problem is neglected it will be much more costly to the health of our servicemen and eventually to our government which will have to take care of disabled veterans. I would like to recommend that two things be done immediately. First, use the physicians, scientists and others like myself to tell from the medical records which servicemen should be removed immediately from the areas of high pollution. These will be persons with any kind of allergy or immune system irregularities. Second, those who must remain should do so on a rotational basis. They should spend no more than three weeks stationed in this polluted environment, followed by a period of time in a pure environment or detox center.

General H. Norman Schwartzkopf
April 4, 1991
Page 2

A further step would be to have doctors skilled in clinical ecology consult with the physicians stationed over there to assist them in dealing with these problems and avoiding pitfalls. These doctors could also consult with physicians at Walter Reed and veterans hospitals on ways of taking care of these people before they are beyond help.

I would consider it a privilege to be able to serve my country by leading you to doctors and scientists who can give you the necessary scientific data to help you cope with this problem before it becomes a disaster. You can write to me or, because time is so important, you can call me at 301-948-1116.

Yours sincerely,

Natalie Golos

Natalie Golos

cc: President George Bush
Senator George Mitchell
Congressman Thomas Foley

UNITED STATES CENTRAL COMMAND
RIYADH, SAUDI ARABIA
APO NEW YORK 09852-0006

CCSG

April 16, 1991

Ms Natalie Golos
P.O. Box 5624
Derwood, MD 20855

Dear Ms Golos:

I have been asked to respond to your letter of 4 April 1991 on behalf of General Schwarzkopf. Thank you for your concern about the health of our soldiers and be assured that we share your concern about the health effects of the Kuwait Oil Fires just as we are concerned about any threat to the well-being of those stationed here.

The specific health risks of this unprecedented environmental disaster are being evaluated through an international effort. By the time this letter reaches you these very questions will be under consideration by the World Meteorological Organization in Geneva. We are happy to report that tests conducted to date by the United States Army, the Saudi Arabian Meteorological Environmental Protection Administration, the Kuwait Environmental Protection Department, and a U.S. Air Assessment Team have shown certain toxic gases (hydrogen sulfide, sulfur dioxide, nitric oxides) to be within the U.S. Ambient Air Standard. This is not to say there is no risk, just that there is a modicum of good news in an otherwise disastrous situation. The U.S. Air Assessment Team is composed of representatives from the Environmental Protection Agency, the Centers for Disease Control, and the National Oceanic and Atmospheric Administration and they are continuing their assessment.

The best course of action would be to extinguish the fires. However, the scope of this disaster precludes the rapid accomplishment of this goal. The next best action would be to get our people out of the area. This is being done as rapidly as possible. In addition to these "best actions" a continuous evaluation of the air, land, and sea pollution is being accomplished on an international basis. We are doing everything possible to protect, evaluate, and treat our soldiers. Thanks again for your interest and concern.

Sincerely;

James D. Bales, Jr., M.D.
COL MC USA

Subj: Persian Gulf Veteran Information [#5599614] 21 Sep 92 08:01 33 Lines
From: HOWARD,NANCY (Med.Care Cost Recovery) in 'IN' basket. Page 1 **NEW**

The following instructions should be followed concerning any billiing aspects for Persian Gulf veterans. This announcement was read on the Director's Conference Call on Friday, Sept 18.
"Facilities were previoously advised to examine and treat, if medically necessary, any Persian GULF veteran who presents at a VA medical facility with symptoms possibly resulting from exposure to environmental or chemical contaminates. Also, you were instructed to defer any billing for treatment provided pending the expected passage of VA proposed legislation which would autorize those actions.
VA was notified by OMB that they would not allow that proposed legislation to go forward. As a result, the Deputy Secretary agreed to the following:
VA is exploring amending existing regulations and other avenues which will permit VA to treat veterans who served in the Persian Gulf area and have symptoms possibly related to their exposure. However, these veterans will be required to apply for a service-
Press RETURN to continue or '^' to exit:

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Subj: Persian Gulf Veteran Information [#5599614] Page 2

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connected disability. If that service-connected disability is not granted, VA Must then bill these veterans for the services they received.
VA WILL bill insurance companies for tretment for insured veterans as appropriate and also bill Persian Gulf veterans for prescription copayments as appropriate.
Until VA regulations are published, you should continue to defer billing (means test Cat C) (EXCEPT FOR 3RD PARTY INSURANCE AND PRFSCRIPTION COPAYMENT) until the veteran's claim for service-connection has been adjudicated or it is determined that the veteran has failed to file a claim.
The legislation which will authorize VA to establish a Persian Gulf Registry and conduct A Persian Gulf examination is still expected to be passed and is a separate issue from the above.
If you have any questions, please call me at FTS 202-535-7387 or sned me an e-mail. We will keep you all informed of changes as they occur.

Select MESSAGE Action: IGNORE (in IN basket)/

Alt-Z FOR HELP' VT102 ' FDX ' 4800 N81 ' LOG CLOSED ' PRINT OFF ' OFF-LI

DEPARTMENT OF VETERANS AFFAIRS
Regional Office
1400 North Valley Mills Drive
Waco TX 76799

OCT 14 1992

In Reply Refer To:
349/21
C 462-35-2123
ZUSPANN, Gary A.

Director, C&P Service (211C)
VA Central Office
810 Vermont Avenue, N. W.
Washington, D. C. 20420

SUBJ: Advisory Opinion

1. The accompanying claims file contains claims for service-connected disability benefits for multiple issues which allegedly arose as a result of the veteran's Persian Gulf experiences. The issues in question include multiple chemical sensitivity syndrome, a spinal cord condition, depression, bronchial asthma, residuals of germ warfare, and parasitic diseases.

2. I am submitting the case for an Advisory Opinion in accordance with the provisions of M21-1, Part IV, Paragraph 7.04, because of the precedent-setting nature of the issues at hand. The Adjudication Officer's analysis of the facts, as well as his conclusions, are shown below.

3. BACKGROUND INFORMATION

The veteran served on active duty with the United States Navy from September 8, 1988, to August 26, 1991. He filed an original claim for benefits with the VA Regional Office, Waco, Texas, on June 26, 1992. The veteran was recalled to active duty on July 17, 1992, for medical evaluation and treatment at the Walter Reed Army Medical Center. He was discharged from the second period of service on August 19, 1992.

4. FACTS

A. We considered the following evidence when we reviewed the claims folder:

(1) Service medical records for period of treatment from May 18, 1988, to July 20, 1991.

(2) Report from Walter Reed Army Medical Center for period from July 16, 1992, to August 19, 1992.

(3) Treatment records from VAOPC, Fort Worth, for period from May 20, 1992, to June 12, 1992.

(4) Report from Dr. Stacks dated June 22, 1992.

(5) Reports from Dr. Gleason dated May 28, 1992, and June 8, 1992.

(6) Hospital report from June 20, 1992, to June 26, 1992, from Zale Lipshy University Hospital.

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REGIONAL DIRECTOR
WACO

March 26, 1993

Dear Mr. Zuspann:

As I related to your wife on the phone, I contacted Mr. Jay Butala on the night in question. He informed me that the Waco Hospital had no facilities to treat you and neither would they authorize payment for medical care outside the DVA system at DVA expense.

If you need further information, please advise.

Sincerely yours,

Jim Richman

JIM RICHMAN
Veterans Counselor

JR:dm

VETERANS ADMINISTRATION — **RATING DECISION**

1. REGIONAL OFFICE NO.	2. TYPE OF RATING	3. ORIGINAL DISABILITY RATING?	4. VETERAN'S FILE NO.
349	DISABILITY	NO	462-35-2123

5. VETERAN'S INITIALS AND SURNAME	6. COPY TO	7. VETERAN'S SOCIAL SECURITY NO.
G. A. ZUSPANN	AO (21)	

8. DATE OF CLAIM	9. DATE OF THIS RATING	10. DATE OF BIRTH	11. DATE OF DEATH
6-26-92	11-10-92	12-5-59	

12. ACTIVE DUTY (Mo.day.yr.) — 13. ADDL. SERVICE CODE

EOD	RAD	EOD	RAD
9-8-88	8-26-91	7-17-92	8-19-92

14. COMBAT STATUS	15. DATE OF LAST EXAMINATION	16. DATE OF FUTURE PHYSICAL EXAMINATION (Mo./yr.)	17. EMPLOYABLE (COMPENSATION ONLY)
1	HR 8-19 TO 10-7-92	11-93	NO

MT

18. COMPETENT	19. SPECIAL PROVISION CODE	20. NO. OF ADDITIONAL DIAGNOSTICS	21. NO. OF ADDITIONAL S/C DIAGNOSTICS
YES			

22. SPECIAL MONTHLY COMPENSATION

A. STATUS	B. BASIC SMC	C. HOSPITAL SMC	D. LOSS OF USE	E. AMAT LOSS	F. OTHER LOSS
CURRENT					
FUTURE					

23. NARRATIVE

J. OC

I. SC, UNEMPLOYABILITY

E. Service medical records for period from 5-18-88 to 7-20-91, report from Walter Reed Army Medical Center 7-16-92 to 8-7-92, treatment records VAOPC Ft. Worth, 5-20-92 to 6-12-92, Dr. Stacks 6-22-92, Dr. Gleason 5-28-92, and 6-8-92, hospital report from Osteopathic Medical Center of Texas 6-14-92 to 6-20-92, Dr. Claudia S. Miller 9-11-92, hospital report from VA Medical Center Houston 8-19-92 to 10-7-92

F. MULTIPLE CHEMICAL SENSITIVITIES CAN NOT BE ENDORSED AS A DISEASE ENTITY. DURING THE VETS SERVICE HE WAS EXPOSED TO VARIOUS CHEMICALS IN THE COURSE OF HIS MILITARY DUTIES, INCLUDING EXPOSURE TO SMOKE FROM OIL FIRES IN PERSIAN GULD DURING OPERATION DESERT SHIELD STORM. ALSO, HE SHOVELED VOLCANIC A[illegible] DURING A STOPOVER IN THE PHILIPPINES, ON SEVERAL OCCASIONS HE WAS SEN FOR RESPIRATORY PROBLEMS AND HEADACHES, A DIAGNOSIS OF ASTHMATIC BRONCHITIS WAS NOTED IN 5-92. TREATMENT AT VAMC RESULTED IN A DX OF ASTHMA, MEDICAL RECORDS INDICATE PROLONGED HOSPITALIZATION FOR TREATMENT OF HIS RESPIRATORY PROBLEMS AND OTHER PHYSICAL COMPLAINTS, MANY RELATED TO FEARS ABOUT HIS GULF WAR SERVICE, A DX OF MAJOR DEPRESSIVE EPISODE WAS MADE AND PROZAC WAS PRESCRIBED. 10-88 EVALUATED FOR CHORNIC SINUSITIS, UPPER RESPIRATORY INFECTION NOTED 3-89. VET HAS PREVIOUSLY STATED HE LAST WORKED 6-10-92 AS AN ASSISTANT MANAGER AT A FAST FOOD ESTABLISHMENT, COMPLETED TWO YEARS OF COLLEGE. ON RECENT 21-8940 VET STATES HE LAST WORKED 5-92, NO DAY GIVEN.

D. Service connection for urinary tract infection is not established as there is no evidence of a chronic urinary condition in service. Congenital bicuspid aortic valve is a congenital condition and the records do not shown service aggravation. There is no evidence of any residuals of germ warfare or parasitic disease. Multiple chemical sensitivities in the absence of organic disease is not a ratable entity. Sinus infections, atid are OK. Consideration of service connection for CS-T syrinx is deferred for additional development which has been requested. Unemployability will be established 6-11-92, date following date last worked per veterans original statement, pending further clarification. Prior entitlement to PT-R&C will not be continued as compensation is the greater benefit.

-4176 600-108

ALTH RECORD

CHRONOLOGICAL RECORD OF MEDICAL CARE

DATE	SYMPTOMS, DIAGNOSIS, TREATMENT, TREATING ORGANIZATION (Sign each entry)
22 May 91	SPECIAL 600
22 May 91	PER OPNAVINST 5100.23B, MEMBER WAS EXPOSED TO HAZARDOUS MATERIAL IN THE KUWAIT/SAUDI THEATER IN SUPPORT OF OPERATION DESERT STORM BETWEEN 25FEB91 TO 23MAR91. MEMBER WAS EXPOSED TO SIGNIFICANT LEVELS OF SULFUR DIOXIDE AND HYDROGEN SULFIDE GAS DUE TO OILWELL FIRES. THIS EXPOSURE MAY BE OF CLINICAL SIGNIFICANCE SHOULD THE MEMBER DEVELOP ANY RESPIRATORY ILLNESSES. THE POTENTIAL HAZARDS OF THE ABOVE TOXINS WERE EXPLAINED TO THE MEMBER. MEMBER WAS ADVISED TO SEEK MEDICAL FOLLOW-UP SHOULD RESPIRATORY SYMPTOMS OCCUR. LAB TEST, PULMONARY FUNCTION TEST, AND X-RAYS WERE NOT AVAILABLE DUE TO COMBAT RESTRICTIONS.
2nd Bn. 5th Marines	
	D B Gillis D. B. GILLIS LCDR, MC, USNR, 246-48-9830 MEDICAL OFFICER
	[redacted] MEMBER

MILITARY FAMILIES SUPPORT NETWORK, INC.
PO Box 2047
Buies Creek, NC 27506
(919) 892-9315

STATEMENT BY
MICHAEL R. ANGE
LEGISLATIVE LIASON

BEFORE THE
SUBCOMMITTEE ON OVERSIGHT AND INVETIGATIONS
COMMITTE ON VETERANS' AFFAIRS
HOUSE OF REPRESENTATIVES
FIRST SESSION, 103rd CONGRESS

STATEMENT ON HEALTH CARE PROBLEMS AFFECTING PERSIAN GULF VETERANS AND THEIR FAMILIES

09 JUNE 1993

Serving our troops while working for peace

Mr. Chairman and Members of the Subcommittee, I am Michael R. Ange, a disabled Persian Gulf Veteran and the Legislative Liaison for the Military Families Support Network, Inc. We are a national non-profit organization with a membership consisting of veterans and their family members. Over the past two years, our organization has worked in close cooperation with other support groups and veterans organizations in an attempt to answer the many medical questions which plaque Persian Gulf Veterans. In that period we have dedicated our efforts to the gathering of information, interviewing and compiling data from veterans and examining the handling (by the Department of Defense and the Veterans Administration) of several specific cases like that of Gary Zuspann and Michael Adcock, now deceased.

The Military Families Support Network, Inc., has asked me to address the overwhelming evidence indicating that the most sever illness facing Gulf War and other veterans today is an internal affliction. An affliction that has debilitated our VA system and rendered it unable to meet its obligation to the veteran.

Both the Congressional and Executive Branches of Government have made obvious attempts to ensure that the medical needs of veterans are met and that support is available to insure a reasonable standard of living for the disabled veteran or active duty person. These attempts are apparent in various administrative codes, laws and regulations that seek to govern the actions of the Veterans Administration. Unfortunately, these various regulatory acts have not resulted in the provision of timely, accurate and efficient health care for veterans and they have not deterred the loss of homes, businesses and assets due to service connected disabilities. They have even failed to keep the disabled veteran out of homeless shelters and off the streets. This Subcommittee has already heard and/or will hear numerous accounts and numbers today which will verify this statement of fact. Literally thousands of patriotic veterans who honorably served their country have now been abandoned by their Veterans Administration, but hopefully, this hearing is evidence that they have not been abandoned by their government.

Numerous veterans, civilians and media sources have asked what one thing could be done to make the system work effectively. In order to answer that question it was necessary to examine what has occurred within the system and how various cases have been handled. Our case studies begin with the handling of the service person, his records, and medical care while on active duty.

During Desert Shield/Storm, hundreds of thousands of service personnel were exposed to a multitude of known hazards including the threat of combat. The threat of parasitic diseases, field sanitation conditions and hostile activities are known and accepted by the service person daily. However, the service member is not likely to be equipped to protect his/her health from the unknown factors in the Gulf region. These factors potentially included: what has been termed, by Major General Ronald Blanck, as investigational drugs (see Attachment 1); exposure to hazardous levels of radiation present

in the depleted uranium of rounds and armor plating (RE: Uranium Battle Fields Home and Abroad: Depleted Uranium Use by the U.S. Department of Defense); and finally the dissemination of blatant misinformation by the command structure.

A significant number of the military personnel serving in Desert Shield/Storm were ordered to take dosages of drugs which were not identified and not recorded in the soldier's service record. The effects of these drugs were not disclosed to the service persons involved. It has been reported in the press and through other sources, that these drugs were given to service members on a voluntary basis only. In my unit and in numerous other units, the service members, which we have interviewed, do not recall being given an option to refuse these medications. If these drugs were voluntary, not experimental (as Major General Blanck claims) and safe for use, why did the military fail to document their administration. The medical personnel administering my inoculations absolutely refused to record it in any form on any record. (Please note that copies of my medical records are available for verification upon request.)

The use of depleted uranium in the production of ammunition and armor plating for weapons systems used in the Gulf is well documented. This substance is proclaimed to be safe by military sources. (See Attachment 2) In the March 29 - April 4, 1993, edition of the *Stars & Stripes* newspaper, the military's information is disputed. (See Attachment 3) The article reports that exposure to one armor-piercing round for one hour is equivalent to receiving 50 chest x-rays. In addition, US. Army Technical Bulletin (TB9-1300-278, parts 1 & 2) Guideline for Safe Handling of Munitions or Armor Containing Depleted Uranium clearly identifies depleted uranium as a hazardous material requiring special handling in order to safeguard personnel.

None of these publications identify the added risk to health which is known to occur from ingestion or inhaling the dust, particles and residues from the use of these munitions. These risks are identified in Uranium Battlefields at Home and Abroad: Depleted Uranium Use by the U.S. Department of Defense. It is interesting to note that the levels of uranium exposure which the military has quoted as safe are taken from 1958 test results. These tests are significantly outdated and up to date data is readily available but has not been used by the military in publicly stating safe levels of radiation exposure. Many scientific experts believe the conditions in the Gulf exceeded this safe level many times.

The level of misinformation purposely disseminated by the command structure is demonstrated at several levels and in several resources including some of those previously noted. The most blatant example of misinformation is demonstrated by the attached memorandum regarding Leishmaniasis Disease. (See Attachement 4) This is the memo I was given through official channels by my command. It states that Leishmaniasis is a harmless, non-contagious disease which the normal healthy body will handle on its own. The U.S. CENTCOM Guide for Diagnosis and Treatment of Diseases of Tactical Importance, pages 31-36, states that this disease can be fatal if not treated, is sexually transmitted and transmittable from mother to fetus. Numerous other facts in this memo

are also demonstrated to be false by the manual, including the claim that no test currently exist for the diagnosis of this disease. We have documented numerous cases of "mysterious illnesses" affecting the spouses and newborn children of Persian Gulf Veterans. If we have spread or risk spreading a potentially fatal and definitely contagious disease to the population, it appears as though the focus should be on prevention of proliferation rather than prevention of responsibility for care and disability. How can we morally justify the creation of new epidemics which will adversely affect the public health. Clearly, current policy makes this possible, if not likely, to occur.

This pattern of misinformation has continued to plague the veteran even after release from active duty. Many of the illnesses which plague the Persian Gulf Veteran are distinctly identified in the various regulations. In addition, a lack of diagnosis cannot justify the denial of medical care for the veteran. Both the Public Law and common human decency require that this policy end. In spite of these clearly identifiable facts, veterans are being denied care on a daily basis. It is even documented that veterans who are rated with 100% service connected disabilities are being denied medical care. (Refer to case of Gary Zuspann for an example.) There is no legal defense for the gross mistreatment and neglect of Persian Gulf Veterans. The only excuse available is a claimed lack of knowledge regarding the origins of these illnesses. Given the common conditions of service, determining the origin of these illnesses seems to be a matter of common sense. It is interesting to note that when a number of people in New Mexico became deathly ill with an "unknown, mystery illness", the Centers for Disease Control did not begin their search for cause in some other location like The Middle East.

The Veterans Administration has now appointed a Blue Ribbon Panel to undertake a study of medical problems afflicting Persian Gulf Veterans. This panel plans to undertake a study of several months (or years) in an attempt to provide medical care for the veteran. Although definitive, scientific diagnosis are important, our veterans cannot afford continued delay. Untold numbers of Persian Gulf Veterans have already died "mysteriously" from these illnesses. Countless others have lost jobs, homes and their quality of life. How many vets must lose their dignity before we begin as a nation to meet our base responsibility. The people of Kuwait received a response within several days of Iraq's invasion. Perhaps the members of the panel can explain why Kuwaiti citizens deserve more immediate assistance from our government than our military veterans do.

An examination of the Veterans Administration policy as reflected in a memorandum from the Veterans Administration's Director, (see Attachment 5) demonstrates that the policy is budget oriented, not veteran oriented. It is too late for concerns of a budgetary nature in this issue. As a nation, we must realize that the costs associated with war continue long after the last strategic bomb has fallen. The U.S. House and Senate approved the expenditure of these funds when they approved our Nation's commitment to military force in the region. If the administration failed to fully advise America of the true cost of this conflict then it is time to set the record straight Budget concerns cannot be allowed to continue to control these policies and even allow the federal laws, regulations and administrative codes to be subverted and circumvented.

These legal codes already make the necessary provisions for guaranteed immediate medical care for the veteran. In short, our system is not broken, but the people running it are failing to follow the regulations set forth by our own Legislative and Executive Branches of Government, this is the true origin of our illness.

As we see it, the problem facing the Veteran's Administration and the Veteran's Affairs Committees are two fold. First, we must insure that the appropriate policies, laws and regulations are followed by staff members of the Veterans Administration. The only way this can be insured is to pass regulations holding VA staff members personally accountable for their actions. As long as any group within our government acts above the law, the law will continue to be a mere inconvenience and not a policy to be respected and followed. This body, as a part of our legislative branch of government, has made great strides towards insuring the welfare of our nations veterans. It is time to take this policy one step further and act upon the obvious intent of current regulations by implementing a policy of accountability. The legislature has expended great energy and resources to protect the rights and interests of our veterans, let's hold those who disregard this effort responsible.

The second problem is to restore the veteran's trust in our Veteran's Administration. Not one member of the Blue Ribbon Panel studying Persian Gulf problems is a Persian Gulf Veteran. We feel that as a minimum equal representation is necessary! Therefore, we have co-sponsored a letter requesting seats for Persian Gulf Veterans on this panel. That letter has been sent to Secretary Brown, but as of this date, we have received no response. Surely, as veterans, we are at least entitled to an official response. I am quite certain that our sacrifice and service have earned it. We are once again requesting equal representation on this panel and we are asking for assistance from this Subcommittee in achieving this objective. We are anxious to see if you will respond.

We hope to work together with this Subcommittee and any other governmental agency to resolve this crisis facing Persian Gulf Veterans and to restore our faith as veterans in the Veterans Administration. In the words of President Lincoln our Veterans Administration should: "Foster and perpetuate this nation's tradition of service to our sick and disabled comrades and their widows and orphans." We must all strive to insure this noble intent does not continue to be perverted and distorted for any reason.

Thank you and I look forward to answering your questions.

larger than that used in the desert. It was considered investigational because of the low dose and its use as a pre-treatment for nerve gas. In the many years they have been used, there are no reports in the civilian medical community of long term effects from any of these vaccines or medications. We have also been unable to document any long term side effects.

• The military also responded quickly to other ecological threats to personal health [An overview of the specific clinical and ecological areas of concern is covered in a September 4, 1992 Information Paper entitled "Post Desert Storm Medical Issues" which is provided as Attachment 3]. A series of studies concerning both soil and atmospheric contamination from the Kuwait oil well spills and fires were initiated [An Executive Summary of the ambient air sampling work performed by a team from the U.S. Army Environmental Hygiene Agency is at Attachment 4]. We performed extensive clinical measurements on personnel in a large unit before, during, and after their exposure to oil well fires in Kuwait. [A Technical Summary of the scope and methodology of the Biological Surveillance Initiative is at Attachment 5. The clinical testing of this unit occurred during the period 1 June 1991 and 14 October 1991]. On August 20, 1992, the Army convened an expert civilian panel to assess the potential for chronic petrochemical toxicity [A consensus statement of this panel is at Attachment 6]. We have looked at possible pesticide and microwave exposure. Finally, the military has worked closely with the Department of Veterans Affairs to

DEPARTMENT OF THE ARMY
HEADQUARTERS, U.S. ARMY ARMAMENT, MUNITIONS AND CHEMICAL COMMAND
ROCK ISLAND, ILLINOIS 61299-6000

REPLY TO
ATTENTION OF

AMSMC-SFS (385-11m) 24 MAY 1991

MEMORANDUM FOR Commander, U.S. Army Training and Doctrine Command, ATTN: ATOS, Fort Monroe, VA 23651-5000

SUBJECT: Depleted Uranium (DU) Contamination

1. The subject of DU has received quite a bit of media attention as a result of Operation Desert Storm. Much of this attention has been devoted to painting a much exaggerated picture of DU as a radiation hazard. A sample of this publicity is enclosed (encl 1). The results of this portrayal has been to needlessly burden soldiers and airmen who handle DU containing ammunition with undue concerns for their safety.

2. While it is true that DU presents a possible hazard, this stems from the fact that it is a heavy metal that can be toxic if ingested or inhaled. The DU becomes a hazard only when burned either by fire or with the heat of impact in a target area. The inherent radioactive properties of this substance are, in fact, negligible under normal use and storage.

3. We are suggesting that some basic information on DU and the safety issues surrounding its proper use and storage be included in the training of infantry and armor soldiers and officers. In an attempt to initiate this effort, we are enclosing some basic facts about DU for your consideration and staffing with the various U.S. Army Training and Doctrine Command schools (encl 2). Our office would be available to assist course developers concerned in preparing this instruction if desired.

4. The POC is Mr. Jeffrey Havenner, AMSMC-SFS, DSN 793-2969.

FOR THE COMMANDER:

David P. Skogman

2 Encls
as

DAVID P. SKOGMAN
Ch, Systems, Chemical, & Radiation Div

ATTACHMENT 2

The Stars and Stripes
The National Tribune
THE OLDEST NATIONAL VETERANS' WEEKLY NEWSPAPER
WASHINGTON, D.C., FOR THE WEEK OF 29 MARCH - 4 APRIL 1993

ATTACHMENT 3

Uranium-Tipped Weapons May Be 'Agent Orange' Of '90s

Washington, DC (UPI)—Veterans of the Persian Gulf War may have been exposed to dangerous levels of radiation from uranium-tipped anti-tank weapons used during Operation Desert Storm, researchers said 18 March.

"This radioactive weaponry could be the Agent Orange of the 1990s, inflicting disease for years to come," said John O'Connor, chairman of the National Toxics Campaign Fund of Boston.

"The problem is the uranium isn't depleted of its radioactive material."

Agent Orange was a herbicide used to clear jungles during the Vietnam War. Many Vietnam veterans blame exposure to Agent Orange for various long-term illnesses.

In a report released at a news conference, O'Connor said military personnel may have been exposed to radiation from some 4,300 rounds of uranium-tipped shells fired during the war.

And in the United States, he said civilians living near 50 weapons-manufacturing plants may also have been exposed to cancer-causing radiation.

The report, "Uranium Battlefields Home and Abroad," said the weapons facilities have contaminated the air, land and water, but said the government has not taken the risks seriously.

The uranium-tipped projectiles were prized for their armor-piercing ability, and were first used in battle during Operation Desert Storm.

"We're concerned about radiation exposure to soldiers who were over there," O'Connor said.

He said the Army has tested 35 soldiers "and found an elevated level of uranium in their urine."

O'Connor said that troops were not notified of any potential health risks from the uranium-tipped weapons.

"It's a tough enough job for Americans to put their necks on the line to defend our freedom," O'Connor said. "And for the military not to fully inform the soldiers of all potential health risks...is wrong."

The report quoted military documents saying that soldiers could have received the equivalent of 50 chest X-rays from spending an hour in contact with one armor-piercing bullet.

Staff Sgt. Carol Picou, an Army nurse based at San Antonio, TX, said she was "exposed to depleted uranium while moving to the front lines" and has been ill since the war ended in early 1991.

She said she has lost control of some body functions and has brain damage affecting her memory and speech. The Army is trying to discharge her for medical reasons, Picou said.

A Canadian doctor working with a Harvard University team recently said the spent shells may

See Uranium-Tipped, Pg. 14

cont'd: From 1

be the cause of cancer and other stomach ailments reported in Iraqi children.

The Army surgeon general's office said the uranium used in the weapons is classified as a form of low-level nuclear waste that is rendered harmless over a period of time that could be days or years.

"We don't think that it represents a health problem," said Peter Esker, a spokesman for the Army surgeon general's office.

He said, however, that military experts "don't have a lot of knowledge, admittedly, in this area" because this is the first time the weapons were used.

One of the plants producing uranium components for the weapons is the Nuclear Metals Inc. in Concord, Mass. A spokesman for the company denied the plant's operations pose undue risks to the environment, workers or local residents.

"We're handling this material safely and our workers' exposures are only a small fraction" of what federal laws allow, said company vice president Alden Gilman. ★

BRIEFING FOR SOLDIERS RETURNED FROM SWA

LEISHMANIASIS DISEASE (lesh" mah-ni' ah-sis)

Newspapers report a new form of disease that may be so mild you are not aware of having been infected.

The organisms may survive in your blood for some time, and could be transmitted by transfusion. Do not donate blood until you are given release to do so by further testing. You cannot pass it to your family or friends by physical contact - it is not contagious. It is not dangerous to your health, and a normal healthy body will control the infection without medical treatment.

There is no screening test for this disease available now, but one is being developed. Do not ask to be screened for it.

You should continue to obtain your normal health care from your private physician at your own expense. Do not make a special visit about this disease.

If you do experience an illness that your doctor cannot find a usual cause for other than the possibility of Leishmaniasis, immediately contact your Unit Representative: SSG SUDDRETH, Telephone: (704) 754-2878/2876. Your doctor will need to furnish written documentation of same. Your unit representative will provide this information through command channels for final review and instructions from the National Guard Bureau's Surgeon Office.

Enclosure-1

ATTACHMENT 4

Subj: Persian Gulf Veteran Information [#5599614] 21 Sep 92 08:01 33 Lines
From: HOWARD,NANCY (Med.Care Cost Recovery) in 'IN' basket. Page 1 **NEW**

The following instructions should be followed concerning any billiing aspects for Persian Gulf veterans. This announcement was read on the Director's Conference Call on Friday, Sept 18.
"Facilities were previoously advised to examine and treat, if medically necessary, any Persian Gulf veteran who presents at a VA medical facility with symptoms possibly resulting from exposure to environmental or chemical contaminates. Also, you were instructed to defer any billing for treatment provided pending the expected passage of VA proposed legislation which would autorize those actions.
VA was notified by OMB that they would not allow that proposed legislation to go forward. As a result, the Deputy Secretary agreed to the following:
VA is exploring amending existing regulations and other avenues which will permit VA to treat veterans who served in the Persian Gulf area and have symptoms possibly related to their exposure. However, these veterans will be required to apply for a service-
Press RETURN to continue or '^' to exit:

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Subj: Persian Gulf Veteran Information [#5599614] Page 2

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connected disability. If that service-connected disability is not granted, VA Must then bill these veterans for the services they received.
VA WILL bill insurance companies for tratment for insured veterans as appropriate and also bill Persian Gulf veterans for prescription copayments as appropriate.
Until VA regulations are published, you should continue to defer billing (means test Cat C) (EXCEPT FOR 3RD PARTY INSURANCE AND PRESCRIPTION COPAYMENT) until the veteran's claim for service-connection has been adjudicated or it is determined that the veteran has failed to file a claim.
The legislation which will authorize VA to establish a Persian Gulf Registry and conduct A Persian Gulf examination is still expected to be passed and is a separate issue from the above.
If you have any questions, please call me at FTS 202-535-7387 or sned me an e-mail. We will keep you all informed of changes as they occur.

Select MESSAGE Action: IGNORE (in IN basket)/

Alt-Z FOR HELP' VT102 ' FDX ' 4800 N81 ' LOG CLOSED ' PRINT OFF ' OFF

ATTACHMENT 5

STATEMENT OF
VICTOR SILVESTER.
NATIONAL PRESIDENT.
OPERATION DESERT SHIELD ? DESERT STORM ASSOCIATION.
BEFORE THE
SUBCOMMITTEE ON OVERSIGHT AND INVESTIGATION
OF THE COMMITTEE ON VETERAN AFFAIRS.
U.S. HOUSE OF REPRESENTATIVES.

JUNE 9, 1993.

Mr. Chairman, Members of the Committee, Ladies and Gentlemen:

As President of the Operation Desert Shield / Desert Storm Association, may I extend the appreciation and thanks on behalf of the members and participants of the Desert Shield / Desert Storm Association and myself, for your invitation to participate in these hearings.

The men and women of our Armed Forces, along with their families, have served this Nation for over two hundred years in the name of Freedom. Fifty Years ago, to a world that was darkened by war, President Franklin D. Roosevelt described the Four Freedoms of Mankind: Freedom of Speech and Expression; Freedom of Every Person to Worship God in His or Her Own Way; Freedom From Want; and Freedom From Fear.

Mr. Chairman, we are here today because two of those Freedoms are in serious danger of being lost by the very people who laid their lives on the line for those same Freedoms. They have served their country in the name of patriotism and the principals of Freedom, with the confidence of support and honesty from their government and their military leaders.

The Operation Desert Shield / Desert Storm Association was developed as the end process of numerous discussion's and observation's. Many of the members of our Armed Forces have been exposed to the problems of veterans over the years. The concerns and problems of the Vietnam Era had touched many of our military personnel within the family circle. Knowledge of Iraq's use of Chemical and Biological warfare was also a major concern in light of the previous problems with "Agent Orange".

From it's inception, ODSA has been collecting and researching data pertaining to military, medical and environmental concerns of the Middle East.

The Armed Forces of The United States of America and the Department of Veteran Affairs are not strangers to the problems of military service in the Middle East! They are not strangers to the effects of military hardware, both to the human factors and the environmental factors. They are not strangers to the problems of Veteran Health Care nor Family situations.

Today, the honorable members of this Committee have and will spend hours listening to testimony pertaining to Veterans Health care, Military Health Care and many other areas of concern. Some of you have heard these stories many, many times, the point is, are we going to do something about it this time? Are we going to take the jackets off, roll up the sleeves, loosten the ties and work out a viable situation?

Living in the Permian Basin Oil community, having associates within the oilfield workforce community who had worked and lived within the Persian Gulf environment, the concerns of wartime activities on an oilfield environment became an important issue.

After the legalities involved in the of formation of the organization were taken care of, ODSA began working with the families of the Desert Shield participants. On many occasions there were problems surfacing with payroll, health care and in many cases, simple everyday activities that had always been taken care of by the Desert Shield participant.

Contingent with those activities, we also would receive calls from family members when they received notification that their family member had been sick. At that time, it was just a part of regular conversation, "Oh, I got a letter or call from my husband, he's doing ok, I asked him about the car, he has it serviced every ..... miles, he said that he had been sick for a couple of days," or whatever.

These incidents were not of any major concern as far as the organization was concerned. Just part of the regular attrition rate that comes with deployment. on a couple of occasions we were notified that somebody's family member had been medically evacuated for a sickness, however, they were being taken care of. As far as this organization was concerned, we were just compiling and storing information for the possible use years down the road, when it would be needed to support veteran claims.

In July, 1991, we began to receive calls in reference to sick troops who were trying to find information on what they should do. People who were not really bedridden, however, they just did not feel right. Some were active duty, some had already left the service and were now part of the veteran community. The majority of these calls were refered to the correct chain of command or VA procedural contacts.

During this time frame, the calls averaged one or two every couple of weeks. In September, 1991, my son returned from the Persian Gulf. He returned home for a few days leave and then returned to Ft. Eustis, Va for outprocessing and termination of his military service. While he was home on leave, there were some incidents of fatigue, headaches, aches and pains, rashes etc. However, we put this down to environmental changes, lots of traveling etc.

When he returned home for the final time, we began to notice the changes in his nature. He stayed awake night after night, he could not remember simple instructions, he would forget what day of the week it was and where he was. Simple every day math problems, adding up his bills were a major chore. This is a person who was Student of the Year in School the year he went into the military. He seemed to always be feeling bad, this is a person who did not miss a day of school for the entire 12 years of his schooling, documented perfect attendance. The final point was finding him on his knees, with his head in his hands suffering from a major headache. He finely informed us that he was getting these on a regular basis. We then began the process of getting him to a Veteran Affairs facility.

Our first inquiries into the system resulted in the attempt to obtain copies of his military medical records. It is now almost three years later, and we still do not have the requested copies of his military medical records.

As our experiences grew with the bureaucracy of obtaining health care through the Weteran Administration, so did the calls pertaining to these same problems. The announcement that a Persian Gulf Registry would be established, helped with the concerns and the calls again declined.

September and October of 1992, this organization received numerous calls pertaining to the Persian Gulf Register. Stories of Weteran Affairs personnel sitting with desk, chair and a notepad, abounded. A sense of direction, or what they were supposed to do with the information was not apparent. The response to questions was that this was a part-time situation, and that there was no funding for a fully established program

In November, 1992, I wrote to the President of the United States, George H. Bush, and requested that he make a special effort to sign the funding bill.

In December, 1992. The Operation Desert Shield / Desert Storm Association began to seriously pursue and coordinate an information gathering system. A review of the areas of concern that had been voiced over the past few months was conducted and five (5) areas of concern were identified:

1. **Environmental Manipulation.**

2. **Chemical Exposure.**

3. **Parasitic, Wiral and Bacteriological Exposure.**

4. **Radiation Exposure.**

5. **Investigational Drug and Waccine Exposure.**

These areas of concentration were determined based of the content of the calls that we were receiving.

The concerns of environmental manipulation were largely based on observations of the Public Television Nova program where television cameras accompanied the United Nations inspection teams and found some thirty (30) Scud Missiles loaded with Nerve and Biological agents. This information, combined with the reports and observations by military personnel of herds of animals dying ovenight in the neutral zone (December,1990), and the reports of Scud Missiles exploding over the Daharan / Al Jubial areas without being fired on by Allied Forces, it appears the concerns of environmental Manipulation are valid.

There have been no successful large-scale uses of biological warfare agents in modern war. Documents made public in the early 1980s, however, indicate that Japan used biological warfare agents on Chinese cities during the late 1930s and early 1940s and conducted large-scale experiments using captured Chinese, Soviet and--from 1943--US soldiers as human guinea pigs. Information about the Japanese biological warfare program was known to the U.S. government in 1947. According to public statements, the decision not to initiate war-crimes proceedings was based on the State Department's evaluation of the experiments as "the only known source of data from scientifically controlled experiments showing the direct effect of Biological Warfare agents on man;" and on the realization that an open trial would release that data to public, and Soviet, scrutiny.

In December 1987, the United States resumed the manufacture of nerve gases, now made in binary form, and budgeted funds for the production in the 1990s of the (227-kg) 500-lb Bigeye, a 155-mm (6.1-in) binary shell containing materials for the lethal nerve gas VX. In 1988 the U.S. government justified the Pentagon's $300 million program to develop defenses against biological weapons using biological agents such as viruses, bacteria, and toxins.

In May 1991, President George Bush promised that the United States would stop manufacturing chemical weapons and would destroy it's entire stockpile of them, once a treaty was signed. In 1988 Libya built a chemical weapons plant masquerading as a pharmaceuticals factory, using chemicals supplied by a West German firm. Iraq used leathal mustard gas often in its war with Iran, the United States used mustard gas on its own troops as a training method during World War II. The possiblity of minimal usage of Nerve and Biological agents by both sides is quite feasable.

There have been, and continue to be, many theories expounded upon as to the problems of Chemical Exposure and Multiple Chemical Sensitivity. there is no denying that this area is playing an important role in the scenario of the Persian Gulf Illnesses. During the Persian Gulf conflict, and for months afterwards, there were situations that resulted in the exposure of military and civilian personnel to concentrated, uncontrolled amounts of toxic petroleum materials, their by-products and numerous other chemical compounds utilized in the procurement and processing of crude oil.

The highway for transport of much of the world's petroleum, the Gulf is a shallow, almost completely enclosed body whose waters are renewed only over about 200 years. The events of the Persian Gulf War in 1991 were therefore viewed with great apprehension by environmental specialists. The release by Iraq of millions of gallons of oil into the Persian Gulf, and the torching of the Kuwaiti oil fields, which spewed untold amounts of oily smoke into the atmosphere and coated areas of the Kuwaiti desert with a lethal layer of asphalt-like soot, are the first instances of the deliberate use of oil as a weapon against the environment.

Many Persian Gulf participants were exposed to crude oil in and around the oil well sites. Ruptured pipe lines, storage tanks, oil-contaminated pools of water and oil soaked sand.
A close study of the photographs and video footage shown during the conflict, revealed the remains of storage buildings or shacks next to many of the destroyed well head sites. Discussions with oil field personnel who had worked on many of these sites, showed that many of those storage areas may have contained chemical materials for the procurement and production of crude oil.

Time and time again, this organization has received calls inquiring into sources of information for Chemical poisoning and Multi-Chemical Sensitivity. Time and time again we have been told that the government entity medical staff have professed ignorance as to the protocol's required to test for any such symptoms, and a reluctance to seek outside assistance from either another government entity or an outside private source.

On numerous occasions we have observed Major General Ronald R. Blanck, discounct the seriousness of oil fire smoke within the Kuwaiti environment. It leaves a question of credability when those statements are compared with the situation of the Champion Chemical Fire in Odessa, Texas on August 24, 1992.

This facility was a storage and outlet for many of the chemicals that are utilized in the procurement and production of crude oil products. The same types of chemicals that were stored in the buildings around the well heads in Kuwaiti. A small single facility fire that burned for four or five hours until it was controlled. A small single facility fire that resulted in a major portion of the City of Odessa being evacuated due to possible toxic fumes exposure. The military personnel in Kuwaite were not evacuated, they lived and worked in that environment for days on end.

In terms of incidents, gastrointestinal illness posed what was conceived to be the largest threat to Westerners visiting the Middle East. Incident rates had been reported as high as 50 cases per 1000 American per week in Saudi Arabia.

Since August 1990, more than 600,000 Americans have been sent to the Middle East, where they encountered a variety of infectious diseases endemic to the area. Although most of the consequent illness are supposed to be treated by military physicians, some will undoubtedly occur outside the purview of the military health care system. This concern is futher promoted by the announcement by the Weteran Administration that some cases of Leishmanisis had been identified and that this disease could remain dormant for up to three years.

This situation, combined with the fact that thousands of the personnel exposed to this problem were reservists and National Guard , called from civilian life to active military service and sent to the Middle East. Some will return to their civilian communities with diseases that only become evident after their homecoming, sometimes after months or years, and others will pose a risk of secondary transmission to people with whom they come in contact.

Given these considerations and the U.S. military experience during the first seven months of deployment, infectious diseases endemic to the Persian Gulf became one of the priority projects of the Operation Desert Shield / Desert Storm Association.

One of the major answers to the early reports of the "Mystery Illness" was the cry of "Stress" and so it may be, however, when investigation of medical publications reveal that "The evaluation of a chronic fatigue or post traumatic stress-like syndrome in those who have returned from the Persian Gulf should therefore include serologic testing to rule out an earlier Sandfly Fever virus infection" and those tests have not been performed. The credability of the "Stress" diagnosis is questionable. With the possible Systemic late presentation of some 13 Middle Eastern Endemic Diseases, the concerns of Desert Shield / Desert Storm veterans and their families are understandable.

The possible late presentation endemic diseases include, Viral Hepatitis, Sandfly Fever, Tuberculosis, Amebiasis, Giardiasis, Intestinal Helminthic Infection, Leishmaniasis, Malaria, Brucellosis, Q Fever, Schistomiasis, Echinocccosis, and Rabies.

It is a documented, historical fact, going back as far as 1943, that many of our military personnel and veterans have suffered from Parasitic, Viral, Bacterial and Fungal infections that have been left undiagnosed and untreated. Even today, that same indifference is apparent, the establishment of the Blue Ribbon Committee, (The Persian Gulf Expert Scientific Panel, May 7) does not include a listed expert on Tropical Medicine or Parasites.

Documentation shows that these endemic diseases may cause bleeding gums, central nervous system damage, liver and lung disease, urinary tract problems, skin rashes, diarrhea, gastrointestinal problems, cancer symptoms and other problems. Many of these symptoms seem to be identical to the symptoms of the Mystery Illnesses that nobody can seem to diagnose or find a reason for.

Parasitic testing can be a very strenuous, tedious process, requiring numerous samples, specific times for testing and a variety of special tests. Documentation and patient statements shows that proceedures for testing are not always followed. Deviation from proper methods result in erroneous findings and inaccurate diagnosis. For example, urine should be collected for Schistosoma Haematobia testing between 11:am and 2:pm. In light infections, examination should include the deposits of the entire specimen, not just one or two slides, as only one or two ova may be present. Investigation has revealed that in some cases, centrifuge processes have been utilized that are not within the parameters of the medical journals that are used to teach the basic skills required to become medical professionals.

The concerns of Radiation Exposure for Persian Gulf veterans have developed over the years since the Gulf war. As more and more information about Iraq's hidden Nuclear agenda, possible collection and storage points, Nuclear Research facilities and U.S. Armed Forces Depleted Uranium utilization has come to light. Investigators for the General Accounting Office have found that combat soldiers and maintenance troops had been exposed to contamination from Depleted Uranium through wounds, ingestion and exposure. The possible exposure list would also have to include medical personnel who removed exposed, contaminated clothing from wounded personnel and their transportation entities who carried exposed troops and equipment.

There appears to be some general concerns about the potential health hazards posed by Depleted Uranium armor and ammunition. The apparent misinformation, confusion, double standards and lack of concern by government entities, has not helped the situation. The statement that Depleted Uranium does not present a significant health risk for soldiers in credible events, is a point to ponder. What events during the heat of battle constitutes a credible event?

Many troops were never informed as to the dangers and problems related to Depleted Uranium. A request for symptoms pertaining to Radiation Exposure will result in a different answer from each official that you ask.

The Environmental Protection Agency has set a limit for uranium -in-soil at 35 picocuries per gram of soil, the standard that is used by the military, quoting an NCRP report, recommends that land in which the DU-in-soil concetration exceeds 2,000 picocuries per gram of soil, should not be used for intensive agriculture, or for the growing of crops which tend to concentrate uranium. Which is the correct level of safety? Given the difference.

What is the difference when the military states "Maximum exposures projected to be received by crewmembers of U.S. combat vehicles uploaded with DU munitions,(during peacetime training) may minimally exceed Nuclear Regulatory Commission limits for the general population, but would certainly not result in any expected adverse health effects." Given the difference between the EPA and the NCRP standards, what is the minimal level and what is the physical difference between the general population and military personnel?

September 1, 1992. Presidential Executive Order 12657, requires the Department of Veteran Affairs to prepare to support the medical needs of the population after a catastrophic nuclear even. Questionaires had already been sent to VA stations to determine capabilities in 1991. the plan to have one "development" team in place by the end of 1992, shows that there was no concern as to the effects of DU ammunition during Desert Storm. Formation of the other three regional teams is planned for 1993.

It is also planned to allow the Bradley Fighting Vehicle to use DU munitions. Because of current NRC exposure limits for the general public, the Army may have to ask for a waiver from the Nuclear Regulatory Commission to allow the potential to exist for the BFV's crewmembers to receive greater radiation exposures than will be allowed by the NRC's revised limits for exposure to the general public.

In our estimation, this shows a total disregard for the long-term health effects of our military personnel by the Defense Department.

Amid reports of troops being marched into unlikely facilities such as mail rooms and mess tents, given shots and pills without notations being made on shot records, or as in some cases, no paperwork at all. The Operation Desert Shield / Desert Storm Association began inquiries into what was being administered. On numerous occasions, we were assured that everything was being done within military guidlines. We were told that the materials that were being given were for the protection of the troops and were being monitored and controlled for the protection of the troops.

ODSA then received information that the shots and pills being given were "Investigational" drugs and vaccines and they were being administered only with informed consent. my son informed me that the only thing he was informed about was to report to the tent!

Futher correspondence from LTC D. William Atwood informed ODSA of the utilization of Anthrax Waccine, Absorbed, and Botulinum Toxoid, another source provided the information on Pyridostigmine Bromide. A futher source of information provided the revelation that these were not the only investigational products fielded in support of Operation Desert Storm.

Many of the military personnel who received these products, have reported that they were not monitored while taking the materials nor was there any evidence of documentation. the question remains, how can it be determine who was given the Investigational drugs years down the line and if a Persian Gulf Weteran gets sick, how can a doctor determine or rule out if the sickness is related to the long-term effects of the Investigational Drugs?

Since it's formation, the Operation Desert Shield / Desert Storm Association has developed a membership of 589 persons. Each of these members have a direct relationship to either Operation Desert Shield or Operation Desert Storm.

The telephone referral system was initiated on December 15, 1992. The 1-800 system was put in place in March 1993. Since the initiation of the telephone referral system, ODSA has received 6,794 calls. Subjects ranging from where to write for medals that were not received, through the entire gammit of Weteran Affairs inquiries to suicidal tendencies have been addressed via this system.

Calls have been received not only from Desert Shield / Desert Storm participants, but, Grenada, Panama, Wietnam, Post Wietnam, Korean and World War II veterans. This telephonic system, combined with a commercial Nationwide computer network, has now put this organization within reach of any veteran who has a question or needs to talk to somebody.

Day after day, we receive calls from veterans and veteran family members seeking answers, looking for assistance with their health problems or just needing somebody to talk to. The majority of sickness calls reflect the same symptoms, the same domestic situation's and the same frustration's with the bureaucratic system.

Many of the complaints in regards to the Weteran Administration pertains to the apparent complacency of the Weteran Affairs community. Weteran after veteran have commented or complained about the apparent cursory treatment that they have received and impression that there is no hurry or urgency to deal with their case or their problem.

Apparently, the Weteran Affairs organization has forgotten that in many of these cases, the veteran is unable to work, or at least work in the field that he was trained in. For a veteran to have to wait for months, and in some cases years for their records to become available before a doctor can make a diagnosis and then wait for more months and in some cases years before the claim is processed, is unforgivable. The problems that face the Desert Shield / Desert Storm cannot be laid at the feet of the Department of Weteran Affairs, cannot be laid at the feet of the Department of Defense and cannot be laid at the feet of the Weteran.

The responsibility for the problems that are being experienced by the Desert Shield / Desert Storm veterans and their counterparts from other veteran era's must be laid at the feet of all entities involved. A doctor cannot make a diagnosis if he or she does not have a set of records to work from, likewise he or she cannot even look for a diagnosis if there is no notification of what the patient was exposed to.

by the same hand, that same doctor cannot make a true evaluation or diagnosis of a patients condition if he or she does not perform the correct medical protocol or order the tests required to determine a correct diagnosis. Not without blame is the veteran, who, if he or she does not take steps to be able to answer questions and record symptoms that occur between visits, is not contributing to the diagnostic process.

During this entire process, the veterans family is struggling to maintain a reasonable standard of living. Unfortunately, during the process of negociating the bureaucratic maze that always involves the Department of Veteran Affairs and the Department of Defense, the veteran family comes out on the losing end.

With the range of problems that the Desert Shield / Desert Storm participants were exposed to, the veteran family now has to contend with the possibility of contracting the same problems.

These problems that we are addressing today are not only contingent to members of the veteran community. The active duty personnel face their own unique set of problems. Military personnel with many years of service under their belts are now finding themselves being removed from service. These same active duty personnel are spending everything that they have to try to find out what is wrong with them so that they can find relief and return to active duty.

It does not appear that an answer to these problems will be forthcoming in the near future. The problems of missing records was part of the Legislative Hearing On Radiation Measures - H.R.1811, S. 1002 And S. 453, Subcommittee On Compensation, Pension and Insurance, May 20, 1987. Some 4,700 records were missing, not finalized or somehwere within the system. This type of record combined with statements like the one made by General H. Norman Schwartzkopf on the Larry King show, that the military didn't care about veterans once they were out of the service, makes a person wonder what is the justification to serve in this Nation's Armed Forces. Even the promises made by the recruiters in regards to health care, cannot be relied upon.

U.S. Army: Medical Care. The worth of you medical coverage depends on how much you use it. Your major medical needs are provided for, therefore, there is no need for you to carry medical insurance.
U.S. Marine Corps. Health, Medical Care, Family Services. Marines and their dependents receive free or inexpensive health and dental care at military hospitals. Care and treatment are available 24 hours a day, Unexpected illness or injury will not cause financial burdens. These are the promises to our military personnel!

The question that must be faced at this time, is what are we going to do in support of the Desert Shield / Desert Storm and very shortly, Operation Restore Hope, veterans and their families while these problems are being worked out. it must be taken into consideration that some of these situations may not be resolved for a number of years.

It is the contention of the Operation Desert Shield / Desert Storm Association that a consideration be given to the utilization of a military base in each state that is slated to be closed, be turned into a research / rehabilitation center for the veterans in that state.

The medical facility on the base could be utilized to train the Reserve and National Guard medical personnel. Research programs and physician training programs could be initiated to utilize civilian expertise. Barrack facilities could be utilized to house single veterans and base family housing could be used to provide homes for married veterans and their families while they are receiving treatment and vocational training.

Many of the military facilities will not be feasable for utilization by civilian population for a number of years. While those bases are being prepared for that situation, security must be provided and the renovations performed. All of these activities will cost the government money, if the veterans can be utilized to perform those duties under a supervised situation, two areas of government concern would be addressed in the most economical manner.

We are now facing the third anniversary of Operation Desert Shield, Mr. Chairman, I ask you, how far have we progressed in addressing the health problems of the Desert Shield / Desert Storm veterans. It does not appear that the situation is getting better, in fact, the reverse situation appears to be surfacing. the current Veteran Affairs Facilities cannot handle the load of veteran care that they are responsible for now, plus we have to face the possibility of veteran family involvement in the "Mystery Illness" situation.

Mr. Chairman, the majority of the Desert Shield / Desert Storm veterans do not want a hand out, they would rather find out what is wrong with them, have it treated and be able to get back to work and live the life that they have dreamed of and worked for.

Mr. Chairman, Members of the Subcommitte, Ladies and Gentlemen, May I once again express my appreciation for this opportunity to testify and voice the opinions of the Operation Desert Shield / Desert Storm Association. this organization will continue to collect and corrolate data and information. The United States Armed Forces spent millions of dollars training the participants of Operation Desert Shield / Desert Storm to win the Persian Gulf Conflict. It is our intention to utilize that same training to win the war for the Persian Gulf Veterans. For The Best, By The Best, With The Best.

Victor Silvester,
President,

NATIONAL ASSOCIATION OF RADIATION SURVIVORS

STATEMENT OF JEAN RALPH, PRESIDENT

OF

THE NATIONAL ASSOCIATION OF RADIATION SURVIVORS

BEFORE THE

HOUSE VETERANS' AFFAIRS SUBCOMMITTEE ON

OVERSIGHT AND INVESTIGATIONS

U. S. HOUSE OF REPRESENTATIVES

JUNE 9, 1993

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NATIONAL ASSOCIATION OF RADIATION SURVIVORS

Jean Ralph Testimony
Page 1

Mr. Chairman and Members of the Committee:

As President of the National Association of Radiation Survivors, I have been requested to provide testimony to this subcommittee with regard to the situation of the fine young men and women who participated in the Persian Gulf conflict. I am honored to be asked to provide such testimony and am more than glad to do so.

WHAT IS THE PROBLEM

Back in October of 1990, when it was clear that the United States was going to be deeply involved in a conflict in the Gulf, stories began appearing about so-called experts who were advocating the use of nuclear weapons, such as the neutron bomb, in the Gulf rather than committing troops. NARS was holding its Annual Conference at the time and, given our experience, we were appalled at the thought. We passed a resolution and wrote an open letter to the President and Congress opposing such action (Copy attached). We felt that we were the proof that the use and testing of such weapons were harmful to more than some designated enemy. The survivors, widows, and genetically damaged children of our association are the living evidence.

Soon after the conflict in the Gulf ended, NARS' Executive Director and NARS' Region V Vice President began receiving calls about the possible use of weapons coated with depleted uranium (DU) during the Gulf War. We were all quite ignorant about the existence of such a substance whose name appeared to contradict itself. Calls were put out to many other organizations in an effort to track down any information we could about depleted uranium and/or its use in the Gulf War conflict.

To our surprise, there was such a substance and it was in fact used on tanks and shells during the Gulf War. Initial responses indicated that in and of itself, DU might be relatively harmless as a coating on a tank or weapon. However, if the tank or weapon were to explode and a fire ensued, the results could be quite harmful to anyone who inhaled or ingested the oxidized DU.

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Later came the media reports about the troops in specific units which had served in the Gulf who were coming down with odd health problems since their return. Hair loss, rashes, fatigue, and other symptoms were common among these troops. The official response seemed familiar, i.e., these were not particularly significant medical problems and could very well be stress-related reactions to service in the Gulf.

What was not in the general media but became common points of discussion among a network of organizations was the fact that these symptoms were not just with a few isolated units but, in fact, appeared to be wide spread in terms of branch of service and type of service if not in actual numbers of servicepeople involved. In addition, we began hearing of a very high rate of miscarriages and children being born with defects from post-Gulf pregnancies.

Because of our initial involvement in trying to ferret out the facts about DU, we came in contact with Gulf War-based organizations such as the Military Families Support Network and because of the similarities in symptoms and illnesses between our Atomic veterans and the Gulf War veterans we created a seat on our board of directors for these particular veterans and have been working quite closely with them.

NARS is certainly not in possession of all the facts and we feel that specific information on the health problems, health care needs and other problems of the Gulf war veterans are better and more authentically presented by those who have experienced the problems and/or represent those who have. At the time of preparation of this testimony, it is our understanding that representatives from the Gulf War veterans will in fact testify.

While our involvement began with DU, our concern goes beyond the possible exposure to DU, which I will discuss in greater depth later. We would like this committee to examine the Gulf War veteran's situation within a context of the history of the treatment of servicemen/veterans who have served their country from World War II onward.

This history shows an attitude among the defense establishment that permits them to use servicemen as guinea pigs by exposing them to chemical, biological, and radioactive substances as well as drugs, in an effort to determine whether these substances and drugs would be effective in use against an enemy. I am referring here to the now acknowledged mustard gas exposures, the LSD experiments discussed in Senator Church's hearings, the Dioxin exposures for Vietnam veterans and, of course, the radiation exposures of the Atomic veterans.

This history includes a failure to adequately inform the servicemen about the upcoming exposure and potential dangers of that exposure. It includes the failure to provide a post-exposure warning about potential health effects which might have motivated these men to seek regular checkups and health monitoring.

This history, in fact, includes the opposite. Generally these men and women have been told that there was no danger in their exposure. They had no reason to question the government they were in the military service to protect. It is only years later that the health effects began to show themselves, often too late for medical remediation.

History shows that when the health problems arise, these veterans are most often denied health care and compensation because the official policy has been that the exposure could not be the cause of the problem or that science has not yet made any connection between the exposure and the particular health problem. Often the onus of proof shifts to the veteran to prove any connection. While under the law the Department of Veterans Affairs is obligated to assist claimants in developing their claims, the reality is they do not do so.

History shows that when the veterans complain about their health, they are told they have psychological problems, in some cases a stress disorder. Some are even put under psychological observation if they become too vociferous in their demands for assistance. Sometimes they are accused of seeking a "free -ide" or a "handout". Men and women who were willing to give their all to their country are now told they are the equivalent of a welfare chiseler.

At least in terms of the Atomic veteran, hi-tory has shown that military records are not always available or complete. Orders that move individuals to test sites are missing, records of medical attention are not available. It is amazing the percentage of Atomic veteran records that were burnt in the 1973 St. Louis fire. It is amazing the number of ships whose logs, including Captain's logs, are incomplete or totally missing. In the VA claims process the veteran is denied compensation if those records are missing and s(he) cannot produce his/her own documentation about exposure.

While the Department of Veterans Affairs is mandated to assist veterans or their surviving spouses in the claims process, the opposite is true as evidenced by remands of the Court of Veterans Appeals and by the DVA's destruction of documents during the discovery phase of NARS' class action suit on the $10.00 fee limitation issue.

Finally, history shows that sooner or later, evidence begins to indicate that what these veterans have been saying has some validity. Incremental legislation is passed with very narrow definitions and interpretations that benefit a very few. It is then believed that our country's obligation to these people has been met. And we move on. Often this minimal legislation is too little or too late for most. Their lives have been lost or destroyed, their families suffering grievous harm, stigmatized by the very government they served so honorably. Local and state governments have had to pick up the tab for many who could no longer work or were widowed. Social Security Disability has been an important source of survival for these people even though the VA should be the agency providing for their survival.

Let us examine the situation of the Gulf War vet in this historical context.

At the minimum the Gulf War vet was exposed to at least one experimental drug that was supposed to protect him/her from a chemical or biological attack. There is at least one shot that was given that we have been told had not been approved by the FDA. We have anecdotal evidence that some were given the shot in the desert and told that the shot would be placed on their shot records when they returned to their home base. Upon return, they were told that the shot could not be placed on their record since the home base had no knowledge of the shot.

QUESTION: What happens to such a veteran if at some future date there is a health outcome from the shot?

In testimony before the House Committee on Veterans Affairs, Brigadier General Ronald Blanck said that the botulinum vaccine "has not been licensed by the FDA because airborne botulinum is very rare and there is no ethical way to conduct the scientific trials needed to prove efficacy". (quoted in American Legion Magazine).

QUESTION: Given the history of experimentation on servicemen, is there any possibility that some Gulf War veterans were used to test the efficacy of this vaccine?

We know that Depleted Uranium (U238) was used as armor protection on the M1A1 tank and on armor piercing shells from those tanks as well as the A-10 Thunderbolt. This DU can contaminate soldiers in several ways.

One involves those who might ride around in DU tanks or in trucks with the shells aboard. It has been estimated that their exposure would be the equivalent of one x-ray every day. This could be of great concern if the soldiers were doing this on a daily basis for some extended time.

A second way would be if the tank or the shell were to be involved in a fire, for example in the incidences where our tanks were hit by so-called "friendly fire". The DU oxidizes under fire conditions and anyone who inhaled or ingested the oxidized DU would be at risk. If the serviceman was to be hit with shrapnel from the tank or shell or had an open wound, s(he) could also be contaminated that way. In addition, this oxidized DU could contaminate the soil and be resuspended as vehicles or men rode or walked over it kicking up sand and dust. Again it could be inhaled or ingested putting these individuals at risk.

DU can also be chemically toxic and, depending on the size of the dose, act as a heavy metal and lodge in the bones or cause kidney, lung or other organ damage.

So, our first historical point applies to the Gulf War Veteran. S(he) may have been exposed to an untested vaccine and s(he) may have been exposed to DU and in either case was not warned in advance or in post-exposure about potential health effects. It was only after coming home, getting sick, and finding others getting sick that these veterans were able to relate their illnesses with their Gulf service.

Our second historical point also applies. The Gulf War veterans have been told that they had nothing to fear from the vaccine or the DU coated tanks and weapons. They too had no reason to doubt the very government they were serving in the Gulf. The historical difference here may be that the Gulf War veteran has manifested problems much sooner than their predecessors and have been willing to come out and talk about the problems where others in the past have been more reticent to do so.

The third historical point is also true. Gulf War veterans are being told that their illnesses are psychological, i.e., stress related (but not post-traumatic stress disorders which are classified as service connected). Some have been subjected to psychological testing or observation. Because of the climate of reduction in forces throughout the military, some of these servicemen are being told they could lose their careers if they complain about their health. Others, who are sick, have been unable to pass their physical training requirements and are being discharged because of that while the illness that prevents compliance is being denied as service connected.

National Guard troops have been accused of trying to enhance their benefit status by claiming Gulf related health problems.

It is not yet clear that our historical point about military records is valid. Again we have anecdotal evidence that some

military personnel were moved to the Gulf on the verbal say-so of an officer or ranking NCO. How many of these troops this applies to we do not know at present. How will they prove their service in the Gulf if they never received written orders?

We believe that our final historical point is in the process of validation. Initially there was an attempt to isolate the "mysterious illnesses" to a few units or to the psychological distress of a few reservists. As the numbers of complaints grew, a registry has been established, doctors and scientists are beginning to take the situation seriously and hopefully will arrive at some conclusion about the source(s) of these health problems.

Many of these veterans are receiving only cursory care from VA facilities or, no care at all. There are active duty military personnel in their quarters, receiving no or minimal care. Physical exams and the registry appear to be of little or no practical value. Veterans are having to spend their own resources to receive appropriate health care, if they are fortunate enough to have the resources. Since some lost their civilian jobs upon return from the Gulf, we even have reports of Gulf veterans who are now homeless, just as we hear of the Vietnam veterans who have become homeless.

In the meantime however, lives are being lost or destroyed, families are experiencing grievous harm, and the veteran is being stigmatized as a "user" or "cheat" on the system. History is indeed repeating itself. If the situation is allowed to progress at its historical rate, any legislation passed will be too little or too late for some, if not many, of these Gulf War Veterans or their families.

Incidentally, if the stories are true, these veterans and their wives, are expe~iencing a high rate of miscarriage and genetically damaged children, just as with the Atomic and Vietnam veterans.

We recognize, as do the Gulf War veterans, that there may be other causes of the rising health problems of Gulf War veterans. The oil well fires (which we have heard but yet to confirm that some of the oil wells were capped with a DU coated material) could clearly cause problems. Reports indicate that some of these oil well fires may have been caused by "friendly fired" DU rounds from our A-10s and Apache helicopters. The black clouds created could also inhibit the dispersal of oxidized DU adding to the destructive effect of the DU and the chemicals from the fire.

Parasitic diseases are also being considered as a potential

health threatening problem. The destruction of Iraqi nuclear facilities, ammunition dumps, and other targets where toxics may have existed could all be part of the problem. But as of the preparation of this testimony, no one seems to have an answer.

WHAT SHOULD BE DONE

1. Congress should enact legislation that provides for immediate health care, including special needs such as sterile environments, for any Gulf War veteran and his or her family.

2. Congress should enact legislation that provides for immediate monetary compensation, at the disability rate, for any Gulf War veteran or, if deceased, his or her family, so that every resource of that veteran/family is not expended for health and other necessary costs, placing these families below the poverty level at the mercy of local welfare offices.

3. In the above legislation Congress should make it clear that when the issues are resolved, there will be no required pay back of any health care or monetary assistance received by these veterans or their families. This is a service that will be provided to those who have served their country.

4. The Congress should subpoena for any individuals or records that would indicate who knew what about DU, the botulinum vaccine, and any other possible cause of Gulf War illnesses, and when they knew it. This should include a demand for declassification, if necessary, of any such record or documents.

5. The Congress should enact legislation that prevents the military services from discharging, harassing, or otherwise intimidating Gulf War veterans who have, or are concerned about, health care problems. This should include records about any such discharges that have already taken place.

6. The Congress should enact legislation and appropriate sufficient funds for an immediate review of the health of Gulf War veterans and the potential causes of health problems. This review should be as rapid as humanly possible in order to resolve the issues at the earliest possible date, not years later. This review should have an oversi~ht committee composed in part, by a representative sample of Gulf War veterans, and specifically not just high ranking career servicemen and other so-called experts named by government agencies. This legislation should provide for on-going follow-ups on Gulf veterans in order to document future health problems that may develop. In addition, both the initial review and on-going follow-ups should include the issues of miscarriages and genetically affected children.

7. The Congress should enact legislation that guarantees the safeguarding of individual military records including movement orders, places of assignment, medical and hospitalization records, unit records, etc.

8. The Congress, through legislation, should guarantee the Gulf War veterans right to obtain complete and total copies of any records applying to his/her military service, particularly although not exclusively, in the Gulf.

9. Finally, there should be a resolution addressing the sense of the Congress, stating that there will be no more experimentation on U.S. military personnel for any purpose and that if the military finds it necessary to use any weapon, or any substance that could possibly cause immediate or future health concerns for servicemen, that those servicemen should be advised of the potential health problems prior to, and post-use of, that weapon or substance and, that the United States is willing to live up to its' contractual obligation to assist the veteran or his widow and orphaned children when needed.

NARS can say without reservation that the overwhelming majority of those exposed to ionizing radiation, if they had known the potential risk of that exposure, would have willingly gone through the exposure if it was deemed necessary for the security of the United States. The problem that we have as an organization and as individuals, is the deceit that was used, the denials of responsibility, and the lack of accountability that has become apparent after the exposures.

The various exposures discussed in this testimony have occurred under both Democratic and Republican Administrations, under a Congress of both Democratic and Republican legislators, and the issues carry no partisan banner. Various committees have heard testimony over the years and various oversight committees have been part of the decision-making process. Congress has, in fact, passed legislation or acquiesced in administration assertions of right, that makes it ever so difficult for veterans to receive justice in any form including:

The $10.00 fee limitation for attorneys assisting veterans in the VA claims process;

The Feres Doctrine that prevents a veteran from suing his/her government for injuries incidental to military service;

Claims of sovereign immunity or discretionary function exceptions to the Federal Tort Claims Act;

The Warner Amendment which provides total immunity to

government contractors involved in nuclear weapons work.

Will the manufacturers of the Botulinum vaccine or the producers of the DU tanks and shells request Warner type legislation for blanket immunity as well?

Will exposure to DU or the vaccine become another exception to the Federal Tort Claims Act?

At an early stage of a repetitive historical process, the Congress has an opportunity to say No More! By adopting the actions listed above, the Congress can end years of misuse and abuse of those who serve their country and ensure that never again will these honorable and patriotic men and women be subjected to the humiliation and pain that has been an aftermath of service to the United States.

We know that not every veteran who expresses a complaint about health or other service-related matters has in fact a service-connected claim and neither the Congress nor the Administration can satisfy or resolve every individuals issue. But a good faith effort on the part of the Congress to get to the bottom of the Gulf War issues might go a long way toward restoring the faith in the basic justice system of the country for which these men and women were willing to make the ultimate sacrifice, but not to be sacrificed by the irrational and irresponsible attitude of some decision-makers.

As we wrote in the attached October 1990 resolution and Open Letter to the President and Congress:

> This is what we wanted for ourselves.
> It is what we demand for them.

Thank you for allowing me to submit this written testimony and for allowing me to speak before the committee.

NATIONAL ASSOCIATION OF RADIATION SURVIVORS

Open Letter to President Bush
and members of Congress

The members of the National Association of Radiation Survivors, being loyal and patriotic Americans, have generally supported the policy ofthe United States in the past and continue to do so in the present.

We feel however, that our government has not always played the game fairly with us, exposing us either intentionally or unintentionally to unnecessary hazards, such as ionizing radiation, and more significantly, denying responsibility for our subsequent conditions and blocking our efforts to obtain adequate treatment and just compensation for our illnesses.

Today, many of us have close relatives and friends in the armed forces who have been or will be sent to the Persian Gulf area. We are extremely concerned when we hear threats of the use of either nuclear or chemical weapons in that conflict. We implore our government not to use such weapons. We also beseech them to take maximum care to inform personnel thoroughly about all the risks to which they might be exposed, to provide maximum possible protection of these personnel, and, to direct the Department of Veterans Affairs to afford them the care and compensation they deserve for any injuries or illnesses resulting from the Persian Gulf conflict.

This is what we wanted for ourselves.
It is what we demand for them

This letter was unanimously passed at the 8th Annual Convention of the National Association of Radiation Survivors on October 5, 1990.

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STATEMENT OF STEVE A. ROBERTSON, DIRECTOR
NATIONAL LEGISLATIVE COMMISSION
THE AMERICAN LEGION
BEFORE THE SUBCOMMITTEE ON OVERSIGHT AND INVESTIGATIONS
COMMITTEE ON VETERANS AFFAIRS
U.S. HOUSE OF REPRESENTATIVES
JUNE 9, 1993

The American Legion appreciates this opportunity to testify before this Subcommittee concerning the medical care being offered to veterans of the Persian Gulf War. We applaud the Chairman's leadership for holding a hearing on such a sensitive issue.

On August 2, 1990, The American Legion and the Vietnam Veterans of American filed a law suit against the United States for repeated failures to aggressively pursue research on Agent Orange. This is the only time in the 74 year history of the Legion that it filed a law suit against the federal government. That same day, Iraq invaded Kuwait. Ironically, much concern centered around the fear that Iraq might use nuclear, chemical or biological warfare.

By October 1990, then President Bush granted three Legionnaires permission to visit U.S. troops deployed to Saudi Arabia. Then National Commander, Robert Turner (GA); his successor, Dominic DiFrancesco (PA); and the National Adjutant, Robert Spanogle (MI) spent time in the Persian Gulf talking with the troops and receiving military briefings. After identifying the material needs of the troops, the Legion activated its Family Support Network.

During Operation Desert Shield and Storm, The American Legion provided over $500,000 in cash grants to needy military families; mailed thousands of cards, letters and packages "to any soldier"; and provided thousands of volunteer hours cutting lawns, changing the oil in family cars, shoveling snow, painting houses, baby sitting and other helpful chores. Even the Legion Post in Dhahran, Saudi Arabia got into the act by hosting over

150,000 troops in their homes, holding picnics at perimeter locations, making hospital visits at M.A.S.H. units and delivering ice to isolated military units.

Due to this degree of involvement, the Legion began to receive information about sick Persian Gulf veterans. The symptoms covered a wide range: fever, diarrhea, skin rashes, fatigue, aching joints, bleeding gums, short term memory loss, hair loss, respiratory problems and hacking coughs. The possible causes covered a broad spectrum to include, but were not limited to: inoculations, crude oil, burning oil wells, pesticides, smoke from burning landfills, insect bites, poor sanitary conditions, diesel exhaust and radiation exposure.

In July 1991, the Senate Veterans Affairs Committee held a series of hearings concerning the readjustment problems of returning Desert Storm veterans. In its testimony, the Legion addressed several problems to include the health care concerns of recently separated veterans, as well as, active duty personnel.

As the number of complaints we received began to grow, the Legion published a press release encouraging all ill veterans to file a claim with the Department of Veterans Affairs (VA). Soon afterwards, active duty personnel began to contact the Legion with their medical concerns. With each new complaint, the veteran would tell the Legion of other veterans having similar health problems. Before long, a few complaints became many, lodged by both active duty personnel and reservists.

The VA began releasing information on the number of Desert Storm veterans being seen at VA medical facilities. Early indications showed the vast majority were being treated for psychological adjustment problems. The Legion's efforts on behalf of Post Traumatic Stress Disorder (PTSD) are well documented. However, the Legion became very concerned that PTSD was becoming the

"catchall" diagnosis and the real physiological problems were not being addressed.

Initially these veterans reported that the military and VA medical professionals diagnosed the symptoms as stress related and recommended anti-depressant medication. To many veterans, this appeared to exacerbate the problems. When a group of Army Reservists in Indiana complained of nagging health problems, a group of health care professionals from Walter Reed Army Medical Center went to Indiana to examine the veterans. The findings were that most of the problems were stress related. The results of that visit, it appears to the Legion, became the standard for all subsequent complaints, both within DoD and the VA.

After conversations with many of the sick veterans, nearly all reported that any stress problems they were experiencing stemmed directly from the way their medical conditions were being addressed by health care professionals. Nearly all of these sick veterans have heard: "We can see that you are sick, but we don't know what's causing it, but we know it is not from your service in the Persian Gulf."

Shortly after the troops began returning to the United States, there was a ban placed on Persian Gulf veterans from donating blood due to a disease called leishmaniasis, a blood parasite transmitted by a sand fly bite. Very little information was known about this disease and there are very few leishmaniasis experts in the United States. Mr. Chairman, there is no test commercially available to accurately detect leishmaniasis. There is no test that can be economically conducted on large numbers of veterans. Medical experts claim that this disease may remain dormant for many years, then become active when the immune system becomes weak. The normal symptoms are skin lesions, fatigue and aching joints. A patient can even be asymptomatic. There are still many unanswered questions concerning this disease.

The Legion finds it hard to believe that only a handful of cases have been detected from the over 500,000 troops deployed. It has been reported that Saudi Arabia normally has about 16,000 cases reported a year. If so little is known about leishmaniasis and testing is so inaccurate, how can military and VA health care professionals rule out the disease on a large scale?

I attended a meeting of the Armed Forces Epidemiological Board in October 1992 when the recommendation was made to lift the ban on blood donation by Persian Gulf veterans. The experts on leishmaniasis did not produce any hard, clear facts to prove leishmaniasis could not be transmitted by transfusion or to justify lifting the ban. In fact, one of the experts suggested keeping the ban in effect until a test could be perfected to accurately detect leishmaniasis. That recommendation fell on deaf ears.

Mr. Chairman, military health experts have admitted that Persian Gulf veterans were exposed to depleted uranium because they still carry depleted uranium shrapnel as a result of friendly fire. The Persian Gulf War was the first time U.S. forces used depleted uranium, therefore, the adverse effects of tens of thousands of rounds being fired by the A-10's and the M-1 Abram's tanks may not be fully realized. Also, depleted uranium is used in the tank's turrets to provide additional protection from armor-piercing rounds.

Many of the ill veterans have expressed concerns over the inoculations received while in the Persian Gulf. Many soldiers received inoculations for anthrax and botulism yet no annotations were made on their shot records or documented in their medical records. In most cases, the veteran was not given the option to refuse the shot. Veterans were also given some medications to combat exposure to nerve agents. Questions about the side effects of these pills have also been asked.

The smoke from the oil well fires is still etched in the minds of all those who saw them. Many veterans are deeply concerned about the hydrocarbons and other by-products of such large scale burning. The smoke from the landfills is also another concern since there appeared to be absolutely no quality control measures associated with the burning. Such items as lithium batteries, plastic water bottles, aerosol cans and used oil were often items placed in dumpsters and taken to the landfills.

Pesticides were used to combat insects, such as, flies, ticks and fleas. In "tent cities," food, clothes, drinking water and sleeping quarters were exposed to the "bug spraying fog machines" used to dispense the pesticides. Pots, pans, stoves and grills used by the food handlers were also exposed. Some units were issued cans of insect repellant that were to be sprayed on uniforms, tents, mosquito netting and sleeping bags, but not directly on the skin.

The American Legion was pleased when the Department of Defense (DoD) began a Persian Gulf Registry to track who was deployed to the Persian Gulf and where their unit was located. However, this registry failed to record those veterans reporting medical problems. To date, DoD does not have an accurate listing of how many active duty personnel have complained of medical problems that the veterans believe may be connected to their service in the Persian Gulf. The only numbers that they report are the confirmed cases of leishmaniasis (28) and depleted uranium exposure (35). There is no list of the growing number of active duty personnel who have complained of continuing health problems and those who have to seek treatment at their own cost outside the DoD medical system. DoD fails to recognize those who have received medical disability since returning and that DoD insists is not related to service in the Persian Gulf. It is amazing the similarities between the way these veterans are being treated and the ways Vietnam veterans were treated.

The Legion was pleased when VA and Congress agreed that a second registry was needed for Persian Gulf veterans who were complaining of continuing health care problems. Simple baseline physicals were desperately needed. The Legion discovered, and a GAO report later confirmed, that many Persian Gulf veterans were discharged without separation physicals. Many of those veterans who did receive a separation physical found the physical to not be very thorough and documented complaints were not taken seriously by the attending physicians.

An area of great concern to the Legion is the failure of DoD and VA health care professionals to consider findings of health care professionals outside the government health care systems. Repeatedly DoD and VA spokespersons have said that they will do everything possible to discover the problems faced by Persian Gulf veterans. Many veterans and active duty personnel have sought diagnosis and treatment from environmental specialists for chemical sensitivity. A doctor in Louisiana has successfully treated three Persian Gulf veterans for two types of bacteria and yet his diagnosis and treatment has been rejected at face value by both DoD and VA without any investigative measures undertaken. The rejection, as we understand, was via telephone conversations. The Legion recommends that VA and DoD should either prove him wrong or use his technique to diagnose and treat other veterans.

The American Legion is pleased and honored to have a member of its professional staff as a member of the VA's Blue Ribbon Panel to review the medical problems of Desert Storm Veterans. The Legion hopes that the members of that Panel will review the official proceeding of this hearing and thoroughly investigate the complaints lodged here today. The Legion would strongly recommend, as a minimum, a large scale epidemiological study done by a nongovernmental agency.

Mr. Chairman, the Legion applauds those private citizens who have joined its efforts on behalf of the ill Desert Storm veterans. Their persistence, dedication and determination have helped to unite veterans who felt lost, rejected and forgotten into coalitions seeking medical help and justice. They too have seen veterans go into serious debt seeking medical answers, while their family members had to watched their lives go into a financial tailspin.

America praised the victory of Operation Desert Storm. The streets were lined in Hometown, USA to cheer these returning veterans. Yellow ribbons and flags were everywhere. Patriotism was contagious. But now the cheers have faded, the ribbons are gone and the flags are furled. Some of the returning heroes are sick, jobless and desperate. Who will come to their rescue? Who will they turn to in their time of need? Who will make them whole? Who will restore their faith "in the system?" Who will treat them like heroes?

These veterans ask for no more of their government than what their government asked of them: dedication and commitment.

STATEMENT OF ROBERT G. LARRISEY
TO THE SUBCOMMITTEE ON OVERSIGHT AND INVESTIGATIONS
COMMITTEE ON VETERANS AFFAIRS
U.S. HOUSE OF REPRESENTATIVES
JUNE 9, 1993

Mister Chairman and Members of the Subcommittee:

My name is Robert G. Larrisey and I am a resident of Chalfont, Pennsylvania. I am also a Persian Gulf veteran, and have encountered many problems trying to get service connection for medical and psychological problems I have incurred as a result of service to my country. I request that this statement be included in the official records of this hearing.

As a member of the Air Force Reserve, I was called to active duty on December 27, 1990 and was deactivated on June 20, 1991. During my active service I was deployed to the Sultanate of Oman, which is on the eastern end of the Arabian peninsula, from January 6 through April 25, 1991.

Upon my return to the U.S., I began to experience recurring skin problems (skin irritations with oozing sores), high blood pressure, and extreme psychological distress which I believe are directly related to my service in the Persian Gulf. In addition to the physical and psychological problems I have suffered, I have been subjected to extremely rude, cynical, and unprofessional behavior on the part of Department of Veterans Affairs (VA) personnel when I sought to document my symptoms and file a claim for service connection.

My last experience with the VA was in May of 1993, when Mr. Dave Allen visited the 913th Air Reserve Facility in Willow Grove, PA. Mr. Allen is a VA representative at the Pittsburgh VA Medical Center. At that time he left some forms relating to the VA's Persian Gulf War Registry for the members of my unit to fill out and return to VA for evaluation. I filled out these papers, listing all my problems, and returned them to Pittsburgh, in care of Mr. Allen.

Two weeks later Mr. Allen telephoned me. He told me that he had been to Willow Grove to tell us about the Gulf War Registry, and that there was nothing that he could do for me. I was further told that I should go to my Senators and Congressman and complain about my problems. I should also point out that when Mr. Allen was at Willow Grove originally, he did not meet with anyone who had served in the Gulf. Further, Mr. Allen asked me not to come, when he comes back again.

This situation all began in June 1991, when I filed a claim for service connection with VA. In October of that year I was informed that my claim had been denied because of lack of evidence. In December 1992, I went to the Philadelphia VA Medical Center to have my condition documented for the Gulf War Registry. My wife and I waited in the emergency room for 4 1/2 hours before finally I was seen by a doctor.

During that time we saw many VA personnel just sitting, doing no work whatsoever. The attitude of most of the personnel was very rude and impersonal. When we were asked why we were there, we told them that some friends in Washington DC suggested that we get the rash documented, and have my condition added to the Registry. I was told, "I don't care about your friends in Washington."

The doctor we finally saw was a foreign woman, with such a thick accent that we could not understand each other. In the course of her examination of me, we never saw her wash her hands or use gloves or any kind of protection. I was not told of any diagnosis of my unknown skin problem.

Every time the skin condition occurs, I have had it documented in my Air Force Reserve medical record. One particularly frustrating episode occurred in April of 1992 on a training weekend. I began to itch so badly I went to the Air Force dispensary. Much to my dismay, the Air Force dispensary was closed, so

I was turned over to the Navy dispensary. The Naval dermatologist made an incorrect prescription, which intensified the irritation and caused the sores to weep and ooze badly. At about this same time I began to experience elevated blood pressure, which was measured at this time at 190/120.

After this extremely frustrating episode, I went to the University of Pennsylvania Medical Center for a diagnosis of my condition. It was diagnosed as nummular diffuse eczema. Antibiotics have been prescribed for the skin infections I have experienced and synalar ointment for the running sores. It was not until February 21 of this year that a VA dermatologist agreed with the diagnosis and the treatment for my condition.

In July 1992 I went to the Veterans Outreach Mental Hygiene Clinic in Philadelphia for an evaluation. I was interviewed by a young woman who entered all my information into her computer. After a time, she informed me that my condition was not service-related, and that I would have to prove that it was, in fact, service-related. One month later I received a bill of $60 for this service, but was told not to pay it.

This $60 bill has also caused me some measure of anxiety. In February of this year, I received a second billing for the evaluation mentioned above. I telephone the VA in Philadelphia and told them I was told not to pay this bill, though I could not tell them the name of the person who gave me this advice.

In March of this year another bill for $60 arrived, with interest. I contacted the VA, and spoke to another VA employee who later told me that my records had been lost. However, I received a fourth billing shortly afterwards, with my name spelled correctly and my correct Social Security number on the bill.

In April I wrote to Mr. Pat Appigani, Chief of Medical Services at the Philadelphia VA Medical Center about this $60 bill I was

told on three occasions not to pay. I also included in that letter my experiences at the Philadelphia Medical Center in December of 1991. Copies of that letter were sent to U.S. Senator Arlen Specter, American Legion Legislative Director Steve Robertson, and U.S. Representative James Greenwood.

Later that month, I was contacted by a Ms. Roslyn Harris on behalf of Mr. Appigani and asked to provide the name of at least one person who had advised me not to pay this $60 bill. My wife then phoned Ms. Linda Wilson, Deputy Director at the Baltimore VA. During the course of their conversation Ms. Wilson told my wife, "Give the veteran a quarter and have him handle his own affairs," which upset my wife terribly. I was so incensed at Ms. Wilson's callous, unfeeling attitude that I returned her call and informed her, "You told me to spend a quarter and I'm spending it."

In the meantime, I continued to pursue my claim for service connection. In August of 1992, my information was submitted through the office of Representative Peter Kostmayer on my behalf. Even so, VA denied my claim. I tried again one month later, as a service representative of the Vietnam Veterans of American collected my papers relative to the appeal process and personally dropped them of at VA to an unnamed person. Unfortunately, he did not get a receipt for them. After getting no response from VA, earlier this month I was advised by Mr. Dwight Edwards, an official of the Pennsylvania Vietnam Veterans, to submit the same information with an updated letter to VA, asking that the appeal process be reopened. Inquiries to VA have revealed that they did not have the information sent to them in September 1992.

Also in September of 1992, we received information about the VA's Gulf War Registry from Linda Wilson in Baltimore. The article listed a Ms. Renee Davis at the Philadelphia VA Medical Center as the coordinator for the Registry. My wife called the

VA to set up an appointment with Ms. Davis. Once my wife told the woman why she was calling, Ms. Davis told my wife, "I don't care what paper you have, I am not the coordinator, and I don't know who is." My wife then spoke to another person and set up an appointment to for an interview when they began. I was put on the VA's Persian Gulf War Registry in October of 1992. However, two months later when we made a call to the Philadelphia VA concerning the registry, we were directed back to Ms. Davis, who told us, "I am now the coordinator of the Registry, and you talk to me."

During the time that I was trying to deal with my physical problems, I also participated in several psychological counseling sessions between July, 1992 and May, 1993. I found these meetings to be generally unproductive, as the major focus of these sessions was on Vietnam veterans and not on Gulf War veterans. Financial planning was discussed at one session, while a so-called "marriage encounter" took place at another. However, each of these programs occurred because they were of interest to the counselor, not because they were requested or needed by the participants.

My wife and I lodged several complaints, specifically in October 1992 and in April 1993, about the lack of sensitivity to the needs of Gulf War veterans at the counseling sessions. We were scheduled for another meeting this month, but we cancelled that appointment and went to a private psychologist instead. My wife and I felt that after ten and a half months that VA had done nothing right for us.

To date, Mr. Chairman, I have incurred unpaid medical insurance costs in excess of $3,400. Since June, 1991 I have also lost more than 135 hours from work. While these amounts may sound paltry, they are not paltry to me or my wife. Furthermore, there is just no reason for the consistently rude, unprofessional, uncaring behavior which we have encountered within the VA

system. My wife was sexually harassed and verbally insulted while I was serving this country overseas. In my opinion, the treatment I have received at the hands of the Department of Veterans Affairs has been no less shabby.

Mr. Chairman, we have given our side of the story over and again, and have been given only lip service by the arm of the federal government supposedly dedicated to serving veterans and their needs. We feel as though we have almost been reduced to a state of begging and groveling for services from VA, as though we were charity cases. We are not asking for charity; we are simply asking that a "grateful" nation honor the promises it made to its service members as they fought for this country and the principles it embraces.

Mr. Chairman, that concludes my statement; I thank you for your attention.

STATEMENT OF

BOB MANHAN, ASSISTANT DIRECTOR
NATIONAL LEGISLATIVE SERVICE
VETERANS OF FOREIGN WARS OF THE UNITED STATES

BEFORE THE

SUBCOMMITTEE ON OVERSIGHT AND INVESTIGATIONS
COMMITTEE ON VETERANS' AFFAIRS
UNITED STATES HOUSE OF REPRESENTATIVES

WITH RESPECT TO

THE HEALTH CARE CONCERNS AND PROBLEMS OF PERSIAN GULF WAR VETERANS

WASHINGTON, D.C. JUNE 9, 1993

MR. CHAIRMAN AND MEMBERS OF THE SUBCOMMITTEE:

Thank you for inviting the Veterans of Foreign Wars of the United States (VFW) to participate in this oversight hearing. Many of our 2.2 million members are veterans of the combat areas of Operation Desert Shield/Operation Desert Storm, which began in August 1990 and is ongoing.

Historically, the VFW has always strongly supported our country's involvement in this strategic part of the world. Over the past two and a half years two of our VFW National Commanders visited American troops on the battlefield. In August of 1992, at the VFW's 93rd National Convention, this organization unanimously passed Resolution No. 640 entitled, "VA Presumptive Care For Persian Gulf Veterans". A copy of the resolution is attached to our written testimony. The two key points regarding this resolution are that it calls for recognizing respiratory disorders and the creation of a registry for Persian Gulf veterans who seek medical treatment. Both of these recommendations became law when incorporated into "The Veterans Health Care Act of 1992".

The VFW's medical consultant, Turner Camp, M.D., was a member of the Department of Veterans Affairs Persian Gulf Expert Scientific Panel. Dr. Camp is also attending this hearing.

The nature and extent of health care concerns and problems reported by Persian Gulf veterans range from infectious diseases such as leishmaniasis from insect bites, exposure to chemical/biological agents, contaminated food or drink, chronic fatigue syndrome (CFS), and Post Traumatic Stress Disorder (PTSD). The VFW is satisfied that both Department of Defense (DoD) and Department of Veterans Affairs (DVA) have taken a completely different approach to a new generation of veterans and their illnesses and/or complaints in contrast to the position taken when Vietnam veterans complained of illnesses and diseases that were finally recognized in 1991 as being directly related to the chemical defoliant called Agent Orange.

The Persian Gulf Registry also reflects the volunteer forces' illnesses/complaints by race, age, rank, and gender. Our information comes primarily from the more than 3,970 registry examinations completed by the VA as of March 1993. The VA has also set up three special environmental medical referral centers at its hospitals in West Los Angeles, California; Houston, Texas; and Washington, DC. These special centers have admitted, through March 1993, an additional 20 veterans where unusual symptoms had not been diagnosed at other local VA medical centers. It is also a fact that at least another 72,000 Persian Gulf veterans have received some degree of VA medical care since leaving active duty. Their illnesses have ranged from flu-like symptoms, chronic fatigue, and bleeding gums to loss of hair and pulmonary disorders.

Of real concern to the VFW is the issue of veterans who may be victims of petroleum poisoning. During the war, the Naval Medical Research Institute determined that servicepersons near oil well fires were exposed to a number of health risks. Now, the Army states that it can find no definitive link between the oil fire exposure and Persian Gulf War veterans' symptoms. The VFW also knows that veterans who suffer from unusual symptoms blame not only exposure to oil well fires, but on unproven DoD vaccinations containing botulism, anthrax, and other environmental contaminants of unknown origin. Therefore, the VFW, along with AMVETS, DAV, and PVA, have concluded in our Independent Budget for Veterans Affairs (IBVA) for Fiscal Year 1994 that investigations into these unexplained disorders must continue until some satisfactory explanations are found. VA agrees with the General Accounting Office (GAO) report of 1992 which states that it is not known how exposure to the smoke from burning wells or other environmental conditions may affect veterans in the future and that, therefore, their health should continue to be monitored.

On a related issue, the VFW is satisfied with the overall efforts of the 32 Persian Gulf War Family Support Program sites in some 26 states. These centers have provided marriage and family counseling services for Persian Gulf War veterans, their spouses, and their children. Part of the Family Support Program staff still consists of 36 temporary counselors hired in FY 1991.

The VFW does have two major concerns involving health care and research. Specifically, the VFW wants to ensure a continuation of the best possible medical care for Persian Gulf veterans. One way to guarantee that this happens is to immediately integrate the information on DoD's active duty registry with the VA's registry. The serviceperson's social security number is the obvious way to accomplish this. The results will guarantee to all active duty Persian Gulf participants that reversion to veteran status will not entail extensive searches for retired medical records or prolonged waits for a current VA medical examination to determine if they have or had any medical problems related to their Persian Gulf period of service.

Finally, the VFW is concerned about the sharp reduction in FY 1994 VA dollars for medical research. The VFW feels it is essential, at a minimum, to provide the necessary funds allowing early medical research to continue in the specific fields of Multiple Chemical Sensitivities (MCS) and Chronic Fatigue Syndrome (CFS). If this course of action is pursued for FY 1994, the VA will also benefit by being able to maintain the extremely cost-effective cooperative studies they are presently involved in with DoD's greater medical community. The VFW is in no position to begin to estimate the minimum total dollar amount needed to meet our "bare bones" research requirements. However, we feel VA, if asked, can and will provide the requested information. As an aside, because most of the research personnel are already federal government employees, there will be very little payroll savings to the taxpayer. The problem is simply which government agency must request the appropriations.

This concludes the VFW's formal statement. Both Dr. Camp and I will be happy to answer any questions you, Mr. Chairman, or any of the subcommittee members may have. Thank you.

Resolution No. 640

VA PRESUMPTIVE CARE FOR PERSIAN GULF VETERANS

WHEREAS, many Armed Forces personnel who served in the Persian Gulf War contacted diseases endemic to that region such as dysentery, schistosomiasis, malaria, leishmaniaisis, Congo-Crimeanhemorrhagic fever, and others; and

WHEREAS, some diseases, due to their nature, have presented diagnostic difficulties and some have proven resistant to standard antibiotic therapy; and

WHEREAS, certain endemic diseases may, because of varying incubation periods and other factors, take months and even years to become manifest; and

WHEREAS, in addition to endemic diseases, many members of the Armed Forces may have incurred respiratory disorders, in some cases with long-term effects, as a result of inhalation of carboniferous gas caused by the oil fires set by Iraqi troops; and

WHEREAS, those individuals who contacted diseases or potential disease causing agents while performing duty in the Persian Gulf War deserve proper medical care from a "grateful nation"; now, therefore

BE IT RESOLVED, by the 93rd National Convention of the Veterans of Foreign Wars of the United States, that the Department of Veterans Affairs provide, on a presumptive basis, appropriate medical examinations and treatment, including follow-up treatment, to all veterans of the Persian Gulf War who report signs or symptoms that may be associated with diseases endemic to that war region and other conditions related to that experience; and

BE IT FURTHER RESOLVED, that the Department of Veterans Affairs maintain a registry of Persian Gulf veterans who seek such treatment to be used in case service-connected presumptions are later established.

Adopted by the 93rd National Convention of the Veterans of Foreign Wars of the United States, held in Indianapolis, Indiana, August 14-21, 1992.

Resolution No. 640

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STATEMENT OF

VIETNAM VETERANS OF AMERICA

Presented By

Gary C. Wall
New Jersey VVA State Council President
Chairman, VVA Special Committee
on Desert Storm Veterans and
their Families

Accompanied by

William F. Crandell
Legislative Assistant

Before The

House Veterans Affairs Subcommittee on
Oversight and Investigations

On

Health Care Concerns and Problems
of Desert Storm Veterans

June 9, 1993

INTRODUCTION

Mr. Chairman and members of the subcommittee, Vietnam Veterans of America (VVA) is pleased to have the opportunity to present testimony regarding the experiences of Persian Gulf War veterans. Under the circumstances, we take an opportunity to discuss a full range of issues concerning Desert Storm veterans that ultimately will bear on the claims for benefits these veterans will file in the future.

In order to establish the credibility of VVA's concern for veterans of Desert Storm, at our founding convention VVA pledged that never again shall one generation of veterans abandon another. That pledge, however, is not all that brings us here today.

Thousands of Vietnam war veterans served in Operation Desert Shield and Desert Storm. Although not as famous as their commanding general, many were Vietnam veterans who remained on active duty after the close of the war in Vietnam. Many of the young volunteer active duty military, Reservists and National Guardsman and women are children of Vietnam veterans or relatives of Vietnam veterans. The interest and involvement of VVA is both direct and heart felt. These are our brother and sister veterans as much as they are our sons, daughters and loved ones.

The terrain and the climate of the war they fought was different from our war of a quarter-century ago. So too was the support they received from the nation during the war and the welcome home they received at it's conclusion. Let the record reflect that their welcome home celebration became, in part, ours. In New York City, for example, thousands of Desert Storm veterans, after completing their march, doubled back along the parade route and entered the groups of Vietnam veterans. They stated over and over again, "If it were not for you Nam-vets, we would not have this, and we know it." We supported them during the war, and support them now.

CLAIMS FOR BENEFITS

Now more than before, is when they need our support the most. The parades are over and the pats on the back are ended. The harsh reality of being incapacitated mentally or physically has replaced the euphoria of a victorious return. The knowledge that those who sent you to war are, generally, no longer concerned with your well being is a traumatic shock. The stark realization that the Department of Veterans Affairs (VA), who the military leadership had promised would take care of your problems when you were discharged is not in the business of approving claims but disproving claims, leaves the veteran frustrated, angry and feeling betrayed by the nation he or she served. Those are the realities faced by veterans and their families, regardless of the claims of the Department of Defense (DOD) and the VA that this war produced no serious health problems. Further, these agencies state that the government is doing all it can to correct those problems that it has identified. VVA would like for that to be true and, while it may be true in some very clear cut cases, such as wounds received in battle, it is not true in the case of illness and mental disorder. It would appear that the old adage of "show me the scar and I'll believe you are disabled" holds more weight than ever before. The veteran who is missing a limb as a result of a combat wound is more readily believable than a veteran who is suffering from rectal bleeding, dramatic weight loss, hair loss (which returns with complete loss of pigment), chronic diarrhea, debilitating fatigue, muscle and joint aches and on and on ad nauseum.

It would be unfair to indicate that only Desert Storm and Shield veterans have problems filing claims with the VA. In fairness, VVA agrees that all veterans have problems filing claims with the VA. The VA seems to operate in the same mode as the

Defense Intelligence Agency working on POW/MIA issues. That mode is to disbelieve, disprove and discredit all claims, allowing only those claims that cannot beyond a shadow of a doubt be disproved to flow through the sluggish claims process. All other claims that have been denied are forced through lengthy appeal and reappeal processes. In fact, most veterans become so frustrated with the delays in the system that they finally give up. This is not because their case is not valid, but because they cannot endure the additional emotional strain and financial cost of pursuing their claims.

Desert Storm veterans face a more serious problem filing claims for benefits than most veterans. The recent practice of not providing exit physicals to discharging veterans, sponsored by the DOD, fails to alert discharging veterans of health problems they might not have previously noticed. Recent conversations with discharging Desert Storm veterans from Fort Dix, New Jersey indicate that the only medical exam they were given was an eye exam. Further, the VA, supported by DOD, is already preparing to deny claims even before they have been filed and, while it may be unintentional, at least one military medical official may have biased VA medical personnel against testing for several potential causes by his commentary in the VA's October, 1992 Persian Gulf Review. These claims that are being dismissed, almost out of hand, are claims associated with chemical exposure, parasitic exposure and radiation exposure.

PERSIAN GULF HEALTH REGISTRY

Congress deserves significant credit for the establishment in the Veterans Health Care Act of 1992 of the Persian Gulf Veterans Health Registry. This tool, listing every individual who served in the Persian Gulf theater of operations, will allow a valid and committed researcher to identify who was there and to have a data base for statistical analysis. The problem is, however, that statistical analysis can never substitute for an epidemiological study and, when combined with the Department of Veterans Affairs ten year contract with the NAS, will only provide statistical data about what has already occurred. Yet even with these tools, veterans are already being denied claims because their medical records cannot be located or their military record fails to reflect their service in the Gulf.

While the VA has published the Persian Gulf Registry requirements, it is significant to note that Reservists and National Guard personnel are not being tracked through the VA system. This information had to be obtained through a Freedom of Information Act (FOIA) request.

HEALTH CARE NEEDED

Further, while the VA has designated several facilities to handle the severely affected Gulf War Veterans, it is incumbent upon Congress to understand what happens when an individual reports to one of those facilities. As an example, I would offer Mr. Nick Kresch. Mr. Kresch has been suffering from fatigue, joint and muscle aches, rectal bleeding and plethora of other health problems. He was advised to go to the specialized facility in Los Angeles by a VA facility in Illinois. Mr. Kresch is unable to work and is without funding. Upon arrival in Los Angeles, the VA facility denied knowledge of his coming. He was kept in the emergency room for over six hours. He met with a panel in the hospital at which time he was advised that he would have to stay in the domiciliary unit. He would be responsible for the cost of his meals and for the privilege of staying, his job would be to wax and buff floors. Is this the method of specialized care that these veterans are to be treated to--to arrive without notification, to be put on a labor gang when you have reported that you are too sick to work? Mr. Kresch may have been exposed to chemicals which are causing his problems. It make no sense to assign him to duties that include exposure to dust and wax vapors.

Similarly, when Gulf veterans report to a general VA facility or to one of these designated care centers, there is at least some evidence to suggest a deliberate deemphasis of the seriousness of the symptoms reported. The medical worksheet used to track Persian Gulf veterans' medical problems is so cursory that overall examinations must be seen as only half hearted (see attached worksheet).

THE PROBLEMS ARE REAL, NOT IMAGINED

VVA does not profess to be an expert in the field of epidemiology, nor do we profess to be medical experts. What we do contend, however, is that we can tell you that the veterans and the families of the veterans who served are worried about the environmental hazards they have been exposed to and they are concerned about the health impacts, not only upon themselves, but their families. Many veterans report that their wives have been suffering miscarriages, hair loss, kidney infections and rashes complete with lesions. They are both concerned and angered by the glib answers being given. Many are tired of being told that their symptoms are caused by chronic fatigue syndrome (CFS) or PTSD. We refuse to believe that all of these symptoms are in their heads.

These veterans are afraid of their deteriorating health. They are afraid of the economic disaster that they have already encountered by paying out of pocket for diagnosis and treatment that should have been provided by the VA. They are afraid that they cannot or will not be able to work and provide an income for their family. They are afraid that, even if allowed to work, they will not be able to secure medical coverage or life insurance for themselves and their families without paying exorbitant premiums or being eliminated from reimbursement for pre-existing conditions. For those who already possess medical coverage, they are slowly depleting their lifetime maximum benefits by filing claims against their insurance that should have been covered by the VA.

These concerns are not diminished in any way by the government's reliance upon specific scientists who for years seemed to think that Agent Orange was a soft drink. General Ronald R. Blanck, now the commander of Walter Reed Army Hospital and a member of the Persian Gulf Expert Scientific Panel appointed by VA Secretary Jesse Brown (VVA was not invited to serve on this panel), has been quoted as reporting that extensive evaluation at Walter Reed Army Medical Center and certain VA hospitals by the Reserve Component medical system and thorough epidemiological investigations have failed to show any commonalty of exposure or unifying diagnosis to explain a wide range of symptoms that have shown up among veterans since the Gulf War. If that is so, than one would be asked to accept as fact that the diagnoses of CFS, Chrones Disease, Fibromyalgia and Alopecia given to many active duty personnel and veterans is simply coincidental and has nothing to do with their service in the Gulf war.

GOVERNMENT HAS BEEN PROVEN UNTRUSTWORTHY

The burden of proving that their ailments are related to exposure to chemicals, depleted uranium, sand flies (parasitic infection), modified (untested) vaccines/inoculations and possible enemy chemical and bacteriological agents must not be allowed to rest on the shoulders of the veterans and their families. Their testing and diagnosis must also not be allowed to remain within the realm of the VA, the CDC, the or the DOD. These agencies have historically shown a vested interest in the outcome of studies and the value of their research will forever be questioned by the veterans community. Some have an interest in denying responsibility while others are motivated by purely fiscal considerations and all are subject to political whims and direction.

What is necessary is a bold step, one that should have been taken long ago. Congress must act immediately to establish

entirely independent testing, diagnostic and treatment facilities throughout this nation.

INDEPENDENT TESTING, DIAGNOSIS AND TREATMENT IS NEEDED

These facilities must be connected with universities or hospitals that specialize and are on the cutting edge of diagnosis and treatment of occupational illness (specifically chemical and radiation exposure), Multiple Chemical Sensitivity, cancer research and parasitic infection (see attached article on Multiple Chemical Sensitivity in Gulf veterans). These facilities must be allowed to operate without restriction and/or interference from the DVA, DoD, or CDC. Their findings must be combined and compared and published openly, without prior review or comment by the aforementioned agencies. They must be allowed to confidentially examine, diagnose and treat not only veterans, but active duty military, National Guard and Reserve veterans of Desert Storm and Shield. They must be allowed to examine, diagnose and treat family members of veterans including children conceived after Desert Storm and who report adverse health affects. Finally, their diagnosis must be accepted without challenge by the VA.

As part of this proposal, we strongly recommend the establishment of professional teams of specialists who can travel to Kuwait and conduct medical status surveys of the indigenous population. In this way, a better picture can be ascertained of what symptoms and medical conditions are common to both our veterans and the local population.

We realize that the cost of such a project could be great. Consider, however, the cost to each individual veteran and their family if we do not undertake such a project. Consider the cost to this nation in the knowledge that our youth has been sent to war and will be abandoned upon their return simply because the cost of legitimate diagnosis and treatment is too great for this nation to bear.

Those who have already borne the cost must be compensated immediately for their outlay. The undiagnosed and untreated "Desert Storm Syndrome" has already cost them more than they should be expected to pay.

The United States government should immediately undertake negotiations with the grateful government of Kuwait and secure their financial participation to offset the cost. If these now ill veterans of the Gulf war had not fought, Kuwait would not have regained their oil fields and vast wealth. If this nation can add an energy tax to increase it's revenue to pay for other programs, we can most assuredly divert some of that tax to this program to treat those who helped preserve our low cost of energy.

Diagnosis, research and treatment cannot be our only concern, however. The inability of these affected veterans to secure gainful employment and the financial burden that has already been placed upon them are contributing to their plight. Again, while we realize that it is a bold move, we strongly urge Congress to allow a partial reopening of the military installations that have been scheduled for closure, specifically those installations equipped with hospital facilities and base housing. It is our sincere belief that equipping and modifying one of these hospitals to function as a facility for diagnosis and treatment of multiple chemical sensitivity, another for radiation exposure, etc., will reduce the cost of this program. Additionally, the housing units could be used to house the families of veterans who are involved in the program. This type of program would allow the family to exist as a unit and prevent the impending financial and emotional disasters that have already claimed many. If McDonalds can recognize the need to keep families together through the Ronald McDonald Houses, the government can surely do the same for those

who have protected this nation and served at our government's request. The question is should the men and women who defend our nation, allowing our freedoms to exist and flourish, be denied the best treatment available?

HORROR STORIES

For purposes of illustration, a few examples are in order. First we refer you to Mrs. Hester Adcock, whose son, a Desert Storm Reservist veteran, died of T. Cell Lymphoblastic Lymphoma last year. Her son was not treated by the VA, but by a civilian hospital. The cost of his treatment, financially, was over $300,000.00 and borne by his commercial insurance carrier. On his death bed, he begged his mother not to allow this issue to be forgotten or neglected. Nothing you or we can do will lessen Mrs. Adcock's loss or replace her son. Nothing we can do can lessen the pain and anger that she feels towards the abandonment of her son by all but her family. What we can do, however, is insure that no other mother of a veteran will be forced to endure the same abandonment. Mrs. Adcock is here today, we strongly urge the subcommittee to discuss this issue directly with her.

While you consider the death and treatment of Mrs. Adcock's son, keep in mind Karen May, of New York. Her husband is also a veteran of Desert Storm. His job was to transport ammunition for the Field Artillery of the 1st Cav. He was diagnosed after his discharge with Squamouscell Carcinoma of the Nasal Septum, Para Nasal Sinus and Nasal Cavity. His nose, upper jaw, the roof of his mouth and Clivas bone at the back of his face were removed. It is malignant. He has also been treated with radiation therapy and is now addicted to codeine. His family had sent a letter to the VA requesting an appointment in June. Finally, they walked into the VA in August and her husband was treated for allergies. Had it not been for the persistence of his wife, the VA would have refused further treatment. We will be more than happy to put you in contact with Mrs. May. Something must be done to alleviate the financial and emotional burden that this family has endured.

Nick Kresch also served in Desert Storm. His treatment was briefly described in this testimony. It is important to note that his treatment from the VA includes the taking of 40 to 60 milligrams of Methadone on a daily basis. On a recent admission to a VA facility in Washington, when he was finally admitted, the head of the physchiatric department, without looking for the reason of Mr. Kresch's prescription by the VA for methadone, stated, bluntly, "so, you're addicted to heroine!" Mr. Kresch and his wife are divorcing because of the terrible emotional and financial strain associated with his illness.

Frank Davis, a Navy E-5 who ran three miles a day before Desert Storm cannot run at all now. Severe stomach pains sent him on sick call. They suspected a blood disease, but could not identify it. Pains in the right side of his brain followed, then more in his bones and liver. The tests show nothing. "It's like being shot with a bullet made of ice," he says. "The wound is there, but there's no bullet." He fears the Navy will dump him and let the VA take responsibility.

Carol Picou was a nurse in Saudi Arabia. Urinary frequency and bowel trouble became uncontrollable, and she developed severe pains in her joints and muscles. Then came skin rashes, hair loss, short term memory failure, mood swings. She was sent to psychiatry. It was not psychosomatic. Tests showed at least three antibodies attacking her immune system, as well as damage to the left thalamus of her brain.

Jason Baker was a tanker exposed to depleted uranium and oil fire smoke. What the Army told him was flu lasted for a year. Then the baby his wife conceived after his return died at the age of five months, suffering extreme anemia and fluid on the brain plus a fever of 104.5 degrees. The death certificate lists no

cause and the Army fought releasing an autopsy which blames Sudden Infant Death Syndrome.

Active duty military personnel report, in anonymity, that their concerns are not being legitimately handled. So great is their fear of reprisal that their wives are taking up the fight in order to preserve their military careers. Such is the case of Mrs. Terri Small, whose husband, an active duty Desert Storm veteran, became sick on his return. He lost over 45 pounds, suffered from chronic diarrhea, total body hair loss, extreme fatigue and aching muscles and joint pain. Their daughter Alex, conceived after Desert Storm, suffered from respiratory infections and urinary tract infections. Mrs. Small has been bothered with kidney infections and a recurring rash and slight hair loss. Mrs. Small, as many of you know, has made repeated trips to Washington at her own mental and financial expense. The price that she has paid to gain attention to the plight of Desert Storm veterans and active duty Desert Storm veterans has been financial ruin and the destruction of her marriage.

Active duty military personnel and discharging veterans report that the documentation that is so desperately needed to support future claims presented in the VA is not being appropriately assembled. Congress must take on the responsibility of securing information with regard to the health, treatment and documentation of the sick active duty military personnel and their families. This must be done with protection of their confidentiality by Congress so that their voice may be heard without fear of reprisal. The failure of the military to accurately report, document, diagnose and treat their ailments will result in more veterans being "dumped" into the VA system, who will have nothing to look forward to but delayed and denied claims while they bear the burden of proof that their illness is a result of military service.

CONCLUSION

In conclusion, these items are not new to those of us who have real concern for veterans and active duty military personnel. It has been exemplified in the DoD and VA treatment of those who were involved in nuclear testing, testing of LSD and other drugs, Mustard Gas testing and exposure during WWII, Agent Orange exposure and now, the "Desert Storm Syndrome." While we are here again today on behalf of those who are sick and dying, history permits no optimism, only hope. It is apparently easier to give the Pentagon billions in unneeded funds than it is to put far fewer dollar amounts into research, diagnosis and treatment of our veterans population.

Finally, as a veteran of the Vietnam Era, a veteran activist and parent who has seen first hand the VA's method of operation and the failure of the government to act decisively to rectify, recognize, diagnose, treat and compensate illnesses associated with military service, what can you tell me that would convince me that my son should consider service in the military?

Mr. Chairman, this concludes our testimony.

Veterans Administration

MEDICAL WORKSHEET

DO NOT INCLUDE THIS DOCUMENT IN A PATIENT'S MEDICAL RECORD

PERSIAN GULF VETERANS ALLEGED EXPOSURE TO ENVIRONMENTAL CONTAMINANTS TRACKING SHEET

Name:

SSN:

Did veteran have active service in Persian Gulf Area? _____yes _____no

Was veteran (circle): Definitely exposed

Probably exposed

Not sure?

Indicate how veteran was exposed (circle): Involved in clearing contaminated area or equipment

Enveloped in smoke

In a smokey area, but not enveloped

Consumed food or drink that could have been contaminated by oil or smoke

Other

Date first reported:

Patient Means Test: Discretionary or Non-Discretionary

Physician,

Please indicate if condition for which patient is being treated could be related to exposure to environmental contaminants.

Return this form to Supervisor, Admissions & Processing

Multiple Chemical Sensitivity (MCS) and the Persian Gulf Veterans

Claudia S. Miller, M.D., M.S.

Some veterans returning from the Persian Gulf display symptoms strikingly similar to those presented by patients reporting multiple chemical sensitivities (MCS). Like an allergy (although it does not seem to involve IgE antibodies), chemical sensitivity appears to involve two steps: 1) induction or sensitization and 2) triggering. Induction or sensitization may occur following a single, acute exposure or repeated, lower level exposures to any of a wide range of petrochemicals, for example, solvents, pesticides or combustion products (pp. 59-74)*. Once sensitization has occurred, extremely low levels of the sensitizing agent or other chemicals appear to trigger a wide range of symptoms such as memory difficulties, headaches, weakness, fatigue, and mood changes. Symptoms vary greatly from individual to individual but seem to be reproducible for a single individual given a particular exposure (pp. 74-84).

Symptoms reported by 79 Persian Gulf Veterans and 50 MCS patients in separate studies include the following:

Symptom	Gulf Veterans, %	MCS Patients, %
Fatigue	70.9	78.0
Sleep disturbance	57.0	(insomnia) 44.0
Forgetfulness	54.4	74.0
Joint pain	54.4	72.0
Irritability	46.8	58.0
Difficulty concentrating	43.0	76.0
Depression	41.8	60.0
Headache	37.2	62.0
Rash	35.4	37.0
Cough	34.6	42.0
Abdominal pain	34.2	56.0
Diarrhea	32.1	44.0
Ringing or pain in ear	24.1	40.0
Fever	12.8	14.0

Other (moderate or severe) symptoms reported by at least half of the MCS patients were: loss of motivation, drive or interest; feeling groggy; dizziness or lightheadedness; muscle aches; slowed responses; problems digesting food; shortness of breath or being unable to get enough air; eye burning or irritation; feeling tense or nervous; difficulty making decisions; head fullness or pressure; feelings of unreality or spaciness; problems focusing eyes; food cravings; abdominal gas; problems with handwriting; and postnasal drainage.

*Page references refer to *Chemical Exposures: Low Levels and High Stakes* by Nicholas A. Ashford, Ph.D., J.D., and Claudia S. Miller, M.D., M.S., Van Nostrand Reinhold, New York, 1991.

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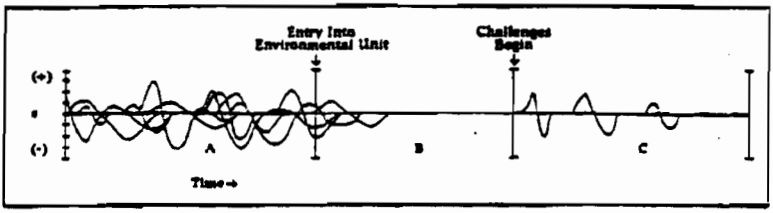
Graphical Representation of an Individual's Symptoms Before and After Entering an Environmental Unit (p. 58)



In time Period A, an individual is responding to multiple exposures (chemicals and/or foods), with stimulatory and withdrawal effects that overlap in time. At any particular time, how the person feels is determined not only by ongoing exposures, but by previous exposures whose effects may still be waning.

In time period B, the individual enters an environmental medical unit. With cessation of contributory exposures, withdrawal effects occur, for example, headache, fatigue, and muscle aching. Symptoms continue for some time (typically 4-7 days) until the individual reaches "0" baseline.

In time period C, single challenges to suspected chemicals or foods are administered. Symptoms, often robust, develop soon after challenges, allowing patient and physician to observe the relationship between exposures and symptoms for that individual.

Selected References On Chemical Sensitivity

1. AOEC (Association of Occupational and Environmental Clinics: *Advancing the Understanding of Multiple Chemical Sensitivity*. **Journal of Toxicology and Industrial Health** 8(4):1-257, 1992.

2. Ashford NA and Miller CS: **Chemical Exposures: Low Levels and High Stakes.** New York, Van Nostrand Reinhold, 1991.

3. Cullen MR (ed.): *Workers with Multiple Chemical Sensitivities*. **Occupational Medicine: State of the Art Reviews.** 2(4):655-806. Philadelphia, Hanley & Belfus Inc., 1987.

4. Hileman B: *Multiple Chemical Sensitivity*. **Chemical and Engineering News.** American Chemical Society, Washington, D.C., July 22, 1991, 26-42.

5. NRC (National Research Council): *Multiple Chemical Sensitivities*. Addendum to **Biologic Markers in Immunotoxicology.** Washington, D.C., National Academy Press, 1992.

Non Commissioned Officers Association of the United States of America

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STATEMENT OF

RICHARD C. SCHNEIDER
DIRECTOR OF STATE/VETERANS AFFAIRS

BEFORE THE

SUBCOMMITTEE ON OVERSIGHT AND INVESTIGATIONS
COMMITTEE ON VETERANS AFFAIRS
U.S. HOUSE OF REPRESENTATIVES

ON

HEALTH CARE CONCERNS OF
PERSIAN GULF WAR VETERANS

JUNE 9, 1993

MR. CHAIRMAN: I am Richard C. Schneider the National Director of State/Veterans Affairs of the Non Commissioned Officers Association of the United States of America (NCOA). My duties include the executive management of the Association's National Veteran Service Officer Program which is fully accredited by the Department of Veterans Affairs. These two roles place the NCOA at a critical junction of intervention to assist military personnel while they are in service, preparing to transition from the military, and following separation as veterans in matters pertaining to the Department of Veterans Affairs. NCOA's Veteran Service Officers provide their counsel and service to all personnel, active duty and veterans, without regard to military grade or individual membership in the Association.

The Association's membership is composed of Non Commissioned and Petty Officers of the five active duty Uniform Services, related Guard and Reserve Components, veterans, and military retirees. Additionally, junior enlisted personnel of the Uniform Services, Guard and Reserve are also eligible for Apprentice Membership in the NCOA. The NCOA is the only military association whose charter and sphere of membership includes personnel of all branches of uniform service. The NCOA is Congressionally Chartered.

The Association does not have medical doctors on staff or under contract for consultation. The comments provided below are based on observation and interviews.

BACKGROUND ASSUMPTIONS

There are problems Affecting Persian Gulf Veterans...

The nation well knows the facts of the Persian Gulf War which included the combined mix of quality people and high technology that translated in military parlance to unprecedented personnel and military readiness. The troops as a class were described as young, best educated, motivated, disciplined, healthy, trained, and best military force ever poised for action.

Environmental conditions that evolved in the theater of operations were never previously experienced on planet earth. These include but are not limited to: oil well fire smoke that turned day into night; burning of garbage containing excessive amounts of oil based products (plastics, poly substances; etc.).

Also introduced into the war environment were new munitions constructed of depleted uranium resources. A limited number of American personnel were exposed to these low level radiation munitions.

An unknown number of American Service personnel who served in the Persian Gulf War during the period declared Desert Shield/Storm are experiencing physical problems and ill health. A variety of symptoms appear to be common to a number of service personnel while some other individually unique symptoms have been reported.

A new dimension of health problems has surfaced as a result of chemical sensitivities to dramatic environmental factors and exposure to petroleum based materials. The fact that only an extremely small percentage of people's health is negatively impacted as a result of exposure to toxic fumes inhaled or absorbed through the skin implies that there are few medical experts that have either studied or managed the health care of those afflicted.

The establishment of the Persian Gulf Registry was based in part on the recognition that this nation really does not know the long term health consequences of those who served in the Persian Gulf. The Department of Veterans Affairs established special medical centers of excellence to support the health needs of Gulf personnel with illnesses of unknown type or origin. Few personnel have made it through the maze to reach these Medical Centers. Some would attribute the lack of utilization to lack of "medical problems of unknown origin" requiring such hospitalization while others would comment that every doctor being a "medical expert" is hesitant to pass patients on for care by others.

The Secretary of Veterans Affairs established a special task force to review, document and project requirements for the health care of Persian Gulf veterans to prevent another possible "Agent Orange" debacle.

HEALTH CARE

The Association recognizes that many veterans and personnel still on active duty report a variety of ailments that are attributed to service in the Persian Gulf War. Such health problems reported by active duty members at medical treatment facilities has been met with skepticism. The lack of perceived positive medical intervention and support further aggravates the member's physical well being and creates unnecessary stress.

It is apparent that the military medical community is not adequately communicating its care and concern for personnel. Failure to present acceptable diagnosis, explanations, and treatment care programs heightens patient concerns and ultimately sends a negative message to other personnel and families.

Personnel are beginning to mistrust their medical care providers. Likewise they are concerned that their quest for adequate medical care will jeopardize their military careers.

Health record documentation of alleged problems is not seen as sufficient to establish service connection of medical problems for future medical care by the VA.

Personnel indicate a perceived threat of a lump sum disability separation for health problems (inflamed joint, etc) that requires either limited duty or waiver for physical fitness testing. The military force reductions contribute to the perception that a perceived health problem will be viewed as a quality indicator for separation.

Administrative separations are also perceived as a threat in a quality environment when ill health effects personal leadership and military bearing.

Active duty personnel are also sensitive to perceived lack of health care provided by the Department of Veterans Affairs to alleged Gulf illnesses reported by veterans. Newspaper and special television investigative reporting further heightens concern for personal medical care.

RECOMMENDATIONS

1. Appointment of Civilian Health Task Force.

There needs to be a special task force established to review the medical concerns of Armed Forces personnel who served in the Persian Gulf War. Leadership of this task force should be appointed from the civilian medical sector with liaison officers from both the Department of Defense and Department of Veterans Affairs. All requested records and research support should be provided. Disclosure of information should be maintained throughout the process as well as the solicitation of information from individuals.

The conclusions of the panels should be reviewed at specified intervals to capture any long term developments of health problems identified with veterans.

Experts need to document and communicate findings for the awareness of all citizens.

2. There should be a mandatory review of Health care Records of Persian Gulf personnel being separated from the military services with a lump sum disability separation payment.

Medical entries should insure sufficient documentation, when appropriate, to establish service connection of the total health problem upon which separation is predicated.

3. Quality Health Care must be experienced by military personnel and veterans.

Both groups are influenced by the professionalism demonstrated by all care providers to patients. Patients must have confidence in the medical treatment process and belief that everything possible is being done to cure their ailment(s).

CONCLUSION

Mr. Chairman, this statement reflects that there is a perceived problem with medical health care provided to Persian Gulf Veterans. Basically stated the "troops" have experienced environmental agents in amounts and for a duration of time for which there is no comparable standard. A small but very real number of people in this group have alleged physical problems which they relate to the war environment. Their doctors, military and veteran affairs, have not been able to successfully explain, treat, or cure their problems.

This Association is grateful that you provided the opportunity to present its views on this subject. Clearly, the comments provided demonstrate that this is a subject of concern to both active duty and veteran groups. Answers are needed.

STATEMENT BY CHIEF MASTER SERGEANT BOB MILLIER, USAF, RETIRED, AIR FORCE SERGEANTS ASSOCIATION

Mister Chairman and distinguished comittee members, the Air Force Sergeants Association truly appreciates having this opportunity to present its views on behalf of our 167,000 members and all active duty, retired and veteran enlisted personnel of the Air Force, Air National Guard and Air Force Reserve. We sincerely thank each of you for your tremendous efforts on behalf of our nation's veterans. As you are all aware, thousands of our brave veterans have suffered excessively over the years from unusual or mystifying ailments. For example, the VA recently announced that it has expanded the list of recognized long-term effects of significant exposure to mustard gas. As a result, an estimated 4,000 World War II veterans who were subjected to high concentrations of mustard gas in full chamber and field testing may finally -- **after 50 years** -- be eligible for VA disability compensation for health problems resulting from their exposure as "human guinea pigs" during those experiments. Also included are veterans who were exposed in warfare during World War I. The VA is attempting to contact these WW I veterans or their survivors -- **after 70 years.**

Then, in Vietnam, we had the Agent Orange tragedy -- and to this day, over 20 years later, the casualties continue to mount from that exposure.

Now, to our dismay, it is apparent that we're experiencing a similar tragedy among Persian Gulf War veterans. Frankly, our association was not fully aware of the magnitude of the health problems associated with service during Desert Shield/Desert Storm until our recent research. Our findings are causing us great concern. We have learned that over 54,000 Persian Gulf War veterans have qualified for service-connected disability compensation and over 1,300 have died. These veterans survived the normal hazards of battle only to die from other service-related causes. How many more will suffer before we can act on this problem? It is our position that **every sick veteran deserves to be quickly diagnose and provided quality state-of-the-art treatment.** These vetera are suffering from ailments with symptoms such as fatigue, skin rash, headache, memory loss, muscle and joint pain, shortness of breath, cough,

diarrhea, suicidal tendencies and chest pain. We believe sources of these ailments include:

- Environmental manipulation -- from chemical or biological weapon sources;
- Chemical sensitivity;
- Parasitic exposure;
- Radiation from depleted uranium;
- Investigational drugs that may have been used by the U.S. government;
- Post Traumatic Stress Disorder.

Some actions have been taken over the last two years to assist affected veterans. With your help, a Persian Gulf registry was established to track their health; the VA assembled a panel of 16 experts to examine the possible health effects of service in the Persian Gulf, including chemical sensitivity, chronic fatigue syndrome and post-traumatic stress disorder; and, the VA established three referral centers to handle unusual symptoms in Persian Gulf War veterans. However, in spite of these positive steps, many victims are still not diagnosed and await adequate health care as they become gravely ill. During this hearing, witnesses will tell their personal stories about the facts surrounding the extreme suffering of loved ones who served in the Persian Gulf. I urge your positive reaction to these reports.

This is not just a veteran problem -- approximately one-third of those suffering are active duty (including Guard and Reserve). Within this group, a significantly smaller problem has been identified among Air Force members. Research needs to be conducted to determine the variations between the services. There must be a more closely coordinated effort between the Surgeons General of all the services and between DOD Health

Affairs and the Veterans Health Administration. VA and DOD health care professionals do not seem to have the expertise necessary to properly diagnose and treat these suffering veterans. Conversely, we have learned that there may be as many as 600 certified experts within the private sector that could assist if the framework, coordination and funding transfer capabilities existed. Also, these experts could train DOD/VA health care providers in the required skills and knowledge.

As we near the close of our testimony, AFSA offers the following suggestions as the committee continues to investigate and react to this critical issue on behalf of the heroes of Desert Shield/Desert Storm.

- Ensure **immediate diagnosis and treatment** for gravely il members.

- Action must be taken to **ensure military medical records ar available** to assist in the diagnostic process.

- Require **direct coordination and transfer of knowledge** ar expertise between DOD, the VA, each of the military services and certified private sector experts.

- **Establish a suicide hot line.**

- **Ensure that long-term research** continues.

- **Establish regional centers** to provide temporary housing, daily medical treatment and vocational training until the patient is well and self-sufficient. (You might consider current facilities on projected base closure sites for this purpose.)

- **Issue a general health warning** to Persian Gulf War veteran: and their family members on the variety of possible conditions that may occur, including the extent and gravity of those conditions.

• **Provide a means to Persian Gulf War veterans for co tacting and paying for services** of health care providers who are certified in this area of expertise.

• **Compile and disseminate to Persian Gulf War veterai** periodically updated summaries of advances in diagnostic and treatment techniques.

This committee's role is invaluable to the well-being of our ailing Persian Gulf War veterans. AFSA is confident that you will leave no stone unturned to overcome the problem before you today. This concludes my statement. Thank you for considering AFSA's views.

ASSOCIATION OF THE UNITED STATES ARMY

2425 WILSON BOULEVARD, ARLINGTON, VIRGINIA 22201-3385 (703) 841-4300

STATEMENT BY

COLONEL ERIK G. JOHNSON, JR., USA RET.

DIRECTOR, LEGISLATIVE AFFAIRS

ASSOCIATION OF THE UNITED STATES ARMY

BEFORE THE

SUBCOMMITTEE ON OVERSIGHT AND INVESTIGATIONS

HOUSE VETERANS' AFFAIRS COMMITTEE

U.S. HOUSE OF REPRESENTATIVES

103D CONGRESS

PERSIAN GULF WAR VETERANS HEALTH CARE ISSUES

9 JUNE 1993

Mr. Chairman and Members of the Subcommittee:

The Association of the United States Army (AUSA) is a private, non-profit, educational organization whose members -- civilian and military -- join in supporting all aspects of national security with emphasis upon the Total Army and especially upon the men and women who serve therein. It is the only professional organization supporting the Total Army -- the Active -- the Army National Guard -- the Army Reserve -- Department of the Army Civilians -- the Retired, and their family members. Our objectives are public education about the Army, professionalism within the Army, industry liaison in support of the Army and people support for those in the Army.

On behalf of our membership, AUSA appreciates this opportunity to express its views concerning the health care concerns and problems of Persian Gulf War veterans and related issues.

It has been reported that more than 15% of the 3.4 million veterans who served during the Vietnam War era may have had, or still have, symptoms of post-traumatic stress disorder (PTSD). Are we now seeing something akin to that problem today? Certainly we are witness to health problems peculiar to Persian Gulf War veterans that lack a ready explanation within the medical community. For that reason, this committee is commended for examining the nature and extent of health care concerns and problems reported during and after the Persian Gulf War.

Kudos are also in order for the fine work that has been done by the U.S. Army Medical Department and especially by Major General Ronald R. Blanck, currently the Commanding General of Walter Reed Army Medical Center. Needless to say many of us at AUSA were delighted when he was named the Commanding General of that hospital. Dr. Blanck has a reputation in the Army as a caring physician; one dedicated to his patients, his profession, and the quality of health care provided soldiers. Because of his initiative the Army has moved-out quickly to address the medical concerns of the Gulf War. AUSA believes that the Army's Medical Department is committed to providing an explanation for those unexplained health problems that have appeared among a small percentage of personnel who served in that theater of operations during the war.

We believe Congress should be prepared to provide appropriate funding for inpatient and outpatient programs that may be necessary in the future should Gulf War veterans experience more health problems. While some of the costs will have to be absorbed by the Military Health Care System for those Gulf War veterans still on active duty, those veterans have who returned to civilian careers must obviously be treated by the Department of Veterans Affairs medical system.

Treatment has already begun to combat the parasitic infection transmitted through sand flies. In some cases personnel have been separated from active duty and those former service-members are being treated through the VA or civilian health care providers. Unfortunately not all the health problems that affected those serving in the Gulf are so easily diagnosed.

It is not that there are no variables from which to develop a construct. We have veterans that show a loss of hair, respiratory ailments and rashes to name but a few of the obvious symptoms. The question to be answered is whether these unexplained disorders were caused by stress, exposure to oil fire pollutants, vaccines containing botulinum and anthrax, or other unknown environmental contaminants.

There is a definite need to continue scientific investigation that will isolate the causes so that satisfactory explanations and solutions can be applied. I know no one here who would like to see a repeat of the Agent Orange affair. The insidious nature of this health problem could be compared with the recent illness that has struck the Navajo nation in Arizona and New Mexico. Americans have a deep rooted faith and respect for the healing properties of western medicine, but the unknown presents fear and resentment during the discovery process. There is a corollary here in that regardless of what the practitioner says, until a definite solution to the problem is found there will be difficult periods of uncertainty for those who show symptoms of illness and those who may have been exposed to the same environment where the problems first originated.

In General Blanck's testimony earlier this morning he made reference to the extraordinary efforts made by the Army Medical Department to insure that all soldiers who served in the South West Asia Theater of Operations (SWA), regardless of component, underwent redeployment medical evaluation and detailed medical history... Subsequently, all clinicians at active duty Army medical treatment facilities who identify or suspect that a chronic medical or psychiatric condition related to service in SWA must report that condition to the Army Surgeon General's office. This is indeed commendable on the part of the Army.

However, neither we nor the public, I suspect, understand who if anyone has the overall responsibility for coordinating the continuing investigation into Persian Gulf War health care problems. Is anyone coordinating and tying together the collection of data from Department of Defense medical facilities, VA special environmental medicine referral centers and private civilian physicians? There are many important considerations in the tracking of symptoms because of the time lag between physical examination and manifestation of illness for discharged veterans. The committee may wish to focus on developing a reporting and management program that will follow the chain of investigation through military, VA and civilian channels.

AUSA also recommends that funding for research into Persian Gulf War medical problems should be exempt from any cuts which may be entertained because of budget shortfalls. Our active duty, reserve component and veteran populations need to be assured that they will receive high-quality care regardless of their status.

STATEMENT BY

MAJOR GENERAL ROBERT F. ENSSLIN, JR. (RET.)

EXECUTIVE DIRECTOR

of the

NATIONAL GUARD ASSOCIATION OF THE UNITED STATES

to the

OVERSIGHT AND INVESTIGATIONS SUBCOMMITTEE

of the

HOUSE COMMITTEE ON VETERANS' AFFAIRS

9 June 1993

INTRODUCTION

It is a pleasure to appear before this committee on behalf of the National Guard Association of the United States (NGAUS) and the men and women of the National Guard. The active and retired members of the National Guard are individuals who, by their service to this country, have demonstrated their commitment and patriotism.

Events over the past few years have reinforced the need for the citizen-soldier to be available in the first line of defense of this nation. During DESERT SHIELD/DESERT STORM over 74,000 Army and Air National Guard personnel were called to active duty. They represented the more than one half million men and women who during their career in the Guard have been willing to answer the call when the country needed them.

MEDICAL CARE

Immediately after Operation DESERT STORM the services began a rapid demobilization of Reserve Component units. To speed up the return of soldiers to their home station over 200 Army National guard members were released who had not completed medical treatment for injuries or illnesses that were duty related. While we understand that the reason to release these individuals was well intended, so that they might return home as soon as possible, many had difficulty receiving treatment once discharged. Upon a review of the medical problems that surfaced after the Gulf War, the Department of Defence set up a review board to examine any claims for return to active duty for individuals that could not be cared for through resources available to the National Guard or the Veterans Administration. It is our understanding that these cases have been satisfactorily resolved.

The Army Surgeon General and the Veterans Administration have a very active program in offering evaluations, counseling and assistance to any DESERT STORM veteran. I would especially like to commend the Veterans Administration for establishing a

registry program for all Southwest Asia veterans to record and monitor potential exposure to toxic agents. It is important that we let all our service members know that that the country takes care of its veterans.

Of particular concern is what is being labled as Operation DESERT STORM mystery diseases. Many soldiers have reported what they believe to be late developing complications from service in Southwest Asia. We are glad to hear that the Veterans' Administration along with the Department of the Army have developed a program to provide individuals, who feel they may have been exposed to unusual or unknown diseases or toxic conditions associated with a tour of duty in Southwest Asia, with medical evaluations to diagnose the cause of their continuing problems.

The proper medical care for all National Guard members before, during and after mobilization is a major concern of this Association. Readiness is not just training and modern equipment, but must include the fitness of the individual soldier and airman.

CONCLUSION

With the development of the Total Force Policy in the 1970's the National Guard has become an integrated part of the Total Force. As Operation DESERT SHIELD/DESERT STORM demonstrated the National Guard and Reserve no longer perform just a reinforcing role in times of conflict. In addition, the Guard is taking on more missions to support the active forces with humanitarian assistance missions, peace keeping missions and possible world wide contingencies.

Through the course of a career in the National Guard, an individual has a continuous requirement to be available within hours for mobilization and deployment, not just for major mobilizations but for any level of conflict. National Guard personnel have been involved in operations from Just Cause in

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Panama, to Operation Desert Storm, to flying relief missions in war torn Bosnia and even supply missions to republics of the former Soviet Union.

As we ask more and more of our National Guard and Reserve Component members we must assure them and their families of our committment to them. Therefore it is imperative that we continue to show each and every member that regardless of their mission or tasking they will receive proper medical care.

The DESERT SHIELD/DESERT STORM was the largest call-up in almost 50 years. As a result we learned some important lessons about mobilization requirements that can be applied to future call-ups. A review of after action reports revealed that there were problems in the area of medical readiness and medical care for members of the National Guard. We believe that the Department of Defense is well on the way toward resolving these problems.

The National Guard Association appreciates the efforts of this Committee to ensure that our veterans are properly treated and cared for. We whole heartedly support your efforts.

ORAL TESTIMONY OF
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FOR THE COMMITTEE ON VETERANS' AFFAIRS
SUBCOMMITTEE ON OVERSIGHT AND INVESTIGATIONS
WASHINGTON, D.C.

JUNE 9, 1993

My name is Claudia Miller. I am a physician, researcher, consultant to the Department of Veterans' Affairs, and assistant professor in environmental and occupational medicine in the Department of Family Practice at the University of Texas Health Science Center at San Antonio. Dr. Nicholas Ashford of the Massachusetts Institute of Technology and I co-authored a report for the New Jersey Department of Health on chemical sensitivity, and wrote a subsequent book on this subject. Recently, I served on Secretary Brown's blue ribbon panel on the Gulf Veterans' health problems.

During today's presentation, I will highlight three issues:

1. Growing numbers of physicians are becoming concerned that we may be seeing a new medical problem, one that is being called "chemical sensitivity".

2. The origin and nature of this problem is the subject of intense debate among physicians and researchers.

3. A specially-designed hospital facility, an Environmental Medical Unit, is needed in order to diagnose whether or not veterans' health complaints are the result of chemical exposures.

Physicians are seeing growing numbers of patients who report chronic and disabling symptoms following exposure to solvents, pesticides, combustion products and buildings with poor indoor air quality. These patients include industrial workers, office workers, schoolchildren, persons living near Superfund hazardous waste sites, and, most recently, Gulf War veterans. They report a wide range of symptoms that wax and wane over time in a seemingly unpredictable manner. They may see ten or more physicians, undergo costly and invasive testing, and be sent to psychiatrists as a last resort. Some patients discover that common exposures, such as perfume, fresh paint, or traffic exhaust, trigger their symptoms. Although many patients report being allergic to these substances, usual allergic mechanisms do not seem to be involved.

Some physicians believe that low level exposures could not cause such severe symptoms. But many patients disagree, and their views are supported by a growing number of professionals who suspect that extremely low levels of chemicals may cause disabling symptoms in some individuals. One hypothesis, supported by animal studies, is that exposure to certain chemicals may sensitize the limbic system--the brain region most closely connected to our environment via the olfactory nerves. The limbic system profoundly affects our emotions, it is essential for laying down new memories, and it influences hormone production and involuntary nervous system function. Thus, for example, if exposure to a solvent sensitized the limbic system, thereafter even tiny amounts of that solvent or other environmental chemicals might cause erratic signaling, disrupting not only mood and memory, but also digestive, respiratory, and other vital functions.

To illustrate sensitization, one 45 year old mechanic I saw had worked with solvents most of his life without difficulty. He had been in good health when he was deployed to the Gulf where he

continued to work as a mechanic. One day a Saudi truck drove through fogging his work area, probably with pesticides. He became dizzy, nauseated, short of breath, experienced chest tightness, and developed a rash. He was hospitalized and a suspected heart attack was ruled out. He returned to his unit, but a week later another truck came through fogging and he developed the same symptoms. He recovered and was sent back to the United States for medical reasons. Soon after his return, he was playing volleyball, when someone came by to clean a piece of exercise equipment with lacquer thinner. He experienced similar symptoms as before and again went to the hospital. He recovered and returned to his job as a mechanic, only to find that he now became ill around solvents and paints he had worked with for years. He visited a physician's office that had been newly carpeted and again became ill. He could not tolerate perfume or cleaning agents used at home.

Other veterans have not sorted out the relationship between their symptoms and exposures in such detail. But growing numbers are reporting fatigue, numbness, dizziness, headaches, and other symptoms, which they link to common chemical exposures.

Urgently needed is a clinical tool for determining whether or not chemical sensitization is at the root of these patients' problems. There is a growing consensus among experts, even the doubters, that these questions cannot be answered without an Environmental Medical Unit--a super clean hospital environment in which chemical exposures have been reduced to the lowest levels possible via specialized air filtration and the use of construction materials and furnishings that do not release chemicals into the air. There, in accordance with scientific protocols, patients can be removed from their usual home and workplace exposures to see if they improve, and if they do, be re-exposed to very low levels of common chemicals to see whether their symptoms recur.

The National Institute of Environmental Health Sciences has described this concept as the "single most important way to develop a reliable clinical approach to the diagnosis and evaluation of chemical sensitivities." The approach has also been endorsed by physicians and researchers attending two national workshops on chemical sensitivity--one sponsored by the National Academy of Sciences and the other by the Agency for Toxic Substances and Disease Registry.

Today, almost two years later, no such facility for scientific inquiry exists. Without it, there is little hope of finding a solution. Just as the invention of the microscope enabled physicians to identify bacteria and control infections, so an Environmental Medical Unit now is needed to enable us to diagnose and treat the health problems of the veterans and other Americans whose health may be at risk from environmental exposures.

Thank you.

Claudia S. Miller, M.D., M.S.
UTHSC-San Antonio

MULTIPLE CHEMICAL SENSITIVITY

Chemical sensitivity or multiple chemical sensitivity is a clinical phenomenon that is becoming more widely known and increasingly the subject of discussion and debate as more and more patients receive this label. Patients with multiple chemical sensitivity report feeling ill when they are exposed to common environmental chemicals, such as perfume, tobacco smoke, diesel exhaust, fresh paint, and new carpeting, and significant improvement when such exposures are avoided. Many of these individuals say they first became ill following an intense exposure to chemicals, for example, following a chemical spill or pesticide application. Others say they experienced repeated, daily exposure to chemicals at much lower levels and gradually became ill, for example, while working in a "tight" building.

Chemical sensitivity has been reported in several different demographic groups: (1) industrial workers; (2) occupants of tight buildings, including office workers and school children; (3) residents of communities whose air or water has been contaminated by chemicals; and (4) individuals who have had personal and unique exposures to various chemicals in domestic indoor air, pesticides, drugs or consumer products. These four groups differ greatly in terms of professional and educational attainment, age and sex, and the type and levels of chemicals to which they initially were exposed. Nevertheless, all complain of multiple symptoms involving multiple organs systems. Central nervous system symptoms such as fatigue, difficulty concentrating, depression and irritability are common. Despite the demographic differences among these groups, they all share in common an initial exposure to chemicals preceding onset of their illness. The fact that a similar pattern of illness, including cognitive difficulties, mood alterations, multi-system complaints and odor intolerances, has appeared in each of these four, demographically diverse groups helps point to the possible existence of a real problem.

Some veterans returning from the Persian Gulf display symptoms strikingly similar to those presented by patients reporting multiple chemical sensitivities (MCS). In Table 1, symptoms reported by 79 Gulf veterans and 50 chemically sensitive patients are compared. Both groups identified fatigue as a major problem. Both groups also reported sleep disturbances, forgetfulness, joint pain, irritability, difficulty concentrating, depression, headache, rash, cough, abdominal pain, diarrhea, ringing or pain in the ear, and fever.

Other (moderate or severe) symptoms reported by at least half of the MCS patients, but not included in the survey of veterans, were: loss of motivation, drive or interest; feeling groggy; dizziness or lightheadedness; muscle aches; slowed responses; problems digesting food; shortness of breath or being unable to get enough air; eye burning or irritation; feeling tense or nervous; difficulty making decisions; head fullness or pressure; feelings of unreality or spaciness; problems focusing eyes; food cravings; abdominal gas; problems with handwriting; and postnasal drainage.

Like an allergy (although it does not seem to involve IgE antibodies), chemical sensitivity appears to occur in two phases: 1) induction or sensitization and 2) triggering. Induction or sensitization may occur following a single, acute exposure or repeated, lower level exposures to any of a wide range of petrochemicals, for example, solvents, pesticides or combustion products. Once sensitization has occurred, extremely low levels of the sensitizing agent or other structurally-unrelated chemicals appear to trigger a wide range of symptoms, such as memory difficulties, headaches, weakness, fatigue, and mood changes. Symptoms vary greatly from individual to individual but seem to be reproducible for a single individual given a particular exposure.

Table 1
Symptoms Reported by 79 Persian Gulf Veterans and 50 MCS Patients

Symptom	Gulf Veterans, %[a]	MCS Patients, %[b]
Fatigue	70.9	78.0
Sleep disturbance	57.0	(insomnia) 44.0
Forgetfulness	54.4	74.0
Joint pain	54.4	72.0
Irritability	46.8	58.0
Difficulty concentrating	43.0	76.0
Depression	41.8	60.0
Headache	37.2	62.0
Rash	35.4	37.0
Cough	34.6	42.0
Abdominal pain	34.2	56.0
Diarrhea	32.1	44.0
Ringing or pain in ear	24.1	40.0
Fever	12.8	14.0

[a] DeFraites RF, Wanat ER, Norwood AE, Williams S, Cowan D, Callahan T. Investigation of a suspected outbreak of an unknown disease among veterans of Desert Shield/Storm 123rd Army Reserve Command, Fort Benjamin Harrison, Indiana, April 1992.

[b] Miller CS, Mitzel HC, Kniker WT and Jackson RB. Comparison of symptoms in individuals reporting onset of chemical sensitivities following exposure to pesticides and to building remodeling (in progress).

The Gulf veterans' health complaints resemble those of chemical sensitivity patients when these patients first became ill and before they were aware of any relationship between their symptoms and exposures. In the earliest stages of their illness, chemical sensitivity patients often report flu-like symptoms that do not seem to go away. Extreme fatigue, headaches, irritability, memory difficulties, gastrointestinal problems, joint and muscle aches, shortness of breath and other symptoms may wax and wane over time in a seemingly unpredictable manner. Later, these individuals say they learn that specific exposures are triggering their symptoms. They may not notice this until another individual or physician points this out to them. They also report that over a period of weeks and months they become unable to tolerate many common chemical exposures. Among the substances that chemical sensitivity patients frequently report as triggering their symptoms are:

Nail polish remover	Perfume
New carpeting	Cigarette smoke
Detergent aisle in grocery store	Diesel exhaust
Insecticides	Asphalt or tar
Fresh newspaper/newsprint	Restroom deodorizers
Felt-tip dry marking pen	Particle board
Poorly ventilated meeting room	Traffic exhaust
New automobile interior	Cigar smoke
Fabric store	Hairspray
Hotel room	Fresh latex paint

In addition, individuals with chemical sensitivity frequently report intolerances to various medications, alcoholic beverages, caffeine and certain foods. Many complain that a single alcoholic drink, such as one glass of red wine or a can of beer, gives them an intense headache or severe hang-over. Ultimately, food intolerances are reported by the majority of these individuals. Initially, however, they may report abdominal discomfort, bloating, diarrhea, constipation or other gastrointestinal symptoms and not attribute these symptoms to food intolerance. To determine which foods cause problems, many undertake an elimination diet, testing one food at a time.

How is chemical sensitivity diagnosed? At the present time, there are no diagnostic markers or laboratory tests for this condition, nor is there any generally accepted case definition. Some physicians feel chemical sensitivity is not a medical illness at all, but rather an inappropriate belief that symptoms are related to environmental exposures. Although there is no biological marker or accepted case definition for chemical sensitivity, the same was once true of other medical conditions, such as lupus and multiple sclerosis. There is general agreement among physicians that patients with chemical sensitivities are more likely to manifest depression than matched controls. However, it is not known whether (a) depression is the cause of their condition, (b) whether depression in these individuals is a consequence of their having a disabling medical condition or (c) whether depression is a symptom caused by exposure to chemicals. Certainly, solvent-exposed workers are at increased risk for developing depression and memory difficulties. The question is whether there are very sensitive individuals in the population who respond to extremely low levels of solvents and other chemicals with similar kinds of symptoms.

It has also been hypothesized that chemical sensitivity could involve damage to the nervous system or the immune system. No single immunologic abnormality has been identified consistently in all patients, although investigators have raised questions concerning possible T-lymphocyte alterations, e.g., altered helper/suppressor cell ratios, and low titers of autoantibodies, e.g., antimyelin, antinuclear, antiparietal cell and other autoantibodies. Sensitization of olfactory-limbic pathways in the brain is another hypothesis. The olfactory nerves provide the most direct link between the outside (chemical) environment and the brain. There is no blood-brain barrier at this site as there is for other portions of the brain. The olfactory nerves communicate directly with the limbic portion of the brain, the so-called "primitive smell brain". This brain area is essential for laying down new memories (hippocampus) and regulates mood (amygdala). In addition, it supplies much of the input to the hypothalamus, which in turn regulates autonomic nervous system and endocrine function. Temperature regulation, smooth muscle tone and appetitive behaviors are influenced by hypothalamic output. For many chemically sensitive patients, depression and memory difficulties are their most disabling symptoms, in addition to odor intolerances, symptoms which seem consistent with a limbic sensitization model.

Once these patients become ill, their sensitivities appear to spread to other common exposures. Thus, in order to diagnose this problem, it may be important for sensitized individuals to be removed both from the original exposure chemicals and from other chemicals that trigger adverse symptoms. Sorting out which exposures are perpetuating the illness may be very difficult: These are common exposures; their resultant symptoms may overlap in time; and, to some degree, individuals adapt as exposure continues. To unravel the effects of overlapping exposures and adaptation may require studying individuals isolated from their usual home and work environments. For this purpose, the use of a controlled hospital environment in which chemical exposures are reduced to the lowest levels feasible has been proposed, as illustrated in Figure 1. Physicians and researchers who participated in a National Academy of Sciences workshop on chemical sensitivity recommended this approach, assigning it their highest priority for research in this area.

Chemical sensitivity is a newly emerging clinical phenomenon. Exposure to chemicals, such as solvents or pesticides, has been reported to initiate the problem. Subsequently, low levels of other common environmental chemicals may perpetuate symptoms. What is needed now are tools for determining whether individual patients' symptoms are related to chemical exposures or occur on some other basis. Clinical evaluation of such patients involving double-blinded, placebo-controlled challenges (below olfactory threshold) performed while patients are in a clean environment may assist in determining the etiology of these patients' complaints.

Graphical Representation of an Individual's Symptoms Before and After Entering an Environmental Unit

In time Period A, an individual is responding to multiple exposures (chemicals and/or foods), with stimulatory and withdrawal effects that overlap in time. At any particular time, how the person feels is determined not only by ongoing exposures, but by previous exposures whose effects may still be waning.

In time period B, the individual enters an environmental medical unit. With cessation of contributory exposures, withdrawal effects occur, for example, headache, fatigue, and muscle aching. Symptoms continue for some time (typically 4-7 days) until the individual reaches "0" baseline.

In time period C, single challenges to suspected chemicals or foods are administered. Symptoms develop soon after challenges, allowing patient and physician to observe the relationship between exposures and symptoms for that individual.

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Health Concerns About Spray Painting of Military Vehicles in the Persian Gulf War

U.S. House of Representatives
Committee on Veterans' Affairs
Subcommittee on Oversight and Investigations
Washington, D.C. 20515

June 9, 1993

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Approximately 180 individuals from the 325th Maintenance Company, a National Guard Unit based in Lake Wales, Florida, were involved in the spray application of paint on military vehicles in Saudi Arabia from November 1990 until May 1991. Green military vehicles were painted a desert sand color; after Desert Storm these vehicles were repainted green prior to leaving Saudi Arabia. Chemical agent resistant coating (CARC) paints which contained hexamethylene diisocyanate (HDI) in addition to solvents and pigments were used.

HDI is a recognized pulmonary hazard and has been associated with asthma, bronchitis, and pneumonitis. Non-specific bronchial reactivity can occur following cessation of exposure.

In 1976 the National Institute for Occupational Safety and Health (NIOSH) published a recommended standard for diisocyanates including HDI. NIOSH recommended a time-weighted average concentration of 5 ppb and a ceiling concentration of 20 ppb. A supplied-air respirator was recommended for exposure concentrations less than or equal to 1,000 ppb. A self-contained breathing apparatus or a supplied-air respirator with an auxiliary self-contained breathing apparatus was recommended for concentrations greater than 1,000 ppb.

In 1987 the U.S. Army Environmental Hygiene Agency issued "Guidelines for Controlling Health Hazards in Painting Operations." The Army adopted the 1976 NIOSH recommended time-weighted average and ceiling occupational exposure limits for HDI. The Army required the use of supplied-air respirators in spray painting operation involving HDI unless air sampling showed exposure levels below the NIOSH recommended limits; then either chemical cartridge or supplied-air respirators were required depending on solvent or pigment exposures.

Spray painting operations were conducted in a limited number of maintenance tents with two open ends, one for the entry and one for the exit of vehicles. Initially the workers were reportedly not provided respirators. Eventually they were provided organic vapor cartidge respirators, and finally they were provided supplied-air respirators. Compressed air made up from outside ambient air was used for both respirators and for spray painting. Back blasts containing paint were encountered by workers through their supplied-air respirators when a fellow worker sharing the same compressed air source turned off his/her spray painting equipment. Also, the compressed air which supplied the respirators was made up from ambient air adjacent to the tents which was contaminated with paint. In addition to spray painting many individuals were involved in mixing paint.

Between 140 and 220 vehicles a day were painted. Personnel initially worked at least 12 hours a day in the spray painting operations. Many individuals coughed up paint. One individual estimated that 25 to 30 percent of the unit personnel experienced breathing problems and that 80 percent experienced symptoms of intoxication including dizziness, light-headedness, and headaches associated with exposure to paint solvents.

Questions have been raised about behavioral problems of National Guard uit members while in Saudi Arabia. One soldier died in a motor vehicle accident after falling asleep. Five individuals were court- martialed after burning down an observation tower: two of the five had previously sought psychiatric help, and one soldier attempted suicide. Three woman became pregnant and were returned to the United States. Many unit members reportedly have not worked since returning to Florida.

An Army unit reportedly refused to take over the spray painting operations because of the recognized hazard of the CARC paint, the inadaquate respiratory protection, and overall concerns about the health and safety. Regular drivers of military vehicles reportedly refused to drive their vehicles in and out of the maintenance tents and left these duties to the National Guard unit.

Three individuals have been evaluated at Eisenhower Army Medical Center at Fort Gordon, Georgia. A 37 year old male referred from Fort Stewart, Georgia after his return from Saudi Arabia, had new onset asthma and had experienced respiratory symptoms including coughing up blood-streaked sputum associated with the spray painting. He was placed on the Temporary Disability Retirement List (TDRL) by the Army Physical Evaluation Board in February 1992,

eight months after his return from Saudi Arabia. His breathing problems have progressed, and he is currently on multiple medications including inhaled steroids.

A 28 year old male was referred from Florida with progressive shortness of breath and features of asthma. A 52 year old male with multiple symptoms including shortness of breath, generalized fatigue, and short-term memory loss. A question of a behavior problem secondary to toxic chemical exposure was raised after psychological testing, and a neurological evaluation was negative. However, he was subsequently asked to quit his civilian job because of his multiple symptoms. Further neurological evaluation is planned.

The wives of the above three individuals believe their husbands have had definite personality changes and short-term-memory loss after returning from Saudi Arabia. These three unit members complain of increasing generalized fatigue. I am concerned about the possibility that these three individuals, in addition to respiratory symptoms, are experiencing behavioral changes and generalized fatigue that may be chronic central nervous system effects associated with solvent exposures.

Any individuals with dysfunctional behavioral changes or chronic fatigue need comprehensive evaluation including neuropsychological testing, psychiatric interviews, and neurological testing. All individuals who were in the National Guard unit in Saudi Arabia should be administered a well-designed questionnaire to assess their health status; a control group could be a National Guard unit not exposed to CARC paint. The toxicology of the constituents of the CARC paint including solvents and pigments should be reviewed. For example, the desert sand paint contained a significant amount of crystalline silica. Chest X-rays and pulmonary function tests should be reviewed.

I recommend that this research work be conducted in Florida by a non-military group with scientific and medical credentials. I also recommend a formal review of these spray painting operations which were conducted in violation of Army standards.

Presentation

to

U.S. House of Representatives Veteran's Affairs Subcommittee
on
Oversight and Investigation

Concerning

Health care concerns of
Persian Gulf War veterans

By

Charles T. Hinshaw, Jr., M.D., President
American Academy of Environmental Medicine

Wednesday, June 9, 1993

TESTIMONY BEFORE HOUSE SUBCOMMITTEE

Chairman Montgomery, panel members, ladies and gentlemen, thank you for this opportunity to address your House Veteran's Affairs Subcommittee on Oversight and Investigations, with special attention to the health care concerns and problems of the Persian War Gulf veterans.

The mysterious illness afflicting the Persian Gulf veterans is Multiple Chemical Sensitivity. I repeat---the mysterious illness afflicting the Persian Gulf veterans is Multiple Chemical Sensitivity.

To expand and clarify the diagnoses of Multiple Chemical Sensitivity, I would like to explain that Multiple Chemical Sensitivity is an illness that is induced or triggered by exposure to hydrocarbon compounds derived from petrochemicals.

I am appearing before you today as President of the American Academy of Environmental Medicine. The Academy of Environmental Medicine was founded in 1965, and currently has 575 members. The majority of these members are doctors of medicine and osteopathy. A smaller number of paramedical professionals and PhDs are also Academy members.

One of the founding members of the Academy of Environmental Medicine is Theron G. Randolph, M.D. In 1951 he first presented his work concerning the diagnosis of chemical sensitivity. The diagnosis of chemical sensitivity became slowly recognized between 1951 and 1965, and in 1965 the Academy was then formed by 15 founding members. Thus, the recognition of chemical sensitivity was first described 42 years ago, and the Academy of Environmental Medicine has been studying and teaching about chemical sensitivity for the past 28 years. One of the current and active members of our Academy is William J. Rea, M.D., Dallas, Texas. Dr. Rea will address the Committee today. He literally wrote the book on chemical sensitivity, with the first edition published in 1992.

Approximately one year from the date of the Persian Gulf War reports of a mysterious illness affecting some of the Persian Gulf veterans began to surface in the medical community. In the summer of 1992, following a description of this illness on the television program, 20/20, I was motivated, as President of the Academy of Environmental Medicine, to form a committee for the study of this illness. I was struck by the reported lack of

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documented abnormalities in the veterans, in relation to both the traditional medical testing and also in relation to reports from well qualified psychiatrists.

A six-member panel of physicians with particular interest and expertise in the field of environmentally triggered Multiple Chemical Sensitivities was formed. The Desert Storm Committee then developed a study protocol, with the objective of answering the question, either positively or negatively, "Do the Desert Storm veterans have Multiple Chemical Sensitivities which have been triggered by environmental exposures in the Persian Gulf to hydrocarbons or other environmental factors unique to the Persian Gulf War?"

The Desert Storm Protocol, as developed, is an extensive study of each Desert Storm veteran, including a detailed environmental history, physical examination, and tests for metal and chemical exposures, tests evaluating the immune response to environmental exposures, tests for routine inhalant and food allergies, and challenge tests for response to exposures to specific hydrocarbon type chemicals including petroleum derived ethanol, formaldehyde, phenol, and exhaust fumes. All participating physicians were asked to waive any fees which were not reimbursed by insurance, and all participating laboratories furnished their services at no charge or at cost. In spite of this, the total cost for testing recommended in the protocol is $725. Frankly, with the invaluable cooperation of Major Richard Haines, I expected that our goal of examining 100 exposed veterans, and hopefully 100 non-exposed veterans, would be easily reached. However, this has not proven to be the case. The report of our findings to date, which I believe to be representative and to reflect an accurate picture of the Desert Storm problems, nevertheless covers only 25 patients. The number of protocols which have been totally completed to date numbers only six.

The findings of our admittedly incomplete study are as follows. The five most common symptoms are skin rash, fatigue, joint pain, loss of short term memory and headache.

The physical findings have been remarkably sparse, those most common include involvement of the skin as the presence of either a scaly dermatitis, hives or petechiae. Additional physical findings include a decreased range of motion in the extremities, loss of strength and nasal congestion.

Positive laboratory findings include: the presence of inhalant and food allergies in five of the veterans, increased chlorinated and aromatic hydrocarbons in one veteran, positive antinuclear antibodies in one veteran, changes in the immune system in one veteran, an increased liver enzyme, suggestive of liver toxicity, in one veteran, increased colonization of the intestines by candida albicans in one veteran, and increased levels of 2-methylpentane and 3-methylpentane in two veterans.

Testing for chemical sensitivity within the physician's offices has been much more informative. Nine of the veterans showed sensitivity to petroleum ethanol, 11 showed sensitivity to formaldehyde, and six showed sensitivity to exhaust fumes. The test method used to identify these sensitivities is known as provocation/neutralization. In this test, the patient is exposed, in a single blind fashion, to a low concentration of the chemical in question. When no subjective or objective symptoms or signs occur, after exposure at three different levels of concentration, the test is considered negative. Positive symptoms and signs are recorded by the person conducting the test, and the substance is then identified to which the patient is sensitive.

The most common diagnoses in the 25 cases reported here today are first, Multiple Chemical Sensitivity, second, dermatitis, third, inhalant allergies; fourth, food allergies; fifth, intestinal candidiasis and sixth, malabsorption.

The method of treating chemical sensitivities can be varied somewhat according to the patient, the severity of illness, and the types of exposure. However, the principal method of treatment is avoidance of exposure to all types of hydrocarbons, and that has been the most common treatment prescribed by our participating physicians. Vitamin and mineral supplements are usually recommended, either orally or by intravenous route, in an effort to enhance chemical detoxication pathways in the liver, and to obtain optimum nutrition. Neutralization related to the provocation/neutralization testing has been used in the veterans. The most interesting treatment to date has been the use of Sporanox (an antifungal agent) alone, Sporanox plus Lovabid (an antibacterial agent) together, or Lovabid alone, by one of the participating physicians, Dr. Andrew Brown. Treatment with Sporanox alone has resulted in eighty, ninety, ninety-five and one hundred percent improvement in four of the veterans. One of the veterans received Sporanox and Lovabid together, and apparently has achieved a 90% recovery of his health. The veteran that received Lovabid alone reports approximately 85% return to normal. Other reported responses to treatment range from 25% to 75% improvement.

The findings which I have reported to you are preliminary, and should not be taken or viewed as the final answer to the question which we have asked. I believe that we will be able to reach numbers permitting statistical significance in our study, although I fear that our ability to examine 100 Desert Storm veterans will be difficult to reach within a reasonable time frame. The major limitation seems to be that the veterans lack personal funds to support this testing, and also that many insurance companies do not recognize the diagnosis of chemical sensitivity, and hence will not reimburse medical claims made for expenses incurred in diagnosing and treating Multiple Chemical Sensitivity.

Our current intent is to continue our efforts, assemble and analyze the data, and present the data at our annual meeting to be held in October 1993. Our findings, whether supportive of the diagnosis of Multiple Chemical Sensitivity, or whether showing no evidence of environmentally triggered illness at all, will be reported at this scientific meeting. The findings will then be made available to the rest of the scientific community and to the press.

Thank you.

STUDIES PROPOSED FOR DESERT STORM VETERANS FOR THE COMMITTEE ON VETERANS AFFAIRS

William J. Rea, M.D., F.A.C.S.
President - Environmental Health Center - Dallas

First Professorial Chair in Environmental Medicine
Robens Institute, University of Surrey, England

The Environmental Health Center - Dallas (EHC-D) is a multi specialty medical surgical clinic with several research scientists. I am not only the chief surgeon and medical director of this center, but I am also the First World Professor of Environmental Medicine at the Robens Institute, University of Surrey, England. Our clinical labs in Dallas and basic research labs in England are dedicated to studying the basic ways that toxic chemicals impede optimal health. The effects seen in the Desert Storm patients are similar to those seen in other chemically sensitive patients.

We have been interested in Desert Storm veterans before the Iraq war started. In fact, we contacted the U.S. Military six months before suggesting that military personnel might be affected by the pollution. We were basically told that they had everything under control. The Saudi government suggested we come over the day before the bombing started. We felt it was too late to institute a program at that time.

Over the last 20 years my colleagues and I at the EHC-D have seen over 20,000 chemically sensitive patients. Our treatment has been quite successful in the majority. In fact, I have written a book on our experience with 20,000 of these patients and explained the scientific and clinical basis for chemical sensitivity.

About 10 months ago we were approached by some veterans about chronic recurring problems that hadn't been solved.

One patient was a seaman, Gary Zusspan, who had been in military hospitals for several months. This man presented at the EHC-D bed ridden, unable to eat and emaciated (having lost 30 pounds) with gums bleeding, joint pain, headaches, asthma, and an extremely rapid heart. He was on an aircraft carrier in the Persian Gulf. He worked in the kitchen and was healthy for a couple of months. He suddenly developed odor sensitivity with bronchial inflammation. He went downhill from then on. His exposure history was fire smoke daily and fuel tank odors. He slept next to the master fuel tanks and was exposed to pesticide spray, odors from the kitchen and odors from the compressors which were used because the air conditioning broke down. These odors bothered him severely and he was ill the rest of the time in the service. We placed him in our environmentally controlled hospital area and gave him intravenous nutrition.

We used the protocol that the American Academy of Environmental Medicine physicians have used for years consisting of massive avoidance of toxics in air, food and water, rotary diversified diet (not eating the same food more than one time in four days), intravenous and oral nutrient replacement and supplementation, injections for his secondary sensitivities to food and biological inhalants. The patient's family built an environmentally controlled room at home and after his condition improved to where he was able to eat well and ride a bicycle at the hospital, he was transferred there. He has been slowly improving since then.

The second set of cases was that of a father and son who were both in Desert Storm. The father presented at the EHC-D unable to work, with shortness of breath, chest tightness, hoarseness, light headaches, pain and unable to stand on his toes. He was in Saudi Arabia from January 1990 to May 1990 performing duties as a mechanic. He not only was exposed to the fumes of the fires but the fumes from the motor pool. In Saudi, his tent was fogged with pesticides. Each time the fogging occurred he developed the aforementioned symptoms. He also developed symptoms when he was hooking up a trailer with the engine running for 3-5 minutes. He also used diesel fuel or Kerosene for heat in his 8X8 room and in the office of the motor pool. The motor pool office had plywood sides (formaldehyde emitter and plastic top). The patient was admitted to the military hospital for four days without a diagnosis. He came home and improved some and was then exposed to the odor of lacquer thinner and it restarted all his symptoms and he became incapacitated. This is a typical picture of the onset of chemical sensitivity. He appeared at EHC-D with the same symptoms, totally incapacitated. After a period of clearing his total load had been decreased. Challenge tests showed him to be sensitive to a myriad of toxic chemicals, especially those of fuel oil origin. He also had a neurotoxic pattern on his brain SPECT scan, autonomic nervous system dysfunction as measured by the Iriscorder and nutritional deficiency as is commonly seen in the chemically sensitive. He was treated on a system of massive toxic avoidance program, heat depuration, physical therapy in a pollutant free, especially designed heat chamber. He improved and developed a decontaminated room.

His son, a karate expert, heard about his father's imbalance and discounted it until he tried it himself and couldn't balance on his toes with his eyes closed. He came to the clinic, was also treated and is working daily.

We have had similar findings and exposure on the other six veterans.

It is our firm belief that there is a subset of Desert Storm veterans who are ill from toxic chemical exposure, that they can be diagnosed easily by using the criteria developed by the environmental medicine physicians in the American Academy of Environmental Medicine over the last 20 years, that treatment is now available and can be performed in a cost effective manner.

In our experience at the EHC-D has treated over 20,000 chemically sensitive patients. These veterans are classic cases and examples of chemical sensitivity described in my book on chemical sensitivity. These deserving men and women who sacrificed for their country deserve to be helped and not branded as psychologically crippled. The treatment is available and can be instituted immediately, and we would be willing to teach the veteran's hospitals and other physicians to diagnosis and treat these individuals, but this takes time.

PROTOCOL

The American Academy of Environmental Medicine has a protocol which we developed to analyze Desert Storm veterans and this is being used around the country. Dr. Charles Hinshaw will speak of this.

Diagnosis of the chemically sensitive in the veterans would consist of:

1. Good environmental history as well as the medical history

2. Physical exam

3. Laboratory

   A. Blood

      1. Immune profiles
      2. Anti pollutant enzymes
      3. Direct toxic chemical profiles

   B. Other tests

      1. SPECT brain scan for neurotoxicity
      2. Autoimmune nervous evaluation

   C. Challenge tests of toxics under environmentally controlled conditions

      1. Inhaled
      2. Intradermal
      3. Oral

Treatment

Most diagnosis and treatment can be performed on an outpatient basis. However, less chemically polluted rooms for testing and treatment should be used to decrease the patient's total body toxic load. Some outpatients may need to live in a less chemically contaminated room for a few weeks in order to stabilize their condition. The sicker ones should be hospitalized in a controlled environment. Both of these environments are available at the EHC-D. (We will be happy to teach the V.A. how to construct a proper unit but his takes time.) The sicker patients might be hospitalized for up to one month in the controlled environment. We would anticipate that less than 1% of the chemically sensitive veterans would need this modality. When necessary this hospitalized unit can be life saving since not only total load is reduced on a timely basis, but intravenous nutrition can be given around the clock. We have had extensive experience in using this unit over the last 19 years and have found it efficacious in the most severely ill, environmentally sensitive patient. We have treated over 2,000 extremely ill patients who were near death or totally incapacitated in such a unit. We would offer the veterans administration a contract for some of these beds until they got the veteran's system started. (It will take a minimum of one year to convert a ward at the V.A. Hospital.)

1. Avoidance - this program consists of avoidance of pollutants in air, food and water. This method can be taught to the veterans after a proper diagnosis is made. They would have to obtain:

a. less polluted room at home designed to be similar to those at EHC-D
b. less polluted food without additives and preservatives
c. less polluted water with filter by spring water in glass

2. Nutrition - this process is designed to keep the nutrient pools full so nutrients are available to fuel the detoxification systems in the body. The procedure consists of individualized supplementation program of vitamins, minerals, and amino acids.

3. Injection therapy - this modality is often but not always needed for the secondary food and biological inhalant sensitivity if it develops after chemical exposure. Once these occur, they will propagate the chemical sensitivity.

4. Heat depuration/physical therapy - many of the more severely injured will need about six weeks of intensive heat depuration, physical therapy under environmentally controlled conditions. The patient would need to be housed in specially designed outpatient housing. (This environment is available at EHC-D and can be taught and designed at veteran's facilities but again, this takes time.) Here the patient is placed in the heat chamber and allowed to sweat, then exercise and be massaged. Physical therapy is performed under environmentally controlled conditions. This procedure takes about four hours per day, six days per week. Once the patient is stabilized, he can develop a less chemically contaminated heat chamber at home. This home heat chamber is cost effective over the long hall.

5. Costs - cost analysis is difficult in today's market. However the average patient with chemical sensitivity who requires outpatient therapy can be treated from $1,000 to $10,000 per year. The more severe outpatients - about $20,000 and the severely hospitalized patient anywhere from $20,000 to $100,000 depending upon the severity. These figures are only guestimates based on our figures at the EHC-D. Most early patients need very minimal treatment and instruction on how to clean up and evaluate pollutant exposure is needed.

We think the deserving veterans need to be helped now. It will decrease costs markedly and restore them to good health.

TESTIMONY OF EDWARD S. HYMAN, M.D., F.A.C.P., BEFORE THE SUBCOMMITTEE ON OVERSIGHT AND INVESTIGATION, OF THE COMMITTEE ON VETERANS' AFFAIRS, OF THE UNITED STATES HOUSE OF REPRESENTATIVES, JUNE 9, 1993.

Thank you for inviting me here today. I am flattered to be one of the **very few full-time, solo, privately practicing physicians ever invited to bring his views on Medicine to the Congress. I am eager to help the sick veterans of Desert Storm.**

You have invited me because I have successfully treated five consecutive sick veterans of the Persian Gulf War, and the sick wife of one of them. In treating them I have had no failure. Four veterans and the wife are restored to full activity. The most recent veteran treated, and the sickest one, is considerably improved and he continues to improve, but as yet he is not restored to full activity. He must re-build the muscles he has not used in more than two years. His illness has prevented him from working for almost a year. He will probably be able to return to work. Each of them has suffered a bacterial infection. I also have good evidence that many more of the victims of the Desert Storm Illness have the same infection as the ones that I have treated, perhaps even similar germs. Thus it is possible that my findings may help a large percentage of the sick veterans and their relatives. I have divided my presentation into three parts:

1) Why and how I got involved in the Government's problem,
2) The nature of the illness that I have identified, and
3) What I propose should be done to help many more veterans.

WHY AND HOW I GOT INVOLVED

I got involved in the Desert Storm Illness because:

1) **In my private practice, I have encountered virtually every symptom and every finding so far described in that illness. Using available tools and available equipment, and using available drugs under the best principles of Pharmacology and Medicine, I had already helped more than a hundred patients in civilian life who had similar findings. I believe that I understand the illness.**

2) **I could not in good conscience sit idly by when I thought that I could help some or many of the large number of deserving veterans who had acquired a strange and progressive illness after they had honorably served our country. After all, I went into Medicine to help people.**

Following my father and my uncle, I was committed to helping the sick when I entered college at 15, when I received a bachelor's degree in chemistry, and when I was graduated from The Johns Hopkins Medical School a few weeks after my 21st birthday. (My Curriculum Vitae has been given to the Committee.) **After the best academic training I could**

get, I went into the private practice of medicine to see illnesses in the raw, to attend patients before they were worked-over, before they lost their identity and became known by the name of the disease assigned, before they were treated by guidelines instead of by doctors, and before they were sent to the so-called tertiary hospitals where I had worked. After forty years of solo practice treating multiple illnesses in the same human, I have learned that diseases by multiple names may be related, and that the way the old masters practiced Medicine is often still the best and least expensive way to care for the sick. The old masters went from the bedside to the laboratory and back to the bedside. They read widely, and they created the laboratory methods. They did not delegate the diagnosis to a laboratory technician, and certainly did not send a test to the laboratory without knowing the limitations of the test. In the Desert Storm Illness, delegation of the diagnosis to a laboratory technician has led to serious oversight.

In private practice I have continued my study of the basic sciences that have so elegantly added to Clinical Medicine since my graduation. Substituting modern "Hi-Tech" methodology for the tedious methods of the old masters, I have found that the information of the old masters was very often correct and accurate, but their methods were often too slow for a centralized "system of medicine". **Over the years, many of those tedious methods have been replaced by faster "short-cuts", "short-cuts" which have never been proved and which are known to exclude important information. Nevertheless, these "short-cuts" are in the current "Guidelines". The urine examination in the Desert Storm Illness is an excellent example.**

GETTING INVOLVED WAS NOT EASY. In August, 1992, I contacted the office of the Secretary for Veterans Affairs in Washington repeatedly and finally gave up. I was told they thought the illness was under control, and that the illness was due to mental stress. **But as a Navy Doctor, I did the discharge physical examinations on hundreds of Marines following World War II. Of those who survived the extremely stressful hand-to-hand bayonet fighting with the Japanese in Iwo-Jima, Tarawa, Saipan, Okinawa, etc., not one complained of stress giving joint pain, progressive fatigue, and the other sequellae of Desert Storm. Those young men had two things in mind, and the second one was going home.** Subsequent contact with the Secretary's Office was fruitless, and contact with the Veterans Hospital in New Orleans was equally frustrating.

I contacted the House Committee on Veterans Affairs last September and received a pack of paper telling little of the illness and something of the psychiatry and epidemiology. But, it is not easy to study epidemiology without having some marker to track, e.g., a specific chemical or germ. I got nowhere with that committee staff.

CONTACT. One evening I saw some of the Desert Storm victims on CNN news. It took me less than five minutes to reach one victim who lives in a small town in Tennessee. I sent him a urine bottle with my preservative and he returned it filled. **His urine contained the germs I sought.** However, he could not come for treatment because he had become too sick to work. Therefore he had lost his job and in turn his hospitalization insurance, and he had no way to pay for hospitalization. He gave me more names, and CNN's Brian Cabell gave me additional names. I phoned each one and I sent each two urine bottles. Each of the urines returned was positive. One victim who was about to

lose his job because of his illness, but still had his hospitalization insurance, came to New Orleans for treatment. The CNN crew knew him and came with him. They have an excellent record of his recovery, his REMISSION. He remains free of symptoms, and works full time. Mr. Lane is scheduled to tell his own story today.

Following widespread coverage by CNN News and the localized but intense coverage by the Birmingham News, my office has received hundreds of telephone calls from the United States, Canada, Israel, England, Austria, Hong Kong, New Zealand, etc. My solo practice of Medicine has been completely gridlocked. My receptionist was often in tears listening to the stories of illness, of unsuccessful treatments, and of the stress seeking help from Army, Navy, and Veterans Administration. The illness is obviously wide spread. In many instances I tried to get active duty victims "Med-Evac'ed" to the nearby Naval Air Station (NAS Belle Chasse, LA) and then brought in by helicopter, but I had no success. **In conversations lasting over an hour, I have had no success explaining the illness or the treatment to many physicians in the Army, Navy, Air Force, and Veteran's Administration. I have been amazed that even their experts were not familiar with the basic scientific work underlying their rote conclusions, and I am disappointed that after giving them exact references in the world's literature, not one has called again to discuss it or even to give a clue that they had read the work. Did they bother to read the references?**

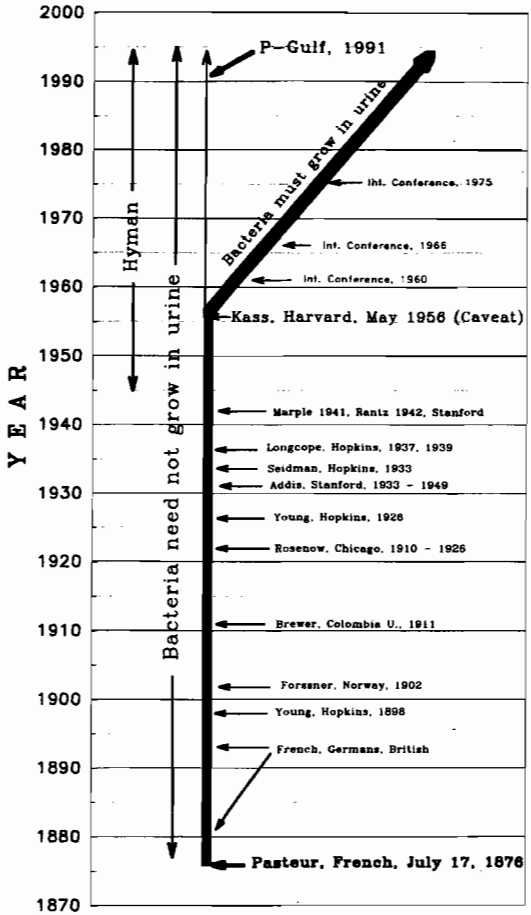
THE ILLNESS THAT I FIND

Why it goes undetected. Why it is difficult to explain to doctors.

N.B. *Although I would like to believe that the illness that I find involves almost all of the veterans of Desert Storm, I can be only be sure in the few cases that I have seen and treated. Any one may have my urine "marker" for some other reason, another illness. However, thus far, each one who has had the marker and has come to me for treatment has had a good response to treatment, and thus each of them has suffered the bacterial disease I suspected. I have evidence that this disease involves many others because I have found my marker for the disease in the urines of many others, including some with other diagnoses.*

THOUSANDS OF VICTIMS HAVE CONSULTED HUNDREDS OF DOCTORS, AND NO SPECIFIC DIAGNOSIS HAS BEEN MADE, NO "CODE NUMBER" HAS BEEN ASSIGNED, AND THERE ARE NO "GUIDELINES" TO FOLLOW. THESE DOCTORS ARE NOT DUMMIES. IF IN ALL OF THOSE PATIENT-VISITS, NO DOCTOR HAS FOUND THE ILLNESS IN THE CURRENT TEXTS OR IN THE UNFORTUNATE "CODE-BOOK", THEN IT MAY WELL BE THAT THE ILLNESS IS NOT IN THE TEXTS AND NOT IN THE "CODE-BOOK". YET IT EXISTS. THE TEXTBOOKS HAVE OVERLOOKED THE EVIDENCES, AND THE OVERSIGHT IS CANONIZED IN THE STANDARD CODE-BOOK OR "*COOK-BOOK*".

"Significant" Bacteria in Urine



LEGEND: The significance of the finding of bacteria in urine has been studied ever since Louis Pasteur very cautiously told the Academy of Sciences in Paris on July 17, 1876, that upon leaving the body, urine of a healthy person was free of bacteria "*étranger à sa nature*". From then to 1956 any bacteria found in urine were considered potentially "significant". Through the years, low counts of bacteria were noted in urine in scarlet fever, tuberculosis, typhoid, and all sorts of important systemic diseases. In the 1940's, Marple and Rantz found low counts of fastidious bacteria *(bacteria that do not grow in urine or in the current laboratory culture)* in urine to be common on the Internal Medicine wards at Stanford. In 1956, Edward Kass, a brilliant physician at Harvard, postulated that all "significant" bacteria in urine grew freely in urine and proliferated to reach high concentrations in the bladder, e.g., 100,000 per milliliter (2.6 million per ounce). This was true when the patient had florid symptoms, e.g., chills, burning on urination, etc. Kass carefully wrote a caveat; if the bacteria do not grow freely in urine, they are outside his rule. After three international conferences and thousands of concurring papers, Kass's assumption has yet to be challenged and his caveat has been forgotten. That concentration became the rule for "significant" bacteria in urine (red arrow which detours), and for a generation the older and more careful literature has no longer been taught to students or to specialists. Some of us who have not forgotten the prior better work still realize that Kass's rule fits only a small portion of "significant" bacteria in urine (green line which does not detour). The bacteria that I find in the urines of sick veterans do not grow in urine nor in the standard laboratory culture media. They are not found by the routine hospital laboratory.

The illness that I have found among Desert Storm Victims and that I have benefited is not in the CODE-BOOK. The reason follows and it is diagramed in the enclosed figure. **THE BACTERIA I FIND IN URINE SERVE AS A MARKER FOR THE DISEASE, A TICKET OF ADMISSION. THEY ARE NOT FOUND BY THE ROUTINE LABORATORY PROCEDURE.** The basic question is, when you find bacteria in urine, what is their significance? Did the bacteria come from inside the patient, or did the urine pick it up after it left the body? Or, even if they came from inside the body, are they "significant"? (See graph, page 4.) This question was first addressed by the famous Louis Pasteur who, in his address to the Academy of Science in Paris, made the cautious remark that urine upon leaving the body is free from bacteria "étranger à sa nature". *I am told that it took twenty years for French physicians to accept Pasteur's notion that bacteria could cause disease.* During the early part of the twentieth century there were numerous papers in the French, German, and British literature and then in the U.S. literature concerning the appearance of bacteria in urine in various systemic diseases, e.g, typhoid, tuberculosis, and scarlet fever. Most of these fastidious bacteria (e.g., of tuberculosis, scarlet fever) do not grow in urine. Many die in urine. Culture requirements for the **fastidious** bacteria to grow in the laboratory are given in the old literature. They require special culture media (broths or gelled broths with additives) and special conditions to survive and grow. They will not grow in the standardized laboratory media used in hospitals today to culture urine any more than Polar Bears would grow in the Amazon. The conditions are wrong.

As early as 1898, Professor Hugh Young at Johns Hopkins gave us a good way to find out whether the bacteria came from inside the bladder or came from external contamination. He passed a sterile needle through the belly wall into the bladder and withdrew the urine. This method of obtaining urine was not practical in a universal setting. In his 1926 textbook of Urology, Professor Young described the clinical manifestations associated with different kinds of bacteria found in urine. Bacilli caused florid symptoms, but cocci usually did not. His laboratory used many culture media in order to satisfy the different fastidious bacteria encountered. Many excellent studies were done in the first half of this century. In the 1940's, at Washington University, I learned to grow fastidious bacteria called Brucella when I participated in Professor W. Barry Wood's study of the then new streptomycin in human brucellosis. Dr. Wood later became chairman of Microbiology at Johns Hopkins and was co-editor of an important textbook on Microbiology. At Stanford from the 1920's until he retired in 1949, Dr. Thomas Addis led an independent, advanced school of thought on kidney disease at Stanford. He taught us how to examine urine under the microscope. His disciples described the detection of bacteria in a stained slide of urine sediment. The last "complete" survey of urine bacteria was from Stanford in 1942 by Dr. Lowell Rantz, who taught me the bacteriology of urine when I was a resident physician. Following Dr. Charles Marple at Stanford, Dr. Rantz surveyed the carefully collected urines of patients on the Internal Medicine Wards at Stanford, irrespective of the illness for which they were admitted. All sorts of bacteria were identified because he used multiple culture media that satisfied all sorts of bacteria. He found the streptococci so frequently that he even entertained the thought that they could be normal flora in the urinary tract. But, in 1942, the only anti-bacterial drugs that Rantz had were the sulfonamides, the nitrofurans, and early penicillin.

The landmark came in May of 1956 when Dr. Edward H. Kass, a very bright and innovative physician at Harvard, studying kidney infections with localizing symptoms (e.g., pain over the kidneys, bladder symptoms, etc.), made a simple assumption. (In the graph, this is the

start of the red detour line.) **In 1956, KASS POSTULATED THAT ALL "SIGNIFICANT" BACTERIA IN URINE WOULD AND DID GROW FREELY IN URINE AS A CULTURE MEDIUM.** Thus, while urine incubates in the bladder, the bacteria would proliferate to high counts. In contrast, if the bacteria were introduced by external contamination, they would not have time to proliferate to such high counts. Simple. If the bacteria divided in 20 minutes, then in 20 minutes 1 became 2, and at 1 hour the 2 became 8. At 2 hours the 8 became 64, and at 3 hours the 64 become 572, and so on. This is a simple exponential rise which can be expressed as 2^n where n is the number of times the bacteria could divide in the time allowed. **Dr. Kass wisely inserted a caveat in his paper. He said that any germ which does not grow in urine is outside his thesis.** The simple beauty of Kass's assumption won out after three international conferences and thousands of concurring publications in medical journals. Kass never stated what laboratory culture media he used, but those bacteria which multiply in urine so rapidly will grow in almost any laboratory medium. Thus the medium used in the routine laboratory became standardized and limited. **Kass's doctrine, that only those germs which rapidly proliferate in urine were "significant", has never been challenged or proved; and this doctrine negates many more extensive and more careful works done before Kass.**

In the past 35 years, Kass's assumption became gospel carved in stone, and his caveat has become forgotten. Thus a whole generation of physicians, and even those who taught them, have either forgotten the caveat or have never learned it. They have never read the prior and more careful work of earlier scientists. They do not know that they do not know. This adherence to Kass's unproved hypothesis has resulted in the dismissal of many important studies on the association of bacteria in urine with systemic illnesses, and it has led to remarkable papers concurring with the hypothesis. For example, in 1968 Angell, Relman, and Robbins published a paper entitled, "*"Active" Chronic Pyelonephritis (kidney infection) without evidence of bacterial infection"*. In other words, an established kidney infection would progress without bacteria to be found. They used Kass's criterion.

MY APPROACH: Among those who learned the bacteriology of urine before 1956, a few of us were never convinced that Kass had solved the whole problem. I remember the remarks of Professor Longcope at Johns Hopkins, my learning experience under Professor Wood, my conversations with Professor Lowell Rantz at Stanford, and what I learned about examining urine under the microscope from disciples of Professor Addis at Stanford. In 1958, in private practice, I attended a woman who was flown home to New Orleans from a famous institution for terminal care. Her urine was negative by the standard culture based on Kass's hypothesis. I found germs by microscopy, I grew the germs by the old-fashioned methods, I gave her antibiotics, and she was up again.

After that case I began to modify the ancient art of examining urine by introducing the technology I was learning in my work in Biophysics, and with the help of other Biophysicists, Biochemists, Physicists, Mathematicians, etc. I could identify bacteria in 90 minutes that would sometimes take the old masters 2 weeks to identify. Moreover, I could identify dead ones that would never grow (dead ones were once alive and alive inside the body). Many years ago I standardized the method and it is now published in a reputable journal.

I have now used this method for twenty five years, I have observed the clinical relevance of the bacteria found, and I have gained considerable experience. The clinical results have

been most rewarding. **I have had three advantages on those who taught me. First, I had the benefit of their teachings, or as Sir Isaac Newton said, "If I have seen further, it is by standing upon the shoulders of giants". Second, I had developed a technology that gave an answer in about 90 minutes instead of two weeks. This allowed me to feed-back laboratory information to the patient care in a timely manner. Third, I had antibiotics which they did not have. Now I have added 35 years of carefully gained clinical experience. Thus far none of my patients has had a significant adverse effect.**

TREATMENT: If a hunter fires his rifle at a bird flying over and the bird falls, then he has reason to believe that he hit the bird. If instead the bird flies on, he probably missed. He may try again. I give an antibiotic and observe the bacteria in the urine by my method. If the antibiotic, or combination of antibiotics, has been less than effective in suppressing the germ as seen under the microscope, I can increase the dosage, add another antibiotic, or change the antibiotic. If elimination of bacteria by an agent that only affects bacteria results in a cure of the concurrent illness, then the bacteria (or some other bacteria) were probably "significant". This is not new. Dr. Paul Ehrlich used this approach to treat a bacterial infection known as syphilis. He saw the germ under the microscope, he gave his antibacterial agent (which he synthesized himself), and the germ disappeared. He called his treatment "*Chemotherapy*". Dr. Ehrlich won the Nobel Prize in 1908. This method has been in use ever since. Thus the method I use is in the ancient bedrock of Medicine. I have simply applied a standard method referenced to the bacteria found in urine. Unfortunately, this disease does not go away in a few days as a theoretical streptococcal sore throat is supposed to do under penicillin. The chronicity is reminiscent of the chronicity of syphilis, tuberculosis, or subacute bacterial endocarditis.

The antibiotics that I use are also not new. They have been sold in pharmacies for ten or more years. The microscopic method is very useful.

With this approach, I have treated well over a hundred patients in a well established hospital in New Orleans. I have not had a single significant adverse effect. Yet, after well over a hundred of such patients, I still feel obliged to follow each patient carefully. The work is tedious. I have worked long hours, nights, and weekends monitoring these patients. I do not believe that a rigid treatment protocol can be written at this time.

PUBLICATIONS

1. My method of urinalysis has been in the scientific literature for more than a year. That method is the key to rapidly finding the bacteria quickly enough to take the information back to the bedside.

2. The above detour of 1956 and the misinterpretation of Dr. Kass's thesis (caveat) is very much the crux of the teaching that has derailed thinking pertinent to the illness that I find. Unfortunately, that mistake is cut-in-stone. Last year I integrated all of the parameters responsible for the quantitation of bacteria in the urine, and I showed without doubt that the currently taught criteria for "significant" bacteria in urine accounted for only a small portion of the clinical problem. Recently my paper was accepted for a well known international journal.

The comments of the Editor's "Peer Reviewer" were most generous. Clearly he agrees with what I have said, and his comments are pertinent to today's subject, as follows:

"There is no relationship between what Ed Kass studied and reported 35 years ago and the present day interpretation of his work. Sadly, the interpretation of the meaning of bacteria in urine, as currently occurs at the bedside, has no relation to the evidence. Mistakes are made daily - and sometimes with dire consequences for the patient.

A hurrah for Dr. Hyman. How refreshing is his approach! How simple! and how sensible! It deserves a wide audience, and should be available on the wards for the enlightenment of students and house staff (and those who teach them)."

WHAT I PROPOSE TO BE DONE

Thus far I have successfully treated five veterans and one wife. I have had no failure. All but one of these servicemen have come from one Navy unit. The sampling is tiny. A larger sampling is mandatory. Following the hundreds of phone calls, I examined urines from a wide sampling of sick veterans, some active duty military persons, and a significant number of civilians with a similar set of symptoms. I have hospitalized several of the civilians who have insurance. The success continues. The veterans, the active military, and the civilians are eager to come to New Orleans. The problem with the sick Desert Storm Veterans is that many have lost their jobs because of the illness, and few have hospitalization. It is painful to hear their plight on the telephone. I believe that the Government should offer support to try to help them.

The approach should take two or more steps.

1. A LARGER SAMPLING. Clearly there is a need to determine whether the studies I have done are relevant to a much larger segment of the Desert Storm victims. I propose that the Federal Government finance the study and treatment of 15 to 20 more victims. They should be studied with a full, undiluted effort, leaving no stone unturned. If the treatment fails, then it would be the approach that failed, and not some factor diluting the effort. Clearly the best arrangement would be to put them where I am already set-up, where I can continue to go from bedside to laboratory in my office and back. They should be hospitalized where the nursing service and the other hospital personnel are familiar with the large number of patients that I have treated. Thus far I have taken each history, done each physical examination, examined each urine, written each admission note and each discharge note, and taken all night calls. With the added patients I would like to have help from doctors familiar with my work, and one in particular who has repeated some of it in New York. My approach should be continued if, and only if, the treatment will put a significant number of the patients in this open study into remission. I would aim for an unrealistic 100%.

   The length of follow-up should be several months at least. A flexible protocol should be set up.

2. IF AND ONLY IF STEP 1 IS SUCCESSFUL, the use of the treatment should be widened. If unsuccessful, then there is nothing to be gained by such an effort. To spread the methodology, it would be necessary to teach a clone of doctors what I have learned

over the past thirty five years. This cannot be done by didactic lectures. **They must first un-learn what they may have been taught is gospel, and then they must gain some experience.** This is not easy. One learned physician from the East has come here more than once and has entered this subject over a period of years. He is in academia, and I would like to bring him into the effort early-on. However, there is ample time to consider how to disseminate the know-how. It may take several steps.

3. I would like to study the illness further. Why did a cluster of servicemen come down with what could be a single set of symptoms and findings? What is the nature of the germ that would cause this? How did it spread? I have preserved some specimens of the bacteria for such a study, and more are easy to get. I have reviewed the literature on such germs.

In conclusion, five considerations are outstanding:

1. It is your problem and not mine. I simply offer help for veterans. I, myself, am a veteran of the Navy Medical Corps. I understand.

2. I will continue whether or not the Federal Government will help. This whole subject is but a branch of the work I have done. Three more sick veterans are coming to New Orleans for treatment when I get back. There will be more. The government could accelerate this.

3. From my own clinical experience, the illness will not go away. Instead, in many cases it will progress with increasing permanent damage. The longer it goes on the harder it is to eliminate. **I have heard that some veterans have died, perhaps of this illness.**

4. Medicine is a beautiful science. Unlike a religion, "truths" in science are not carved in stone and carried down a mountain. Instead any of today's "truths" in Medicine is up for revision at any time better data or evidence is obtained. It is painful for me to see the beautiful science reduced to a retail chain; to see yesterday's "truths" in Medicine canned in a "Code Book", resistant to change, and enforced by a remote, hidden, and uninformed clerk; and to see Doctors of Medicine reduced to retail salespersons. **Medical care has and will progressively suffer, and the cost will inevitably continue to rise inordinately.**

5. I consider myself a conscientious, independent, Doctor of Medicine. Doctors like me cannot function under the less efficient "systems of health-care" already in effect, and getting more constricting. The Vice President (himself an environmentalist) has been quoted as saying that the solo privately practicing physician will become extinct.

Thus, I hereby ask for Federal protection under the Endangered Species Act.

Acknowledgment: The country owes a debt of gratitude to Mr. Brian Cabell of CNN News and to Mr. Dave Parks of the Birmingham News for their exercise of journalism in the National interest in their respective media.

Statement of Victor Gordan, M.D., Pulmonary Specialist at the VA Medical Center, Manchester, New Hampshire, before the Committee on Veterans Affairs, June 9, 1993, Washington, DC.

I have interviewed and evaluated 87 Persian Gulf veterans between November 91 and June 93. Ten of these were telephone calls from other states: Texas, Arizona, Illinois, South Carolina, Tennessee, Maine, and Massachusetts. Five were telephone calls from New Hampshire. Seventy-eight veterans present symptoms considered to be possibly related to Persian Gulf exposure to chemical elements. The majority of these veterans are from New Hampshire and Massachusetts. The veterans from other states are self referrals. The health problems of these veterans present considerable personal, social and family life implications.

After spending hours listening to the veterans, their parents, and spouses, I can outline some of their concerns. They feel that the army and the VA do not show understanding for their sufferings. I have heard stories about misunderstanding of their medical problems by some of the VA physicians. In my opinion this misunderstanding, if there was one, stems from lack of knowledge of these physicians regarding the nature and the cause of these symptoms. Most of these veterans under my care have a job. However, there is a significant number who do not have a job or had job(s) and were not able to hold these jobs because of the severity of their symptoms. The persistent questions they ask regard the cause(s) of their illnesses and the availability of a treatment. The veterans are also concerned for their future in terms of quality and span of their lives, their ability to function in society, to hold a job, to have and support a family. The veterans' frustrations stem from lack of satisfactory answers to their medical problems, lack of efficient treatment and from being denied VA benefits when they file claims.

Only one veteran might have post traumatic stress disorder (PTSD). Most of them fell very strongly that their illnesses are not psychiatric in nature.

I will now elaborate on the medical spectrum of these so-called unexplained or mysterious illnesses. After interviewing and evaluating these veterans, I noticed that the pattern of the symptoms found in one individual is seen in the rest of the individuals. The difference between individuals is only the degree of the severity of these symptoms. The similarity and even identity in symptoms features is invariably correlated with the consistent history of exposure to chemical elements in the Persian Gulf area. Taking the medical history of these veterans, I found that their health status before deployment to the Persian Gulf is rated by them from very good to perfect.

The similarity of the symptoms, the history of exposure to chemicals and their previous health status make a strong circumstantial evidence for multichemical sensitivities condition they acquired in Persian Gulf environment.

In this situation the multichemical sensitivities emerge as the possible cause of veterans' illnesses.

The treatment which I currently offer consists of medication for alleviation of their symptoms, i.e. asthma, headaches, diarrhea, joint pain, etc. The result of this treatment is very discouraging

because the symptoms either do not respond to treatment or, if they do, the recurrence is seen with regularity. If one accepts that their illnesses were caused by exposure to chemicals (and I believe so) then the right treatment would be chemical detoxification. To my knowledge this specific treatment is not offered by the VA except at the Northampton VA in Massachusetts. The American Academy of Environmental Medicine presents a treatment protocol as well as specific laboratory tests panel. I think we should start referring our veterans, particularly those with severe symptoms, to the environmental specialists for necessary evaluation and treatment.

The VA should recognize the multichemical sensitivities syndrome as a codifiable medical diagnosis so that veterans who apply for compensation will be awarded benefits. I have few Persian Gulf veterans under my care whose symptoms raise the possibility of radiation from depleted uranium (D.U.) materials. The VA should set up centers where the veterans will have easy access for evaluation and follow up. It is necessary for the VA to improve the education of health care providers on Persian Gulf veterans' health issues. This will result in better relationships between these veterans and the VA medical staff.

The need for scientific research on Persian Gulf veterans' health problems is long overdue. This research will solve the ongoing dispute on chemical sensitivities as a cause of these unexplained symptoms.

A number of research projects were conducted by the Department of Defense and by the Department of Defense in conjunction with the Department of Veterans Affairs. To my understanding the conclusion from this research shows no connection between veterans' illnesses and Persian Gulf environmental elements.

I am wondering if the methodology, the results and the conclusions of this research were subjected to a peer review process before being published.

I would like to conclude my testimony with statements which reflect my personal view on Persian Gulf veterans' illnesses.

I believe these symptoms are not caused by Post Traumatic Stress Disorders (PTSD) in the majority of cases. These symptoms are caused by something else which we have to discover. Multichemical sensitivities might be very likely cause.

The medical stories of these veterans break my heart if I have one, make me cry if I have a soul, and open my mind if I want to listen.

Thank you.

RECORD VERSION

STATEMENT BY

MAJOR GENERAL RONALD R. BLANCK

COMMANDING GENERAL

WALTER REED ARMY MEDICAL CENTER

BEFORE THE

SUBCOMMITTEE ON OVERSIGHT AND INVESTIGATIONS

COMMITTEE ON VETERANS' AFFAIRS

HOUSE OF REPRESENTATIVES

FIRST SESSION, 103RD CONGRESS

HEALTH CARE CONCERNS AND PROBLEMS OF

PERSIAN GULF WAR VETERANS

09 JUNE 1993

NOT FOR PUBLICATION UNTIL

RELEASED BY THE HOUSE

VETERANS' AFFAIRS COMMITTEE

MAJOR GENERAL RONALD R. BLANCK
U.S. Army Medical Corps

Major General Ronald R. Blanck was born on 8 October 1941 and raised in Ephrata, Pennsylvania. He was awarded a Bachelor of Science in 1963 from Juniata College and his Doctor of Osteopathy from the Philadelphia College of Osteopathic Medicine in 1967.

General Blanck entered the Army in 1968 and was initially assigned as a general medical officer, U.S. Army Vietnam. Following an assignment as a general medical officer at Fort Myer, General Blanck completed a residency in Internal Medicine at Walter Reed Army Medical Center in 1973, and is board certified in Internal Medicine. He then served as Assistant Chief of the General Medicine Service and the Assistant Chief, Department of Medicine at Walter Reed. Later assignments included Assistant Dean for Student Affairs, Uniformed Services University School of Medicine, Chief Department of Medicine, Brooke Army Medical Center, Fort Sam Houston, Texas, and Chief, Medical Corps Career Activities Office, U.S. Army Medical Department Personnel Support Activity. General Blanck served as Commander, U.S. Army Medical Department Activity, Berlin and as Commander, Frankfurt Army Regional Medical Center, Frankfurt, Germany. Most recently he served as the Director of Professional Services and Chief, Medical Corps Affairs, Office of The Surgeon General, Falls Church, Virginia. He is presently the Commander of Walter Reed Army Medical Center, Washington, D.C.

General Blanck is a graduate of the Army War College where he also served as class president. He is a Fellow of the American College of Physicians, and an active member of the Association of Military Surgeons of the United States, the American Osteopathic Association, the American Medical Association, the Berlin International Medical Society, and the American College of Physician Executives. General Blanck has held many academic positions throughout his career to include Assistant Professor of Medicine (clinical), Georgetown University, Associate Professor of Medicine, Uniformed Services University School of Medicine and Clinical Professor of Medicine, University of Texas at San Antonio. General Blanck has published many scientific articles. His military awards include the Defense Superior Service Medal, the Legion of Merit, the Bronze Star, and the Meritorious Service and Army Commendation Medals. He and his wife Donna have two children, Jennifer and Susan.

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Mr. Chairman and members of the Committee, I am Major General Ronald R. Blanck, Commanding General of Walter Reed Army Medical Center. You might remember that during the Persian Gulf War I was the Director of Professional Services within the U.S. Army Surgeon General's Office and, in that capacity, I testified before the Committee on Veterans' Affairs Subcommittee on Hospitals and Health Care in September of 1992 when they were reviewing the "Health of Service Members and Former Service Members Who Served in the Persian Gulf War." In that capacity, and now in fulfilling my responsibilities at Walter Reed, I have been actively involved in many of the soldier-health issues which I believe you wish to discuss and I look forward to sharing with you my, and the Army Medical Department's, best professional evaluation of these issues.

I can summarize my previous testimony by saying that the Army's response to health issues prior to, during, and after the Persian Gulf War was and continues to be aggressive, open and proactive. Endemic diseases and environmental stresses were anticipated, considered and countered before, during and after deployment to Southwest Asia. Soldiers medical records were reviewed to ensure that they had current immunizations against polio, typhoid, diptheria-tetanus, influenza and meningococcal meningitis. In addition, soldiers were given immune serum globulin to protect them against infectious hepatitis and some soldiers were given chloroquine chemoprophylaxis to protect against malaria. Preventive medicine guidance was published for soldiers in pocket-size booklet form, "The Threat of Disease and

Non-Battle Injury to U.S. Military Personnel on Operation Desert Shield" and widely distributed in order to minimize disease and non-battle injury (DNBI). A second book, "Diagnosis and Treatment of Diseases of Tactical Importance to U.S. CENTCOM Forces," was distributed to assist medical personnel in the early diagnosis and treatment of the diseases found in Southwest Asia (SWA). Proof of the effectiveness of the Army Medical Department's efforts was the remarkably low incidence of DNBI exhibited by our deployed forces. The DNBI rate for Operations Desert Storm and Desert Shield was less than one-half the rate of the Vietnam Conflict, about one-quarter the rate during World War II, and one-fifth the rate of World War I. Four leading causes of hospital admissions in theater included non-battle trauma, heat injury, diarrhea, and respiratory problems; the U.S. Navy and U.S. Air Force DNBI rates were similarly low. There were 31 cases of leishmaniasis, 7 of malaria, 2 of meningococcal disease (including one death) and 1 case of Q fever. No cases of sandfly fever, hepatitis A, schistosomiasis, plague, rabies, brucellosis, toxoplasmosis, trachoma, or anthrax were diagnosed. The low DNBI rate and the few cases of tropical diseases indicate the high degree of command emphasis on preventive measures and the success of preventive medicine programs.

With that introduction, let me address some of the specific health issues which have been raised relative to the service of our soldiers in the Persian Gulf theater. While deployed and preparing for battle, military intelligence reports indicated

there was a real probability that Iraqi forces would employ biological and chemical weapons; in response to that threat, anthrax vaccine and a botulinum vaccine were administered. The anthrax vaccine, which is licensed by the Food and Drug Administration (FDA), was given to approximately 150,000 individuals. The botulinum toxoid vaccine, which is not FDA-licensed but its use as an investigational new drug (IND) is allowed by the FDA and has been used safely for over 25 years, was given to approximately 8,000 individuals. Both may cause minor local or systemic side effects, but no long-term adverse health effects have been documented. A nerve agent pretreatment, pyridostigmine bromide (PB) was also administered. Pyridostigmine bromide has been licensed in the U.S. (as Mestinon and Regonol) since 1955 for treatment of myasthenia gravis. It can be used prophylactically as a nerve agent pretreatment and was used by tens of thousands of soldiers during the Gulf War. Both the Botulinum Toxoid vaccine and the PB pretreatment are considered IND products by the FDA; both are well known, have an outstanding safety record and have been in use for many years. Some acceptable side-effects can be expected in a small percentage of those who are administered any treatment, but the price of a minimal potential for minor side-effects was easily worth being prepared for exposure to deadly biological and chemical warfare agents. The side-effects that did develop in a small number of soldiers were transient and we are confident that no long-term adverse side effects will develop from having been administered the vaccines and nerve

agent pretreatment.

In the wake of the war, we recognized that there were some health issues which merited special study -- two specific issues were (1) the exposure of our soldiers to the smoke generated by the Kuwaiti Oil Fires and (2) the atypical exposures of a small number of soldiers to Depleted Uranium dust and fragments.

There was concern, initially, that there could be some adverse health effects demonstrated among our soldiers who were exposed to the smoke generated by the Kuwaiti Oil Fires. Reports from the U.S., French, Norwegian and Kuwaiti Environmental Protection Agencies did not find significant quantities of pollutants that would cause acute or chronic health effects, except for particulates, which are naturally high in the region. The groups, however, indicated that there was some uncertainty associated with their conclusion, relative to long-term health effects, because of insufficient data. For that reason and at the request of DoD, the Army Surgeon General's Office tasked the U.S. Army Environmental Hygiene Agency (USAEHA) to conduct an assessment of the long-term risk of adverse health effects sustained by U.S. troops. The project consisted of three main areas: an environmental monitoring effort (with subsequent health risk assessment), an industrial hygiene sampling study, and a biologic surveillance initiative. Upon their completion, and scientific review, the three studies will be integrated to obtain a complete picture of the environmental situation in the Persian Gulf region and the resultant health consequences to DoD personnel. The Interim

Report, "Kuwait Oil Fire Health Risk Assessment," which has been peer reviewed by the U.S. EPA, the U.S. Public Health Service, and other agencies, concludes that the total predicted excess cancer risk is below the U.S. EPA's range of concern. The total predicted non-cancer risk, however, did exceed the U.S. EPA's range of concern slightly, but was comparable to the non-cancer risk predicted for persons living in Saudi Arabia and not exposed to significant levels of Kuwaiti Oil Fire smoke.

Another project which will assist in answering soldier-health questions related to the Kuwaiti Oil Fires is the project initiated in response to Public Law 102-190 in which the DoD was tasked with creating and maintaining a Registry of the names of individuals who served in the Persian Gulf region; additionally, the DoD was tasked with developing an air pollutant exposure model. The purpose of the two efforts is to be able to determine individual exposures to the smoke from the burning oil wells and the health consequences of the estimated exposures. The U.S. Army and Joint Services Environmental Support Group (ESG) Desert Storm Task Force is responsible for creating and maintaining two data bases: (1) a personnel data base identifying each military member who served in the Persian Gulf and (2) a combat unit location data base identifying and tracking the daily locations of all U.S. Armed Forces units that served in the Desert Storm Theater of Operation. The ESG Desert Storm Task force now has ten of the fifteen civilian personnel required for this project on board. Computers and software for the computers have been delivered and are ready for use.

Personnel are currently being trained on the computers, the methodology to be used, military records and map reading. The personnel data base to be used in the project was created by the Defense Manpower Data Center (DMDC) located in Monterey, California. The DMDC data base contains approximately 650,000 names of service members who served in the Persian Gulf. The ESG Desert Storm Task Force is expected to start initial unit tracking operations in late June or early July 1993. ESG is expected to complete the collection and tracking of unit location information by June 1995.

The second specific health issue is related to atypical exposures to depleted uranium dusts or particles, and fragments. (Typical exposures are received in the normal course of transporting, loading and firing depleted uranium penetrator munitions.) Depleted uranium dusts and particulates can be created when a depleted uranium penetrator strikes a hard target (for example, the armor of an Abrams Battle Tank), or burns in a fire; these dusts can then be either inhaled or ingested. Twenty-seven soldiers of the 144th Supply and Services Company, Army National Guard were identified as having the greatest potential for inhaling or ingesting depleted uranium dusts (they were preparing damaged battlefield vehicles for retrograde). Half of those soldiers have undergone medical evaluation at the Boston VA Medical Center and the results of those examinations have shown no effects of uranium toxicity and no uranium residues or byproducts were detected. Later this year, fresh samples from the entire group will be analyzed at the U.S. Army

Environmental Hygiene Agency, using an even more sensitive technique. Another atypical exposure to depleted uranium resulted for a possible 36 soldiers who were aboard battlefield vehicles when the vehicles were struck by U.S.-fired depleted uranium penetrators. Twenty-two of the 36 suffered fragmentation injuries; some of the fragments remain imbedded in the tissues of the soldiers; and some of the fragments could be depleted uranium. Careful analysis of these atypical exposures to depleted uranium suggest there will be no significant increase in risk to health, either in the short or long-term. In the case of those soldiers who are identified as retaining depleted uranium fragments, however, we have decided that it will be prudent to conduct annual medical evaluations for a period of at least five years. By conducting these annual medical evaluations, we expect to accomplish two valuable objectives: (1) we will gain additional information which might be useful in the management of similar injuries in future conflicts, and (2) we will provide some degree of peace-of-mind to the soldiers who are undergoing the medical evaluations.

In addition to the previously discussed, relatively well-studied, well-understood issues, I am concerned about the increasing number of soldiers with vague and nonspecific symptoms, the etiology of which has so far defied identification. The symptoms suffered by these soldiers have included malaise/fatigue, muscle/joint pain, intermittent fever, intermittent diarrhea, abdominal pain, thick saliva, thinning/loss of hair, weight loss, skin rash, and bleeding

gums. The Office of The Surgeon General sent an Epidemiological Consultant Service team (EPICON team) to assist the 123rd ARCOM Surgeon in evaluating over 100 individuals in Indiana with multiple symptoms. An extensive investigation was conducted by the EPICON team. A total of 79 soldiers reported for medical evaluation and completion of questionnaires. Other soldiers were evaluated by private physicians and physicians at area military and Department of Veterans Affairs medical treatment facilities. No objective evidence to suggest an outbreak of any specific disease. The documentable medical and dental problems and illnesses found in that group were typical of what would be expected in the general population. Musculoskeletal injuries and their sequelae were the most important medical problems experienced by the group. Stress associated with post-deployment adjustment to civilian life was a plausible etiology for some of the symptoms reported, especially sleep disturbances, depression, forgetfulness and cognitive difficulties. In general, these symptoms were worrisome, but not debilitating. Chronic or persistent diarrhea may have been associated with the deployment, although no specific etiologic agent was identified in most cases. No common source of exposure to infectious disease, microwave radiation, petrochemicals, environmental hazards, or toxic materials was identified. Many of these and other soldiers have responded well to the medical management of their specific symptoms; but, traditional medical treatment has been unsuccessful in eliminating the health problems of a few. Post-traumatic stress

disorder, or PTSD, is also being investigated. The Conference Report on the FY92 Defense Appropriations Act directed the Department of Defense to study the effects of the Gulf War on active duty, guard, and reserve personnel and their families who are located in Greensburg, Pennsylvania, and in the State of Hawaii. This is to determine specifically if personnel are showing signs of significant psychological distress brought on by abrupt changes in their lives. The Walter Reed Army Institute of Research (WRAIR) has already completed a similar study on Army active duty, guard, and reserve personnel and their families during the pre-deployment, and post-deployment phases of the Gulf War. DoD asked WRAIR to perform its survey on this focused population to determine what its mental health needs may be as a result of the war. WRAIR will use the data base from the former study which is derived from a larger population to assess this particular population's needs. Between March and May 1993, WRAIR surveyed units and individuals in Hawaii and Pennsylvania. Also the Department of Veterans Affairs will collect additional data on ODS/DS veterans using local DVA facilities in the target area. The final report of the study will be completed by November 1993.

All who served in the Persian Gulf War are being provided the very best medical care we can offer. Those who currently remain on Active Duty receive their medical care within our Active Duty Medical Treatment Facilities; those who are Reservists typically would be supported by Veterans Affairs (VA) Hospitals but can also access care in an Active Duty MTF; those

who are neither Active Duty nor Reservist can receive their care from the VA. By Department of the Army policy, all soldiers who were to serve in the SWA Theater of Operations, regardless of component, would undergo redeployment medical evaluation and detailed medical history. Soldiers with abnormal medical evaluations received further examination and treatment and disability processing if indicated. When reports of unusual medical symptoms appeared, a standard evaluation protocol was developed with the other services and the VA to provide guidance for physicians in evaluating patients with possible post-Operation Desert Shield/Desert Storm (ODS/DS) related illness.

In order to determine the existence and prevalence of chronic long-term illnesses, conditions or symptomology directly related to or associated with service in SWA, the Office of The Surgeon General sent out a worldwide message in August 1992 to active duty medical treatment facilities. The message requires that clinicians who identify or suspect that a chronic medical or psychiatric condition is related to service in SWA must report that condition to the Office of The Surgeon General. As of 01 June 1993, 67 case reports had been received. The principal diagnosis/condition of each of the 67 cases is recorded in enclosure 1. Of these 67 cases, 15 have been processed by the Army Physical Disability Agency. Five were found fit for duty. Ten were found unfit for duty (4 had psychiatric conditions, 3 had pain syndrome, 1 had acromegaly, 1 had chronic fatigue, and 1 had meningoencephalitis).

The U.S. Navy established a similar surveillance system for post-ODS/DS illnesses. As of 5 May 1993, 38 cases (which includes 10 leishmaniasis cases) had been reported with a distribution of illnesses and symptoms similar to the Army. The U.S. Air Force established a surveillance system to collect physician-verified cases of post-ODS/DS illness and to date no unexplained illnesses and only several cases of leishmaniasis have been reported.

Service members and veterans with specific illnesses or conditions related to service in SWA received appropriate medical care for that diagnosis. Individuals with undiagnosed conditions continue to undergo diagnostic testing and medical follow-up through active or DVA medical treatment facilities.

In order to determine numbers and trends in discharges for medical disabilities, two diagnoses were selected to compare pre- and post-Persian Gulf Conflict discharge data from the Army Physical Disability Agency: Post Traumatic Stress Disorder (PTSD) and Chronic Fatigue Syndrome (CFS). The following numbers reflect cases processed through the disability system for years before and after Operation Desert Storm: For PTSD, FY90, 44 cases (37 active, 7 reserve) and FY92, 163 cases (92 active, 71 reserve); and for CFS, FY90, 1 case (1 active, 0 reserve) and FY92, 4 cases (4 active, 0 reserve).

Compared to the large number of military service personnel deployed to SWA (over 600,000), only a relative small number report chronically ill-defined symptoms which are difficult to diagnose and/or treat. Those individuals have had extensive

medical evaluations at military, DVA, academic, and civilian institutions. The military health system has sought extensive consultation with outside agencies and individual experts in their fields. Extensive research has been done, especially concerning leishmaniasis, and we support further research in the field of multiple chemical sensitivity and chronic fatigue syndrome. Under way is a collaborative effort among the VA, DoD and the National Academy of Sciences (Medical Follow-Up Agency) to evaluate the feasibility of future research projects to further advance our understanding of Persian Gulf War medical problems. To date, no single pathological agent or exposure has been identified to account for the undiagnosed symptoms and conditions seen in some ODS/DS veterans. All veterans of the Persian Gulf conflict will continue to be evaluated on a case-by-case basis as the search for a common causative agent continues.

I appreciate the opportunity to appear before the Committee and will be happy to answer any of your questions.

Principal Diagnosis/Condition of
67 Cases Reported by U.S. Army

	Diagnosis/Condition	Cases
	Fatigue	13
	PTSD/Neuropsychiatric Condition	10
	Orthopedic Condition	7
	Asthma/Dyspnea	6
	Alopecia Areata	4
	Difficulty Sleeping	3
	Atypical Chest Pain	3
	Cutaneous Leishmaniasis	2
	Abdominal Pain	2
	Diarrhea	2
	Recurrent Urticaria	2
	Hypoplastic/Aplastic Anemia	1
	Problem with Concentration	1
	Crohn's Disease (possible)	1
	Acromegaly	1
	Acute Orchitis	1
	Encephalitis	1
	Salmonellosis	1
	Sarcoidosis	1
	Giardiasis	1
	Organic Brain Syndrome (Provisional)	1
	Neurologic Problems	1
	Chronic Osteomyelitis (Possible)	1
	Hiatal Hernia	1
Totals	24 Diagnoses/Conditions	67 Cases

ARE SYMPTOMS OF PERSIAN GULF VETERANS RELATED TO ENVIRONMENTAL CHEMICAL EXPOSURE?

A PROPOSAL FOR CLINICAL INVESTIGATION

I. PROBLEM STATEMENT

Hundreds of military veterans have returned from the Persian Gulf complaining of illnesses characterized by multiple, diverse symptoms. An increasing number of these veterans and their physicians attribute these symptoms to chemical exposures. This issue warrants careful investigation. Exposure to chemical pollutants is endemic to our modern industrial society. There is a growing perception that exposure to relatively low levels of chemicals may cause serious disease. This awareness on the part of the public, Congress, and regulatory agencies has led to heightened scientific attention to a problem that has been termed "chemical sensitivity".

Individual susceptibility to chemicals may vary by orders of magnitude.[1] Chemically sensitive individuals appear unique in that they report disabling symptoms at levels of exposure apparently well tolerated by most people. However, sensitivity to chemicals is in fact widespread in the population: The EPA surveyed 4,000 of its employees and found that nearly one-third considered themselves "especially sensitive" to one or more common chemicals in indoor air.[2] In another survey, more than 600 college students were asked about their responses to five common chemical exposures. Fifteen percent indicated that at least four of the five made them ill.[3]

Review of the literature on exposure to low levels of volatile organic chemicals (LLVOCs) reveals four groups or clusters of people who report heightened reactivity:[4]

- Industrial workers
- Occupants of "tight buildings," including office workers and school-children
- Residents of communities whose air or water is contaminated by chemicals
- Individuals who become ill or disabled following personal and unique exposures to various chemicals in domestic indoor air, pesticides, drugs or consumer products

To this list might be added a fifth group: Soldiers, whether deployed in combat or engaged in non-combat activities, who have encountered substances commonly found in the military environment, such as fuels and propellants, paints and/or preservatives,

solvents, lubricants, pesticides and herbicides, combustion products, repellents, and chemical weapons agents. Symptoms reported by 79 Persian Gulf veterans of the 123rd ARCOM are strikingly similar to those of patients reporting chemical sensitivities subsequent to an identifiable exposure (Figure 1):

Figure 1. Symptom Frequencies for Persian Gulf Veterans versus Self-Identified Chemically Sensitive Patients

SYMPTOM	GULF VETERANS, % [a] (N = 79)	PATIENTS REPORTING CHEMICAL SENSITIVITIES, % [b] (N = 50)
Fatigue	70.9	78.0
Sleep disturbance	57.0	44.0 (insomnia)
Forgetfulness	54.4	74.0
Joint Pain	54.4	72.0
Irritability	46.8	58.0
Difficulty concentrating	43.0	76.0
Depression	41.8	60.0
Headache	37.2	62.0
Rash	35.4	37.0
Cough	34.6	42.0
Abdominal Pain	34.2	56.0
Diarrhea	32.1	44.0
Ringing or pain in ear	24.1	40.0
Fever	12.8	14.0

[a] DeFraites RF, Wanat ER, Norwood AE, Williams S, Cowan D, Callahan T. Investigation of a suspected outbreak of an unknown disease among veterans of Desert Shield/Storm 123rd Army Reserve Command, Fort Benjamin Harrison, Indiana, April 1992.

[b] Miller CS, Mitzel HC, Kniker WT and Jackson RB. Comparison of symptoms in individuals reporting onset of chemical sensitivities following exposure to pesticides and to building remodeling (in progress).

Other symptoms attributed to LLVOCs reported by at least half of the chemically sensitive patients, but for which comparative data on the veterans was not available, include: loss of motivation, drive or interest; grogginess; dizziness or lightheadedness; muscle aches; slowed responses; problems digesting food; breathing difficulties; eye burning or irritation; tenseness or nervousness; difficulty making decisions; head fullness or pressure; feelings of unreality or spaciness; problems focusing eyes; food cravings; abdominal gas; problems with handwriting; and postnasal drainage.

The requirement to maintain peacetime military readiness, assure combat effectiveness, and minimize both battle and non-battle casualties suggests that the following questions need to be addressed:

- Are there individuals/soldiers who are especially sensitive or susceptible to LLVOCs found in the military environment?
- If there are soldiers who are more sensitive to LLVOCs, what kinds of symptoms do they experience and how might this affect their performance?
- Is there a laboratory test or biological marker that might be used to identify a soldier's sensitivities at an early stage?
- If sensitivity to LLVOCs exists, what is the mechanism(s)? Possibilities include genetic differences in detoxification pathways or enzymes; sensitization of olfactory-limbic pathways in the central nervous system as a consequence of prior chemical exposure; psychological conditioning; trigeminal nerve irritation; inflammation or vascular constriction in target tissues; or some other as-yet-unidentified mechanism.

Knowing the answers to these questions will enable the Army to identify vulnerable individuals and avoid placing them in exposure situations, detect affected individuals early in their illness, and provide prompt intervention to minimize losses of trained manpower. Some soldiers may become ill coincident with a chemical exposure and incorrectly attribute their symptoms to such exposure, when in fact there is another cause. As long as physicians cannot explain their symptoms or rule out chemical causes, soldiers will have understandable fears that their symptoms may indeed be due to chemical exposures. Such fears also can compromise performance. If chemical causes underlie some veterans' symptoms, informed application of engineering controls, respiratory protection and selection of less toxic chemicals and materials will enable the military to protect against degradation of the performance and reliability of combat leaders, tactical equipment and vehicle operators, repair technicians, and others with critical functions whose vigilance, judgment and performance must be at their peak.

Some investigators attribute chemical sensitivity to underlying psychological problems such as depression, to psychological conditioning, to stress, or to an inappropriate belief that chemicals are causing symptoms.[5,6,7,8,9] However, these investigators have not ruled out the possibility of chemical causes prior to making their diagnoses.[10,11] Certainly stress or depression can produce some of the same symptoms that have been attributed to chemical sensitivity. Nevertheless, evidence is mounting that

LLVOCs also may cause such symptoms in certain individuals, and clinically-oriented pilot studies are needed to ascertain whether or not there is a scientific basis for concluding that low-level concentrations of chemicals can cause these conditions.[4,10,12,13]

II. PROJECT FOCUS

Like allergy, chemical sensitivity appears to involve two steps: 1) induction or sensitization, and 2) triggering.[4,10,12,13] Induction or sensitization may occur following a single, acute exposure or repeated, lower level exposures to any of a wide range of petrochemicals, such as solvents, pesticides or combustion products. Once sensitization has occurred, extremely low levels of the sensitizing agent or other chemicals appear to trigger a wide range of symptoms, such as memory difficulties, headaches, weakness, fatigue, and mood changes. Patients often report adverse reactions to various medications, alcoholic beverages and foods. Symptoms vary greatly from individual to individual but seem to be reproducible for a single individual given a particular exposure.

It has been hypothesized that, in chemical sensitivity, sensitization may involve olfactory-limbic pathways.[4,10,12,13] The olfactory nerves provide the most direct link between the outside (chemical) environment and the brain. The olfactory nerves communicate directly with the limbic region of the brain, the so-called "primitive smell brain". There is no blood-brain barrier at this site as with other portions of the brain. This brain area is essential for short-term memory, especially spatial memory, and regulates mood. Many patients who report chemical sensitivities complain of memory difficulties that affect their ability to work, and sudden mood swings (bouts of depression, episodic anger) with exposure to environmental chemicals. The limbic area also supplies much of the input to the hypothalamus which in turn regulates autonomic nervous system and endocrine function. Temperature regulation, smooth muscle tone and appetitive behaviors also are influenced by hypothalamic output. Many patients report increased sensitivity not only to chemicals, but also to heat or cold, loud noises (augmented startle response) and other stimuli, further suggesting limbic involvement. In addition, some report food cravings following chemical exposure. Limbic sensitization has been demonstrated in animals exposed to pesticides and other chemicals.[14,15,16]

Once limbic sensitization occurs, it appears to spread to other common chemical exposures. Thus, in order to diagnose this problem, it appears important for the sensitized individual to be removed both from the original exposure chemicals and from other chemicals that may be triggering adverse symptoms. Sorting out which exposures are perpetuating the illness may be very difficult: These are common exposures; their resultant symptoms may overlap in time; and, to some degree, individuals adapt as exposure continues. Adaptation is characterized by acclimatiza-

tion (habituation, tolerance) with repeated exposure that results in a masking of overt symptoms. Symptoms may become chronic in nature and appear unrelated to any particular exposure. Adaptation has been recognized to occur for a variety of substances, for example, ozone, nitroglycerine, cigarette smoke, solvents and pharmaceuticals (tachyphylaxis).[4,17,18,19,20] Solvents are among the chemicals most frequently implicated by chemically sensitive patients as causing their symptoms. Withdrawal symptoms may occur if exposure is discontinued, a phenomenon recognized for solvents, smoking and caffeine. Once an individual has adapted, the effect of any single exposure may not be discernible because a kind of "saturation" effect has occurred. Background "noise" from many concurrent exposures may interfere with recognition of the "signal" from any particular exposure (see Figure 2 below). Persons who are especially sensitive to certain chemicals, for example ozone, may adapt more slowly, adapt less completely or lose their adaptation more quickly than individuals with normal degrees of tolerance. Unravelling the effects of overlapping exposures and adaptation may require isolation of individuals from their usual home and work environments. This approach was endorsed in a recent National Academy of Sciences report on chemical sensitivity, with a recommendation that it be given the highest priority for attention.[12]

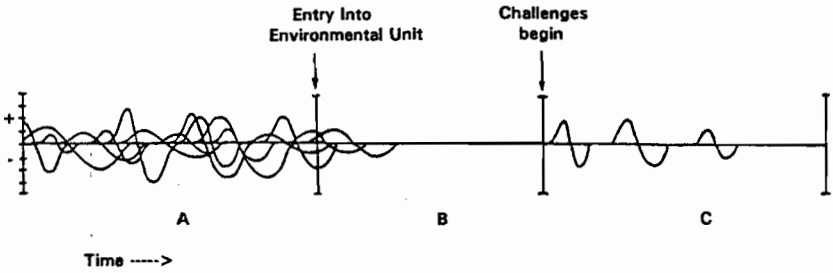
III. CLINICAL APPROACH

The specific aims of this proposed effort are to:

- Establish a specialized environmental medical unit (EMU) in which LLVOCs have been reduced to the lowest levels feasible, designed specifically for investigation of sensitivities to LLVOCs.
- Select individuals who report neuropsychological or other symptoms subsequent to exposure to LLVOCs for admission to the EMU.
- Isolate patients in the EMU.
- Perform blinded challenges with LLVOCS and foods to determine the nature and degree of sensitivities.
- Identify objective measures of physiological functions, e.g., respiratory and central nervous system (mood, motor and cognitive), which correspond to symptoms reported by these patients.

In order to define possible adverse effects of LLVOCs, a hospital-like environment is needed in which patients can be completely isolated from their usual background of chemical exposures and observed for extended periods, up to several weeks. The requirement for an environmentally-controlled medical unit to address this problem is illustrated in the following figure:

Figure 2. Graphical Representation of an Individual's Symptoms Before and After Entering an Environmental Unit [4]



In time Period A, prior to entering an environmental medical unit (EMU), an individual is responding to multiple exposures (chemicals and/or foods), with stimulatory and withdrawal effects that overlap in time. At any particular time, how the person feels is determined not only by ongoing exposures, but also by previous exposures whose effects may still be waning.

In time Period B, the individual enters an environmental medical unit. With cessation of contributory exposures, withdrawal effects occur, for example, headache, fatigue, and muscle aching. Symptoms continue for some time (typically 4-7 days) until the individual reaches "0" baseline.

In time Period C, single challenges to suspected chemicals or foods are administered. Symptoms, if they occur, develop soon after challenges, allowing patient and physician to observe the relationship between exposures and symptoms for that individual.

The proposed EMU will be designed and implemented as an 8-bed facility in a hospital setting. Construction and furnishing materials will be selected to minimize "outgassing," i.e., the spontaneous release of VOCs into the air. Examples of such materials are stainless steel, ceramics and glass. State-of-the-art ventilation and air filtration systems also will be incorporated into the EMU in order to reduce VOC exposure to the lowest level feasible. Environmental monitoring for volatile and semi-volatile organic compounds, carbon dioxide, particulates and other air contaminants will be performed longitudinally -- before, during and after fabrication of the environment -- in order to document the effects of construction materials, interior finishes, equipment and furnishings, ventilation and occupancy upon air quality. In addition, a chemical challenge system will be developed capable of delivering low level or subsensory concentrations of selected volatile chemicals without contaminating the

model environment. The inhalation challenge system will allow patients to remain inside the clean environment while they are being tested. The technical difficulties in using an exposure chamber for challenge without contaminating the model environment or challenge system affect this choice. A face mask delivery system is one alternative that would allow quantitative challenges while minimizing contamination of the surrounding space. Design considerations for the challenge system include wearer acceptance and potential outgassing from construction materials used in the face mask and delivery system.

In the EMU, patients will undergo double-blind, placebo-controlled provocative challenges to selected substances at entry (adapted phase) and again following improvement in their condition (de-adapted phase), if improvement occurs. Both patients and controls will undergo a battery of clinical, neuropsychological, biochemical and immunological tests 1) at entry into the unit, 2) after clinical remission, if it occurs, and 3) before and after blinded challenges with low, preferably subsensory levels of selected environmental substances. Inter- and intra-individual comparisons will be made to determine differences in individual responses before and after staying in a controlled environment, and differences between individuals who report chemical sensitivities and normal controls. The proposed neuropsychological tests fall into four general categories: 1) stable aspects of personality and intelligence, 2) mood and affect, 3) motor function, and 4) cognitive performance and ability. A test of the startle response will also be performed. Indices of cholinergic, adrenergic, limbic and hypothalamic function will be assessed before and after entering the unit, and before and after challenge.

Successful completion of this process of isolation and challenge will provide definitive diagnosis and appropriate disposition of individual patients. In addition, collective results will yield information which the Army can use to support policy options concerning personnel assignments, materials selection, medical treatment and evacuation, and other issues critical to military preparedness. Finally, it will permit more accurate and cost-effective risk assessment for activities related to demilitarization and hazardous waste disposal missions.

IV. RESOURCE REQUIREMENTS

Resource requirements are presented in three categories: 1) Direct costs of site preparation, involving renovation and furnishing of 2920 square feet of leased space, plus acquisition and installation of equipment necessary for the conduct of EMU activities; 2) staff (and annualized direct costs thereof) needed to conduct the unit's activities; and 3) an estimate of one year's direct operating cost for the EMU once it is completed, assuming 80% occupancy.

SITE PREPARATION $ 902,000

(One-time cost)

- Construction	$ 500,000
- A & E	50,000
- Furnishings	22,000
- Specialized equipment	120,000
- Consultant services	95,000
- Lease	45,000
- Project management	70,000

STAFF (13.95 FTE) $ 585,295

(Per annum following completion of site preparation)

FUNCTION	FTE	COST
- Principal Investigator	.75	$ 68,765
- Co-Investigators	1.70	157,170
- Nurse Coordinator	1.00	54,740
- Nutritionist/Dietician	.55	23,950
- Programmer/Analyst	1.00	38,320
- Psychology Technician	1.00	34,215
- Administrator	.25	13,685
- Secretary	1.00	20,530
- Data Clerk	2.50	8,305
- Nursing Staff	4.20	134,230
- Dietary Technician	2.00	31,385

OPERATING COSTS (excluding salaries) $437,100

(Per annum following completion of site preparation)

- Supplies	$ 13,800
- Travel	2,400
- Patient care	208,000
- Maintenance	95,000
- Basic Hospital Services	91,600
- Other	26,200

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STATEMENT OF
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UNDER SECRETARY FOR HEALTH
DEPARTMENT OF VETERANS AFFAIRS
BEFORE
SUBCOMMITTEE ON OVERSIGHT AND INVESTIGATIONS
HOUSE COMMITTEE ON VETERANS' AFFAIRS

HEALTH CARE BENEFITS FOR PERSIAN GULF VETERANS

JUNE 9, 1993

Mr. Chairman,

Thank you for the opportunity to report on how the Department of Veterans Affairs (VA) is addressing the health care needs of veterans of the Persian Gulf War.

Secretary Brown has committed VA to easing the pain and suffering of the men and women who answered to the nation's call to service in the Persian Gulf War. VA has moved aggressively to respond to the health concerns of Persian Gulf veterans by instituting new programs and expanding existing services. These efforts include the establishment of a "Persian Gulf Veterans Health Registry"; creation of special Persian Gulf Referral Centers for veterans with seemingly undiagnosable conditions; providing priority access for health care for Persian Gulf-related health conditions; the establishment of the Persian Gulf family support program; and augmentation of our readjustment counseling program.

Priority Access to VA Care

Mr. Chairman, if a Persian Gulf War veteran requires care for a condition possibly related to Persian Gulf service, VA will provide it without delay. We are providing priority access to services to assure that needed health services are provided promptly without the need first to determine causation or possible entitlement to compensation. VA physicians determine if the veteran's condition could be related to Persian Gulf service, and, if so, services are provided. We are formalizing this policy by amending our regulations to permit care for Persian Gulf veterans pending an official determination of whether their condition is connected to Persian Gulf duty.

As of March 31, 1993, VA had provided outpatient treatment to nearly 73,000 Persian Gulf theater veterans and provided inpatient services to over 4,500 theater veterans. We do not know whether their conditions are related to service in the Persian Gulf. However, a comparison of VA treatment records of both theater and non-theater Persian Gulf era veterans shows no significant difference in the major categories of diagnoses except in the category of adjustment disorders, including PTSD. We are continuing to review our Persian Gulf-related health care data to identify any significant health trends.

Persian Gulf Referral Centers

Mr. Chairman, shortly after VA became aware that some Persian Gulf veterans were having medical problems for which there appeared to be no logical explanation, we established special referral centers at the Los Angeles, Houston, and Washington, D.C. VAMCs. These centers were selected on the basis of availability of clinical and academic expertise in such areas as pulmonary and infectious diseases, immunology, neuropsychology, and access to toxicology expertise. The centers focus on groups of symptoms that may suggest responses to toxic environmental agents (e.g., multiple chemical exposures) and diseases endemic to the Persian Gulf theater (e.g., leishmaniasis). Candidates for referral are veterans with conditions that defy conventional medical diagnosis at the local VA medical center or who would otherwise benefit from intensive inpatient evaluation.

As of May 31, 1993, 26 veterans have been admitted to the referral centers for diagnostic workup. Examination of these veterans by the referral center staff has indicated no common pattern of conditions presented. Diagnoses have included such a wide range of conditions as possible chemical hypersensitivity with etiology unknown, pernicious anemia, chronic fatigue syndrome, Cogan's syndrome, giardiasis and reactive airways (or asthma). Twenty-six additional cases are currently being considered for referral.

Readjustment Counseling Services

On the day the ground war began in the Persian Gulf in January 1991, the Secretary of Veterans Affairs announced VA's support for legislation to open VA's Readjustment Counseling (Vet Center) program to veterans of Lebanon, Grenada, Panama, and the Persian Gulf. Legislation providing that authority was enacted into law on April 6, 1991, in section 334(d) of Public Law 102-25. Through May 1993 Vet Centers have seen approximately 35,000 Persian Gulf war veterans.

In the first year following the war, the Readjustment Counseling Service (RCS) undertook extensive preparations to meet the needs of Persian Gulf veterans. Concurrently, liaisons with the regular military, reserve and national guard units were carried out to meet and inform the new veterans. Utilizing emergency resources supplied by Congress, RCS in 1991 hired 84 temporary counselors, who provided outreach and counseling for Persian Gulf veterans. Forty of these counselors worked during FY 1992 and will be maintained through 1994.

At the end of 1991 less than 9 percent of Persian Gulf War Vet Center clients had PTSD or subdiagnostic PTSD. The majority of readjustment problems pertained to family, employment, and information about VA benefits.

Readjustment Counseling Service is currently carrying out a prospective study in collaboration with VA's National Center for PTSD. The study includes a sample of new Persian Gulf veteran cases being seen at 82 Vet Centers. This study will produce valuable data for assessing the impact of wartime duty on readjustment and other aspects of psychological functioning. This is the first prospective study on war veterans' readjustment carried out by VA in its history.

In the initial phase of the study (from October 15, 1991 to April 15, 1992), the Persian Gulf veteran survey was disseminated through 82 Vet Centers nationwide. One thousand and six surveys were completed and returned.

The overall PTSD prevalence for this sample of 1006 veterans was 11.5 percent. The PTSD prevalence in a sub-group that was specifically seeking help for psychological distress was 37.1 percent.

The six-month follow-up study was carried out from April 15 to October 15, 1992, at which time the participating Vet Centers mailed the follow-up surveys to all veterans who had completed the initial survey. Completed surveys were received back from 226 of the 1006 veterans who participated in the initial phase. The overall prevalence of PTSD for the 6 month follow-up group was 14 percent. With particular reference to the group of veterans specifically seeking help for psychological distress, the reduction in PTSD at the six month interval was even more pronounced (19.4 percent compared to 37.1 percent). An 18 month final follow-up survey is planned to commence in June 1993.

These findings lead us to conclude that early availability of readjustment counseling at the Vet Centers and the vigorous system-wide outreach campaign by Vet Center counselors helped to ease the transition for many veterans when psychological distress was presented.

National Center for PTSD

The VA National Center for PTSD is conducting additional longitudinal studies at such places as the Boston Center for PTSD, the New Orleans VA Medical Center, and the Pittsburgh VA Medical Center.

The largest of these studies is the Fort Devens, Massachusetts, survey of returning Persian Gulf troops. Here the principal investigator, Dr. Jessica Wolfe began a study of 3,000 Persian Gulf veterans who were deployed from Fort Devens in April and July 1991. The study sample comprised more than 46 different units distributed across active duty, reserve and National Guard forces. Approximately 8 percent of the sample is female. The initial data was collected within five days of the veterans' return to Fort Devens.

In the initial survey 3.2 percent of males and 9.6 percent of females reported PTSD symptoms. At 18 months 9.4 percent of males and 19.8 percent of females reported PTSD symptoms.

The data from all of our studies shows that about 10 percent of the veterans surveyed experience some level of PTSD symptoms. The data also shows that for the surveyed groups that PTSD is more prevalent among females and non-white minorities.

Persian Gulf Family Support Program (PGFSP)

Public Law 102-405 authorized the VA to provide marriage and family counseling to Persian Gulf veterans and their spouses and children. The program was funded by transfer of funds from the Department of Defense to the Department of Veterans Affairs.

Funding was allocated to 36 VAMCs, in 26 states representing the largest population (4,000+) of formerly activated National Guard and Reservist troops. Services may also be provided under a contract or fee arrangement by certified marriage and family counselors.

The PGFSP relies on active outreach and cooperation with such diverse community groups as guard and reserve units, churches, schools, veterans' organizations, and local media as connecting points between the VA and veterans. By the end of 1992, almost 13,000 veterans had been contacted directly, and by May 1993, over 33,000 had been contacted. As of May 1, 1993, 627 Persian Gulf veterans had received family counseling services through the Persian Gulf Family Support Program.

Of the Persian Gulf family members who have been seen, 77.2 percent were spouses/partners, 12.3 percent were children, and 10.5 percent were siblings, parents, and grandparents. The major problems among these families included depression and stress, alienation among family members, marital dissatisfaction, and employment problems.

Persian Gulf Veterans Health Registry

Shortly after the cessation of hostilities in the Persian Gulf War, VA administratively established a registry modeled on VA's Agent Orange and Ionizing Radiation Registries. It quickly became apparent, however, that legislative authority was needed and the Congress responded by enacting Public Law 102-585 on November 4, 1992. As of March 31, 1993, more than 3,970 registry examinations had been completed and entered into the computerized portion of the registry program.

Through nationwide satellite broadcasts, conference calls and directives, VA physicians, other clinicians and administrative staff at all VA medical centers have been educated and sensitized to the special needs of Persian Gulf veterans and the importance of the registry program.

Health examinations for the registry are comprehensive and consist of a series of baseline laboratory tests, that is, chest x-rays, blood counts, blood chemistries, enzyme tests and urinalysis. Other tests are also provided when medically indicated. VA physicians personally discuss results of the examination with each veteran, and follow-up letters are sent from the examining physician communicating examination findings and any medical recommendations. When the veteran's medical condition requires treatment, VA provides it and patients with unusual symptoms whose conditions evade diagnosis can be sent to the special referral centers. VA is currently field testing an addendum to the registry examination protocol which expands the range of environmental exposures considered in taking histories of registry participants.

A recent review of the first 1,404 registry participants shows that common complaints were fatigue, skin rash, headache, loss of memory, muscle/joint pain, shortness of breath, cough, diarrhea and chest pain. A wide range of medical conditions were diagnosed among the participants. Prevalence of chronic PTSD among those in the Registry has been low (2.6 percent). Veterans with symptoms or with medical diagnoses did more frequently report having been

in contaminated areas, in a smoky area, having been enveloped in smoke, or eating/drinking contaminated foodstuff than veterans without symptoms or medical diagnoses.

With appropriate caution and appreciation of its limitations, the Persian Gulf Registry can serve as a useful resource for surveillance of health problems and any common experience(s) during the deployment. The registry data may also help to generate a hypothesis for in-depth analytical study.

VA is updating registry addresses annually to maintain the registry as a valuable outreach mechanism and to update participants on health care, compensation, and scientific issues. The **Persian Gulf Review**, a publication designed with this goal in mind, is being sent to all registry participants periodically.

Interagency Cooperative Efforts

VA has been a key participant in federal interagency committees such as DoD's Kuwait Oil Fires Health Effects Working Group and the Department of Health and Human Services' Kuwait Working Party. DoD's efforts have focused on development of a roster of troops assigned to each military unit that served in areas possibly affected by the Kuwaiti oil well fires; construction of a file of daily unit locations; and creation and maintenance of a central file containing information on air pollutant levels from locations. DoD has provided VA with an automated roster of approximately 657,000 military personnel who served in the Persian Gulf theater. VA will use this roster for research, health surveillance and cross-reference purposes. In addition, VA is closely cooperating with the DoD in providing for a special 5-year health surveillance of American military personnel wounded with depleted uranium (DU) as a consequence of "friendly fire." VA is also cooperating with the Congressional Office of Technology Assessment as they undertake their review of both VA and DoD's registries.

Persian Gulf "Blue Ribbon Panel"

Because of continuing concerns about the possible health effects of military service in the Persian Gulf, on March 30, the Secretary established a "Persian Gulf Expert Scientific Panel." The 16-member panel was composed of experts in environmental and occupational medicine and related fields from both government and the private sector. The panel met in open session on May 7, 1993, to review health issues related to the diagnosis, treatment and research of Persian Gulf-related health conditions. At the conclusion of the one-day meeting, Panel members individually concluded that additional review and analysis of research, education and clinical issues are essential in view of the complex scientific and medical variables associated with these conditions. As a result of this meeting, VA is examining what could be the most effective way to follow through on these issues.

Review of Persian Gulf Health Effects by the NAS MFUA

Section 706 of Public Law 102-585 requires that VA and DoD "jointly seek to enter" into an agreement with the National Academy of Sciences Medical Follow-up Agency (MFUA) of the Institute of Medicine for a review of existing scientific, medical and other information on the possible health consequence of Persian Gulf service. The law requires VA and DoD jointly to fund this effort in FY 1993 and continue funding general epidemiologic research on veteran and military populations during the period of FY 1994 - FY 2003. Up to $250,000 is to be made available annually by each Department to support this effort. VA and the DoD have been in active negotiations with the MFUA and are hopeful that the contract will be signed and work begun in the immediate future.

Summary

Mr. Chairman, the vast majority of Persian Gulf veterans that we treat have conditions that are readily diagnosable and treatable. However, there are a small number of cases for which there are no readily available answers. These

cases present complex health issues, some of which appear to defy our best efforts to define them, issues which will undoubtedly require further review and analysis. The health issues associated with chronic fatigue syndrome and multiple chemical sensitivity syndrome are particularly vexing. Some ecological clinicians have claimed that they can successfully treat Persian Gulf veterans with such conditions; however, at this time, no clear mechanism or cause for multiple chemical sensitivity syndrome has been determined.

Mr. Chairman, VA is committed to ensuring that the health care needs of Persian Gulf veterans are being met consistent with accepted medical practices and procedures. Those who need care will receive care. We are also committed to finding the causes of and appropriate treatments for the illnesses and conditions that have evaded our diagnosis thus far.

Mr. Chairman, I am prepared to answer any questions you or members of your Subcommittee may have on VA's Persian Gulf-related efforts.

* * * *

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STATEMENT OF
MICHAEL P. CLINE (RET)
MASTER SERGEANT

EXECUTIVE DIRECTOR

BEFORE THE
OVERSIGHT & INVESTIGATION SUBCOMMITTEE

ON

PERSIAN GULF HEALTH PROBLEMS

9 JUNE 1993

On behalf of the Enlisted men and women of the Enlisted Association National Guard of the United States (EANGUS) we appreciate being permitted to submit testimony for the record to the Oversight & Investigation Subcommittee of the House Veterans Affairs on Persian Gulf Health Problems.

The Enlisted Association represents the views of Army & Air Enlisted National Guard members. During Operation Desert Shield/Storm, more than 74,000 National Guard members answered the call to duty. More than 65,000 enlisted Soldiers and Airmen, the backbone of the National Guard, served proudly. The National Guard will continue to perform required missions as it has done during its 356 year history. The National Guard is truly America's finest.

Mr. Chairman, this Association is aware of the inquiry made by Representative Charles Canady (R-FL) concerning care for Desert Storm Veterans. Mr. Canady specifically points out that a unit of the Florida National Guard was directed to use toxic Chemical Agent Resistant Coating (CARC) paint during duty in South West Asia (SWA). These individuals were required to paint a large number of vehicles without the required protective equipment mandated by Army occupational health requirements. The Commander of this unit strongly objected to this policy but was overruled by higher level Active Duty Army Commanders.

This paint, when inhaled, can cause an acquired pulmonary allergic condition. Acute pulmonary symptoms reoccur when the person is again subjected to the same toxic chemicals. Most common plastics contain residuals of this toxic agent which can also cause the same symptoms.

Members of the Florida unit are currently being treated at MacDill Air Force Base, Florida; Fort Stewart, Georgia; and Fort Gordon, Georgia.

During the rush to demobilize the Reserve Forces, and due to adverse decisions made by certain Army agencies concerning the retention of Reservists on duty for medical treatment, many soldiers were inappropriately released from active duty while still requiring medical care. This problem was strongly addressed by National Guard leaders with modest success. Some soldiers who were

returned to their home states continued to receive medical care at military or Veterans facilities; many were placed on incapacitation pay if they were unable to resume their civilian employment.

Because National Guard soldiers are frequently considered second class citizens by some active component personnel and agencies, this office makes great efforts to assure that these soldiers receive the proper treatment and benefits that are prescribed by the regulations which are basically identical for all Reserve Components.

To our knowledge, National Guard Soldiers have received medical care from military facilities and Veterans Hospitals. They have also paid for civilian care after release from active duty. The Army Surgeon General and the Veterans Administration have offered evaluations to any Desert Storm soldier requesting it, even if clear-cut linkage to duty in Southwest Asia does not exist. The Veterans Administration has established a registry program for all SWA veterans to record their duty location and potential exposure to toxic agents. These special programs have received wide publicity through the National Guard units and other military organizations.

The U.S. Army and the National Guard accept the responsibility of caring for soldiers who are injured or develop diseases in the line of duty. Each case is evaluated individually for entitlement and several appeal routes are available for the soldiers. Generally, each decision is reviewed by at least two, and sometimes three, independent reviewing authorities before a final decision is made.

Medical Care

Immediately after Operation DESERT STORM, the Army began the rapid demobilization to return Reserve Component soldiers to their home stations. More than 200 Army National Guard members who had not completed medical treatment for duty-related injuries and illnesses, were released from active duty. Once discharged, many of these indivi-duals had difficulty receiving treatment. Through

the efforts of Congress, the Department of Defense set up a Review Board to examine any claims for return to active duty for individuals that could not be cared for through resources available to the National Guard or the Veterans Administration. The Army Surgeon General and the Veterans Administration have developed a very active program that offers evaluations, counseling, and assistance to any DESERT STORM veteran. EANGUS commends the Veterans Administration for establishing a registry program for all Southwest Asia veterans to record and monitor potential exposure to toxic agents. It is important that we let all of our service members know that the country takes care of its veterans.

Of particular concern to EANGUS is what is being labeled as "Operation DESERT STORM Mystery Diseases". Symptoms have been reported by many soldiers who served in Southwest Asia. The Veterans Administration, along with the Department of the Army, has developed a program to provide individuals medical evaluations to diagnose the cause of their continuing problems.

Questions need to be answered.

Mr. Chairman, although we do not know what is making our Soldiers and Airmen sick, we do know that everything possible must be done to find the cause of the diseases so that there will be no future occurrences. We must care for those Guardmembers who answered the call and put their lives on the line for their country. EANGUS again thanks the committee for permitting us to submit testimony on behalf of the Enlisted men & women of the National Guard who served with great distinction in the Persian Gulf.

Persian Gulf List of Issues

There are two fundamental issues associated with the Persian Gulf illnesses. First, what's causing the men and women who served in operation Desert Shield/Storm to be sick? Secondly, are the VA and the DOD taking care of their veterans and soldiers? These two issues raise many other questions. For the purposes of a formal meeting or hearing, we feel that these two issues should be addressed separately:

I. **WHAT'S CAUSING THE DESERT STORM ILLNESSES; IS THE VA/DOD LOOKING FOR THE ANSWER?**

A. **Current medical theories:**

1. **Leishmaniasis**: There are two types of leishmaniasis, cutaneous and viscerotropic. The latter form causes symptoms including fatigue, gastro-intestinal problems, weakness, and fever. Although some veterans' wives have begun to experience similar symptoms, neither the military nor the VA believe the species of viscerotropic leishmaniasis is contagious.

2. **Oil Smoke**: While this theory was prevalent earlier this year, little has been written about it lately. Exposure to oil smoke allegedly caused neurological symptoms, i.e., confusion, memory loss and depression, in some veterans. To our knowledge, this has never been verified.

3. **Multiple Chemical Sensitivity**: (MCS) After either a high dose exposure or a series of low dose exposures to chemicals and petrochemicals, individuals have become hypersensitive to a wide variety of common allergens. Due to lack of research, MCS has not been scientifically accepted as a bonafide medical illness or injury.

4. **Vaccinations/Medications received in the Persian Gulf**: During the September hearings, discussion was brought to light that experimental drugs were used. The VA/DOD maintains that they were not. This question arises. Why weren't these vaccinations listed on individual's shot records?

5. **Depleted Uranium**: The military has announced that 35 soldiers have been exposed to depleted uranium from friendly fire. Some of these individuals are complaining of health effects contributed to the residual radiation in the uranium. DOD claims that depleted uranium should not be radioactive.

6. **Staphlycocci and Streptococci infections**: Dr. Hyman from New Orleans, Louisiana, claims to have cured two Persian Gulf veterans who suffered for two years from similar symptoms of fatigue, depression, insomnia, aching joints, and

weight loss. Dr. Hyman identified Staphlycocci/Streptococci bacteria in their urine and successfully treated them with moderate to high doses of intravenous antibiotics.

II. **WHY IS THE MYSTERIOUS DISEASE MOSTLY PREVALENT IN GUARD/ RESERVE FORCES?**

The answer is two-fold. Several active duty Desert Storm veterans have reported these symptoms in the Congressional Record. However, active duty personnel have been warned not to make an issue of this or negative personnel actions will result. The second reason is that unlike their active duty counterparts, medical facilities are not adequately available for Reservists. In order to rapidly discharge Reserve Component soldiers from active duty, outprocessing physicals were completed improperly and hastily. A question arises. If the active component was so adamant in processing Reserve Components for active duty, actually totaling discharging most of the administration functions then why wasn't the same determination done at the completion of duty? A double standard; you be the judge.

To date, approximately 200 cases have been reported within the National Guard.

CLOSING STATEMENT

The National Guard and Reserve Component of the United States Armed Forces are a vital part of our Nation's fighting force. These brave men and women willingly volunteer to serve in the military, understanding fully that they may be called upon to fight for their country. The people of the United States should feel an obligation to ensure that these servicemen and women are taken care of when they return home from active duty.

More than 356 years ago our forefathers laid down their plows and went off to fight for what is now the greatest nation in the world. When the need for their services were complete, they returned to their land and resumed life as before. Shouldn't our Guard member of today enjoy this the same privilege?

Thank you for your time and patience. This concludes my statement.

TESTIMONY BY

RUTH A. ETZEL, M.D., Ph.D.

CENTERS FOR DISEASE CONTROL AND PREVENTION

PUBLIC HEALTH SERVICE

U.S. DEPARTMENT OF HEALTH AND HUMAN SERVICES

BEFORE THE

SUBCOMMITTEE ON OVERSIGHT AND INVESTIGATIONS

COMMITTEE ON VETERANS' AFFAIRS

U.S. HOUSE OF REPRESENTATIVES

June 9, 1993

Good morning, Mr. Chairman. I am Dr. Ruth Etzel, Chief of the Air Pollution and Respiratory Health Branch in the Division of Environmental Hazards and Health Effects of the National Center for Environmental Health of the U.S. Centers for Disease Control and Prevention (CDC).

Thank you for the opportunity to appear here today and provide information on the CDC's activities regarding potential adverse health effects related to service in the Persian Gulf. As you are aware, on several occasions since the end of the Gulf War, CDC and the Agency for Toxic Substances and Disease Registry (ATSDR) have assisted the Department of State and the Department of Defense in matters relating to the Persian Gulf.

In February 1991, more than 600 oil wells were set on fire throughout Kuwait. In response to a request from the State Department regarding concerns about the health impacts of the burning oil fields, the Public Health Service issued a preliminary health assessment in March of 1991, to be transmitted to the U.S. Embassies in Kuwait and Saudi Arabia and the Department of Defense Central Command in Saudi Arabia.

That statement advised that the emissions from oil fires are a varied mixture of unburned materials and combustion products, many of which are toxic. The combustion by-products of burning crude oil are similar in nature to what is found in the exhaust of a poorly functioning automobile. The smoke produced by the burning of crude oil is a mixture of heated, potentially noxious gases and coated carbon particles representing products of combustion. The most obvious constituents of the smoke are carbonized particles of unburned material. The hazards posed by these particles depend on both their size and composition. Particulates of less than 10 micrometers are considered to pose the greatest hazard, since particles of this size are deposited deep in the lungs.

Burning of crude oil also generates combustion products that are irritating and/or toxic. These include carbon monoxide, carbon dioxide, sulfur oxides, nitrogen dioxide, various polycyclic aromatic hydrocarbons, acid aerosols such as sulfuric acid, aldehydes, and acrolein.

Following a review of air monitoring activities from April through July 1991, the PHS issued a revised Health Advisory for Kuwait and Saudi Arabia on October 9, 1991. The health advisory provided the following information: two major pollutants, sulfur dioxide and nitrogen dioxide, never reached harmful levels; levels of carbon monoxide exceeded the U.S. alert level on rare occasions, possibly due to increased vehicular traffic; levels of particulate matter on a number of occasions exceeded U.S. alert levels, but this occurs regularly in Kuwait even in the absence of oil well fires due to sand and dust storms. However, measurements of air pollutants from the Kuwait oil fires were still not complete or adequate to fully evaluate the potential long-term health effects.

The advisory for Kuwait and Saudi Arabia recommended precautions for populations at risk, including asthmatics, individuals with chronic respiratory conditions, children, the elderly, and pregnant women. These recommendations were similar to those given in U.S. cities on days when air pollution levels are high; people at risk were encouraged to stay indoors, refrain from outdoor physical activity, and seek medical attention early if symptoms arose.

At the request of the U.S. Army, the CDC laboratory analyzed blood samples collected at three different times from a small number of soldiers; their blood was sampled while in Germany before leaving for Kuwait, after two months in Kuwait, and after leaving Kuwait and returning to Germany. Compared to measurements of volatile organic compounds in U.S. residents, the levels of these same compounds were not elevated among these

soldiers. The one exception was tetrachloroethylene (TCE), which was elevated. Exposure to this chemical most likely resulted from its use as a degreaser by the soldiers.

In April, I was sent to Kuwait to investigate the acute respiratory hazards associated with exposure to the oil well fire smoke. While in Kuwait, I also assisted officials from the Government of Kuwait to design and undertake monitoring and research projects to assess the health effects of the air pollution created by the burning oil fields. These projects included the initiation of a health alert system for public health authorities, physicians, and the public, and the initiation of emergency room surveillance at two local hospitals and five clinics.

Air monitoring data from the Kuwait Environmental Protection Department demonstrated that the quality of air during April in Kuwait City was comparable to many American cities. In other words, the pollutants were not elevated to levels that would be associated with acute adverse health effects.

Data analysis of emergency room admissions at two hospitals in Kuwait City showed a small increase in the proportion of visits for gastrointestinal illnesses and psychiatric illnesses during the period after the oil well fires. However, we saw no increase in the proportion of visits for such expected conditions as acute upper and lower respiratory infections or asthma in the period when the oil fires were burning.

Kuwaiti soldiers and physicians who had treated civilian patients reported symptoms that included dry cough, black-tinged sputum, sore throats, increased nasal discharge, mildly burning eyes, a sensation that particles were falling on the skin, and fear that the exposure to the polluted air would result in adverse health effects. However, no reports of respiratory complaints requiring

medical treatment among previously healthy individuals were observed. No deaths attributable to the air pollution were reported during the field investigation, although the disruption in Kuwait precluded a complete ascertainment of mortality.

During my second visit to Kuwait in October 1991, I conducted a cross-sectional study of exposure to 33 volatile organic compounds among American fire fighters. I visited an area where fire fighters gathered for meals at the end of the day, and recruited volunteers for this study. Samples of blood from 40 fire fighters, typically within two hours after they left the oil fields, were collected and analyzed by the CDC laboratory. Compared to a sample of 114 U.S. residents, these fire fighters had higher blood concentrations of some volatile organic compounds in their blood. These chemicals remain in the blood for only a short period of time before being excreted. We do not know the long-term health effects of very short term exposures such as these.

In August 1992, I participated in a working group convened by the U.S. Army of experts to review concerns over health effects associated with low dose exposures to petroleum products. At that time, the working group reviewed recent reports of illness in veterans, discussed the appropriate clinical work up for patients being evaluated for concerns of petroleum toxicity, and discussed other possible causes for various reported symptoms. A consensus statement from that meeting was developed by the Army. I expect that this will be discussed by a representative from the Army today.

Summary of Current Findings

The hazards to the soldiers posed by the smoke were largely dependent on the concentration of the pollutants in the air near the camps. Fortunately, the plume from the fires rose up to 10,000 to 12,000 feet, mixing with the air and then dispersed for several thousand miles downwind over a period of several weeks.

As the plume travelled, the particles and gases contained within it became more widely dispersed and also more diluted. The highest concentrations were in the areas nearest the affected oil fields and the areas immediately downwind. We understand that few soldiers were in these areas for long periods of time. We expect the Army has specific information about how many soldiers were within a few miles of the fires. Considerable dilution took place over space, such that by the time the plume reached Saudi Arabia, where most of the troops were stationed, it was far less visible and less concentrated than in Kuwait.

Nevertheless, some minor respiratory problems were present among the soldiers. As mentioned previously, surveys of Marines stationed in Saudi Arabia and Kuwait showed that Marines in Kuwait reported more frequent symptoms of upper respiratory irritation such as dry cough compared with those who served only in Saudi Arabia. Marines with a history of asthma were more likely to report wheezing in Kuwait compared with Marines in Saudi Arabia.

The potential long-term health effects most likely to occur, as a result of prolonged exposure to the plumes, would probably be effects on the respiratory system. Potential effects on the respiratory system, such as a loss in lung function or the development of chronic bronchitis, would be of particular concern to those who were exposed for many months to severe particulate pollution. The exposure information available suggests that few troops would be placed in this category. These respiratory effects also might be more likely to occur in cigarette smokers.

Some of the hydrocarbons measured at low concentrations in the smoke have been shown to cause cancer in laboratory animals, but only at much higher levels of exposure. Most epidemiologic studies of health effects in humans following prolonged exposures are based on many years of exposure to the chemicals of interest. Thus, it would not be sound scientific practice to extrapolate from those studies to this situation, in which exposure changed

daily as the wind shifted direction and more fires were extinguished. Based on the exposure information that has been assembled, we would not expect a detectable increase in lung cancer in Gulf War Veterans as a result of the oil well fires.

Mr. Chairman, the Public Health Service cares about the health of the U.S. military personnel who served in the Gulf. We are available to provide consultation to the Department of Defense and the Department of Veterans Affairs in any efforts they decide to undertake to assess the health status of military personnel who served in the Gulf.

Mr. Chairman, this concludes my testimony. I will be happy to answer any questions you or other members of the Subcommittee may have.

EARON S. DAVIS, J.D., M.P.H.
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Statement of Earon S. Davis, J.D., M.P.H.

to the House Committee on Veterans Affairs
Prepared June 3, 1993

Honorable Chairman and Committee Members:

Your committee will soon be holding hearings on the health problems faced by returning Gulf War veterans and active duty soldiers. Of the proposals you will be hearing, one proposal is absolutely vital - the creation of an environmental control unit in San Antonio, TX under the supervision of Claudia Miller, M.D.

This unit has already been recommended by the National Academy of Sciences for conducting studies on Multiple Chemical Sensitivity, which is one of the core problems for these soldiers. Yet, there is infighting within government agencies on who would control this type of unit and where the money should come from. **Your committee has the power to resolve this impasse and get the job done.** As such, it will have just as much application to the massive civilian problems involving sick building syndrome, formaldehyde sensitivity, carpet illness and other synonyms for chemical sensitivity.

The proposal for an environmental unit has already been backed by General Blank, head of Walter Reed Army Medical Center. Similar support has come from the National Institute of Environmental Health Sciences, according to documents I have reviewed. However, unlike the V.A. and Army, most of the civilian agencies lack authority to fund construction projects.

Please do what you can to secure approval of funding for this environmental unit. San Antonio is the best location for numerous, very strong practical reasons, at this time. In order for the unit to be effective under current conditions it must be located in close proximity to a major V.A. center and, most importantly, to Dr. Claudia Miller, who is uniquely qualified to set up and operate this unit in a way that will satisfy both the scientific community and the affected individuals.

The proposal submitted by Dr. Miller is sound and reasonable. The price tag of 2-3 million dollars is a bargain considering the magnitude of the problem and the total inability of the military and V.A. to help these soldiers without research to better understand the sensitivity illness.

The only reason not to support this project is a desire not to understand the chemical sensitivity phenomenon. While some

vested interests would just as soon have you ignore the problem, our nation can not afford to take that course. Unstudied and unchecked, the chemical sensitivity problem has the potential to severely overload our disability compensation systems, substantially burden our economy and disrupt the ability of our military to defend our nation. Yet, these problems appear to be totally preventable! The time to act is now - and this proposal is the optimal vehicle.

Please let me know if I can provide any additional information to assist in your consideration of this question. I don't have any economic interest in this proposal, but I have been involved with the chemical sensitivity issue for 15 years and know most of the people involved. I wouldn't be writing if this were not a very, very important opportunity to make a major advance in understanding both the desert storm illness and the larger national problem related to chemical sensitivity.

Sincerely,

Earon S. Davis, J.D., M.P.H.

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June 25, 1993

Lane Evans, Chairman
Subcommittee on Oversight
and Investigations
U.S. House of Representatives
Committee on Veterans' Affairs
335 Cannon House Office Building
Washington, D.C. 20515

Dear Congressman Evans,

After interviewing about forty Desert Storm veterans, performing extensive medical evaluations on three and reviewing medical records on several more, I have come to several conclusions.

First, the physical health of many of the Desert Storm veterans has been seriously impaired and many more are having significant problems.

Although I am not privy to the deliberations of the Department of Defense concerning these matters, my conversations with federally employed physicians, Desert Storm veterans and military public health officials have lead to my second conclusion, i.e. the military has erroneously and superficially concluded that the Desert Storm veterans are simply overstressed or neurotic or seeking secondardy gain. In cases where physical impairment is undeniable, they have simply turned their backs on the veterans or active duty personnel.

By virtue of the questions I have been asked, I have also concluded, that most of the military public health physicians and other related personnel do not have the proper training to deal with the subjects at hand. This is not in itself a criticism, however it becomes a fault when the goverment health officals are reluctant to openly ask for assistance from more knowledgable physicians outside the military. In fact, civilian physicians are frequently ignored or verbally attacked by the military personel who have not even researched the subjects at issue.

Although I am positive that the Desert Storm veterans have significant health problems, I do not know, as of yet, what caused their problems. The interviews that I have had with many veterans have suggested several possible etiologies for their complaints. I believe that the main possibilities would be as follows: toxic effects of the pyridostigmine bromide (given as an anti-nerve gas agent), adverse reactions to the immunizations given for biological agents (in particular the anthrax vaccination), chemically adulterated pesticides used in the camps, chemical contaminated food or water due to the poorly controlled methods used to obtain and to transport food and water, exposure to organic solvents and other chemicals used for

maintenance of equipment, exposure to chemicals such as volatile organics, organic tin and organic lead that are used as fuel additives, exposure to unknown chemicals from the smoke produced when Iraqi munitions bunkers were destroyed by explosives and fire.

I also believe that the involvement of an unknown biological agent, natural or man made, needs to be ruled out. Legionnaire's disease and the AIDS virus have been around for a long time, however it took serendipitous circumstances for us to realize that these microorganisms even existed, much less a cause for public concern.

To reach a definitive conclusion as to the etiology of the Desert Storm Syndrome would require a combination of epidemiological studies, interviews of veterans by specially trained physicians, comprehensive medical evaluations and site evaluations for possible biological or chemical agents.

I am particularly concerned about the military medical personnel and their apparent lack of knowledge or lack of willingness to use the state-of-the-art medical testing that could be applied to these problems. We have spent fortunes developing and using smart weapons, however when it comes to our servicemen the military is using routine medical techniques as if looking for a common illness.

I believe that the possibility exists that an act of omission or commission by the military has caused or contributed to the development of these illnesses. Therefore, I conclude that the military is not impartial enough to conduct the necessary investigations. Based upon the reports I have received by soldiers regarding their harassment by the military for reporting medical complaints, I must conclude that a serious attitude and communications problem exists and would interfer with such investigations.

Based upon my medical training and experience with this matter, I recommend the following as part of the evaluations needed by the Desert Storm personnel.

They need a complete, basic medical evaluation to look for and to rule out garden variety illnesses.

They need to have a standardized, structured interview that contains the proper questions concerning the chronological development of symptoms and a description of the soldier's activities, including geographical position and dates, while in the middle east, as well as estimations regarding types and degrees of exposures.

The soldiers need to be triaged based upon the results of their symptom profiles and they need to be divided into categories based upon severity and type of symptoms, i.e, neurological, pulmonary, dermatological, etc.

All of the most significantly effected soldiers, a selected number of the less affected soldiers and some controls, e.g. combat veterans from Granada, Somalia and Panama, need evaluations by state-of-the-art testing methods that are appropriate for the problems observed in that individual or group.

These tests would include testing such as Positron Emission Tomography and/or 3 headed Single Photon Emission Computerized Tomography of the brain. PET is available at several areas around the country including a VA hospital in Los Angeles via Dr. Ali Khonsary, M.D.). SPECT is available at most major hospitals. Other tests might include visual, cognitive, somatosensory and auditory brain stem evoked potentials, quantitative and standard electroencephalograms,

rotational chair and dynamic posturograpy. Note that such tests are available at the best medical institutions and are used by NASA.

I can not emphasize enough the sincerity of the Desert Storm troops and the magnitude of their problems. Once again many dedicated Americans put their lives on the line when their country called and we should not let them down. We should put the same energy and resources into protecting and helping our American soldiers as we have done for other countries and their citizens.

Sincerely,

Thomas J. Callender, M.D.

STATEMENT OF PAUL E. PERRONE

Gentlemen,

My name is Paul Perrone. I was an active duty Air Force Sgt. for over five years. My specialty was Law Enforcement. I served from 20-Apr-1987 through 1-August-1992 when I was Honorably discharged. I served in Operation Desert Sheild/Storm from 28-Sep-90 through 20-Apr-1991. Let me start by thanking you for taking seriously what we have come to know as the Gulf War Syndrome. As you know this syndrome is literally ruining the lives of hundreds and possibly thousands of brave and patriotic men and women. All of this could be prevented if the Department of defense would step forward with the truth about what these soldiers were exposed to and start providing the proper medical/financial benefits.

The Department of Defense says are symptoms are mysterious or related to stress. I propose to you that these symptoms are obvious. Let's look at the symptoms of over exposure to pesticides alone. According to Linda Softely coordinator and Environmental Poison Specialist at the Massachusetts Poison Control Center, they include diarrhea, nausea, headache, influenza like syndrome, altered vision, shortness of breath, and skin irritation to name a few.

I was deployed from Williams AFB, Az. to Saudi Arabia in September of 1990. After seven months I returned to the United States in April of 1991. While in The Gulf my duties consisted of resource protection and base patrol. My co-workers and I were exposed just about daily to pesticides, jet fuel fumes, and diesel fuel fumes. Each one a toxic cocktail. Our food was brought in from local merchants in the form of box lunches. The water was bottled but by a Saudi Arabian company. We were told to go to the hospital and receive vaccines and not informed of there experimental nature. Now we have evidence of prolonged exposure to radiation.

In July of 1991, three months after my return from The Gulf, I started to have whole body reactions to certain foods. Driving in traffic would make me dizzy and confused. Common household cleaners would make me experience nausea and shortness of breath. In September of 1991 I started to seek medical help from the staff at Williams AFB, Az. for headaches and recurring vertigo. Ear infections and strange wart like growths on my left hand. When these growths were removed they would grow back. I also had severe shortness of breath and altered vision. I experienced muscle spasms and numbness. Fatigue so great I could hardly walk down a hallway without stopping to rest.

In April of 1992, one year after my return from the Gulf War, I became very fatigued and ill with nausea, vertigo, headache, shortness of breath and rapid heartbeat while performing the aerobic potion of the Air force Physical Fitness Exam. This was the first time in my five year military career that I had not passed this test. It took the emergency room staff over two hours to get my heart down from 135+ beats per minute to 100+ beats per minute. About a week after the fitness test I was admitted to the Williams AFB Hospital with vertigo, fatigue, impaired liver function, altered vision, muscle numbness and spasms. I was transferred to the Wilford Hall Medical Center with all symptom persisting and getting worse. After a total of 14 days in the hospital I was given a diagnosis of vestibuler dysfunction even though no vestibuler dysfunction was found.

When I was released from the hospital I was ordered to see a social worker for what she called a panic disorder. When I would go to the hospital with physical complaints I would always be referred to the Mental Health clinic. Because of my symptoms and lack of medical help I separated from the Air Force in August of 1992. I was not granted a medical discharge.

At this time I am being treated at the V.A. Medical Center Northampton, Massachusetts by Dr. Myra Shayevitz for Multiple Chemical Sensitivity Syndrome, Bronchial Asthma and Exertional Asthma. However I still have not been granted service connected disability for what is obviously a service connected disability.

THANK YOU!!

PAUL E. PERRONE
METHUEN, MASSACHUSETTS

RUTH GORDON MCGILL, M.D.
1302 SHAFTER
SAN ANGELO, TEXAS 76901

Written Testimony to the House Veterans' Affairs
Subcommittee on Oversight and Investigation
on Health Issues and Gulf War Veterans
June 8, 1993

Good morning. My name is Ruth Gordon McGill. I am a psychiatrist, a millionaire, and a civilian. I have Gulf War Syndrome (GWS). To the best of my knowledge, I am the first sick physician in the world to be given the double diagnoses "oxidative phosphorylation disorder (OxPhos) aka mitochondrial encephalomyopathy (MEM) plus "multiple chemical sensitivity (MCS)." I am certainly the first physician so afflicted to admit this in a Congressional hearing.

Prior to this hearing, I had interviewed eighteen sick veterans, about half in person and half by phone. Their symptoms were my symptoms, and their story is mine. I spent twelve years and more than $700,000 with more than twenty consultants in at least three major medical centers and half a dozen states. We found my answer, and I want to share the shortcuts and the price cuts with the military physicians in a technical briefing.

As a psychiatrist, I cringed every time I heard a witness or Congressman at this hearing use the word "stress," as it has too often been equated with lack of moral fiber, poor intestinal fortitude, and weak ego strength, and further used to so designate any group of political undesirables. The technical misuse of the word "stress" has contributed tremendous semantic confusion to our misunderstanding of GWS. Let us delete "just stress," which can be expected to clear up with rest, good food, peace of mind, and time. To further differentiate GWS from "psychogenic stress" or "psychogenic fatigue," I prefer the term "pathological fatigue." There are many kinds of pathological fatigue, but the unifying principle is this: none will clear up without medical treatment. Psychotherapy alone won't touch them.

I believe GWS is not one disease but a spectrum, that each veteran has more than one disease but in different combinations, and that one veteran's combination may or may not overlap another's so that at first they may not appear to be related. I believe that the combinations need be lumped into only four categories for which the diagnostic criteria are already known, that the connection between the four is the nervous system, and that the impact of nervous system dysfunction on each category has been grossly underestimated for decades.

Attachment I, Fig. 1 shows a Venn diagram with sets of patients or sets of symptoms of GWS. On my set diagram there is a place for all of the contributions offered by the nine physician witnesses, and for each of the six veterans, including Rep. Buyer and Mrs. Zuspann, who testified orally. It is an encompassing system offering a unifying pattern; nothing I say need be construed to conflict with anything offered by the other witnesses.

By far the largest group of patients has the mildest disease. I have included in one large circle those patients with mild nutrient deficiency, mild neurotoxicity, or both. The dual-cause theme is carried throughout the four sets, and deficiency/toxicity are the fundamental pillars of the nervous system connection. In both

conditions the signs and symptoms, such as periperal neuropathy, mouth lesions, and rashes, may be similar. That the twin pillars, deficiency and toxicity, are two different causes does not matter; the basic treatment, i.e. aggressive repletion of vitamins, minerals, and other essential nutrients, is the same for both, although for each patient the regimen must be individualized, secondary effects must be managed, and determination of particular toxins may indicate particular treatments.

The moderately sick fall into two related sets, fibromyalgia (FM) and Chronic Fatigue Syndrome (CFS). Researchers agree that FM and CFS are "sister diseases," distinguishable but strongly overlapping. Again, I believe that the link between FM and CFS is neurological, and that the dual theme deficiency/toxicity applies to both to different degrees. Fibromyalgia bears the nickname "soldier's disease," so I have shown FM overlapping the largest circle more than CFS. Witness Hyman's ideas fit into the CFS set, and its area of overlap can be enlarged if Dr. Hyman's ideas prove to apply to more veterans.

By far the most sick, and I believe the smallest (less than 1%) group, are those who fit into the small circle labeled "OxPhos." These patients have the worst nutrient depletion, the worst toxic damage, and the worst neurological symptoms. I propose that the most expensive neurological testing be reserved for this group, including tests at the research level. The moderately sick must be given conventional neuro tests, but I believe that positive-research test results for the very sick can be applied backwards by inference to the less sick, especially since the treatment is the same for mild, moderate, and severe.

Attachment I, Fig. 2, shows the similarity of GWS to Environmental Illness (EI) of Randolph. Almost all EI patients have pathological fatigue. Nutritional deficiencies have been documented in major subsets of this population. Probably a third have FM, and another fraction fulfils criteria for CFS. There is strong overlap with allergic disease, some classical but many atypical due to the chaotic interaction of allergies with more than one complication/variable. MCS/allergic disease is a cloud over <u>all</u> EI patients; on Fig. 2 I leave open circles for those GWS patients who do not complain of hypersensitivity to chemicals.

I propose that the veterans fell ill in a spectrum, with the largest, mild group losing water-soluble vitamins, and that the most ill proceded to deep, profound depletion of nutrients rarely found to be deficient, such as choline, carnitine, and CoQ10. Toxins are known to compete with and to deplete nutrients, and restoration of nutrients has been found to improve and speed recovery from toxicity of many kinds.

Given its modern description in World War II, FM probably appeared in survivors of the Lewis and Clark expedition and Napoleon's disastrous campaign in Russia. These campaigns were attended by incredible physical hardships over a period of weeks and months, exceptional even in combat and usually avoided by the modern army. Critical to my concept of GWS is my idea that grueling physical labor in the hot desert is such an exceptional hardship. Last year chiropractor Chris Chalk told the Associated Press that the soldiers' excessive sweating caused vitamin depletion. In this case, the M.D. agrees with the D.C. GWS veterans share generalized nutrient depletion with MCS patients in whom vitamin deficiencies are common. Both sets of patients are well fed, but neither set is well nourished because plenty of good food is not enough. Illness drains the MCS patient. I propose that the demands of hot, heavy labor literally exceeded the capacity of the soldiers' digestive systems. Military physicians, dieticians, and MRE's are not to blame. Rather, neither the RDA nor the human digestive system was equal to the exceptional

speed of ground deployment demanded in this war far more than any other (3). The RDA for combat and other exceptional stress conditions must be drastically raised. I propose that at least some soldiers drove themselves beyond their unique normal human capacity and paid for it.

The only area in which I depart from textbook nutrition is my own hypothesis that FM is caused by chronic choline deficiency/malutilization/hypersensitivity. We will have to be careful to distinguish the less serious choline deficiency of FM from the CoQ10 deficiency of more serious acquired MEM, as CoQ10 is an expensive supplement. I have lived with both conditions, I have controlled my own FM with choline metabolites, and I am still improving. Any textbook diagram of the cholinergic nervous system shows connections of numerous otherwise unrelated body systems and organs, and the organs so connected figure prominently in the complaints of veterans with GWS. The only surprise is that we have overlooked this for so long. There is no proof for the accepted view that FM is a rheumatoid disease; as a patient, I challenge this view.

Physicians have difficulty accepting GWS as a distinct disease because symptoms of lungs, skin, guts, muscle, and brain do not seem to be related. Witness Picou described neurogenic bladder; witness Zuspann described neurogenic hypersensitivity of guts and bronchi; witness Robertson described neurogenic pain and weakness of muscles. All complained of foggy thinking and neurogenic rash. We arrive at a pattern by widening our perspective to consider the connections of the nervous system. Now I propose that we find the target defect in the nervous sytem by enlarging our perspective with the electron microscope and considering the dysfunctional or damaged mitochondria, the particles in every cell of the body which generate the energy to keep the cell alive and doing its job.

The mitochondrion is a living battery. It even looks like a tiny battery, with the same arrangement of fluid-filled chambers we see in a car battery, with the same purpose to separate negative charge from positive charge. The problem with the vets' nervous systems is that their cellular batteries are low. The nervous system is the first to show dysfunction as a result of too little energy because its cells are the most demanding of energy and they heal poorly. Nevertheless, in severe acquired OxPhos all cells of the body may ultimately suffer from lack of energy. Like other specialists, neurologists are not accustomed to closely examining systems and organs other than their own interest, and I took my third neurologist by surprise by showing dysfunction of my pancreas, guts, endocrine glands, skin, bone marrow, and kidneys/bladder. That damage to mitochondria has many causes has been known for decades. We are about to learn that mitochondrial damage has more effects than we had previously estimated.

"OxPhos" is the name for low battery disease that refers to the target process of energy generation that is damaged. "Acquired mitochondrial encephalomyopathy (AMEM)" is the name for the same disease that refers to the target structures, brain and muscles, that suffer. No physician who has not lived with low battery disease could realize from the neurological literature that this is what our vets have, because patients described in the literature have much more striking neurological damage. My OxPhos is mild and I have reason to hope that the disease of most of the sick vets is even milder than mine. However, I second witness Roberts's statement that no soldier so afflicted before the war could have made it through boot camp. It is typical of the history of research in a new disease that the sickest patients are identified and studied first, and the milder cases turn up later, being gradually connected to the earlier, severe cases.

OxPhos was not identified in the veterans for three reasons. It is a concept of disease new to most neurologists, so only a few researchers readily recognize it. The VHA is chronically underserved in neurology; the veterans I interviewed had inadequate and inappropriate neuro exams and testing, and this is not a problem new to the Gulf War. The causes of mitochondrial damage are legion, as physicians will understand immediately from their biochemistry training alone. Most vets were exposed

to more than one cause, and some exposures will not overlap in any way with others. This means we will not find a linear cause-effect relationship and the sooner we give up that idea, the better. The dogged, dogmatic search for the linear relationship is the single worst obstacle to the diagnosis of OxPhos in the vets. The relationship of multiple causes and effects in OxPhos, MCS, and other baffling disease is "chaotic," a mathematical term that has found wonderful application in biology.(5) It is possible to reason backwards from a chaotic situation, as I did, to discover the initial event (mitochondrial damage) and contributing variables (deficiency and toxicity); it is not possible to predict the effect in the individual patient except in the most general terms. Because of the mathematical impossibility of prediction, the burning question from witnesses and Congressmen about a screening test may not be answerable. If the vulnerable are pre-selected out by flunking boot camp, then acquired OxPhos in the fit remainder would be a matter of bad luck, and control a matter of prevention. Prevention of toxicity and deficiency is relatively easy and potentially very fruitful.

Physicians unacquainted with environmental illness complain that it is poorly defined. This is not true. It is, however, mathematically chaotic because every patient presents with at least three variables. A logical system of criteria for EI of Randolph, not shown on the set diagram, is as follows:

1. Multiple chemical sensitivity, with or without
2. Underlying metabolic or constitutional weaknesses and pre-esisting conditions, with or without
3. Allergic hypersensitivity, classical or atypical, and
4. Secondary complications of (1), (2), and/or (3).

Under each heading are potentially inumerable known and diagnosable conditions. It remains to be seen whether all GWS vets have allergies and/or MCS on formal testing, but even if some vets prove simple to diagnose, we are well into a chaotic pattern, and confusion over GWS shows that EI of Randolph is not just one disease, but a whole new paradigm of cause and effect, and a whole new specialty of training.

Despite the chaos, it will not be difficult to meet witness Blanck's goal of diagnostic criteria. Accepted criteria for occupational asthma and FM are in place. Criteria for pre-clinical nutrient deficiencies are a political, not a medical problem, but will have to be expanded; we should be ashamed of ourselves for hearing complaints of bleeding gums and not thinking of scurvy. Diagnostic criteria for both OxPhos and CFS will have to be enlarged; they are designed for research, not application. There remains the knotty problem of criteria for MCS.

The other physician witnesses will crucify me, but as a patient in distress I must expose this fact: the peer-reviewed literature on MCS is rotten with dirty intramural politics. In no other medical controversy have physicians used sick people as political footballs for personal, financial, and political advancement. Even the scientific method has been corrupted.(1,4) Only an article that concludes that MCS is psychiatric is politically correct and acceptable for publication. This conclusion is easily reached by performing the wrong procedures on the wrong patients at the wrong time under the wrong conditions, producing negative findings and "proving" that MCS is psychiatric by default. According to the principles of logic, it is impossible to prove a negative; according to medical politicians, even a negative is proof as long as it is p.c.

Everyone in medicine knows that it is career suicide to champion the MCS patient as a medical and not as a psychiatric problem. As a patient I can say this because chronic illness blew my career to smithereens years ago. Academicians who testify in toxic torts that MCS patients are psychiatric may expect to advance in the hierarchy and to collect more fees and more grant money to "prove" that MCS is not a medical problem, over and over again. Policians know well the adage that the more a lie is repeated, the more it is believed to be true. The great American psychologist William

James called this kind of group dynamic, this evolving group mindset, not a conspiracy but a "tyrannical machine." A sign of the intrusion of politics into diagnosis is the fact that the conclusion of Maj. Ann Norwood, MC, the Walter Reed team's own psychiatrist, that "relatively few described symptoms highly suggestive of PTSD," has been widely ignored. Maj. Norwood's work is honest but it has been twisted in use, just as have the psychiatric findings in civilian literature. Where positive psychiatric findings for MCS patients are described, they show that MCS patients have the same psychometric profile as pregnant women, cancer patients, and others with uncomfortable physicial conditions, but this finding has been explained away. It is generally known and just as readily disavowed that sixty percent of patients who score high on the MMPI scale for psychiatric complaints eventually turn out to have an undiagnosed medical problem. Such civilian patients are written off with the diagnosis of "somatization disorder," a diagnosis abused, like PTSD, as a wastebasket label.

Witness Mather has accurately testified that the widely accepted (read "p.c.") definition of MCS a) limits the pool of patients to those with documented exposure to known toxins and b)states that there is no widely accepted test for MCS. Mather is not to blame that this definition is widely accepted. It is even more narrow than the "Cullen definition" on which it is based. It is so narrow that it almost eliminates MCS as an operational topic altogether, although poor Cullen probably didn't intend this. Lawyers and politicians can see more readily than the physician what the problem with this definition is. a) It excludes almost all MCS patients by assigning them the burden of proof of their exposure and b) dismisses out of hand any test that might come up for MCS, because that would not fit the definition. In the military, this is known as Catch 22. Indeed, more than ten such tests have been gleefully dismissed by medical politicians. The whole point of the widely accepted definition is to anathematize MCS. It was written as if by a lawyer to protect the academician. It is the ultimate absurdity in defensive medicine, where medicine is written out altogether. It circumscribes a small domain, a "King's X" safe territory where the academician may perform research free from the harassment given to the mostly private physicians who dare to champion MCS in court and in public. It makes the patient prove to the researcher that he has MCS and relieves the researcher of any responsibility for proof whatsoever.

Academicians almost never testify for the MCS plaintiff because they observe that private physicians who do frequently get hauled before the state medical boards and slapped in turn for the "malpractice" of offering medical treatment to "psychiatric" patients who are a priori judged incompetent to select their own personal physicians. To say that academicians are terrified of losing their posts, their grant money, and their prestige over this controversy is an understatement. Witness Wall has testified that there are at least 1100 experts in occupational medicine who could be called upon to help the V.H.A. He is mistaken. Research in occupational medicine on MCS has been severely curtailed by terroristic politics and few academicians know beans about it. Instead, they have limited their efforts to very high quality work in the tiny circumscribed areas that are politically acceptable. Last fall I attended a convention where one of the nation's top occupational experts told us that he had worked with only three MCS patients. Academic occupational medicine is on the same learning curve as the V.H.A.

The honor roll of physicians who have been harassed for championing the MCS patient is a matter of public record. The list of articles "proving" MCS is psychogenic is available through Medline. Public statements from the American College of Physicians, the California Medical Association, and the American College of Allergy and Immunology say that MCS is psychogenic if not ridiculous.

Polite consensus at the 1991 National Research Council workshop on MCS held, gently, that the ACP statement is suspect because it was crafted by an internist who earns fees as an anti-MCS professional witness. The unsavory enforcement process of the CMA statement was struck down for violating the Bill of Rights and restraint-of-trade laws, although the substance was allowed to stand. The ACAI position is based upon the efforts of some allergists, also anti-MCS professional witnesses, who wandered out of their field and declared MCS a psychiatric disease; their psychiatric expertise can only be suspect. A handful of over-eager psychiatrists have pronounced MCS psychogenic based upon self-reporting psychometric profiles, although there is still no such thing as a laboratory test for psychiatric disease of any kind. The eager beavers threaten the entire premise of psychiatry by holding MCS researchers to higher standards of proof than they themselves can muster or abide, and they are outvoted by the sheer number of psychiatrists who actually suffer from MCS.

When witness Holsinger was asked if nations other than the U.S. knew and accepted MCS, he said he was not aware of any. It is true that most U.S. physicians are unaware of the positions of other nations on MCS; it is not true that it is unknown and not accepted abroad. In 1982 I obtained a Medline printout of references to "chemical hypersensitivity" in all languages. It was two inches thick, and the best references seemed to be abstracted from articles in eastern European languages I couldn't read. With the fall of the Iron Curtain and unveiling of ghastly pollution in eastern Europe and the former U.S.S.R., it is now clear why physicians in those nations had so much to write about. The definitive Canadian document, a report to the government of Ontario by a panel chaired by AAEM member Dr. John Gerrard (analogous to Miller and Ashford's report to the State of New Jersey), has been so misrepresented and distorted in the U.S. medical press that it is nigh unrecognizable. Most U.S. physicians mistakenly believe that it condemns MCS, but it says pretty much the same thing as the NRC report calling for more research. My own regimen includes CoQ10, known to improve tissue damage by "free radicals," a class of chemicals including pollutants. The Japanese take CoQ10 like candy; maybe we should be worried.

Any flat declaration that there is no accepted test for MCS is a lie, but few physicians realize this. Many tests have shown abnormalities in MCS patients in a chaotic pattern, but these tests have systematically been declared "okay" for patients with disease other than MCS and "not okay," "lab error," "poor quality control" (read p.i.) for MCS patients. New advances in neurological technology are ready to detonate the safe, limited, accepted definition. The new technology cannot be explained away. It differentiates between pathological (neurogenic) fatigue and psychogenic (depression) fatigue. I have been hospitalized five times in an environmental unit for prostration. I have taken the advanced tests and they show I have OxPhos. The sick veterans must be given these tests and the indicated treatment. I have made a matching grant of $30,000 to the AAEM for this purpose. The veterans shouldn't have to be millionaires, and they shouldn't have to overthrow the tyrannical machine, to get the diagnosis and treatment they have earned. It is not difficult.

No one will be more surprised than the neurologist to learn that MCS is a neuro logical disease. Given the political climate, the neurologist, who like most physicians has accepted the psychiatric misdiagnosis of the patient, will also be dismayed, appalled, and horrified to find the hot potato in his lap. I am pleased to help the neurologist find peace of mind by offering a physician-patient's definition of MCS.

> Multiple chemical sensitivity is neurotoxic, neuroinflammatory, neurometabolic hypersensitivity to environmental levels considered acceptable of chemicals considered to be of low toxicity. Most important target organs of MCS are brain, lungs, guts, and skin, in that order, as these are first in line to take the impact of chemical bombardment and/or are difficult to heal.

The acceptability of environmental levels and the toxicity of chemicals will vary with time and with more research. This sliding standard is not central to my physician's definition of MCS; it is the lawyer who would make it so. My definition is aligned with arguments from witnesses Violante, Wall, and Robertson that the disability of the patient should be adjudicated based on the condition of the patient and not upon the circumstances in which the condition was incurred, and that the "higher incidence standard" should not apply to persons demonstrably sick. My definition is proactively medical, not politicolegal or operational. There are different kinds of definitions, and mine offers no diagnostic criteria. Witness Miller has offered an operational definition that can be tested readily and which will generate the diagnostic criteria sought by the military team. The diagnostic criteria so generated will dramatically broaden the Cullen definition of MCS.

There are at least three good models in basic neuroscience which can easily apply to MCS. But these models, due to the political contamination of science, have been allowed to to applied only to animals, not humans. When Miller stubbornly defended the need for a long-term research unit in the face of aggressive questioning by ideological opposites Rep. Buyer and Rep. Kennedy, her stock soared with a scientific community that believes that a closed book is a closed mind is an obstacle to progress. I am delighted to second her request for said research unit.

It is not an accident that GWS turns out to be a neurological disorder mistaken for psychiatric, because it is a fact that disorders of the brain affect the mind. It is also a fact that psychiatric treatment will not heal a neurological disease. Neurologists and psychiatrists still flinch at the memory that once patients with atypical seizures, post-encephalitic Parkinson's disease, and Tourette's syndrome were written off as psychiatric.

Political intrusion into applied nutrition is second only to political intrusion into environmental medicine. Textbook knowledge in nutritional biochemistry was overlooked in the GWS puzzle because it is politically incorrect to diagnose deficiency in the well-fed U.S. population, and more so in the well-fed military. Intrusion has reached a crisis in the past several years, as FDA Commissioner Kessler has moved to ban and recall as many over-the-counter nutritional supplements as possible. His move is based on the FDS's mandate from the 1950's, long since rendered obsolete, but the FDA is not being nice about it.

In the past twelve years I have survived documented deficiencies of at least five essential nutrients, requiring hospital repletion followed by lengthy outpatient therapy. OxPhos patients are known to suffer a grab-bag of underlying and secondary metabolic problems, many relieved by supplements. My latest regimen was prescribed by a distinguished neurologist at a distinguished university medical center, and it is illegal. The veterans' grapevine hums with reports of improvement of GWS with supplements, and they are also illegal. The only thing more embarrassing than the fact that the treatments for GWS were discovered by the patients themselves is the fact that the treatments are against the law, so the law must be changed. Congress must pass the Hatch-Richardson bill (S.784 and H.R. 1709) to stop Commissioner Kessler from arresting Gen. Colin Powell for trafficking in illegal substances.

The mind is only responsible for itself, that is for maintaining its own sanity. The mind has very little control over the function of the nervous system and no control whatsoever over its structure. The most cockeyed optimist in in psychology still denies that a causal relation between emotion and structural lesions has been proven. (2) Recent breakthroughs demonstrating connections between n the nervous system and the immune system, impressive on their own, have been abused and twisted by premature claims that these studies have something to do with psychology. Such speculative elaboration leaps several quanta to the conclusion that they "prove" that the mind causes structural lesions by bad feelings. It is cruel to demand of our veterans that they cure themselves by thinking happy thoughts.

Civilian medicine has served the military badly, and the military ought to be hopping mad. The mystery illness is no mystery, but the military was caught unprepared as a consequence of the malevolent political suppression of research and communication about MCS, and an unacceptably large number of gallant soldiers are paying the price. The military should abandon civilian constraints and champion their own work. From time to time the military just can't help but make a wonderful contribution to medicine at large because they have to innovate out of dire necessity, although they are not primarily mandated to perform research. Now is the time.

Summary:

1. The veterans have pathological fatigue, ranging from mild to OxPhos, the most serious. Pathological fatigue manifests in the nervous system first and worst.
2. Multiple chemical sensitivity is a major aspect in nervous system dysfunction in GWS.
3. The target organs (structures) and target neurotransmitter systems (functions) may vary from patient to patient depending upon individual differences and circumstances of exposure.
4. MCS is reversible in early stages. MCS is treatable to a limited extent and improves slowly if at all, because the nervous system heals itself poorly.
5. Vitamin deficiency is a known cause of nervous system damage and dysfunction, and is notorious for being overlooked.
6. Toxicity is another known cause of nervous system damage.
7. Mitchondria are damaged and rendered dysfunctional by many kinds of nutritional and toxic insults. Consequences of mitochondrial damage are manifold.
8. Manifold variables dictate a chaotic mathematical pattern and negate a linear cause-effect relationship.
9. There is no medical controversy over MCS. This controversy is entirely political.
10. Speed of treatment is of the essence. Proper treatment is cheaper than neglect and prompt action is cheaper than delayed action.

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3. Pagonis, Lt. Gen. William G., with J. L. Cruikshank, Moving Mountains: Lessons in Leadership and Logistics from the Gulf War, Harvard Business School Press, Boston 1992
4. Roisman, Anthony, "'Junk Law:' Defense Attacks on Causation," Trial, Sept. 1991
5. Wempen, Ronald R., "Chaotic Analysis of Biological Dynamic Systems," presentation to American Academy of Environmental Medicine, Jacksonville, FL, Oct. 1991

Wish List, Recommendations, and Proposed Legislation:

1. Support Hatch-Richardson bill (S.784) to revise FDA's mandate to regulate nutritional supplements.
2. Immediately fund Title 38 to provide reimbursement to private phsycians and facilities for care of both veterans and active military, in cases where military capability is inadequate.
3. Ask Secretary Brown to authorize civilian consultants, especially in Environmental, Occupational, and Nuclear Medicine and Neurology to certify Gulf War and earlier veterans for disability and treatment; ask VHA to accept such certification.
4. Fund $450,000 matching grant to U.T. H.S.C. San Antonio jointly with U.S. military for environmental research and treatment center. With private pledge in place, this would be in irresistable bargain and would more than pay for itself.
5. Match Ruth G. McGill's grant to AAEM for research on oxidative phosphorylation disorder in G.W. veterans. Funding is already in place in at least one V.A. - university joint facility for part of this research.
6. Fund NIH for more research in OxPhos and earmark funds for proposed San Antonio center.
7. Increase VHA budget specifically for recall and re-evaluation of veterans turned down for environmental disability.
8. Enlarge definition of qualification for purple heart medal to include metabolic injury.
9. Call on vendors of high-tech diagnostic and experimental equipment to give the military some free deomonstrations on GW veterans. They will probably be delighted, as availability of this equipment is still too limited anywhere.
10. Fund active military for 20-year mass statistical epidemiological study of recruits for screening test(s) for Gulf War Syndrome.
11. Authorize military to admit civilians into proposed San Antonio unit on space available basis so as to minimize expense to military and maximize capability to treat all sick U.S. citizens. Limited number of most sick veterans will soon be restored to outpatient status, but cases continue to arise among civilians, for whom facilities are inadequate. Military would not be competing with civilian facilities because there is only one other.
12. Protect physicians for championing GWS and MCS patients. Stop kangaroo courts. Stop politicolegal harassment of these physicians.
13. Enlarge Medicare and Medicaid coverage for treatment of environmental illness in civilians and veterans without disability. Ask Hilary Rodham Clinton.
14. Enlarge registry to include late complications, cancer, and birth/defects and dying infants born to veterans. Autopsies of such infants to medical centers with capability in molecular genetics.
15. Ask military physicians and scientists to debrief me. I have technical information to share.
16. Presidential Medal of Freedom for Dr. Theron Randolph. Pass the word.

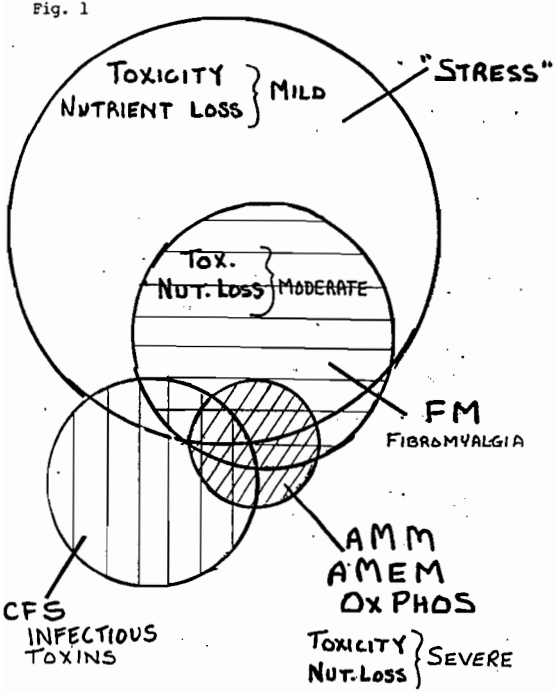
Thank you for reading, listening, and hearing. I feel better already.

Ruth G. McGill MD

Ruth G. McGill, M.D.

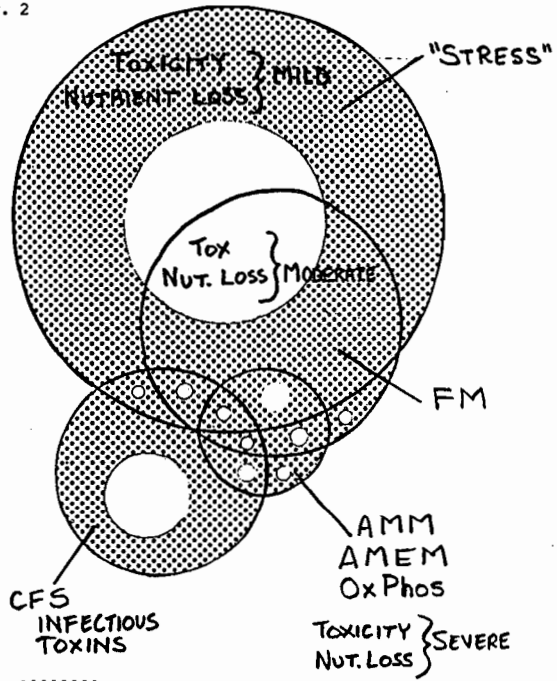
ATTACHMENT I. Relationship of Pathological Fatigue, Gulf War Syndrome, and Environmental Illness of Randolph. All patients in all circles have pathological fatigue. Four subgoups can be distinguished with existing diagnostic criteria. Psychiatric patients are excluded.

Fig. 1



Areas outside largest circle may be used to designate civilians with same disorders.

Fig. 2



With MCS/allergies/asthma

Without MCS/allergies/asthma (some veterans)

STATEMENT OF HESTER ADCOCK

June 9, 1993

HOUSE VETERANS AFFAIRS SUBCOMMITTEE ON OVERSIGHT AND INVESTIGATIONS

Mr. Chairman and members of the subcommittee, thank you for allowing me the opportunity to submit my personal views in regards to Desert Shield, Desert Storm illnesses, health care, and namely, the death of my son. I am the mother of Army Specialist Michael C. Adcock, 22 year old Gulf War veteran, now deceased. Michael served in Desert Storm from January 18, 1991 to May 19, 1991, arriving home May 23rd, 1991 only to die eleven months later, on April 23, 1992. Prior to the Gulf War Michael was very active physically. In high school he was a four year letterman in football, playing "all" positions, broke a weightlifting championship, worked out daily, ran at least five miles a day and while serving in the Army in Geramny, he was a boxer and a wrestler. Michael became ill as early as January 25th, 1991 and reported to the 8th Evac hospital in Saudi Arabia complaining of rectal bleeding. He was given what appears to be the Army's drug of choice "Motrin". Although the examining physician wrote on Michaels military records requesting surgical consult, my son was never referred to a surgeon. I learned this after my sons death, when I received very limited military records of my son. After requesting by phone and writing to Arperson in St. Louis, Missouri on several occasions, I have as yet to obtain all of my sons military medical records. It is bad enough that my own government has in my own opinion helped "kill" my son - now I cannot obtain the pertinent medical information that I feel is due me. Unfortunately, it appears to be a commom practice to lose, misplace, and /or have incomplete personal and medical records including but not limited to immunization, dental, and all x-rays. Losing of such records of our Armed forces is causing a tremendous hardship on families such as myself. It causes undue stress; it costs the military extra monies to try to locate such lost records, and this causes the military , V.A. and us the taxpayers more money.

I have been advised by many attorneys that the offices who condone such practices are in direct violation of the U.C.M.J. This poor record keeping and lackadaisical attitudes of our military in charge of such affairs must cease immediately.

I, as a breaved and grieving mother, have many questions I want answered. I feel that since Michael was sick while serving in the Gulf that he should have been given a one hundred percent medical discharge instead of a regular discharge. Michael should

have been sent to either Germany for further diagnostic testing or back state side,especially since he had repeated rectal bleeding, rash, severe headaches, raspy voice, hoarseness, achy joints, just to name a few. Instead , he was given more Motrin. And upon return to state side, he along with many others in his unit was given very limited physicals with no chest x-rays, although Michael military records stated, surgery consult requested per attending physician. Again; Such a practice must cease immediately. The military should be held responsible for my sons death. Had Michael been given proper diagnostic testing while serving in the Gulf, my son could possibly be alive today. My son was a very patriotic young man. He loved his country, his family and God. I ask you today, "How much did my country love and appreciate my son?". He felt it his patriotic duty to serve in the military, he wore his Army uniform proudly, he was a brave and courageous soldier. Had Michael died on the battlefield, I would not be asking any questions. War is war - but now I must admit I am angry. I feel that my son died a senseless, needless, very painful death of multiple cancers. Why? Will I ever get an answer? My jewel is gone forever.

Micahaels death bed wish was for me to fight for him and fight for all of his comrades. After this request, a few short hours later, Michael slipped into a coma- never to talk to mommy again- he died seven days later. Fight I must! One young life is one too many to lose!

When I tried to get Michael treated at the V.A. hospitals, he was denied entrance, namely Walter Reed Army Medical Center and Gainesville V.A. This is inexcusable, absolutely deplorable.

Also, our military must stop discharging all soldiers, army, marines, sailors, coast guardsmen - all military without proper diagnosis and proper disability ratings. With 0-10% ratings of our sick, injured and unfortunately dying veterans, they do not qualify for V.A. treatment or disability checks. The administrative practice of P.E.B. boards giving these low ratings, no matter the degree of sickness or level of impairment must not be allowed or tolerated.

It is a much larger problem than just that of my son. I have a heartfelt concern for all veterans. I want a study done with the P.E.B. of all veterans discharged with the same and similar sicknesses and ailments of my son to be conducted on our Gulf War veterans. The military is not giving proper or quality medical treatment prior to discharge from active duty. The veterans are too sick to perform their duties in the military, but are expected to process out of the military and get a job to support themselves and their families. This military bureracy must stop! Our sons and daughters are being treated unfairly. They are being turned away from V.A. hospitals and left to just "fend for themselves". This is America; we should not be treating our veterans like they are just a number! This angers me! We must stand up- speak up- be heard. I am one mother that intends to make a difference. I am sorry that I have to say that I cannot with a good conscience recommend any young person to enter the military. I love my country; I fly my flag everday. Unfortunately,

our own military and our government failed my son. My familys loss cannot be measured in words. Michael is gone from our touch, never from our heart.

Time is of the essence! OUr Gulf war veterans need immediate medical attention. We do not have trained physicians in our V.A. hospitals to properly diagnosis and treat these multiple debilitating and often fatal illnesses now plaguing our Gulf war veterans. I urge this panel to review all of the veterans and their families, friends and concerned persons statements, testimonies that have and will be submitted; read and listen with an open mind and search your heart, please - please don't wait any longer to help my sons comrades. Don't wait until another Mom, DAd, Brother, and sister-in-law has to bury another young soldier.

We must not allow the military or our government to "coverup" as was the case with our Viet Nam veterans. Many of these soldiers are sons and daughters of Viet Nam era veterans and resent their children being treated with disparate disregard. When the shooting stops, we must not walk away and turn our backs on our veterans.

Thank you for allowing me the opportunity to write my views and concerns of not only my son but all of his comrades. May God truly bless America.

Sincerely,

Hester Adcock

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WRITTEN COMMITTEEE QUESTIONS AND THEIR RESPONSES

CONGRESSMAN CLEMENT TO DEPARTMENT OF VETERANS AFFAIRS

QUESTIONS SUBMITTED BY
HONORABLE BOB CLEMENTS
SUBCOMMITTEE ON OVERSIGHT & INVESTIGATIONS
COMMITTEE ON VETERANS' AFFAIRS

HEALTH CONCERNS OF PERSIAN GULF WAR VETERANS
AND RELATED ISSUES

JUNE 9, 1993

Question 1: If MCS is recognized by VA as a medical condition, how will it impact the VA?

Answer: The initial impact of VA recognizing "Multiple Chemical Sensitivity" (MCS) as a medical condition would be intangible and difficult to measure. The first impact would be the challenge of establishing an acceptable definition for the condition and defining exposure and disease relationships. Then the problem of diagnostic and therapeutic decisions would have to be addressed. What works? Why? What do various tests mean? What are normal values for them? There are no well controlled studies providing confirmation of the efficacy of the diagnostic and therapeutic modalities involved in diagnosing and treating multiple chemical sensitivities, so the usual basis for these decisions is missing. What we have is anecdotal evidence based on clinical experience that certain procedures work. Trying to train scientifically oriented physicians to take care of patients or even provide adequate compensation examinations without the usual academic and scientific support will be difficult and may not be successful. This would lead to contracting for care without the usual criteria for judging the quality of that care. The more tangible impact is difficult to predict since there are no good estimates of the scope of the problem in the civilian or veteran populations.

Question 2: VA regulations permit care for Persian Gulf vets' conditions pending official determination of whether their conditions are connected to Gulf duty. How long does this take? What exactly is involved in the official determination? What is the next step for the vets if no connection is found between their condition and their service in the Gulf War? What is the next step for the vets if there is a connection?

Answer: VA regulations do not yet exist permitting care for Persian Gulf veterans' conditions pending official determination of whether their conditions are connected to Gulf duty. VA has, however, submitted proposed legislation allowing such care under these conditions. Pending passage of such legislation, VA is allowing such care as a matter of policy.

Current policy allows VA health care facilities to provide treatment to any veteran who served in the Persian Gulf theatre for any condition a VA physician has determined is possibly related to such service. If a veteran requiring such treatment has no other eligibility other than as a discretionary veteran required to make copayments, copayment requirements are deferred until the veteran's claim for service-connection has been adjudicated.

Veterans who are found to have conditions requiring treatment that could possibly be related to their service in the Persian Gulf Theatre are encouraged to file claims for service-connection through their local VA regional office. Veterans are requested to do so as soon as possible as such ratings can affect their continued care through VA.

Once a veteran has filed a claim, all copayment actions for care of conditions possibly related to the veteran's service in the Persian Gulf Theatre are deferred until adjudication action has been completed. Time required between referral of a veteran to a VA regional office and actual notification that rating action has been completed varies widely from veteran to veteran.

If the veteran is determined to be service-connected for a condition(s), the veteran is entitled to receive any medical care or services required in the treatment of that condition(s) free of charge. If any copayment billing action is pending, all such action will be waived and any future care provided for that condition(s) will be provide without any copayment billing action taken.

If the veteran is determined to be nonservice-connected for the condition(s) for which VA has been deferring copayment action, then copayment billing will be initiated. Any future care will be provided only if the veteran agrees to make the necessary copayments.

Question 3: You referred to an extended environmental study of 1,400 vets claiming similar symptoms to those widely reported. What exactly is being done in this study? What findings can you report thus far? How does this relate to the 26 referred to the 3 referral centers, that is, is there any correlation of symptoms and will these 1,400 be sent to the referral centers?

Answer: Our Environmental Epidemiology Service (EES) reviewed the first 1,404 veterans who received the VA Persian Gulf Registry examination to obtain information about the problems that were experienced by these veterans. This review showed that common complaints were fatigue, skin rash, headache, loss of memory, muscle/joint pain, shortness of breath, cough, diarrhea and chest pain. A wide range of medical conditions were diagnosed among the participants. EES will periodically review Registry medical data to help generate a hypothesis for in-depth analytical study. This review is completely separate from the work of the Referral Centers. These centers help diagnose and treat Persian Gulf veterans who cannot be helped on an outpatient basis at a local VA medical center. The 1,404 veterans will not be sent to the Referral Centers. The special centers only deal with very unusual and difficult diagnoses.

Question 4: Secretary Brown's recent comments have expressed a desire and intent to look at other possible explanations, such as environmental factors, and I have read about plans to enter into a venture with the University of Texas at San Antonio's Environmental Medical Center to look at MCS. What is the position of the VA on MCS? Do the recent statements and actions by Secretary Brown reflect a change in VA policy with regard to MCS?

Answer: The Department is very interested in the proposal made concerning the University of Texas at San Antonio. Currently, we can neither rule out multiple chemical sensitivities as an explanation for some of the problems experienced by Persian Gulf veterans, nor can we endorse it as a bona fide medical diagnosis. Currently, there simply is not enough information on this subject. The proposal mentioned in your question is an attempt to close this information gap. We do not see this as a change in VA policy on this matter.

HONORABLE BOB CLEMENTS

Question 5: Shouldn't the VA begin looking at the big picture and apply a comprehensive approach to analysis and treatment of symptoms as opposed to treating each symptom and each soldier independently?

Answer: VA is looking at the "big picture." At the same time, we must continue to treat each veteran as an individual and respond to his or her symptoms. Not all veterans have the same problems. The symptoms of which Persian Gulf veterans complain are very non-specific and could relate to a number of diseases. It does veterans, or any patient, a disservice, not to rule out as many of these as possible before accepting a non-specific label.

Question 6: What interaction has the VA had with Dr. Hyman? What are the VA's views of Dr. Hyman and his method of treatment? Your testimony made reference to "appropriate treatments" would VA consider Dr. Hyman's treatments appropriate?

Answer: VA has had numerous contacts with Dr. Edward Hyman concerning his treatment modalities for Persian Gulf veterans who have contacted him for diagnosis and treatment of their symptoms. Currently, VA considers Dr. Hyman's methods to be investigational. Dr. Hyman has been requested to share his diagnostic and treatment protocol with VA. However, Dr. Hyman expressed reluctance in doing so and, to date, VA has not received a protocol that can be reviewed. Dr. Hyman gives every evidence of being a concerned physician who wishes to treat the conditions presented to him by some Persian Gulf veterans. The informal description given by Dr. Hyman of his treatment indicates that he is treating low grade bacterial infections with massive doses of IV antibiotics. He was not very specific about the types or amounts, but has advised that he prescribed treatment according to the results of urine tests on each individual and the patient's response to that treatment. VA cannot consider Dr. Hyman's treatment as "appropriate" since no protocol has been made available that provides an adequate description of the treatment modality. VA is very concerned that any treatment of veterans be in accordance with recognized medical practices. There is also concern that any protocol for treatment or research on veterans be vigorously peer reviewed and that human subjects committees review all research involving humans. Until this is done, it is not possible for VA to accept Dr. Hyman's treatment regimen for Persian Gulf veterans.

Question 7: Can you provide to the committee a breakdown of the 26 vets sent to referral centers, such as symptoms, treatments, diagnoses, etc.? Are they still complaining of symptoms? Have they come back to the VA for treatment? What kind of followup has been done?

Answer: As requested, we are providing you with a breakdown of the 29 discharged veterans sent to VA's Persian Gulf Referral Centers as of July 2, 1993. (Attachment) This breakdown provides a description of the symptoms, consults/procedures, discharge diagnosis and treatment of these individuals. In some instances, in spite of extensive diagnostic workup and treatment, some veterans continue to present symptoms that they believe requires further diagnosis/treatment. In such cases, these veterans are invited to return to the Center for additional diagnosis and treatment as medically indicated. Some veterans have done so. However, some have elected not to return.

HONORABLE BOB CLEMENTS

VA attempts to provide for a followup of these individuals by referring them back to the medical center that originally provided for their medical workup at the Persian Gulf Referral Center. These medical centers are advised of each veteran's discharge and provided with information concerning their diagnosis and treatment while at the Referral Center.

Question 8: The committee has been told several steps were taken to ensure that everyone in the VA had knowledge of the Registry and what was expected of them, yet Betty Zuspann told us earlier that she had taken calls from VA personnel who had seen her on television talking about the Registry and who wanted to know exactly what they should be doing. She also told us that she discovered the VA Medical Centers were holding their Registry lists and not reporting them to Central Office, or wherever it is they are accumulated, and so she began calling the VA Medical Centers to tell them to send their lists in. Obviously, this would have some impact on the low numbers and slow assessment of the extent of the problem. What are your views on this and do you have any knowledge of this, or any comment concerning Mrs. Zuspann's statements?

Answer: VA, through ongoing nationwide conference calls, site visits, periodic mailouts of significant Persian Gulf-related scientific and other information, special nationwide satellite broadcasts and other informational outreach efforts, is making an ongoing effort to fully educate its health care and other staff concerning Persian Gulf Registry policies and procedures. They have been particularly sensitized to the need to make the availability of the Registry examination program known to Persian Gulf veterans contacting or visiting VA health care facilities.

It has also made every effort to acquaint Persian Gulf veterans with the availability of the "Persian Gulf War Veterans Health Registry" mandated by Public Law 102-585. Outreach efforts have included the design and widespread dissemination, both within and without VA, of special Persian Gulf Registry posters. VA has also briefed military officials within the Department of Defense and the major chartered veterans service organizations of the special examination program in order to assist them in alerting military personnel and members of veterans organizations and others of the Registry program. A further outreach effort includes design and widespread distribution of a publication entitled "Persian Gulf Review." This publication informs Persian Gulf veterans of VA's Persian Gulf-related policies and procedures including establishment and maintenance of the Persian Gulf Registry in their behalf.

VA does not believe that the total number of participants in the Persian Gulf Registry is inordinately "low." As of May 31, 1993, over 6,000 have participated in the examination program and data from their examinations entered in the computerized database maintained at VA's Austin Automation Center (AAC) in Texas. Health examinations, provided under authority of the Persian Gulf Registry are voluntary on the part of the veteran. To participate in the Registry, a veteran does not have to be sick. Some veterans are sick, some are the "worried well" and a certain number are those individuals who simply wish to establish a record on their Persian Gulf experience. The number of Registry participants, therefore, cannot be compared to the number of veterans receiving care on either an inpatient or outpatient basis. Regarding timely inclusion of examination data in the computerized portion of the Registry, VA is concerned that such data be incorporated into the database in an expeditious manner.

HONORABLE BOB CLEMENTS

However, it should also be noted that there is a certain amount of administrative lag time between completion of an examination at the receiving medical center, forwarding of the diagnostic code sheet to the AAC, and input of that data into the computerized database. Therefore, the total number of examinations may be greater, although we do not believe excessively so, than that reflected in the Registry's database. Every effort is being made to ensure that the medical centers expedite the submission of the examination code sheets to the AAC. VA is not aware at this time of any calls received or made by Mrs. Betty Zuspann concerning the "holding" of Registry lists. As previously noted, it is VA policy to transmit Registry data to the AAC as expeditiously as possible.

QUESTIONS SUBMITTED BY
HONORABLE SPENCER BACHUS
SUBCOMMITTEE ON OVERSIGHT & INVESTIGATIONS
COMMITTEE ON VETERANS' AFFAIRS

HEALTH CONCERNS OF PERSIAN GULF WAR VETERANS
AND RELATED ISSUES

JUNE 9, 1993

Question 1: In the testimony of VA given by then Deputy Secretary Tony Principi before the Subcommittee on Hospitals and Health Care on September 16, 1992, he stated, "We currently lack scientific evidence that the health problems experienced by Persian Gulf Theatre veterans are related to their exposure to environmental or chemical contaminants." Does there remain a lack of scientific evidence to date? What do we know now that we didn't know in 1992?

Answer: There is no scientific evidence to date that definitively links various environmental exposures experienced by Persian Gulf veterans and the symptoms/conditions presented by some of them. Although a variety of hypotheses have been posed, there are no firm medical or scientific conclusions concerning such exposures. The current state of knowledge indicates that Persian Gulf veterans undoubtedly were exposed to a wide variety of environmental agents during their service in the Persian Gulf Theatre. VA believes that there are Persian Gulf veterans who are ill for whom no explanation can be medically found for their symptoms. Whether a linkage exists between these health problems and one or more exposures in the Persian Gulf has not been determined. VA is proceeding, through a variety of approaches to resolve these complex health issues. Such efforts include the establishment of a "Persian Gulf Blue Ribbon Panel," which met in Washington on May 7, 1993; possible formation of a permanent advisory committee to address the scientific and medical health issues related to Persian Gulf service, and establishment of an internal Persian Gulf Working Group to review research needs. Further, VA is in the process of entering into a contract with the Medical Followup Agency of the National Academy of Science's Institute of Medicine for a scientific review of the possible adverse health effects of Persian Gulf service. VA believes that this multi-faceted approach will assist in our efforts to address fully the complex issues raised by the service of American personnel in the Persian Gulf.

Question 2: The VA attempted a six-month followup study in April of 1992 to determine the prevalence of Post Traumatic Stress Disorder. The VA mailed out 1006 surveys, but only received responses from 226 veterans. What effect does this low participation rate have on the results of such a study?

Answer: The effects of the smaller size of the followup sample on any inferences that can be drawn from Dr. Litz's study depend on the extent to which those who participated in followup are representative of the sample as a whole. Analyses are underway to examine this question. Currently, it appears that treatment-seeking veterans who participated at followup were initially healthier than treatment-seeking veterans who dropped out of the study. Thus, data from the followup sample may underestimate the current prevalence of PTSD and other post-war problems.

HONORABLE SPENCER BACHUS

Whatever the final analyses ultimately show about Dr. Litz's study, it is important to remember that there are at least two additional major studies of veterans who served in the Persian Gulf. One of these studies, by Dr. Jessica Wolfe and her colleagues, has over 2,000 participants with an 18-month followup rate of over 18 percent.

QUESTIONS SUBMITTED BY
HONORABLE LANE EVANS, CHAIRMAN
SUBCOMMITTEE ON OVERSIGHT & INVESTIGATIONS
COMMITTEE ON VETERANS' AFFAIRS

HEALTH CONCERNS OF PERSIAN GULF WAR VETERANS
AND RELATED ISSUES

JUNE 9, 1993

Question 1: Nearly 80,000 Persian Gulf War theatre veterans have reportedly come to VA for medical care, but only 4,000 of these veterans have reportedly received the Registry examination. If VA has encouraged the veterans who have come to VA for care to have a Registry exam, what factors account for VA's failure to encourage Persian Gulf veterans to receive the Registry examination?

Answer: The Registry examination program is a relatively new initiative. The examinations began in August 1992 for Persian Gulf veterans with medical problems. In November after Public Law 102-585 was enacted, we were able to expand the program to include veterans who were worried about their health, but who were not experiencing obvious medical problems. As with many new programs, there has been some delays in orienting and training personnel at some facilities and not all veterans have been promptly advised of the Registry examination program. The Department of Veterans Affairs (VA) has made every effort to educate its health care and other staff on Registry-related policies and procedures and to sensitize them to the need to be aware of the concerns of Persian Gulf veterans and to make them aware of the availability of the examination program. It should be noted, however, that not all Persian Gulf veterans eligible for the examination are interested in participating in this voluntary program. A questionnaire must be completed and certain tests performed. This requires some time and effort. Veterans may have to take time off work to receive the examination. Some veterans do not perceive any direct, immediate tangible benefit in participating in the program. We have expanded our outreach efforts to increase awareness of the Registry program. As a result, the number of veterans seeking the examination has significantly increased. More than 6,000 veterans have participated in the program to date.

Question 2: How many Persian Gulf War veterans who have come to VA for medical care have been given a diagnosis? How many have not been given a diagnosis?

What diagnosis have been made most frequently by VA for Gulf War veterans?

How many Persian Gulf War veterans treated on the basis of their VA diagnosis have received treatment which has not helped them?

In addition to trouble in making a diagnosis, what else would explain VA treatment not being helpful in some cases?

In cases where establishing a diagnosis has proven difficult, does VA still provide treatment?

HONRABLE LANE EVANS

What types of treatment has VA provided in cases where a diagnosis has proven difficult to establish?

Are veterans, for whom it has been difficult to establish a diagnosis, ill?

Answer: As of July 19, 1993, we had master records for 3,012 veterans included in the Persian Gulf Registry database maintained at the VA Automation Center in Austin, Texas. All but 564 of these veterans had one or more diagnoses. The 564 veterans had no diagnosis because they were in good health. The most common symptoms noted are malaise, fatigue and headache, and the most common diagnoses are unspecified non-infectious gastroenteritis and colitis, dermatitis - unspecified cause, and unspecified sinusitis - chronic. Most, but not all, Persian Gulf veterans who have been treated based on their VA diagnosis have been helped. Many have seen significant improvements in their health; others have experienced minimal or no improvements. These are very subjective judgments. We do not have a count of how many have not been helped despite our efforts. Some diagnoses do not respond well to any treatment. Some medications or treatments are very effective for some patients, but have little or no ameliorating effects on other patients with identical problems. Despite our best efforts, occasionally a patient may be misdiagnosed. Even when a clear diagnosis is not available, VA physicians treat a veteran's symptoms. The type of treatment provided in such cases is based on the types of problems a veteran is suffering. Treatment is based on an individual's specific needs. Simply because a physician is not able to put a definite disease label on a veteran's health problems does not mean that the veteran is not ill.

The most common diagnoses for Persian Gulf veterans who have received inpatient treatment in a VA health care facility but who have not received the Registry examination are alcohol dependence, cocaine dependence, inguinal hernia and tooth eruption disturbance.

Question 3: Has VA contracted or considered contracting with one or more other health care providers to provide a diagnosis for the Persian Gulf veterans for whom VA has encountered some difficulty in making a diagnosis? If not, why not?

Answer: VA may contract with one or more other health care providers to determine a diagnosis for the Persian Gulf veterans when the situation warrants such action. We do not anticipate that this will be necessary very frequently.

Question 4: Identify the health problems or symptoms most frequently reported by Gulf veterans.

What patterns of health complaints have Gulf War veterans reported most frequently?

Answer: The most common medical complaints reported by Persian Gulf veterans who have received the Registry examination are malaise and fatigue, headaches, non-specific skin eruptions and other symptoms involving the nervous and musculoskeletal systems. We will closely monitor data gathered to determine whether a pattern emerges in the future.

HONORABLE LANE EVANS

Question 5: Please respond to Dr. Hinshaw's statement that, "the mysterious illness afflicting the Persian Gulf veterans is multiple chemical sensitivity."

Answer: We are well acquainted with Dr. Hinshaw's views, and we respect his professional judgment. On the other hand, while it is possible that he may be correct, we are not prepared to endorse his conclusion. It is our view that there is insufficient data at this time to reach a definite conclusion. Secretary Brown has recently established a working group to address the need and possible funding for research into multiple chemical sensitivities.

Question 6: Please respond to the statement that health problems of Gulf War veterans aren't really a mystery, DOD and VA simply don't know how to diagnose the problem correctly.

Answer: This is primarily the view of physicians who practice clinical ecology, now often called "environmental medicine." They believe that exposure to low levels of environmental substances in the air or in foods and liquids, in susceptible individuals, causes a variety of ill-defined symptoms affecting nearly every organ system. However, the majority of American physicians agree with the AMA's Council on Scientific Affairs, which concluded that (1) there are no well-controlled studies establishing a clear mechanism or cause for MCS and (2) there are no well-controlled studies providing confirmation of the efficacy of the diagnostic and therapeutic modalities relied on by those who practice clinical ecology.

Question 7: A variety of health problems including dizziness, fatigue, muscle spasms and pain, joint pain, coughing, shortness of breath, wheezing, headaches, loss of feeling in hand and feet, congestion, gastro-intestinal problems, hair loss and bleeding gums have been reported by Persian Gulf War veterans. Would these symptoms be expected to be related to only a few or to possibly many diagnoses?

Answer: You mentioned numerous symptoms. Many of these symptoms could be related to many different diagnoses.

Question 8: How do the VA physicians conducting Persian Gulf War Veterans Health Registry medical exams pay particular attention to occupational exposures, insect bites, and infectious diseases, such as leishmaniasis, chemical and/or biological agents, contaminated food or drink or other environmental agents?

What special training and education have been received by all VA physicians who conduct Registry examinations to better equip them to pay particular attention to each of those aspects of the exam?

Does each Persian Gulf War Veterans Health Registry medical exam include diagnostic tests which are intended to diagnose:

> occupational exposures, insect bites, and infectious diseases, such as leishmaniasis, and/or chemical/ biological agents, contaminated food or drink or other environmental agents.

HONORABLE LANE EVANS

Answer: VA physicians conducting Persian Gulf War Veterans Health Registry medical examinations carefully study each veteran. The physician asks questions of each veteran to learn about his or her individual exposures and experiences. The physician also performs a comprehensive physical examination and arranges for specialized consultations where medically indicated. In addition to their regular medical education and training, VA physicians who conduct the Registry examinations receive ongoing specialized training through our satellite broadcasts, nationwide telephone conference calls and mailout programs. They may consult with staff at the special Persian Gulf Referral Centers and VA Central Office staff. Each Persian Gulf veteran who participates in the examination program receives comprehensive tests designed to help the clinician determine an appropriate diagnosis. While information is obtained from this testing, most information must be obtained from the veteran during an interview. There are no screening tests for many of the exposures you list, but physicians are guided by symptoms to order specific tests.

Question 9: After a request for a Persian Gulf War Veterans Health Registry medical exam has been received, what is the maximum amount of time which could elapse before VA completed the exam?

Describe the information VA collects from Registry medical exams. How has this information already been used? How will it be used in the future?

Does the standard Persian Gulf War Veterans Health Registry medical exam identify individual chemical or toxic substances to which veterans may have been exposed while serving in the Persian Gulf theatre or multiple chemical sensitivity?

Identify diagnostic tests capable of identifying individual chemical or toxic substances to which a veteran was exposed while serving in the Persian Gulf theatre.

Does the standard Persian Gulf War Veterans Health Registry medical exam diagnose leishmaniasis?

Describe the conditions the Persian Gulf War Registry medical examination is expected to detect.

Summarize the results of all Persian Gulf War Registry medical examinations conducted to date.

What is the cost of the standard Registry exam?

Answer: When a request for a Persian Gulf Registry examination is received, the VA health care facility schedules an appointment as promptly as possible. There is no established "maximum amount of time" to complete an examination. Every effort is made to accommodate the veteran's schedule whenever possible. Obviously, when a large number of requests are received by a single field station at the same time there will be some delays. In such instances, VA field stations take special action (such as increase the number of physicians conducting the examinations) to respond to the workload increase. A great deal of demographic data (date of birth, address, race/ethnicity, marital status, etc.), military information (branch of service, periods of service in Persian Gulf, geographical areas served, military units), environmental exposures, health complaints and diagnostic information are gathered during the examination. Researchers have analyzed and will continue to review the data to ascertain clues for epidemiologic studies.

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There are no validated tests capable of identifying individual exposures to many of the chemical or toxic substances in the Gulf or to differentiate exposures that occurred then from exposures occurring more recently. "Multiple chemical sensitivity" is a descriptive term that does not depend on any single exposure to a specific substance and for which there is no accepted diagnostic test. When the "diagnosis" is made, it is based on a good history. The diagnosis of leischmaniasis is made by the demonstration of the organism in a bone marrow or spleen biopsy. When a veteran has a history and physical examination compatible with leischmaniasis, the more extensive testing is undertaken. The Registry examination is comprised of a good general Internal Medicine history and physical examination capable of leading to the diagnosis of a wide range of conditions. To date, that appears to be what has occurred. Those who have undergone the examination have been found to range from good health to those with a variety of medical maladies. It is estimated that the average examination costs $140 to complete.

Question 10: What additional diagnostic tests are conducted at each of the three specialized referral centers? What is special about each of the three specialized referral centers? What is the specialized purpose of each of the designated regional treatment centers?

Answer: Whatever additional diagnostic procedures are indicated by the individual patient's medical condition will be undertaken by the Persian Gulf Referral Centers. These center locations were selected based on availability of clinical and academic expertise in such areas as pulmonary and infectious diseases, immunology, neuropsychology and access to toxicologic expertise. The centers have an emphasis on specific symptom complexes, such as fevers of unknown origin compounded by unexplained weight loss. The Referral Center in Washington has special expertise in the diagnosis and treatment of leishmaniasis and other infectious diseases. The Referral Center in Houston sees veterans suspected of suffering from "multiple chemical sensitivities." All VA medical centers offer the Registry examination on an outpatient basis. The Referral Centers provide for inpatient stays to allow for observation, multidisciplinary consultations, and lengthy occupational and exposure history with an opportunity to re-examine veterans with unusual medical conditions.

Question 11: Private practice physicians reportedly are successfully treating Gulf War veterans who have not been treated successfully by VA.

Is the treatment being provided by these physicians offered by VA?

How can VA improve the treatment it provides to Gulf War veterans?

Dr. Hinshaw has offered to teach VA hospitals how to diagnose and treat chemically sensitive patients. Should VA accept this offer? If not, why not?

HONORABLE LANE EVANS

Answer: We are very interested in the treatment provided to Persian Gulf veterans. However, we are unwilling to provide any treatment or procedure unless and until it is carefully studied and proved effective by an independent authority. We have not, and will not, subject our patients to treatments or theory based on anecdotal reports. We have an open mind to all possible treatments. We are hopeful that the treatment we currently provide to Persian Gulf veterans can be improved. While Dr. Hinshaw may eventually be proved accurate in what he says, his conclusions do not now have the support of mainstream medicine. Unless and until his theories gain greater acceptance in the medical/scientific community, we think it is premature to invite him to train the professional staff at VA health care facilities.

Question 12: What is the mission and purpose of VA's Persian Gulf Expert Scientific Panel?

What date has been set for the Persian Gulf Expert Scientific Panel to complete its work?

Answer: The mission and purpose of VA's Persian Gulf Expert Scientific Panel was to examine the concerns of veterans regarding the possible long-term health consequences of military service in the Persian Gulf theatre of operations. These concerns include, but are not limited to, multiple chemical sensitivity, chronic fatigue syndrome, and post-traumatic stress disorder. On May 7, 1993, the Panel met to review a variety of health issues related to the diagnosis, treatment, and research of Persian Gulf-related health issues. At the conclusion of the meeting, Panel members recommended that there should be additional scientific reviews of the possible health consequences of Persian Gulf service. The Panel members recommended that VA consider establishment of a permanent federally chartered advisory committee to oversee this work. VA is currently pursuing the possible establishment of such a committee to continue the work begun by the Persian Gulf Expert Scientific Panel. Until such a committee is established, it is not possible to set a date for completion of activities which were outlined by the Persian Gulf Expert Scientific Panel.

Question 13: The National Center for PTSD has reported preliminary results which indicate, "a substantial percentage of troops were exposed to war zone stressors" and some servicemembers including combatants, women troops, national guardsmen and reservists, minorities and troops who were parents of young children may be at greater risk for PTSD.

What action(s) has VA taken in response to these findings?

Have these findings been formally communicated to DOD?

Answer: Actions taken by VA to meet the trauma-related needs of Persian Gulf veterans are as follows:

The National Center for PTSD produced a manual to instruct VA clinicians on the needs of Persian Gulf (Operation Desert Storm/ODS) veterans and on appropriate assessment and treatment strategies. This ODS Clinician Packet was delivered to all Department of Veterans Affairs Medical Centers (VAMCs) and all specialized PTSD programs.

The National Center for PTSD produced an issue of its Clinical Newsletter specifically to inform its readership of over 6,000 clinicians about the assessment and treatment needs of ODS veterans.

The specialized needs of female ODS veterans have been addressed programmatically in the new specialized women's PTSD programs (e.g., the women's inpatient unit at the Menlo Park division of VAMC Palo Alto) and by the National Center's new Women's Health Sciences Division.

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HONORABLE LANE EVANS

Pursuant to Public Law 102-405, VA Social Work Service has created a Persian Gulf War Family Support Program, to provide marriage and family counseling to veterans who saw active duty in the Gulf War (including guardsmen and reservists) and their spouses and children. VA is also collaborating with the Department of Defense in a study of war-trauma-related problems of Gulf veterans and their families in Pennsylvania and Hawaii. Mental Health and Behavioral Sciences Service and Readjustment Counseling Service are continuing their surveys and clinical services to Gulf veterans.

The information cited by Congressman Evans was circulated to all VAMCs and also to DOD. Dr. Robert Ursano of DOD was a member of the committee that created the reports on Persian Gulf veterans and included the information in his report on the Gulf War to DOD.

Question 14: How many Persian Gulf War veterans have experienced readjustment problems and how many are experiencing readjustment problems now?

How many Persian Gulf War theatre veterans have experienced readjustment problems severe enough to have interfered with resumption of their pre-war life style?

What role, if any, does age play in the occurrence or intensity of PTSD?

Answer: The findings of Dr. Jessica Wolfe's study, which includes data from over 2,000 Gulf War veterans, suggest that 18 months after returning to the U.S., 9.4 percent of men and 19.8 percent of women had PTSD. Almost 30 percent of men and 41.3 percent of women reported negative change in their physical health after serving in the Gulf.

Almost 12 percent reported a high level of post-war unemployment problems, 17.3 percent left a job or were fired, and 3.4 percent were demoted. In addition, some veterans have reported a high level of post-war problems in financial (18.3 percent), residential (4.5 percent) and marital(5.3 percent) domains.

At 18 months, 4.3 percent of male veterans and 10.2 percent of female veterans had PTSD severe enough that it was likely to interfere with resumption of the pre-war life style. Of these individuals, 74.3 percent of men and 93.3 percent of women reported a post-war decline in physical health.

We are unaware of data on the influence of age on post-war adjustment in ODS veterans. However, one might expect that post-war problems would be relatively greater in younger than in older veterans. For veterans of the Vietnam War, age of Vietnam service was inversely related to the likelihood of post-war PTSD.

Question 15: Stress has been reported as a possible cause of some health problems reported by Persian War veterans.

Has stress possibly been substituted as a diagnosis when the cause is unknown?

Answer: A Persian Gulf Expert Scientific Panel was convened by Dr. Susan Mather, ACMD for Environmental Medicine and Public Health, to address questions regarding the health of Persian Gulf veterans, with special attention to complaints about

Multiple Chemical Sensitivities (MCS) and to data regarding PTSD and other psychological symptoms of distress. Dr. Wolfe's data suggests that there is only partial overlap between those Gulf veterans who report the generalized symptoms (e.g., fatigue, headaches, etc.) that have been associated with possible MCS and those reporting PTSD symptoms. Also, the physical problems most commonly associated with PTSD (e.g., cardiovascular hyper-reactivity) are not prominent among the symptoms of those veterans without PTSD symptoms. Therefore, it is unlikely that stress has been substituted as a diagnosis when the cause is unknown.

Question 16: What actions has VA taken to inform servicemembers and their dependents about the Persian Gulf War Family Support Program and the services it provides?

Answer: Effective outreach to potential Persian Gulf Family Support Program (PGFSP) clients was planned as a primary activity, especially during the first phases of program implementation. Outreach efforts are an important aspect of social work practice, in general, but particularly among populations who might not be familiar with systems or services available to them, as in the case of reservists and family members of veterans. Because of the diversity of the population intended to receive PGFSP services, outreach through traditional and non-traditional means was stressed. Outreach efforts are concentrated on two target populations -- veterans and their families. In compliance with the legislative mandate, family support groups and community networks have been contacted to assure that all eligible veterans and family members are aware of the availability of PGFSP services. Briefings have been presented to reserve and national guard units that had personnel activated during the Persian Gulf War period, during which program coordinators and staff members describe the PGFSP and the types of problems that some veterans and their families have experienced during or following the war. During these presentations veterans and their family members are encouraged to contact PGFSP staff members if they have concerns that can be addressed by the program.

Outreach efforts at briefings include the collection of information from veterans in attendance, to expedite their enrollment in the program. This information includes: Application for Care (VAF10-10, VAF10-10M, VAF10-10I), and a copy of the veteran's discharge orders (DD214). Information from these forms is entered into the Decentralized Hospital Computer Program (DHCP) to facilitate processing in the event that additional medical treatment is requested. Most ongoing treatment cases are the result of outreach presentations made by the staff to military units, community family support groups, veterans' organizations, etc.

Some program coordinators have found it advantageous to set up clinics in remote areas of their states. These have been useful for providing family counseling and marriage therapy to veterans and their families for whom services would not otherwise be available. Case management is another program outreach strategy used to create a single point of entry into the service system from which a planned sequence of procedures can assist clients in gaining access to services suited to their unique needs.

Program advertisements include a public service announcement and distribution of brochures and posters, which were developed with the assistance of the VA Learning Resources Center. The posters, pamphlets and PSAs were distributed to all VAMCs. The public service announcement was sent to local television stations by the Public Affairs Officers at each of the VAMCs.

Presentations on the program have been made to representatives of the Veterans Service Organizations in Washington, D.C. Articles highlighting the program appeared in the DAV Magazine, July 1993 and the Rockford Magazine (Rockford, Illinois), February 1993. Numerous articles have appeared in local newspapers such as the Louisville Courier Journal (Louisville, Kentucky), Green Bay Press-Gazette (Green Bay, Wisconsin), Indianapolis Star (Indianapolis, Indiana), The Birmingham News (Birmingham, Alabama), Suburban Life Citizen (Chicago, Illinois), News-Gazette (Martinez, California), The Florida Times Union (Gainesville, Florida), The Columbus Dispatch (Columbus, Ohio), The Tennessean (Nashville, Tennessee), The Topeka Capital-Journal (Topeka, Kansas), El Especial (New York, New York) and Passaic Valley Today (New Jersey), among others. Social Work Staff members have been interviewed by local and national television news programs for appearances on broadcasts featuring the PGFSP including New England Cable News (November 11, 1992), and ABC World News Saturday (May 8, 1993). To date a total of 1369 outreach activities have occurred with approximately 48,000 persons attending, and a total of 72,300 public service announcements have been made either on TV, radio, newspaper or by other means. Some program coordinators have developed newsletters that have been mailed to all Persian Gulf veterans enrolled at the VAMC. These newsletters provide information about the Persian Gulf Registry and other topics of interest to the veterans and their families.
A letter was sent to all Social Work clinicians in the Army, Air Force and Navy informing them of the PGFSP. Program pamphlets and a listing of all VA Social Work Chiefs were enclosed to facilitate referral for eligible servicemembers and their families who are being discharged from active duty and are in need of counseling services.

Question 17: Can every disability or disabling condition be accurately diagnosed?

Could a veteran have a service-connected disability which VA could not diagnose?

Does VA recognize multiple chemical sensitivity as a disability?

Answer: A VA disability determination has three components: (1) the determination that a disability exists (i.e., that there is some interference with a person's ability to perform normal activities) (2) the disability results from a recognized disease or injury and (3) the disease or injury had its origin in or was aggravated by military duty.

For many disabilities, these three conditions can be met fairly easily. However, there are instances when there is a problem with one or more of the areas. Sometimes, the veteran has a diagnosis, but it is unclear that this disease is disabling. Other times, there is a clear disability, such as weakness and neurologic disfunction and it takes additional time to diagnose the causative disease, such as multiple sclerosis. In still other cases, there is a question about the diagnosis. At the current time VA does not recognize multiple chemical sensitivity as a bona fide medical diagnosis.

DISCHARGE SUMMARIES FOR 29 PERSIAN GULF VETERANS AT VHA REFERRAL CENTERS AS OF JULY 2, 1993

	ADMISSION	DISCHARGE	SYMPTOMS	CONSULTS/PROCEDURES**	DISCHARGE DIAGNOSIS	TREATMENT	REFERRED TO
WLA-1 27 YR WHITE MALE W/EXTENSIVE W/Us RE P.G. SYMPTOMS IN VARIOUS VA & US ARMY HOSPITALS	11/3/92	11/10/92	NIGHT SWEATS SORE THROATS NASAL STIFFNESS LOW GRADE FEVER NAUSEA VOMITING FRONTAL&OCCIPITAL HEADACHES SHINGLES HAIR LOSS/GRAYING BLOODY STOOLS	PULMONARY UROLOGY NEUROLOGY GEN MEDICINE ID PSYCHIATRY RADIOLOGY/MRI RHEUMATOLOGY DERMATOLOGY GI/COLONOSCOPY AT WALTER REED: CULTURES INFECTIOUS DISEASE MARROW BIOPSY	PRIMARY FIBROMYALGIA (PTS WITH ABOVE ARE DEPRESSED,ANXIOUS OR HYPOCHONDRIACAL/ DIFFICULT TO TREAT) ALOPECIA AREATA FLAMMATORY NODULES/ILEUI CONSISTENT W/LYMPHOCYTIC INFILTRATES	DISCHARGE MEDICATIONS METHADONE AMITRIPTYLINE MOTRIN COMPAZINE COLACE (CONDITION AT DISCHARGE: STABLE)	WALTER REED HINES * WLA WASH.DC
WLA-2 40-YR WHITE MALE W/HISTORY OF IRON DEFICIENCY ANEMIA SECONDARY TO GI BLEED DUE TO SMALL BOWEL ULCERATION FROM ENSAID USE	3/29/93	4/23/93	CHRONIC HEADACHES MUSCULOSKELETAL PAINS CHRONIC FATIGUE	INFECTIOUS DISEASE NEUROLOGY RHEUMATOLOGY ORTHOPEDICS LUMBAR PUNCTURE MRI OF C-SPINE MRI LEFT SHOULDER (EXTENSIVE PAST W/US IE NERVE CONDUCTION STUDIES/CT, EMG/ARTEROGRAM ENDOSCOPIES/COLONSCOPIES WITH PRIOR NEUROLOGY,RHEUM GI/HEMATOLOGY-ONCOLOGY & MEDICINE WUs AT FRESNO)	HEADACHES EITHER MIGRAINE OR TENSION MRI SHOWED SMALL BONY SPUR W/MINIMAL COMPRES SION OF SURROUNDING SOFT TISSUE	MEDICATIONS/ ELAVIL/TYLENOL (CONDITION AT DISCHARGE: STABLE)	FRESNO*
WLA-3 22 YR WHITE FEMALE W/PAST HISTORY OF RIGHT OVARIAN CYST	1/7/93	1/21/93	FATIGUE DIARRHEA HEADACHES NIGHT SWEATS OCCASIONAL FEVERS/CHILLS	GI CONSULT INFECTIOUS DISEASE NEUROLOGY PSYCHIATRY RADIOLOGY/MRI SCAN	FATIGUE/HEADACHES	NO MEDICATIONS (CONDITION AT DISCHARGE: STABLE)	PHOENIX* FOR F/U & SLEEP STUDY TEST

DISCHARGE SUMMARIES FOR 29 PERSIAN GULF VETERANS AT VHA REFERRAL CENTERS AS OF JULY 2, 1993

	ADMISSION	DISCHARGE	SYMPTOMS	CONSULTS/PROCEDURES**	DISCHARGE DIAGNOSIS	TREATMENT	REFERRED TO
HU-4	11/10/92	11/24/92	ABDOMINAL PAIN	NEUROLOGY/MRI	PTSD	MOTRIN/ANTI-SPASMATICS/	
29 YR OLD MALE			NAUSEA	EXTENSIVE LAB TESTS	OBSESSIVE COMPULSIVE	DONNATAL/ENAFRANIL @ VAMC	TUSCALOOSA*
			VOMITING	PSYCHIATRY	DISORDER	TUSCALOOSA,AL	FOR PSYCHIATRIC
			WEIGHT LOSS	GASTROENTEROLOGY/	IRRITABLE BOWEL	BOTH PT & VA STAFF FELT	& GI W/Us
			VAGUE DIARRHEA	GASTRIC BIOPSY	SYNDROME	THAT PTS COMPLAINTS WERE	
			SEVERE HEADACHES		CHRONIC LYMPHOCYTIC	PROBABLY UNRELATED TO P.G.	
			WEIGHT LOSS		GASTRITIS CONSISTENT	SERVICE	
					WITH PERNICIOUS ANEMIA		
HU-5	8/19/92	10/7/92	CHRONIC FATIGUE	NEUROPSYCHOLOGY	BRONCHIAL ASTHMA,	ALBUTEROL INHALER	DALLAS *
33 YR OLD MALE			PALPITATIONS	PHYSICAL MEDICINE & REHAB	WELL DOCUMENTED	AZNACORT INHALER	
GOOD HEALTH PRIOR			JOINT PAINS	PSYCHIATRY	SYMPTOMS COMPATIBLE W/M	TYLENOL	
TO 12/90			ASTHMA	NEUROLOGY	ETIOLOGY AS YET UNDETERMI	IBUPROFEN	
			HEADACHES	UROLOGY	C5-T1 SYRINX	PANCREATIC LIPASE PREPARA-	
			TREMORS	ENT	MAJOR DEPRESSION	TIONS/SIMETHICONE	
			HAIR LOSS	ALLERGY IMMUNOLOGY	ESCHERICHIA COLI URINARY TRACT		
			BLEEDING GUMS	RENAL	INFECTION		
				HEMATOLOGY	CONGENITAL BICUSPID		
				INFECTIOUS DISEASES	AORTIC VALVE		
				OCCUPATIONAL MEDICINE			
				DR. CLAUDIA MILLER/UNIV OF TX			
				IN SAN ANTONIO/EXPERT MCS			
				DR. GEORGE DELCLOSE UNIV			
				OF TX SCHOOL OF PUBLIC HLTH			
				IN HOUSTON			
				PROCEDURES/LUMBAR PUNCTURE			
				MRI OF SPINE			
				AUDITORY EVOKED POTENTIALS			
				VISUAL EVOKED POTENTIALS			
				METHACHOLINE CHALLENGE TEST			
				WITH PULMONARY FUNCTIONS			

DISCHARGE SUMMARIES FOR 29 PERSIAN GULF VETERANS AT VHA REFERRAL CENTERS AS OF JULY 2, 1993

	ADMISSION	DISCHARGE	SYMPTOMS	CONSULTS/PROCEDURES**	DISCHARGE DIAGNOSIS	TREATMENT	REFERRED TO
HU-6 21 YR OLD MALE W/HISTORY OF LYMPHDENOPATHY FOR APPRX 2 MOS (BORN W/HEART MURMUR WHICH DISAPPEARED AT AGE IF 12 ANG BLOOD IN URINE WHICH ALSO DISAPPEARED/PT UNDERWENT NODE BIOPSY IN 92 &LEFT KNEE TRAUMA)	9/9/92	10/7/92	WEIGHT LOSS VAGUE HAND/SHOULD/KNEE PAIN HEADACHES AT VERTEX WHICH IS EPISODIC OCCASIONAL NAUSEA FEVER BLEEDING GUMS BLISTER & PUSTULES ON LIP BY HISTORY NUMBNESS AT TIP OF TONGUE HAIR FALLING OUT EYEBROWS THINNING	CHEST/ABDOMINAL/PELVIC CTs MRI/HEADECHOCARDIOGRAM LYMPH NODE BIOPSY SEROLOGY THYROID FUNCTION TEST CANDIDA CONTROL ALLERGY/IMMUNOLOGY EXTENSIVE LAB TESTS	CHEMICAL HYPERSENSI- TIVITY OF UNKNOWN ETIOLOGY SLIGHT LYMPHADENOPATHY IN LEFT AXILLA	ADVISED NOT TO SMOKE (SMOKES ABOUT TEN CIGARETTES PER DAY FOR LAST TWO YEARS) & KEEP DIARY OF SYMPTOMS WITH EXPOSURE TO DIFFERENT CHEMICALS	RETURN FOR FURTHER TESTING IN THE FUTURE
HU-7 45 YR OLD MALE NO PAST MEDICAL HISTORY	9/16/92	10/6/92	OCCASIONAL PARESTHESIA SHORTNESS OF BREATH HEADACHES (POSSIBLE HYDROCARBON TOXICITY) ABOVE SYMPTOMS PERSIST WHENEVER EXPOSED TO CHEMICALS SYMPTOMS EPISODIC (HAS 15 YR OLD SON WITH SIMILAR PROBLEMS)	ALLERGY CLINIC ROUTINE LABS ALLERGY & IMMUNOLOGY DR MILLER/TOXICOLOGY EXPERT/ SAN ANTONIO	POSSIBLE CHEMICAL HYPERSENSITIVITY, ETIOLOGY, UNKNOWN	MEDICATIONS ON ADMISSION: ALUPENT INHALER RECOMMENDED PT TO INFORM M.D. WHEN HE IS GOING TO BE EXPOSED TO CHEMICAL AGTS/DR. MILLER WILL SEND EVALUATION TO HOUSTON VAMC	NO F/U
HU-8 24 YR OLD BLACK MALE PAST MEDICAL HISTORY UN- REMARKABLE	9/4/92	10/5/92	EPISODIC SHORTNESS OF BREATH GENERALIZED MALAISE/FATIGUE LEFT FACE,ARM/LEG NUMBNESS AT TIMES WITH PAIN TRANSIENT MYALGIAS ARTHRALGIA SINUS CONGESTION FLEETING CHEST PAIN	GASTROINTESTINAL NEUROLOGY PM&R DR. MILLER/SAN ANTONIO EGD WITH SMALL BOWEL BIOPSY & DUODENAL ASPIRATE ECHOCARDIOGRAM PFT's UPPER G.I. NERVE CONDUCTION STUDIES	NONSPECIFIC SYMPTOMS EOSINOPHILIA	SELDANE & KEEP DIARY OF SYMPTOMS & RELATION TO ACTIVITIES	FU AT NASHVILLE*

DISCHARGE SUMMARIES FOR 29 PERSIAN GULF VETERANS AT VHA REFERRAL CENTERS AS OF JULY 2, 1993

	ADMISSION	DISCHARGE	SYMPTOMS	CONSULTS/PROCEDURES**	DISCHARGE DIAGNOSIS	TREATMENT	REFERRED TO
HU-9 35 YR OLD WHITE FEMALE (PAST MEDICAL HISTORY NEGATIVE)	3/22/93	4/19/93	FATIGUE GENERALIZED BODY ACHES, PAINS & ARTHRALGIAS MYALGIAS,FEVERS,CHILLS 102-103 WEIGHT LOSS DECREASED SLEEP JOINT PAIN PROBLEMS WITH BOWEL MOVEMENTS/INTERMITTENT BOWEL PAIN GENERALIZED MALAISE DIARRHEA	LAB TESTS EKG MEDICINE SVC RHEUMATOLOGY SVC PSYCHIATRY/CPK&ALDOLASE/EMG PM&R DR. MILLER/SAN ANTONIO WHOSE IMPRESSION WAS/1 FIBROMYALOGIA/2-POSSIBLE CAFFEINISM/3-POLYDIPSIA & POLY- RIA/4-MULTIPLE COGNITIVE & SOMATIC COMPLAINTS RE ENVIRONMENTAL EXPOSURES	PRESUMPTIVE FIBROMYALGIA MAJOR DEPRESSION (STABLE CONDITION)	MOTRIN REGULAR EXERCISE PROGRAM RECOMMENDED ELAVIL	FU AT GRAND ISL*
HU-10 46 YR OLD BLACK MALE/PAST MEDICAL HISTORY: UNREMARKABLE)	4/13/93	4/21/93	CHRONIC FATIGUE GENERALIZED JOINT ACHES HEADACHES W/FRONTAL TENSION SCOTOMA DECREASED LIBIDO OCCASIONAL NAUSEA VOMITING DIARRHEA PREVIOUS BLOOD IN BOWEL MOVEMENT DECREASED APPETITE SLEEPLESS NIGHTS SECONDARY TO JOINT PAINS (NORMAL WEIGHT - 230#-LOST 12# IN PAST 3 MOS)	LAB TESTS X-RAYS CERVICAL & THORACIC SPINE/PA&LATEREL OF PELVIS CT SCAN XRAYS OF NECK/LUMBAR SACRAL & BOTH ANKLES RHEUMATOLOGY SVC COLONOSCOPY	CHRONIC FATIGUE SYNDROME QUESTIONABLE INFLAMMA- TORY SPONDYLOPATHY	MAPROXEN,CYTOTEC	F/U BILOXI (RHEUMATOLOGY LAB IN 2 MOS) ALSO, GI FOR UPPER & BARIUM ENEMA IN 1 MO.
WA-11 40 YR OLD MALE (NO PAST MEDICAL HISTORY)	4/20/93	5/8/93	SHORTNESS OF BREATH FUNGAL INFECTION	PULMONARY SVC CT PPD/CONTROL PANEL GALLIUM SCAN CHEST X-RAY PULMONARY FUNCTION TESTS PULMONARY STRESS TEST	EPISODIC BRONCHOSPASM SECONDARY TO SMOKING FUNGAL INFECTION OF FEET & SCROTUM	NICODERM PATCH ALBUTEROL INHALER LOTRIMIN CREAM DESONIDE CREAM	NO F/U

DISCHARGE SUMMARIES FOR 29 PERSIAN GULF VETERANS AT VHA REFERRAL CENTERS AS OF JULY 2, 1993

	ADMISSION	DISCHARGE	SYMPTOMS	CONSULTS/PROCEDURES**	DISCHARGE DIAGNOSIS	TREATMENT	REFERRED TO			
WA-12 39 YR. OLD MALE (WITHOUT SIGNI- FICANT PAST MEDICAL HISTORY)	5/18/93	5/27/93	SUSTAINED LOWER BACK INJURY IN PG WHILE LIFTING WEIGHTS DEVELOPED PAIN IN RIGHT HIP & KNEE & 2 WKS LATER ONSET OF SEVERE FATIGUE PERSISTING WAXING & WANING DURING DALY WITH BACK/HIP & KNEE PAIN GENERALIZED WEAKNESS TROUBLE SLEEPING FAINTED FEW TIMES DEVELOPED PAIN IN RIGHT LEG & BACK/NUMBNESS IN BOTH LEGS & FEET (PRIVATE NEUROSURGEON PERFORMED MRI OF LS-SPINE WHICH SHOWED RIGHT RETRO- DISPLACEMENT OF BODY OF L2 AND L3 WITH BULGING OF ANNULUS FIBROSIS & MILD SPINAL STENOSIS AND GAVE HIM 3 SPIDURAL STEROID TRTMTS EEG/POLYSOMNOGRAM	PHYSICAL EXAM INCLUDED: HEENT, CARDIAC & ABDOMINAL EXAMS LAB TESTS EMG NERVE CONDUCTION MRI LYME STUDIES EPSTEIN-BARR VIRUS STUDIES ACETYLCHOLINE RECEPTOR ANTIBODY STUDIES TENSILON TEST RHEUMATOLOGY SVC INFECTIOUS DISEASE PSYCHIATRY	CHRONIC FATIGUE SYNDROME CHRONIC LOWER BACK PAIN SECONDARY TO TRAUMA	TYLENOL	F/U CHARLESTON* FOR NEURO- PSYCHOLOGICAL TEST			
WA-13 36 YR. OLD BLACK MALE (NO PAST MEDICAL HISTORY)	2/9/93	2/16/93	RECURRENT HEADACHE FEVER COUGH W/SPUTUM CHILLS NIGHT SWEATS OCCASIONAL DIARRHEA "PNEUMONIA" 3 TIMES NAUSEA VOMITING (INITIALLY STARTED AFTER ANTHRAX VACCINATION)	NEUROLOGY LAB STUDIES CHEST X-RAY STOOL STUDIES PULMONARY SVC. GALLIUM SCAN	CHRONIC COUGH	ROBITUSSIN	F/U PROVIDENCE*			

DISCHARGE SUMMARIES FOR 29 PERSIAN GULF VETERANS AT VHA REFERRAL CENTERS AS OF JULY 2, 1993

	ADMISSION	DISCHARGE	SYMPTOMS	CONSULTS/PROCEDURES**	DISCHARGE DIAGNOSIS	TREATMENT	REFERRED TO
WA-14	2/23/93	2/25/93	CHRONIC COUGH	LAB	CHRONIC COUGH OF	DISCHARGED PER PT WISHES	PURSUE W/U
26 YR. OLD MALE			SMALL LESIONS ON LOWER	NEUROLOGY	UNKNOWN ETIOLOGY	TO CONTINUE SCHOOLING	AT CLARKSBURG*
(NEGATIVE PAST			EXTREMITY	INFECTIOUS DISEASE	W/REACTIVE AIRWAY	WITH RECOMMENDATIONS	DERMATOLOGY
MEDICAL HISTORY)				PULMONARY	DISEASE	FROM PULMONARY FOR	ON OP BASIS
				DERMATOLOGY		EXERCISE PFTs, GALLIUM SCAN,	
				EXERCISE PULMONARY		SWALLOWING STUDY &	
				FUNCTION TEST		TRANSBRONCHIAL BIOPSY	
				GALLIUM SCAN OF LUNGS			
				SWALLOWING STUDY			
				TRANSBRONCHIAL BIOPSY			
WA-15	1/12/93	1/21/93	HEADACHES	LAB STUDIES	NO DEFINITIVE DIAGNOSIS	CHLORPHENIRAMINE	
22 YR. OLD WHITE			NASAL CONGESTION	MRI W/WITHOUT GADOLINIUM OF HEAD		FLORINAL	NO F/U
MALE (PAST MEDICAL			CONSTIPATION	EEG		TYLENOL	
HISTORY-NEGATIVE)			TINGLING FINGERS/WRIST	ELECTROMYOGRAM W/NERVE			
			FREQUENT SINUSITIS	CONDUCTION VELOCITY			
				SHOWING CROSS LEG PALSY			
				PSYCHIATRY			
				UROLOGY			
WA-16	1/6/93	1/12/93	DEPRESSION	(INCOMPLETE FILE-WAITING	INCOMPLETE REITER'S	DOXYCYCLINE	F/U @ E.ORANGE*
23 YR. OLD MALE			FATIGUE	FOR ADDITIONAL INFO)	SYNDROME	INDOCIN	W RHEUMATOLOGY
(NO PREVIOUS			MOUTH SORES			CARAFATE	&PSYCHIATRY
MEDICAL HISTORY							
INDICATED)							
WA-17	5/27/93	6/3/93	HEADACHE/MUSCLE SPASMS	PHYSICAL EXAM/NEUROLOGIC	POSSIBLE VARIANT OF	F/U VAMC HINES/	
27 YR. WHITE MALE			RECTAL BLEEDING, FATIGABILITY	EXAM/ELECTROCARDIOGRAM/	PERIODIC PARALYSIS	DR. LENTINO	
W/EXTENSIVE W/Us			WEIGHT VARIABILITY/NIGHT	BLOOD TEST, CHEST X-RAY	INFLAMMATORY BOWEL		
RE P.G. SYMPTOMS			SWEATS,EASY BRUISABILITY,	URIANALYSIS	SYNDROME		
AT WLA/HINES -			BLEEDING GUMS, DRY MOUTH	INFECTIOUS DISEASE CONSULT	ALPECIA AREATA		
SEE WLA1			DRY EYES, TOOTH PAIN	METHADONE TEAM CONSULT	POSSIBLE COAGULOPATHY		
			VOMITING/ABDOMINAL PAIN	RHEUMATOLOGY CONSULT			
				HEMATOLOGY CONSULT			
				ELECTROMYOGRAM NERVE			
				CONDUCTION STUDY			
WA-18	9/9/92	10/2/92	HEARING LOSS	ENT	IDIOPATHIC AUTOIMMUNE	STEROIDS	F/U ATLANTA*
23 YR. OLD WHITE			MILD BACK PAIN	NEUROLOGY	SENSORINEURAL HEARING	PREDNISONE	IN RHEMATOLOGY
MAN (NO			BLURRY VISION	MRI	LOSS, POSSIBLE EARLY	ADVISED TO AVOID CONTACT	
PAST MEDICAL			VOMITING	LAB & X-X-RAY/OPHTHALMOLOGY	COGAN'S SYNDROME &	SPORTS & DRIVING	
HISTORY NOTED)			ARTHRALGIAS/KNEES & WRIST	RHEUMATOLOGY	POSSIBLE EARLY		
			PLEURITIC CHEST PAINS	INFECTIOUS DISEASE	HYPOTHYROIDISM		
			EAR INFECTION	REPEAT MRI/SI JOINT FILMS			

DISCHARGE SUMMARIES FOR 29 PERSIAN GULF VETERANS AT VHA REFERRAL CENTERS AS OF JULY 2, 1993							
	ADMISSION	DISCHARGE	SYMPTOMS	CONSULTS/PROCEDURES**	DISCHARGE DIAGNOSIS	TREATMENT	REFERRED TO
				SI JOINT FILMS			

DISCHARGE SUMMARIES FOR 29 PERSIAN GULF VETERANS AT VHA REFERRAL CENTERS AS OF JULY 2, 1993

	ADMISSION	DISCHARGE	SYMPTOMS	CONSULTS/PROCEDURES**	DISCHARGE DIAGNOSIS	TREATMENT	REFERRED TO
WA-19	9/30/92	10/19/92	SKIN DISORDER	NO CLINICAL DIAGNOSES OR	GRANULOMA ANULARÀE	WAITING FOR MEDICAL	
42 YR. OLD WHITE				PROCEDURES PERFORMED		RECORDS	
FEMALE (NO							
MEDICAL HISTORY)							
WA-20	3/9/93	3/24/93	MULTIPLE SOMATIC SYMPTOMS	PSYCHIATRY	GASTRITIS & DUODENITIS	PEPTO BISMOL	F/U E.ORANGE*
32 YR. OLD WHITE			VAGUE ABDOMINAL PAIN	EEG	HELICOBACTER PYLORI	FLAGYL	
MALE			DIARRHEA	MRI	PSYCHOSOMATIC DISORDER	AMOXICILLIN	
INFECTIOUS MONO			GENERALIZED MUSCLE & JOINT	GI		ZANTAX	
NUCLEOSIS AT			PAIN	RHEUMATOLOGY			
			HEADACHES	INFECTIOUS DISEASE			
			10 # WEIGHT LOSS	EGD			
				C10			
				BIOPSY OF DUODENUM/STOMACH			
				LAB TESTS			
				CT/ABDOMEN			
				ULTRASOUND/ABDOMEN			
WA-21	10/14/92	10/30/92	LEG PAIN AND ARM WEAKNESS	LAB STUDIES	TRICHINOSIS WAS A	PERCOCET	F/U LEXINGTON*
23 YR. OLD MALE			CHEST PAIN	RHEUMATOLOGY	POSSIBLE ETIOLOGY	MOTRIN	
(NO PAST MEDICAL			WEIGHT INCREASE FROM 180#	MEDICINE	OF HIS ILLNESS		
HISTORY)			TO 261# AFTER MILITARY SVC	NERVE CONDUCTION STUDIES			
			DIARRHEA	EMGs			
WA-22	12/17/92	12/23/92	POLYARTHRALGIA	LAB TESTS	GIARDIA	FLAGYL	F/U WITH PRIVATE
21 YR. OLD			RIGHT SIDED KNEE PAIN	RHEUMATOLOGY SVC	POLYARTHRALGIA		PHYSICIAN
WHITE MALE			HIP PAIN	GI SVC			
(BENIGN PAST			ELBOW PAIN				
MEDICAL HISTORY)			OCCASIONAL LEFT SIDED KNEE				
			PAIN				
			HAIR LOSS				
WA-23	10/20/92	11/18/92	HEADACHE	MRI ANGIOGRAM			
42 YR. OLD			LEFT SIDED WEAKNESS	MRI/HEAD	PRESUMED CENTRAL	RECOMMEND READMISSION	F/U SAN JUAN*
FEMALE			LEFT SIDED TREMOR	TRANSESOPHAGEAL ECHOLCARD.	NERVOUS SYSTEM	FOR STEROID TREATMENT	
(NURSE) PAST			HYPERINTENSE LESIONS	PULMONARY FUNCTION TESTS	VASCULITIS	GIVEN HER HISTORY OF	
MEDICAL HISTORY-			IN RIGHT OCCIPITAL PARIETAL	CHEST X-RAY		DIABETES W/CLOSE GLUCOSE	
IDIOPATHIC THROM-			LOBES	LAB TESTS		MONITORING	
BOCYTOPENIA			SINUSITIS	THYROID FUNCTIONS			
PURPURA-TREATED			OCCASIONAL A.M. VOMITING	BRAIN BIOPSY			
W/STERIODS)				CORTROSYN STIMULATION TEST			
PT HAS HISTORY				ANGIOGRAM			
OF ITP,DIABETES							

DISCHARGE SUMMARIES FOR 29 PERSIAN GULF VETERANS AT VHA REFERRAL CENTERS AS OF JULY 2, 1993

	ADMISSION	DISCHARGE	SYMPTOMS	CONSULTS/PROCEDURES**	DISCHARGE DIAGNOSIS	TREATMENT	REFERRED TO			
WA24 43 YR. OLD BLACK FEMALE (PAST MEDICAL HISTORY INCLUDES HYPERTENSION FOR 12 YRS/PT HAD MISCARRIAGE IN 72 REQUIRING DILATATION & CURETTAGE) ALSO, HISTORY OF PHOTOPHOBIA & THROBBING SENSATION	4/25/93	5/17/93	UNCONTROLLED BLOOD PRESSURE SHORTNESS OF BREATH COUGH W/GREEN SPUTUM IN SAUDI ARABIA WHEEZING INCREASED MENSTRUATION TO 2 WK CYCLE OVER LAST 2 YRS INCREASED WEIGHT & HIRSUTISM ON FACE & CHEST RASH PERSISTING SINCE SAUDI ARABIA ON DORSAL ASPECT/FEET AS WELL AS HANDS & FACE (BLACKHEADS WITH NO PUS)	ENDOCRINE W/U HYPERTENSION W/U RENIN STIMULATION TEST THYROID FUNCTION TEST SALINE LOAD TEST DERMATOLOGY INFECTIOUS DISEASE PPD BONE MARROW BIOPSY HEMATOLOGY SERUM ELECTROPHORESIS URINE PROTEIN ELECTRO-PHORESIS ANEMIA W/U RETICULOCYTE COUNT OF 1.1 (STARTED ON IRON SULFATE) PULMONOLOGY PULMONARY FUNCTION TESTS GYNECOLOGY NEUROLOGY/HEAD CT ENDOMETRIAL BIOPSY (DISORDER ENDOMETRITIS) PELVIC ULTRASOUND - UTERUS ENLARGED W/LARGE FIBROID & NABOTHIAN CYST RIGHT OVARY W/FOLLICULAR CYSTS (STARTED ON PROVERA) LIPID SCREEN EXTENSIVE LAB TESTS EKG CHEST X-RAY	MENORRHAGIA, PRESUMABLY FROM UTERINE FIBROID IRON DEFICIENCY SYNDROME CORYUNEBACTERIUM RASH HYPERTENSION, CONTROLLED	VERAPAMIL IRON SULFATE ERYTHROMYCIN ERYMAX OINTMENT	F/U TUSKEGEE*			

DISCHARGE SUMMARIES FOR 29 PERSIAN GULF VETERANS AT VHA REFERRAL CENTERS AS OF JULY 2, 1993

	ADMISSION	DISCHARGE	SYMPTOMS	CONSULTS/PROCEDURES**	DISCHARGE DIAGNOSIS	TREATMENT	REFERRED TO
WA25 23 YR. OLD WHITE MALE	10/27/92	11/18/92	MUSCLE WEAKNESS/TWITCHING PAIN IN LEG ACNE ASTHMA-LIKE ATTACK HEADACHES/VISUAL DISTURBANCE	NERVE CONDITION STUDIES EMG/EEG/PFT/SKIN BIOPSY EGD/COLONOSCOPY MRI SKIN BIOPSY THYROID FUNCTION STUDIES NEUROLOGY	PITUITARY TUMOR OBSTRUCTIVE AIRWAY DISEASE	PT REQUESTING SURGERY	TRANSFER TO MANCHESTER*
HU26 38 YR. OLD WHITE MALE	6/7/93	6/24/93	RASH ON ANTERIOR SHINS & EXTENDING ALL AROUND BOTH LEGS UP TO GROIN CYCLIC, ULCERATED & OOZING BLOOD, SHORT TERM MEMORY LOSS, MOOD SWINGS, SLEEP APNEA, DAYTIME FATIGUE AND LOSS OF STRENGTH, WEIGHT GAIN/CANNOT CONTROL GENERALIZED INCREASED INDOLENCE AND BODY ACHES	PHYSICAL EXAM, LAB TESTS- BLOOD, EKG, EMG, MRI/HEAD, DERMATOLOGY AND NEUROLOGY CONSULTS, EEG, CHEMICAL TOXICOLOGY CONSULT (DR. MILLER) (DOES MANIFEST SYMPTOMS REPORTED BY OTHERS WHO COMPLAIN OF CHEMICAL SENSITIVITY. NAS RECOMMENDS DOUBLE BLIND PLACEBO CONTROLLED CHALLENGE TEST IN CLEAN CONTROLLED ENVIRONMENT TO DOCUMENT PROBLEM. CURRENTLY NO SUCH RESEARCH FACILITY EXISTS	FATIGUE, MYALGIAS POSSIBLE CHEMICAL SENSITIVITIES MEMORY ATTENTION DEFICIT BRONCHOSPASM & BILATERIAL WHEEZING WITH INCREASED EXPOSURE	NO MEDICATIONS IF SYMPTOMS CONTINUE & ARE CLEARLY WORK-RELATED ALTERNATIVE WORK SHOULD BE SOUGHT. EXPOSURE AS MECHANIC UNAVOIDABLE CHECK COGNITIVE TESTING FOR MEMORY & ATTENTION DEFICITS RECOMMEND DISCONTINUE SMOKING IF SENSITIVITY TO COMBUSTION PRODUCTS RECOMMEND PROVIDING PEAK FLOW METER FOR CHARTING PEAK FLOWS PRE/ POST WORK	F/U @ LOUISVILLE VAMC
HU27 43 YR OLD BLACK MALE	6/29/93	7/2/93	INTERMITTENT DIARRHEA SKIN RASH, SOME JOINT PAIN ARTHRALGIA	PHYSICAL EXAM; LAB TESTS BLOOD, EKG, CHEST X-RAYS RHEUMATOLOGY/DERMATOLOGY CONSULTS	ATOPIC DERMATITIS	AUGMENTIN; ATARAX, PRN, CYCLOCORT OINTMENT	F/U @ NASHVILLE VAMC
WA28 26 YR OLD ASIAN MALE	6/23/93	6/25/93	INTERMITTENT DIARRHEA FEVERS, ANOREXIA, LOSS OF ENERGY OCCASIONAL DRY COUGH JOINT PAINS PULMONARY TB DIAGNOSED IN 88 & TREATED 1 YR IN MILITARY	PHYSICAL EXAM INDICATED A WELL DEVELOPED, HEALTHY- LOOKING MALE IN NO DISTRESS LAB TESTS, BLOOD, URINE, CHEST X-RAYS, ELECTROCARDIOGRAM ALL NORMAL - BLOOD DRAWN FOR LEISHMANIASIS - RESULTS STILL PENDING; NORMAL COLONOSCOPY & ESOPHAGOGASTRODUODENO- SCOPY NORMAL & JEJUNAL ASPIRATES TAKEN & SENT FOR ANALYSIS	NO DIAGNOSIS AT THIS TIME - HOWEVER TESTS RESULTS OF VARIOUS EXAMS TO BE F/U AT ASHEVILLE VAMC	NO MEDICATIONS RESULTS OF VARIOUS EXAMS TO BE FORWARDED TO ASHEVILLE VAMC	DISCHARGED TO ASHEVILLE VAMC

DISCHARGE SUMMARIES FOR 29 PERSIAN GULF VETERANS AT VHA REFERRAL CENTERS AS OF JULY 2, 1993

	ADMISSION	DISCHARGE	SYMPTOMS	CONSULTS/PROCEDURES**	DISCHARGE DIAGNOSIS	TREATMENT	REFERRED TO			
WA29 47 YR OLD WHITE MALE	5/25/93	6/1/93	GENERALIZED ARTHRALGIAS EXCESSIVE FATIGABILITY STOMACH ACHE/INTERMITTENT DIARRHEA, DYSPNEA ON EXERTION, ANKLE EDEMA & SWELLING OF KNEES WITH GENERAL TINGLING & NUMBNESS THROUGHOUT BODY GAINED 12#S OVER 6 MOS PRIOR TO ADMISSION PAST MEDICAL HISTORY-GOUT/ HEMORRHOIDAL SURGERY & BACK SURGERY FOR PRO- LAPSED DISK AT L5/S1 MEDICATIONS ON ADMISSION- TENORMIN/DOXEPIN/TYLENOL & VARIOUS NONSTEROIDAL ANTI- INFLAMMATORY DRUGS	PHYSICAL EXAM REVEALED OBESE MALE IN NO DISTRESS. EXAM RESULTS WITHIN NORMAL LIMITS LAB TESTS COMPLETED SEEN BY GASTROENTEROLOGIST AND INFECTIOUS DISEASE SVC LEISHMANIASIS - NEGATIVE ABDOMINAL ULTRASOUND STUDY COLONOSCOPY RECOMMENDED PT HAD STOOL SAMPLES TAKEN FOR CYSTS, OVA, & PARASITES, FECAL FATS, CULTURE & SENSI- TIVITY & TO LOOK FOR FECAL LEUKOCYTES. BLOOD TESTS DRAWN INCLUDED EPSTEIN-BARR VIRUS, LEISHMANIA TITERS, ANTI-NUCLEAR ANTIBODY, RHEUMATOID FACTOR, LYME DISEASE TITERS (IgM & IgG FOR BORRELIA BURGDORFERI BRUCELLA TITERS, C-REACTIVE PROTEIN & THYROID FUNCTION TESTS. PPD PLACED ON 5/27/93. TEST READ NEGATIVE	NO DIAGNOSIS AT THIS TIME-HOWEVER, TEST RESULTS , HIV ETC STILL PENDING/F/U AT SALEM VAMC	DISCHARGE MEDICATIONS: TENORMIN	F/U AT GASTRO- ENTEROLOGY SVC SALEM VAMC FOR COLONOSCOPY & UPPER ENDOSCOPY PT'S HIV TEST IS PENDING AT THIS TIME & PT WILL CALL FOR RESULTS @ INFECTIOUS DISEASE CLINIC 3 WKS AFTER DISCHARGE			

* VAMC OF ORIGIN

** ALL DISCHARGED PATIENTS LISTED ABOVE HAVE RECEIVED A COMPREHENSIVE PHYSICAL EXAMINATION

QUESTIONS SUBMITTED BY
HONORABLE LANE EVANS, CHAIRMAN
SUBCOMMITTEE ON VETERANS' AFFAIRS

HEALTH CONCERNS OF PERSIAN GULF WAR VETERANS

June 9, 1993

QUESTIONS FOR DR. WILLIAM J. REA
PRESIDENT
ENVIRONMENTAL HEALTH CENTER

1. How many Persian Gulf War veterans have you examined? What health care problems have these veterans reported to you? What have you concluded based on your examination of Persian Gulf War veterans?

   a) 10
   b) fatigue, headache, muscle pain, no energy; intolerances of chemical odors, foods, biological inhalants, arthritis, skin turning brown, asthma, heart irregularity, gastrointestinal upset; malnutrition
   c) They have chemical sensitivity.

2. How many Persian Gulf veterans have you treated?

   10

   What are the conditions for which you've treated Persian Gulf War veterans? Describe the treatment you've provided for these conditions.

   Described in 1b above. Treatment involves avoidance of pollutants in air, food and water; rotary diet (less chemically contaminated food); injection therapy for food, biological inhalant sensitivity and some chemicals; nutritional supplementation; heat depuration physical therapy.

3. What are the results of the treatment you've provided to Persian Gulf War veterans?

   Improved.

   Are the results of the treatment you've provided to Persian Gulf War veterans permanent or temporary? If temporary, how long do the beneficial results of your treatment last?

   They continue to improve over time.

   How much does this treatment cost?

   Individual---ranges from $1,000 to $100,000 (hospitalized patient)

4. What are the most likely causes of the problems reported by Gulf War veterans?

Exposures to the fires, shells, pesticides, fuel oils, paints, bacteria, viruses, fungus and parasites.

5. Are the health problems you've treated in Gulf War veterans communicable?

No.

6. Identify the available evidence which supports exposure to chemical or toxic substances during Gulf War service as a cause of health problems reported by Gulf veterans.

Overwhelming by challenge tests and SPECT scan, computerized balance tests, autonomic nervous system measurements, and blood levels.

7. Because of wartime stress are Persian Gulf veterans more likely to suffer from environmental illness? Describe the connection, if any, between stress and environmental illness.

Yes, both stress and chemicals use the nutrient polls to cope; the same is for immune and detoxification systems

8. Can multiple chemical sensitivity be successfully treated? How?

Yes, see enclosed protocol.

Identify federal government agencies which recognize multiple chemical sensitivity as a disability.

Social security, HUD, EEOC, Justice Dept., EPA, Department of Education

Is chemical sensitivity communicable?

No.

9. Individuals with no military service have reportedly become sensitive following chemical exposure. For Persian Gulf War veterans, how can it be determined if their health care problems are related to chemical/toxic substance(s) exposure which occurred during military service? Which tests, if any, can accurately detect exposure to a particular chemical/toxic substance months or years after exposure?

See enclosed protocol.

How long (hours, days, weeks, etc.) after exposure, can individual exposure to chemical or toxic materials be accurately assessed?

Months to years.

10. **What types of injections are used to reduce secondary sensitivities to food and biological inhalants?**

    Diluted doses of foods, molds, pollens, terpenes.

11. **How is a decrease in a patient's "total load" measured?**

    Decrease in total load is measured by improved immune system, vitamins, minerals, amino acids and a decrease in chemical blood profiles, clearing of autonomic nervous system by Iriscorder, SPECT scan and balance studies.

12. **How is brain spect scan made and who is qualified to diagnose a brain spect?**

    Using three (3) cameras similar to a CAT scan, done by nuclear medicine specialists.

    Please describe a neurotoxic pattern on a brain spect scan.

    See attached sheet.

13. **What nutrients are needed to "fuel the detoxification system in the body" and how are "nutrient pools" kept full? What dose of each nutrient is needed to fuel detoxification?**

    Vitamins - A, B, C, D, E; minerals - Magnesium, Calcium, Zinc, Selenium, Manganese and Copper.

    The nutrient dosage is on an individual basis.

A. EVALUATION OF CHEMICAL SENSITIVITY

1.(a) Environmentally oriented history - this history includes the standard medical history, with extra detail about the patient's outdoor and indoor air environment, his working conditions, what specific tasks he performs, his diet and water sources, and his medication use. Special attention is given to potential environmental pollutants in all of these parameters as well as tendencies toward life-long problems, whether it be behavior or medical (see Appendix D).

Appendix A, (attached) shows some of the potential Gulf War hazards.

Appendix B shows a Rand questionnaire for health comparison and research purposes.

Appendix C shows the Environmental Health Center patient intake questionnaire.

(b) Physical exam - comprehensive (see enclosed expansion Appendix D)

2. Blood analysis - (not all the following investigations are needed on the same patient)

a. CBC w/differential & ESR (the WBC is frequently below 5,000 and the RBC is often low in the chemically sensitive patient)

SMAC - 40% of chemically sensitive patients have abnormal liver functions, usually at least one enzyme is elevated

b. direct measurements of xenobiotics by AccuChem Laboratories, 990 N. Bowser Road, #800, Richardson, Texas 75081. Dr. John Laseter is the director, and is one of the world's leading human pollutant chemists. We have over 13 years of experience correlating his laboratory tests with our clinical evaluation under environmentally controlled conditions.

72-939 O – 94 – 14

1. GVST - General volatile solvent test measures benzene, toluene, ethylbenzene, xylenes, styrene, trimethylbenzenes, chloroform, dichloromethane, 1,1,1-trichloroethane, trichloroethylene, tetrachloroethylene and dichlorobenzene. These are found in fuel oils, oil fires and degreasers, medication, vehicles and inerts in insecticides and other sources.

2. HSST - Hydrocarbon solvent screening test, consists of measuring levels of aliphatics of several types, including cyclohexane, 2,2-dimethylbutane, 2-methylpentane, 3-methylpentane, n-hexane, n-pentane, cyclopentane, n-heptane. These are found in fuel, fuel oil exhausts, fires, vehicles and inerts in insecticides and other sources.

3. CPST - chlorinated pesticides screening test - The Saudis apparently sprayed weekly in tents. We don't know which insecticides were used. If they were organophosphates, they would not be measurable now; if chlorinated, they would still be present, including DDT, chlordanes, hexachlorobenzenes, Dieldrin, aldrin, and endrin. These could be in stored blankets and materials, also. (We have had reports of such cases.)

4. PCBs - These can leak from electrical transformers and other sources

5. Pentachlorophenols - These were used previously for wood and leather treatment as well as for material preservation.

6. Phthalates - These substances are found in any plastic containers for water and food and leak into the contents.

3. Antipollutant enzymes - Glutathione peroxidase is dependent upon selenium, and sulfur amino acids; superoxide dismutase upon manganese, copper and zinc; catalase upon iron. These all may be induced by chemical exposure, in which case they may be elevated. With a large chemical exposure or if the patients

develop chemical sensitivity which becomes severe, these levels are usually depressed. We use Monroe Medical Research Laboratory, Route 17, P.O. Box I, Southfields, New York 10975.

4. Nutrient profiles are extremely important, since chemical overload results in further disturbance of orderly nutrient metabolism which may be initiated by poor food (such as rations wrapped in plastic which leak in the heat and by unpalatable c. rations.) Chemical disturbance of the GI tract occurs by the ingestion of water contaminated by phthalates leaked from plastic containers, other toxics, and food contaminated with pesticides and herbicides as well as combustion materials from oil well fires and smoke. All may induce the malabsorption of nutrients from the gut. Gastrointestinal flora is disturbed and competitive inhibition of nutrient absorption occurs with the xenobiotic contaminated foods. Nutrient transport across membranes may be disturbed since most of the toxics are lipophilic and attack and disturb cell membrane function. Overutilization of nutrients occurs due to the hypermetabolism, associated with the body's attempts to cope with excess intake of xenobiotics. Finally renal leaks occur for vitamins, minerals and amino acids, in that many xenobiotics may inhibit reabsorption in the kidney. Some xenobiotics also act like diuretics. Both excess and deficient nutrients occur related to cell membrane damage.

5. Vitamins - assessment is important as pollutant load greatly stresses and reduces available stores.

   60% of chemically sensitive are B_6 deficient;
   26% are deficient in B_1;
   35% are deficient in B_2;
   21% are deficient in B_3;
   15% are deficient in B_{12};
   28% are deficient in C;
   15% are deficient in D;
   15% have excess D;
   15% are deficient in A;

   Therefore <u>evaluation of these vitamin levels is essential for long term treatment.</u>

6. Intracellular minerals - due to pollutant-derived membrane damage, intracellular minerals may frequently be either deficient or in excess. These two conditions can occur in the same

individual for different nutrients. Serum levels of minerals are of little value when studying the chemically sensitive patient.

In a study at the Environmental Health Center - Dallas (EHC-D), the number of high levels of intracellular minerals averaged 3.25 per patient versus .53 per control ($p < .027$) while the number of minerals in the patient group that were low was 2.25 per patient versus .73 per control ($p < .001$.) For this analysis, we use Doctor's Data, 30 W. 101 Roosevelt Road, P. O. Box 111, W. Chicago, Illinois 60185-9986.

7. Amino acids - Amino acid abnormalities are abundant in the chemically sensitive, and may be found in excess or deficient. The clinician must realize that they are not only necessary for building blocks of proteins, immunoglobulins, vasoactive and neurotransmitter substances, etc., but are also essential for detoxification and detoxication. Therefore the sulfur amino acids such as cystine, cysteine, taurine, methionine and glutathione are paramount in clearing xenobiotics from the body. Inhibition of methylation appears to be the number one defect in xenobiotic metabolism in the chemically sensitive. However, any of the other major xenobiotic conjugation systems such as acetylation, acylation, sulfonation and gluconation may be involved and functioning poorly in the chemically sensitive. Each has to be evaluated carefully by blood and urine amino acid analysis. Dr. Jon Pangborn is head of Bionostics, a division of Doctor's Data of Chicago and is the man with the most experience in evaluating this data.

8. Fatty acid analysis is performed by Monroe Medical Research Laboratory and can be used for devising treatment for the chemically sensitive if abnormal.

B. CHALLENGE TESTING FOR DIAGNOSIS

1. Challenge tests - These tests are the cornerstone for the diagnosis of chemical sensitivity, as they can prove direct cause and effect between a low-dose exposure and subsequent symptoms and signs, especially if done with a double-blind placebo controlled methodology. However, these must be performed in a meticulous manner and under rigid environmentally controlled conditions so that the pollutant load is decreased after the patient is deadapted. Here cause and effect can be proven once the patient reaches the baseline state.

Attached are exhibits which describe the specially constructed controlled environments. These will have to be constructed with meticulous detail so as to minimize both particulate and outgassing contamination. Once this is accomplished and less polluted environments are proven by proper analytical air analysis using gas chromatography, mass spectrometer and particulate counts as well as sensitive human monitors, challenges can be commenced. However, all personnel and the veteran to be challenged will have to be devoid of perfume, cigarette smoke, deodorants, polyesters, etc. (These will have to be trained in detail. Each mode of challenge will be described.)

a. oral - Here the patient is allowed to eat one less chemically contaminated organic food at a time. Four hours must elapse before the next challenge. A challenge on another day can be used once the less contaminated food is proven safe. This time the same food is purchased from the commercial market where it has been contaminated with additives, preservatives, herbicides and pesticides. This challenge will evaluate the sensitivity to ingested chemicals. We have performed 50,000 oral challenges over the last 20 years. Water is challenged for contaminate sensitivity but no food can be eaten for four hours.

   A second technique may be used where a graduated dose of 1/5 dilutions of the food or chemical can be placed under the tongue and observed for a reaction.

b. intradermal challenge - .05 cc of desired dilution (1/5) of the chemical can be injected. Measurement of wheal growth and observation for production of signs and symptoms can be evaluated. We have performed over 1,000,000 challenges by this method.

c. inhaled challenge - Ambient doses of inhaled chemicals for challenges can be performed after the patients total body load is decreased, his metabolic systems are deadapted and he is in the basal state either asymptomatic or has a few stable symptoms. Any chemical can be used, however, our standard protocol has used chlorine at <0.33 ppm, formaldehyde <0.20 ppm, petroleum derived alcohol (ethanol) <0.50 ppm, pesticide 2,4 DNP, or chloropyrophos <0.0034 ppm, phenol < 0.0020 ppm, toluene ambient dose and 1,1,1 trichloroethane ambient as well as many blanks.

We have now performed in excess of 30,000 inhaled double blind challenges at the EHC-D.

C. TREATMENT OF CHEMICAL SENSITIVITY

1. Massive avoidance of pollutants in

a. Air

1. Outside air - Getting less polluted outside air is difficult at times. Its acquisition depends on the location that the individual is on earth (western U.S. better; high is better than low; ranch better than farm because of insecticides; outside the city is better)

2. Indoor air - Each patient has to develop one oasis room at home with no carpet, no foam mattress or water bed, no dry cleaning, etc. This area is the most important in the patient's life because of being in it at least eight hours per day for sleep.

b. Water - We now drink the waste water from the town upstream. Less polluted water is needed. This can be obtained by using specially designed ceramic carbon filters, spring water in glass, (not plastic bottles) or distilled.

c. Food - It is necessary to use less chemically contaminated organic foods that are grown in the relative absence of pesticides, herbicides, and artificial fertilizer with no additives or preservatives in them.

Doing these meticulous and massive avoidance techniques will decrease the total body load and often allow recovery.

2. Injection therapy - 80% of the chemically sensitive develop secondary food, biological inhalant (pollen, mold, terpenes, dust, etc. sensitivity. These may then act as a primary trigger that will propagate the sensitivity. Therefore, they must be treated by injections that will neutralize their reactions. Often these injections will be needed daily, every

other day or every four days depending upon the severity. Injections may well clear the patient rendering the need for future treatment unnecessary. The use of the lesser toxic chemicals such as ethanol, perfume, newsprint, orris root, etc. will often help. There is the toxic, the pharmacological and immune aspects to consider.

3. Nutrition - Replacement, supplementation and balance of the disturbed nutrient is necessary to allow the immune and non immune detoxification systems to work optimally in order to combat the xenobiotics. Since there is membrane damage excess and deficiency my occur. Usually they are both present in the average to severe chemically sensitive. Each will be discussed separately. Oxygen and alkali salts are given freely to prevent vasospasms and acidosis. The detoxification systems usually operate better with oxygen and alkaline pH.

   a. Vitamins

      Vitamin A in the form of B-Carotene is often necessary because of the liver involvement with detoxifying xenobiotics. Those who are especially exposed to pesticides may need anywhere from 10,000 to 25,000 IU daily.

      B vitamins of all classes need to be supplemented daily. They should be preservative and yeast free. Since the majority of the chemically sensitive are deficient in B vitamins, these are necessary. They are the most difficult to tolerate by the chemically sensitive. These will fuel the cytochrome P-450, alcohol and xenobiotic detoxification systems.

      Vitamin C in the doses of 6,000 to 20,000 mgm will be needed daily as a free radical scavenger and an anti oxidant.

      Vitamin D is needed in the 15%, that are deficient. Sunlight exposure is often enough. However at times supplementation with D_3 is necessary.

      Vitamin E - This strong cellular antioxidant is needed to prevent further pollutant triggered lipid perioxidation.

Specific dosing schedules must be individualized, some will need parenteral because oral won't be absorbed or leaks from the kidney too fast.

b. Minerals - Usually oral supplementation can be given using 1-3 capsules containing 1,000 mgm calcium citrate, 500 mgm magnesium aspartate, 30 mgm of zinc oratate, 2 mgm copper gluconate, selenium (200 mgm of seleno methionine, chromium 200 mg and molybdenum 500 mgm, manganese gluconate 10 mgm.

Again, all minerals must be individualized and parenteral administration may need to be given initially.

c. Amino acids - Depending on the nutritional status, the blood and urine analysis, protein and amino acid supplementation may be needed. These supplementations should be balanced and caution taken in that the chemically sensitive often react to the source such as the beef, corn, or soya.

Anti xenobiotic amino acids such as taurine 2 gm/day, glutathione 600 mgm daily, methione 2 gm/day and/or cysteine 2 mgm/day will be needed depending on which amino acid detoxification pathways are malfunctioning. Often these have to be given intravenously initially.

d. Fatty acid to support membrane integrity may be given in the form of linseed oil, 1 tsp. 3 times a day and primrose oil, 1 capsule 3 times a day. They will overcome the delta three and delta six desaturase injuries.

e. Enzymes - Digestive enzymes may be needed on those individuals who bloat. These will have to be titrated with varying oral doses in depending on the tone of food intake.

4. Heat depuration physical therapy - This process involves placing the patient in specially designed ceramic heat chambers (with decontaminated grout using electric heat units, massage and exercise under environmentally controlled conditions. Heat increases metabolism with mobilization of xenobiotics from their cell membrane stores

resulting in more liver detoxification. Also elimination occurs through increased sweat and sebum. The exercise under less polluted conditions allows for mobilization of xenobiotics stored in fascia and muscle as does the massage. This process has to be done precisely and under medical supervision.

5. Tolerance moderators - once the patient is detoxified and his nutrients are replaced, he occasionally will not improve. We have found that immune modulators such as transfer factor will often give them a "jump start" and allow their system to function properly.

Edward S. Hyman, M.D., F.A.C.P.
3525 Prytania Street, Suite 220
New Orleans, LA 70115

July 15, 1993

Congressman Lane Evans
Chairman, Subcommittee on Oversight and Investigations
Committee on Veteran's Affairs
U.S. House of Representatives
335 Cannon House Office Building
Washington, D.C. 20515

Dear Congressman Evans:

In response to your written questions and those of Congressman Bachus, I submit the following in the format you requested.

To Congressman Evans:

1. **Q.** How many Persian Gulf Veterans have you examined?

   A. I have physically examined only the 7 veterans that I have treated. I have examined the urines of many others.

   Q. What health problems have the veterans reported to you?

   A. Their medical problems vary. My information is from a much smaller sampling than the VA, but it is compatible. The VA and the military have spent millions of tax-payers dollars collecting this information in registries, individual patient visits, hospitalizations, etc.

   Q. What have you concluded based on your examination of Persian Gulf War veterans?

   A. I have concluded that the veterans that I have seen suffer from the bacterial infection that I have found, and that their improvement followed the treatment for that infection.

2. **Q.** How many Persian Gulf veterans have you treated?

   A. 7 veterans and 2 wives. Four veterans are nearly completely restored, 2 recently discharged from the hospital continue to improve. One (#4) is difficult to manage at a distance. He has severe localized infection and lung impairment, and his improvement is very slow but definite. One wife is well and the other is improving.

   Q. What are the conditions for which you've treated Persian Gulf War veterans?

   A. See above.

   Q. Describe the treatment you've provided for these conditions.

   A. I have given adequate doses of antibiotics as I have done successfully in civilian life. In order to assure safety, I have started with intravenous antibiotics in a hospital. I track the bacteria in the urine closely, and I modify the treatment until the bacteria respond.

3. **Q.** What are the results of the treatment you've provided to Persian Gulf War veterans?

   A. Results: 100% have improved, starting in the hospital. Four of seven (#'s 1, 2, 3, and 5) are in what appears to be a full remission from the Persian Gulf disease. Numbers 6 and 7 are recently out of the hospital and are continuing to recover. Number 6 will probably fully recover in a few months, but # 7 has demonstrable brain damage and his slow recovery may never be complete. Number 4 is severely scarred and continues to recover slowly at 2 months. He had a predictable setback traveling 900 miles home by bus, and had another setback traveling "1000 miles" by surface from one VA facility to another after arriving home. Several, including #4, have had financial difficulty buying medicines after discharge. One wife is well, the other is recently discharged. She is improved, but not yet

well. Her husband is bankrupt, and they have difficulty buying medicine.

Q. Are the results of the treatment you've provided to Persian Gulf War veterans permanent or temporary? If temporary, how long do the beneficial results of your treatment last?

A. I can only extrapolate from my civilian experience. THE LONGER THE ILLNESS GOES UNTREATED, THE HARDER IT IS TO ELIMINATE. I believe that the first three veterans I have treated have almost fully recovered in four or more months, but prudence requires continued medicines and observation. (One of them has had an unrelated "coronary" due to coronary artery disease which was serious before he went to the Persian Gulf. He was promptly and expertly treated in Birmingham with excellent results) There is a good chance that those three plus #5 will be permanently remedied, but I cannot predict with any accuracy in individual cases in a new group of patients. In civilian practice, some are permanently recovered, others return in a few years, and a few have required continued, periodic treatment. Veteran #4 is improved and will get more improvement, but he needs further intense care. Veterans #'s 6 and 7 are out of the hospital only a few weeks. Number 6 will probably have a permanent resolution. Number 7 has been down for more than 2 years and has brain damage. He continues to improve slowly, and I can only hope that he will have sufficient recovery to "bypass" the brain damage.

Q. How much does this treatment cost?

A. In the cases I have treated, the hospital cost has been about $18,000. This does not include any fee for physician services or for follow-up costs. That cost is less than their expenditure prior to my treatment. They have been attended in Bethesda, Walter Reed, other Army and Navy facilities, VA facilities, and civilian hospitals. They have been hospitalized for longer periods than they were here. One (#3) spent 12 days here for successful treatment, and has subsequently spent 12 days in the VA "Center of Excellence" in Houston with no treatment and with minimal study. No one of them has had any benefit from prior treatment. One cited an expenditure of $200,000 prior to coming here. The bulk of the hospital cost has been assigned to medicines, but that assignment is entirely arbitrary. From study of these 7 veterans, I believe that they should be hospitalized for 3 weeks instead of 12 to 17 days. After returning home, medicines have cost them about $250 per month, and in only one instance has the VA cooperated to fill prescriptions. I have not asked for a fee from any of them, even for the post-hospitalization care. I cannot do that indefinitely. I have no subsidy. There is no doubt that the cost would be significantly reduced in an organized program. I have prepared a proposal to establish the basis for the extension of my work to this Desert Storm Illness, and in it is the beginnings of such an organization.

4. **Q.** What are the likely causes of the problems reported by Gulf War Veterans?

   A. The single likely proximate cause is a bacterial infection as stated.

5. **Q.** Are the health problems you've treated in Gulf War veterans communicable? See also question #8.

   A. Quite likely! Any bacterial infection is communicable. In one Seabee unit close to 10% came down, and 4 wives who have complained of the sickness have positive urines. I have successfully treated 2 of that 4.

6. **Q.** According to your testimony, you have also treated patients with no military service. Can you determine if the condition you are treating in Gulf War veterans was incurred or aggravated during military service? How?

   A. The strongest evidence for a connection with the Persian Gulf War is the cluster of cases in the veterans and in a few civilians who were also there. About 10% of one Seabee unit came down. Some servicemen and servicewomen came down with the illness while there. Others suffered soon afterwards. I believe that the illness has spread to wives and even to children. This also speaks of contagion. I believe that the servicemen picked up strange bacteria while there, and that it can be communicated to others. The origin of the bacteria is speculative. The bacteria could be a spontaneous variant of an ordinary germ, but, as I pointed out on June 9, such bacteria can be essentially created.

7. **Q.** Please explain why you agree or disagree with Dr. Hinshaw's statement that the mys-

terious illness afflicting Persian Gulf veterans is multiple chemical sensitivity which has been induced or triggered by exposure to hydrocarbon compounds derived from petrochemicals.

A. I do not remember all of his testimony, I am not well informed on that line of thought, and I am not particularly concerned with his hypothesis, but I will try to explain my comments on June 9, and **I enclose a paper and an editorial in the latest ANNALS OF INTERNAL MEDICINE on the subject (APPENDIX A). I recommend that you and your committee read it (at least the editorial and the summary of the paper).**

First, petrochemical workers around here do not get an illness like the Persian Gulf sickness. Moreover, if it were a sequel of petrochemical exposure, that illness would not spread to wives and children who have not been exposed to petrochemicals. Nor would the disease remit on antibiotics.

Environmental Illness. Several have claimed that some environmental exposure had sensitized the victims, and they are now sensitive to the environmental factors. My first patient, Chief Tom Lane who testified on June 9, told me that he was tested and was found positive for environmental illness after he was treated by me, after he became essentially well, and after he had resumed full activity and full living. He said that he had positive skin tests to various agents, among which are ethyl alcohol and formaldehyde. *(Any live animal will get a reaction to these chemicals injected beneath the skin).* Whatever tests they perform, Chief Lane is handling the finding well and in good health. If he is "environmentally sensitive", then it is not bothering him as he is exposed to the full environment daily. *(Prior to treatment he could not function mentally. He had been seen at Bethesda Naval Hospital by the chief of infectious disease and elsewhere by several VA physicians. His boss at the Tennessee Valley Authority had written him reprimands on his poor mental performance and had reduced his pay because of his mental dysfunction. He also had pain in his left hip which limited him to wobbling less than one block, he had skin lesions, etc. You have seen video recordings of him supplied by Brian Cabell of CNN)* With his permission, I attach his letter to me **(APPENDIX B)** after treatment and after he had served two weeks of active duty at Camp LeJeune. Another of my patients (Captain Hollingsworth who also testified on June 9) was exposed to smoke of the burning oil "so thick that I could not see my hand in front of my face", yet he too responded to antibiotic treatment like the others.

I do not remember whether it was Dr. Hinshaw who spoke about the methyl-pentanes or about the hexa-methylene di-isocyanates, so I will comment on both.

The iso-hexanes (2-methyl pentane and 3-methyl pentane) are light petroleum fractions which are relatively harmless. I keep a bottle of them in my bathroom as a solvent. In very high concentrations they are anesthetics. They are normal components of commercial gasoline in a cold climate (because the lighter fractions of petroleum are needed to start your car). You have smelled them. If inhaled while filling your gasoline tank, these volatile hydrocarbons will be quickly blown off as you breathe. Hydrocarbons are poor allergens. Were the iso-hexanes serious toxins or allergens, it is unlikely that they can persist in the blood long enough to cause illness, much less a prolonged illness. A higher, less volatile hydrocarbon is mineral oil, and even higher is paraffin. Inhalation of mineral oil causes lipoid pneumonia and scarring visible in an X-Ray.

Hexa-methylene di-isocyanate (HDI or HMDI) was implicated among those who spray-painted U.S. tanks with a polyurethane paint. HDI is a straight hexane (6 carbon) chain with an isocyanate group (-NCO) on each end. It is used to react with another chemical (a polyalcohol) to form polyurethane. HDI's toxicity is identical with that of toluene di-isocyanate TDI), an alternate chemical used to form polyurethane. One or the other is present in every can of urethane paint or varnish in every hardware store. I am fully familiar with the toxicity of di-isocyanates because by chance I have attended several victims exposed to toluene di-isocyanate while they were working in a plant on the Mississippi River where that chemical is manufactured, and because I have reviewed the world's literature on the subject. The di-isocyanates differ from the methyl isocyanate of the Bhopal disaster only in that each molecule has two isocyanates ("di-") instead of one. In low, long lasting exposure, the di-isocyanates cause asthma, bronchitis, and scarring of the lung. In massive doses of short duration, they cause a chemical pneumonia. Twenty four cases of di-isocyanate pneumonia are reported in the world's literature, and I would be happy to supply the references. One case in the Danish literature is directly appropriate. In that

report, a worker spray-painted the inside of the hull of a ship without using his positive pressure mask and without ventilation. He became short of breath, his blood oxygen was low. He was quickly treated with "cortisone" and an antibiotic for his pneumonia. He recovered. He had no sequellae. (*Boll, KL, and Eriksen, J. Toksisk interstitiel pneumoni fremkaldt af diisocyanat. [Toxic interstitial pneumonia caused by diisocyanate]. UGESKRIFT FOR LAEGER (Danish). 1988 Oct 3. 150(40). P 2405.*) Repeated large exposures of isocyanates will cause cumulative lung scarring. I believe that I have studied one death from toluene di-isocyanate. The illness resulting from di-isocyanates does not resemble the Desert Storm Illness.

Reverse isolation, or enclosure within a plastic bubble, is the extreme measure used to protect the "environmentally ill". It is expensive and it does not restore a person to a normal life or to military service. I have examined the urine of one patient living in a bubble. It was full of the bacteria I seek. I can only wonder whether elimination of the bacteria would set him free. Victims less ill are taught to avoid all sorts of environmental factors. To my knowledge, my 9 patients are the only ones who have improved, and among them are the only ones restored to a full life, free in the world full of environmental factors.

Finally, although I am not very familiar with the teachings of the environmentalists, and I am not able to believe the few bits of information that I have heard on Environmental Illness, I enclose a photocopy of an article (APPENDIX A) in the most recent issue of the Annals of Internal Medicine (*Simon, GE, Daniell, W, Stockbridge, H, et al. Immunologic, Psychological, and Neuropsychological Factors in Multiple Chemical Sensitivity. A Controlled Study. Annals of Internal Medicine 1993;119:97-103*) and of the accompanying editorial (*Terr, AI. Multiple Chemical Sensitivities. Editorial, Ann Intern Med 1993;119:163-4.*). These scientists are far more familiar with the subject than I, but my understanding of the problem is clearly stated in the editorial.

8. **Q.** Is the condition you've treated in Persian Gulf War veterans the same condition you've treated in individuals with no military service?

   A. As best I can tell, yes. The strange thing about the Persian Gulf War veterans is the numbers, the concentration, and the timing of onset. I believe that there is a localizing factor such as a mutant germ or mutant set of germs, either a natural mutant or a germ that has been educated. I find no evidence that any agent has compromised the victim's immune system to weaken them to the bacteria, and if so, that agent would have to be transmitted to wives.

   Q. Is the condition you're treating communicable?

   A. Quite likely. Any bacterial infection is communicable, and I believe that this illness has been communicated to wives and children. I seriously doubt that the transmission is sexual. It is probably inhaled as an aerosol (e.g., in coughing or sneezing) like most streptococcal infections, or passed on to wives by kissing.

9. **Q.** Before prescribing treatment, have you made a diagnosis for each veteran?

   A. Yes. I do not treat anyone without a diagnosis except in a dire emergency. In this case I have examined urines, I have reviewed prior medical records (from Walter Reed, Bethesda, VA facilities, etc.), and I have found evidence of this illness on personal examination before I have accepted any veteran for treatment.

   Q. What diagnosis have you made for these veterans?

   A. As I explained in my written and oral testimony, there is no listed diagnosis to use. Indeed this is why the disease is so strange to so many doctors, but the mechanism was known to doctors a generation ago, and it is still valid. I have begun to call it SYSTEMIC COCCAL DISEASE, and others around me have called it HYMAN'S DISEASE. For coding purposes I use the nearest code, that for a urinary tract infection (UTI), although I know that the bacterial invasion is not localized to the kidney or to the urinary tract. This is the fault of a rigid code. There is a need to upgrade it.

QUESTIONS SUBMITTED BY CONGRESSMAN BACHUS

I will answer the questions starting with numbers 10 and 11 because the subject of those questions is the core of subsequent questions.

10. **Q.** Are you willing to share your findings and treatment methodologies with physicians at the Department of Veterans Affairs or at the Department of Defense? Why or why not?

A. Of course I am more than willing to share such information, and I have been all along, but this question, passed through Congressman Bachus, raises more serious questions. Does this question imply that I intend to treat 3,000 veterans one at a time, single handed?

I entered and persisted in this Desert Storm Illness in order to end the mystery and the problem. I personally felt badly that those who had honorably served our country were suffering unnecessarily, and it was not the fault of those physicians who were trying. I thought that the problem was a defect in medical teaching which started in the 1956 and has since become "carved in stone". I thought I understood the illness based on my 30 years of work. **Now that I have treated 7 veterans and 2 wives Pro Bono without a failure, I am even more confident** that I can show the way to solve most or all of the problem of the Desert Storm Illness. In spite of all the concurrently proposed hypotheses on the cause of the Desert Storm Illness (psychologic, environmental, uranium, chemical warfare, etc.) , I believe that my cases are the only successfully treated veterans. These same veterans had been unsuccessfully treated elsewhere, including Bethesda Naval Hospital, Walter Reed, and one of the VA's "Centers of Excellence".

The real question is whether the VA and/or the DOD is willing to work with an outsider (I too am a veteran). For a year they have been less than cooperative. **The VA:** Following Senator Shelby's visit to the VA, I had a 65 minute conversation with **Dr. Susan Mather** of the VA. I told her what I was doing, why it did not appear in the standard texts, and why I was not misled. I gave her references to the world's literature as I went along. I also told her that I am very busy with my academic work and with my practice of medicine which is necessary to support my family and my academic pursuits. The conversation ended with a verbal agreement that we could work something out. Unfortunately, with no further exchange of words or letters, I and my ethics were publicly defamed by name. I have no reason to believe that she bothered to read the references. The defamation from the VA was traced to her statement within the VA that I would not tell her anything. It may be true that she did not understand what I told her, but I tried and she acted like she understood. **The DOD:** Similarly, **Col. Arlene Zaloznic, M.D.**, called me from the Office of the Surgeon General of the Army. I gave her the same information that I gave to Dr. Mather. Again, there is no reason to believe that she read the references that I gave her. Yesterday my patient relayed to me a serious, unprofessional, unjustifiable, and libelous condemnation which had been sent to him, and which was attributed Dr. Zaloznic and to other military physicians who had not spoken to me, *"There is no scientific merit to his (Dr. Hyman's) proposed treatment" . . . "However, Dr. Hyman's evaluation and treatment of the Gulf War Syndrome cannot be considered good medical care by any standard of today's medical practice". . . "I cannot condone exposure of any soldier to medical care below accepted medical standards. Further to allow an individual with a complicated or poorly understood medical condition to undergo therapy of unproven, poorly documented benefit that may even be deleterious, risks confusing further diagnostic measures or degrading proven therapeutic efforts".* **(APPENDIX C)** Before he came to New Orleans, this veteran (my patient who received these cruel remarks) was seen and studied in the Walter Reed Hospital where all tests failed to diagnose his illness. I diagnosed his illness prior to his arrival in New Orleans. He spent less time in the hospital in New Orleans than he did at Walter Reed, and his illness turned-around here. He is now headed toward full recovery. **Would it be within "accepted medical standards" to let him continue to decay?**

The information that I gave to Dr. Mather and to Dr. Zaloznic was adequate for each of them to arrive at the conclusion that it was poor medical care, and thus to defame me. Now, as passed on in this question, the same information becomes inadequate. With the VA and also with the DOD, the first condemnation is incompatible with the second condemnation. The incidents are unfortunate.

On June 9, I purposely gave some of the scientific background in my written presentation. I have sincerely tried, and I am still ready to cooperate, providing the work is well

done and good medical practice. The bottom line is that I have had success where those who condemn me have failed. Thus, the higher judge, NATURE, agrees with me, not with them. Unfortunately, both Drs. Mather and Zaloznic wanted the treatment reduced to a rigid protocol, as if a dumb computer terminal were treating the patient. After 30 years of work, I still cannot answer in the format they demanded, namely, "What drug, what dose, and for how long?" I believe that any answer to that simple "computer protocol" might produce a few good results but would produce a few tragedies. That is very poor medical care, and I want no part of the tragedies. Also unfortunately, neither Dr. Mather (Public Health) nor Dr. Zaloznic (Oncology) has the background upon which to build such information, certainly not in 1 hour. I also spoke freely to General Blanck (Osteopathic Physician, Chief of Medicine at Walter Reed), to Commander Ohl (Chief of Infectious Disease at Bethesda Naval Hospital), and to other Army, Navy, and VA physicians.

To my knowledge, in an 8 month effort, I have the only successful treatment. Now, rather than unknowledgeable condemnation, I invite their help so that this treatment can be extended to more veterans. **Perhaps the Congress will supply support so that we can put the veterans' illness behind us.** The longer you wait the sicker many of these veterans will become. I started one year ago. Had the VA cooperated the solution might be further along. I consider procrastination cruel.

There are simple requirements that I cannot relinquish:

1) The academic priority for my 30 years of work must remain with me.

2) The methodology, as I know it or as it can be improved, must be correctly disseminated. Dissemination should begin by personal contact on the wards and in the laboratory while following a few individual cases from bedside to laboratory and back.

3) I must be in position to direct and supervise any provision of this form of care given using my technology to insure that it is given correctly and safely.

If these conditions cannot be agreed upon, then the veterans must wait until I can publish in the usual channels.

I see no reason why the Veterans or the Military cannot live with those conditions. These requirements do not interfere with their mission. My desire is and was to help the veterans. I assume that their desire is the same. If successful this methodology will solve a large portion of your problem. I hope that the Congress will fund my proposal and let us get on with the help.

11. **Q.** Have you submitted a research protocol, as you described in your testimony, to VA for approval and award? Why and why not?

A. I said on June 9 that I was not prepared to do that, and that I would submit it to the Committee, not to the VA. My protocol was complete and was ready to send to Congressman Bachus as he had suggested to me in the hallway on June 9, and ready to send to the Committee as several other Congressmen had suggested in the hearing. When I received these questions, I learned that the protocol would go to the VA instead. I confirmed this with Ms. Ann Patzke in Congressman Bachus's office by telephone, and I learned that the proposal would be sent directly to Secretary Brown. I tried in vain to contact Congressman Bachus. In the hearing on June 9, I answered that I could not work with the VA under the existing circumstances, and I specifically stated why. Secretary Brown himself defamed me personally and my medical activity in the Birmingham newspaper on February 13, 1993, and this abuse was disseminated via E-Mail to all VA hospitals on February 17, and via that newspaper chain to other cities. Since then patients, and even news media, have brought back to me defamatory remarks from VA facilities. In letters, Secretary Brown's staff stated that he flatly refused to withdraw the remarks. I can live comfortably with the remarks themselves however disseminated. Historically, those remarks elevate me to the level of eminent scientists, such as Pasteur and Semmelweiss, who were similarly defamed while making scientific advances important for mankind. However, I am concerned about my protocol being judged by a person who has stated his prejudice so blatantly. Since I have learned that my proposal will be sent directly to the VA I will modify it appropriately.

General Blanck, D.O. (Chief of Staff at Walter Reed Hospital) telephoned me prior to June 9 and said that we could work together. General Blanck reaffirmed that thought in the hearing room on June 9, and said he would cooperate and help. I have not heard from him since.

I believe that the following is fair. As stated in my proposal, I must expand my office and laboratory facilities to cope with the much heavier load which will be borne, and I must provide time and space to make it possible to educate and train DOD and VA personnel if they wish. Thus the expansion of my facilities must be left with me, and I will use the facilities to continue my more general studies when the Desert Storm problem is over. Perhaps the same DOD and VA personnel would like to participate in an even bigger effort with benefits to a much larger segment of the population. I will discuss this as we go along. I believe that this approach is much more productive and much less expensive alternative to the other proposals, and it is the least expensive way to solve the country's problem.

1. **Q.** What is the name of the "germ" you isolated in the urine of Desert Storm veterans?

   A. Primarily Streptococci.

   Q. Please describe it scientifically, and detail the effects it has on the human body. Is it known to other scientists?

   A. First, thank you. For the first time in this whole matter, someone has inferred that I am a scientist!

   In the above sequence, it has become clear that the subject is not known to many scientists. Its effects on the body are to produce the symptoms of the Desert Storm Illness. When funded I will try to define how.

2. **Q.** In your testimony on page 7, you mentioned a paper you published more than a year ago about your method of urinalysis. What publication was it in and when?

   A. Hyman, ES. Improved Microscopic Detection of Bacteriuria. Biotechnic & Histochemistry, 1992;67:1-8. I had assumed that those physicians in the Army, Navy, and VA, who have passed judgment on me, had already extended to me the courtesy of finding it and reading it.

   Q. Have you published any other papers which directly relate to the Persian Gulf Illness you have been treating?

   A. No, not yet.

3. **Q.** In your testimony on page 7 you stated a paper of yours was recently accepted by a well-known international journal. What is the journal's name and when will the paper be published?

   A. NEPHRON. I do not know when it will be published. I enclose a copy of the reviewer's report because it very strongly supports my comments on June 9. **(APPENDIX D)**

4. **Q.** You state in your testimony that in regard to what you term "Desert Storm Illness, delegation of the diagnosis to a laboratory technician has led to serious oversight." Please explain to the Subcommittee what you mean.

   A. First read the report of the reviewer cited above (**APPENDIX D**). When I trained in Medical School and thereafter, the physician made a diagnosis on history, physical findings, accumulated knowledge, and laboratory tests. He either did the test himself or he had the full knowledge of the limits of the test that was done. He would often take the problem to the laboratory himself and bring the result back to the patient's bedside. As a student and a resident I examined hundreds of urines. Now, because of the streamlining of Medicine and of laboratory tests, I examine thousands of urines because I know that the routine examination is inadequate. However, almost all doctors do not examine any urine or do any other test. Even urologists, nephrologists (Internists who specialize in kidney disor-

ders), and infectious disease specialists simply send the urine (and other tests) to the laboratory for a technician to examine and to report. In turn, the technician is schooled in the thoughts: 1) that bacteria in urine are not "significant" unless 100,000 colonies of bacteria per milliliter of urine grow from that urine (the "10^5 rule"), and 2) that the "significant" bacteria will grow in the standard media used in the bacteriology laboratory. A generation of physicians have been taught that rule also, and they "know" that the rule is final. Thus, they simply send the urine to the laboratory. If the technician reports 10^5, then the diagnosis is a urinary tract infection. If the technician reports "no growth" or "less than 100,000 per milliliter", then the clinician "knows" that the bacteria are not present or that they are not "significant". In doing so they have effectively deferred the diagnosis to the technician.

5. **Q.** Is there a common trend in the symptoms of the veterans you have seen?

   A. Yes. The pattern is essentially the same, and the trend is downhill. With time they get sicker, and permanent changes occur. See Congressman Evans's questions #1 and 5.

   Q. Have all symptoms disappeared after antibiotic treatment?

   A. For the most part, yes. Recent symptoms are likely to disappear completely. However, long standing lung dysfunction (with probable scarring) and dissolution of parts of the brain are not reversible. In those instances, the fondest hope is to interrupt the process.

6. **Q.** Since you have found a "marker" in the urine of many others who did not serve in the Persian Gulf, can you be sure these veterans' illnesses are due to service in the Persian Gulf?

   A. This is about the same as Congressman Evans's question #6. The answer is the same.

7. **Q.** Is the bacterial infection you have isolated contagious?

   A. I believe it is. Please refer to Congressman Evans's question #8.

   Q. If so, how is it transmitted?

   A. I do not know. My guess is that it is transmitted by aerosol, e.g., by sneezing, by witting aerosol, etc.

8. **Q.** Other than antibiotics, and urine testing, what treatment is required in your treatment protocol?

   A. Whatever is necessary for the patient. This will vary with the individual case. No two patients are identical. One of the aims of my study will be to establish an algorithm. It is also necessary to stand-by for drug reactions.

9. **Q.** What are the names of the antibiotics you prescribe?

   A. Almost any one on the market, any in the Physician's Desk Reference (PDR). I avoid ones that carry a high risk, e.g., chloramphenicol because it insidiously and unpredictably (but rarely) causes an aplastic anemia. A few others (e.g, aminoglycosides) can cause kidney failure, etc. If needed, any ill effect that is reliably detected and interrupted is acceptable. After decades of clinical observations, I still rely on the examination of the urine to confirm efficacy of a drug in a given patient.

   Q. How are they administered? Does the patient require hospitalization?

   A. It is best to administer the initial doses by vein. It is safer and less painful. In order to get the best results, a hospital setting is advantageous for regulation of the dosage, for the changes in drugs and doses resulting from urine examinations done in my office across the street, and to observe the patients for drug reactions, etc. So far, I have put all veterans in the hospital. In my study it is conceivable that the hospital setting can be modified, particularly with those less sick. When funded I would be eager to determine that. The implications go well beyond the Desert Storm problem.

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EDITORIALS

APPENDIX A

Multiple Chemical Sensitivities

Multiple chemical sensitivities has been proposed as a name of a new disease in which the affected patient has adverse reactions when exposed to numerous items encountered under ordinary, daily conditions. The items, referred to as "chemicals," include organic solvents, pesticides, paints, new carpets, household detergents, new clothing, building construction materials, and many others. Reactions consist of subjective symptoms without accompanying physical signs or biochemical abnormalities. Patients have many and varied symptoms, but the ones they report most frequently include fatigue, malaise, headache, lack of concentration, memory loss, and "spaciness." Many of these patients report similar intolerances to many foods and almost all drugs. In a few cases, the onset of illness appears to coincide with a reported single high-dose exposure to a specific chemical, usually in the workplace. This subgroup of patients has been particularly perplexing to specialists in occupational medicine (1).

Multiple chemical sensitivities was first proposed as a new disease in the 1950s, at which time it was called "environmental illness" (2). For many years, proponents of the existence of environmental illness, or multiple chemical sensitivities, have theorized that the disease results from an immunologic dysfunction caused by inhalation of fumes from various chemicals. The chemically induced toxic damage to the immune system is postulated to then lead to "sensitivities" to other chemicals (3). Recently, a neurologic dysfunction theory has emerged as an alternative explanation of multiple chemical sensitivities (4). This theory proposes that inhaled chemical molecules travel along the olfactory nerve to the forebrain, the hypothalamus, and other parts of the limbic system. The many symptoms and alterations in mood and thought processes that these patients experience are thought to be of neurotoxic origin, and reactions to other chemicals are explained on the basis of "kindling."

The phenomenon of multiple chemical sensitivities as a disease has generated widespread skepticism among clinicians who encounter patients with this diagnosis (5). Seasoned internists, other primary care physicians, and specialists recognize in these patients an all-too-familiar pattern of over-utilization of medical diagnostic facilities because of many longstanding unexplained symptoms. The only thing that distinguishes environmental illness or multiple chemical sensitivities from this pattern is the attribution of symptoms to environmental exposures.

A series of clinical investigations of patients with multiple chemical sensitivities, including the one by Simon and colleagues (6) in this issue of *Annals*, now provides a reasonably coherent medical picture of the multiple chemical sensitivities phenomenon. Immunologically, these patients are functionally intact (7). As a group they display no deficiency or excess in their ability to mount appropriate immune responses, nor do they suffer an excess prevalence of unusual or opportunistic infections, allergic reactions, autoimmune disease, or cancer (8).

Because of the absence of consistent physical, biochemical, or immunologic abnormalities, most studies have focused attention on a possible psychiatric cause. Although selection bias and small numbers of patients suggest the need for some caution in interpreting these studies, it is clear that diagnosable psychiatric illness is common in patients with this disorder (9–12). Early studies suggested that the multiple chemical sensitivities entity was merely undiagnosed somatoform illness (9, 13). Later reports, however, documented that anxiety, depression, panic disorder, schizophrenia, and affective disorders, with or without somatization, could be diagnosed in most patients (10–12). Does this mean that common everyday environmental chemicals cause a group of disparate mental illnesses? Probably not; psychological testing of patients with multiple chemical sensitivities, as reported by Simon and colleagues and others, reveals a substantial number with preexisting diagnosable psychiatric illness. Other investigations that analyzed the previous medical records of these patients point strongly to a much higher prevalence of preexisting psychiatric illness compared with that uncovered by current psychological tests (14).

The temporal association of symptoms with chemical exposure rests solely on patient reports. In most cases, awareness of an odor is the triggering factor. An odorant-induced learned response has been proposed to account for an expanding range of chemical "sensitivities" (15). Thus, a pattern of increasing intolerance to common, familiar, and formerly innocuous environmental exposures, coupled with the iatrogenic suggestion of a serious underlying lack of immunologic protection, readily explains the anxiety, depression, fear, and frank panic experienced by patients with a diagnosis of multiple chemical sensitivities.

The immunotoxic concept, however, can be acceptable to individuals with either a susceptible personality type or a preexisting psychiatric illness who then perceive their environment as physically harmful to them. The perception is reinforced by frequent media reporting of pollution incidents and environmental disasters and by inappropriate avoidance therapy prescribed by certain "environmental" physicians. These physicians typically recommend a variety of therapies of unproven worth (16, 17). Central to their goal of preventing multiple environmental sensitivities are chemical avoidance

strategies, often reaching extremes of social isolation and restrictive diets (18). Detoxification franchises are appearing that offer a program of niacin-induced flushing followed by exercise and sauna combined with high-dose vitamin and fatty acid ingestion promoted as a means of ridding the body of foreign chemicals (19). Vitamins, minerals, diets, intravenous gamma globulin, and other medications are prescribed allegedly to enhance immunologic function. No clinical trials assessing safety or efficacy exist to support these measures. In fact, some evidence exists that patients worsen with such a treatment regimen (8). Avoidance therapy, rotation diets, sauna detoxification, and various maneuvers to "boost" the immune system serve merely to reinforce a counterproductive behavior pattern.

Investigation of multiple chemical sensitivities by proven methods of clinical science is a daunting endeavor. Clearly, more work needs to be done, but the existing data provide clinicians with a reasonable framework for dealing with these challenging patients who are disabled by factors that cause them no physical illness or physiologic impairment. The task is made all the more difficult by their mistrust of and hostility toward the medical profession in general. It is not necessary to offer advice to treat patients with multiple chemical sensitivities with sympathy and understanding, because compassion and respect should not be withheld from any class of patients. Scheduling regular visits, making extra time available for these visits, and establishing short-term, modest, workable goals aimed at reducing disability rather than focusing on specific symptoms is helpful. The temptation to order still another test when the "going is rough" should be resisted. Antidepressant medication and psychotherapy are rational approaches to current depression and anxiety, although these patients usually reject psychiatric intervention, which they often express in symptomatic intolerance to even low doses of antidepressant medications. Beyond these general suggestions, firm recommendations for specific treatment modalities must await results of definitive clinical trials. Based on the current knowledge of multiple chemical sensitivities, behavior modification therapy seems to be a good place to start.

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APPENDIX A

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APPENDIX A

15 July 1993 Volume 19 Number 2

Annals of Internal Medicine

Immunologic, Psychological, and Neuropsychological Factors in Multiple Chemical Sensitivity

A Controlled Study

Gregory E. Simon, MD, MPH; William Daniell, MD, MPH; Henry Stockbridge, MD; Keith Claypoole, PhD; and Linda Rosenstock, MD, MPH

■ *Objective:* To examine the role of immunologic, psychological, and neuropsychological factors in multiple chemical sensitivity.

■ *Design:* Case-control comparison.

■ *Setting:* Community allergy practice (cases), university-based clinics for musculoskeletal injuries (controls).

■ *Participants:* Forty-one patients with chemical sensitivity and 34 control patients with chronic musculoskeletal injuries.

■ *Main Outcome Measures:* Immunologic measures included autoantibody titers, lymphocyte surface markers, and interleukin-1 generation by monocytes. Psychological evaluation included standardized measures of anxiety, depression, and somatization.

■ *Results:* Immunologic testing did not differentiate patients with chemical sensitivity from controls. The only difference noted (lower interleukin-1 generation among cases) appeared attributable to laboratory methods. Patients with chemical sensitivity reported greater prevalence of current anxiety or depressive disorder (44% versus 15%, $P = 0.006$). This difference, however, did not appear to precede the onset of chemical sensitivity, and 25% of chemically sensitive patients showed no significant current psychological disturbance. Cases reported significantly more "medically unexplained" physical symptoms before and after the onset of chemical sensitivity. When considering only symptoms that preceded chemical sensitivity, 25% of cases (and no controls) satisfied criteria for somatization disorder. Neuropsychological testing revealed no significant case-control differences.

■ *Conclusions:* Immunologic testing failed to confirm findings from earlier uncontrolled studies, militating against proposed immunologic mechanisms. The decreased memory and concentration frequently described in multiple chemical sensitivity were not confirmed by brief neuropsychological testing. Psychological symptoms, although not necessarily etiologic, are a central component of chemical sensitivity.

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During the last decade, physicians practicing primary care, occupational medicine, and allergy/immunology have encountered a growing number of patients with symptoms attributed to low-level chemical exposure. These patients typically have a wide array of respiratory, neuropsychologic, and systemic symptoms without well-defined physical or laboratory findings. One syndrome, variously labeled "environmental illness" or "multiple chemical sensitivity," has been described as "an acquired disorder characterized by recurrent symptoms, referable to multiple organ systems, occurring in response to demonstrable exposures to many chemically unrelated compounds at doses far below those established in the general population to cause harmful effects" (1). Immunologic, neurotoxic, and psychiatric causes have been proposed, but the cause and treatment of chemical sensitivity remain controversial.

Some physicians with special interest in chemical sensitivity, particularly clinical ecologists or environmental physicians, emphasize the role of immunologic abnormality in chemical sensitivity (2). They contend that accumulated everyday exposure to synthetic chemicals causes "immunologic overload" and an immunologically mediated sensitivity to common chemical exposures. Treatment regimens may include dietary changes, unorthodox desensitization techniques, and strict avoidance of common low-level chemical exposures. These recommendations can cause major life disruption and severe social withdrawal.

The limited scientific data available do not clarify the role of immunologic abnormality in multiple chemical sensitivity and similar disorders attributed to low-level chemical exposure. A number of small case series describe elevated immunoglobulin levels (3, 4), antichemical antibodies (5–9), autoantibodies (5), elevated levels of TA1-positive cells (5, 7, 8), and various changes in lymphocyte subsets (5, 7–9). These reports, however, reveal no consistent pattern of immunologic abnormality. Results from two larger series of patients selected from a referral occupational medicine clinic (10) and from a group of disability applicants (11) showed no abnormality of immunoglobulin and complement levels, B-cell, T-cell, and T-cell subset levels. None of these investigations, however, included systematic selection of patients with chemical sensitivity from a defined pop-

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ulation, blinded assessment, or comparison with appropriate controls.

Traditional medical organizations express skepticism about the immunologic basis of chemical sensitivity and the practice of clinical ecologists (12–14). A recent report of the American Medical Association's Council on Scientific Affairs concluded that "multiple chemical sensitivity should not be considered a recognizable clinical syndrome" (15). After reviewing medical records of patients claiming compensation for work-related chemical sensitivity symptoms, Terr (16) reported that most patients reported similar symptoms before exposure at the workplace. A double-blind evaluation of the neutralization-provocation techniques used by some clinical ecologists found that patients with multiple food sensitivities were unable to distinguish placebo from low-level food or chemical exposures (17).

Previous psychologic studies of patients with multiple chemical sensitivity have all reported elevated levels of anxiety and depression and have implicated psychological distress in the cause of the syndrome (18–22). Two of these studies, however, considered patients specifically referred for psychiatric evaluation (18, 19), and none systematically sampled a defined population of patients with chemical sensitivity. Three of these reports included no control group (18–20), and the remaining two (21, 22) compared patients with multiple chemical sensitivity to community volunteers or mildly ill controls who might be expected to report less psychological distress. Fiedler and colleagues (10) recently described moderate levels of psychological morbidity in a series of eight patients with chemical sensitivity referred to a occupational health clinic, but no comparison group was included.

To address some of these gaps in knowledge, we compared immunologic, psychologic, and neuropsychological factors in a systematically selected sample of patients with multiple chemical sensitivity and a medically ill control group.

Methods

Study Sample

Patients with chemical sensitivity were recruited from the practice of a community allergist with special interest in treating chemical sensitivity. All patients with a recorded diagnosis of chemical sensitivity seen between January 1989 and June 1990 were identified from computerized billing records. We then reviewed standardized history questionnaires included in clinical records for the following eligibility criteria: duration of illness 3 months or more; symptoms reported in at least three organ systems, including the central nervous system; and reported sensitivity to 4 or more substances from a list of 14 common exposures including fresh paint, newspapers, perfume, hair spray, and solvent fumes. All potential participants were sent a letter requesting their participation. Of the 76 patients with chemical sensitivity identified from records, 32 did not respond to letters and 3 were judged to be ineligible (2 reported complete resolution of chemical sensitivity and 1 described respiratory symptoms only). The remaining 41 patients (56% of those potentially eligible) were enrolled.

Controls were selected from two university-based clinics for patients with musculoskeletal injuries: an occupational musculoskeletal clinic and a back injury specialty clinic. We reviewed clinic charts to identify all patients seen between January 1989 and June 1990 whose ages were within the range of the chemical sensitivity cases and who resided within 25 miles of the study clinics. Patients with any systemic illness (such as rheumatoid arthritis) likely to affect the results of immunologic testing were excluded, and potential controls were frequency matched to cases by sex and 5-year age strata. This procedure identified 85 potential controls (34 from the occupational clinic and 51 from the back clinic) who were sent a letter requesting participation in the comparison group for a study of chemical-related health problems. Forty-nine did not respond (17 from the occupational clinic and 32 from the back clinic) and 2 patients (both from the back clinic) were judged ineligible because of reported symptoms of chemical sensitivity. The remaining 34 patients (41% of those potentially eligible) were enrolled. The primary diagnosis was low-back pain for all 17 control patients from the back clinic and for 4 from the musculoskeletal clinic. Of the remaining control patients, 8 had repetitive-motion syndromes and 5 had other chronic symptoms following work-related musculoskeletal injuries.

Laboratory Methods

All immunologic studies were performed by a commercial laboratory with special interest in the evaluation of chemical sensitivity. Laboratory personnel assisted in design of the immunologic battery but remained blinded to case/control status during testing. Total leukocyte count, red cell count, hemoglobin, and hematocrit concentration were measured on a Coulter T140 Cytometer (Coulter Electronics, Hialeah, Florida).

For cell-surface marker studies, mononuclear cells were isolated using a Ficoll-induced density gradient followed by 50% dilution in saline and triple washing in Hanks balanced salt solution to remove serum protein. Phenotypic marking of lymphocytes was performed using monoclonal antibodies against CD5 (total T cells), CD4 (T-helper cells), CD8 (T-suppressor cells), CD19 (total B cells), and CD25 (interleukin-2 receptor-positive cells) (all from Becton Dickinson; Los Angeles, California), then counterstained with mouse antihuman IgG coupled to fluorescein. The monoclonal antibody against CD26 (TA1-positive cells) (Coulter) was directly coupled to rhodamine. The percentage of labeled cells was determined using fluorescence microscopic examination.

Autoantibodies against parietal cells, mitochondria, smooth muscle, brush border, and nuclear components (Medica; Carlsbad, California) were screened at a dilution of 1:20 in phosphate-buffered saline, pH 7.0, by incubation with species substrate in a room temperature humidifier. Counterstaining was with Evans blue, and fluorescence was classified as present or absent. Each assay run included positive and negative controls.

For assay of interleukin-1 generation, peripheral blood monocytes were isolated from sodium heparinized blood by differential centrifugation, washed, and isolated by adherence to tissue culture plates. Monocytes were incubated overnight at 37 °C in the presence of lipopolysaccharide (1500 μg/mL) and phorbol (1 mg/mL) in 10% fetal calf serum. The supernatant was collected and frozen for later assay. Generated interleukin-1 was measured with an enzyme-linked immunoassay technique using microtiter plates coated with a monoclonal capturing antibody and polyclonal second antibody (Cistron; Pine Brook, New Jersey) linked to peroxidase. Each run included standard and control specimens.

Psychological and Neuropsychological Evaluation

Patients in both groups completed a questionnaire assessing demographic data, work and chemical exposure history, as well as type, frequency, and duration of chemical sensitivity symptoms.

Psychological evaluation included the Hopkins Symptom Checklist-90 (SCL-90), a self-report measure of psychiatric symptoms (23), and the Diagnostic Interview Schedule (24), a highly structured psychiatric diagnostic interview based on the criteria of the American Psychiatric Association's DSM-IIIR (25). Diagnoses assessed by the structured interview included panic disorder, generalized anxiety, depression, and somatization (a tendency to seek care for physical symptoms that have no apparent medical explanation). The standard Diagnostic

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Table 1. Comparison of Immunologic Studies in Patients with Multiple Chemical Sensitivity and Controls with Musculoskeletal Injury

Immunologic Study	Cases (n = 41)	Controls (n = 34)	95% CI* for Difference	P Value
Positive test for autoantibodies, n(%)				
Anti-smooth muscle	20 (49)	16 (47)	(−0.22 to 0.24)	>0.2
Anti-parietal cell	4 (10)	4 (12)	(−0.16 to 0.12)	>0.2
Anti-brush border	5 (12)	11 (32)	(−0.02 to −0.40)	0.03
Anti-mitochondria	1 (2)	0 (0)	(−0.06 to 0.02)	>0.2
Anti-nuclear	4 (10)	2 (6)	(−0.04 to 0.22)	>0.2
Any positive	26 (63)	23 (68)	(−0.28 to 0.14)	>0.2
Cellular studies, ±SD				
Lymphocyte count, $\times 10^3/L$	2580 (±546)	2450 (±778)	(−171 to 431)	>0.2
B cells, %(±SD)	6.4 (±4.1)	7.4 (±6.3)	(−1.4 to 3.8)	>0.2
T cells, % (±SD)	69.8 (±9.7)	67.4 (±7.9)	(−1.6 to 6.4)	>0.2
CD4+ helper cells, %(±SD)	49.4 (±9.2)	46.1 (±7.1)	(−0.5 to 7.1)	0.1
CD8+ suppressor cells, %(±SD)	23.2 (±7.7)	22.5 (±7.4)	(−2.8 to 4.2)	>0.2
Interleukin-2+ cells, %(±SD)	2.1 (±2.0)	2.1 (±2.2)	NA†	>0.2†
TA1+ cells, %(±SD)	6.5 (±5.5)	13.0 (±10.4)	NA†	0.008†
Interleukin-1 generation	3.94 (±5.02)	7.72 (±6.09)	NA†	0.003†

* Confidence interval given in same units as original measure (proportions for serologic measures, percentages for lymphocyte subsets).
† Skewed distribution requires use of Wilcoxon test; confidence interval not calculated.

Interview Schedule was supplemented with questions to determine the age of onset for individual somatization symptoms. Because the structured interview includes specific questions about medical history, the interviewer could not be blinded to case/control status.

Neuropsychologic evaluation included the Logical Memory and Visual Reproduction subtests of the Wechsler Memory Scale-Revised (WMS-R), evaluating immediate and 30-minute recall for contextual verbal and diagrammatic visual information; Trails A and B, timed paper-and-pencil tests of visuomotor speed and mental flexibility; the Rey Auditory-Verbal Learning Test, examining verbal learning and memory for disassociated verbal material; the Wechsler Adult Intelligence Scale-Revised (WAIS-R) Digit Span, evaluating auditory attention and concentration; and the WAIS-R Digit-Symbol, a timed paper-and-pencil test of concentration and visuomotor speed.

Data Analysis

We used unpaired t-tests to compare group means for normally distributed variables and Wilcoxon tests to compare variables with skewed distribution. Group proportions were compared using contingency tables and chi-square tests. Linear regression and analysis of covariance were used to examine adjusted case-control differences.

Initial analysis of psychological data included all structured interview symptoms in the assessment of psychiatric diagnoses. This approach may inflate the prevalence of psychiatric disorders among patients with chemical sensitivity because some psychological symptoms might reflect neuropsychiatric effects of chemical sensitivity. Similarly, our requirement that patients with chemical sensitivity report symptoms in three or more organ systems might artificially increase the prevalence of somatization disorder by structured interview. Consequently, further analyses of structured interview data attempted to exclude symptoms temporally associated with chemical sensitivity. The reported date of onset of chemical sensitivity for each case was used to identify structured interview symptoms and diagnoses occurring before chemical sensitivity ("pre-existing" psychiatric symptoms). Each control was then paired with a case of the same sex and age (within 5 years) using the 34 cases for which ages matched most closely to those of controls. Pre-existing psychiatric symptoms for each control were identified using the date of onset for the paired case. This procedure allowed computation of the prevalence of psychiatric diagnoses and somatization symptoms that began before the onset of chemical sensitivity (for cases) or before an analogous "censoring date" (for controls).

Results

Among those completing the evaluation, demographic and background characteristics were similar for cases and controls. Both groups were predominantly female (85% of cases, 82% of controls), with the mean age slightly greater for cases (46.4 ± 9.5 [SD] years) than for controls (42.7 ± 10.4 years). Educational attainment was similar; 14.6 years (±2.7 years) for cases and 15.1 years (±2.6 years) for controls. Controls were more likely to report any current alcohol use (24% for cases versus 56% for controls), but the proportion of participants who reported consuming more than three drinks per week was similar in the two groups (17% for cases versus 21% for controls). The two groups did not differ in frequency of current tobacco use (17% for cases versus 25% for controls) or current caffeine use (61% for cases versus 78% for controls).

Those included in the study sample did not differ from nonparticipants in age or sex. Patients with chemical sensitivity who did not respond had a mean age of 44.3 years (±12.1 years), and 78% were female. Comparison patients who did not respond had a mean age of 42 years (±10.9 years), and 76% were female.

Comparison of immunologic studies revealed few differences between groups (Table 1). Prevalence rates for five of six autoantibodies were strikingly similar in cases and controls. The only statistically significant difference was in the frequency of antibodies to brush border, with the direction of the difference (controls greater than cases) being the opposite of predicted (5). Mean total lymphocyte counts as well as mean percentages of T cells, B cells, CD8+, and interleukin-2+ cells were similar in the two groups. The mean percentage of CD4+ cells was somewhat higher among cases, but the absolute counts were nearly identical. The mean percentage of TA1+ cells appeared to differ between cases and controls, but the direction of the difference (greater in controls) was opposite that predicted by earlier reports (5, 7, 8). Cases had significantly lower levels of

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Table 2. Comparison of Psychological Studies in Patients with Multiple Chemical Sensitivity and Controls with Musculoskeletal Injury

Psychological Study Result	Cases (n = 41)	Controls (n = 34)	95% CI* for Difference	P Value
SCL-90 symptom scores, *mean raw scores* (±*SD*)†				
Depression	1.19 (±0.91)	0.51 (±0.44)	0.32 to 1.04	<0.001
Anxiety	0.87 (±0.89)	0.29 (±0.36)	0.30 to 0.89	0.001
Somatization	1.30 (±0.74)	0.64 (±0.49)	0.37 to 0.94	<0.001
Current structured interview diagnoses, n(%)				
Panic disorder	10 (24)	1 (3)	0.07 to 0.35	0.008
Generalized anxiety	4 (10)	0 (0)	0.01 to 0.19	0.06
Major depression	12 (29)	4 (12)	0 to 0.34	0.08
Any of the above	18 (44)	5 (15)	0.1 to 0.48	0.006
Structured interview somatization symptom count, *mean* (±*SD*)§	15.5 (±5.9)	3.5 (±2.8)	10 to 14	<0.001
Preexisting structured interview diagnoses, n(%)				
Panic disorder	3 (9)	5 (15)	−0.09 to 0.21	>0.2
Generalized anxiety	2 (6)	4 (12)	−0.02 to 0.14	>0.2
Major depression	16 (47)	10 (29)	−0.04 to 0.40	0.1
Any of the above	16 (47)	12 (35)	−0.10 to 0.32	>0.2
Preexisting structured interview somatization symptom count, *mean* (±*SD*)	7.9 (±7.1)	2.4 (±2.6)	3.2 to 7.8	<0.001

* Confidence interval given in same units as original measure (proportions for diagnostic measures, symptom counts for somatization measures).
† Mean scores in general population samples were approximately 0.3 for women and 0.2 for men (23), with a higher score indicating more distress.
§ Mean scores in general population samples are approximately 2.0 (28).

interleukin-1 generation by cultured monocytes. Because cases were evaluated earlier in the study period, it was considered whether temporal factors, such as changes in laboratory methods or materials, might have contributed to the observed difference. Cases were evaluated between day 1 and day 146 (mean, 68; ±49 days), whereas controls were evaluated between day 24 and day 365 (mean, 227; ±92 days). Values for interleukin-1 generation tended to increase with time among both case and control groups, suggesting that such a temporal effect might exist. When analysis of covariance was used to examine the joint effects of time and case/control status, interleukin-1 generation was strongly associated with evaluation date ($P \approx 0.003$) but not with the presence of multiple chemical sensitivity ($P > 0.2$).

Current psychological distress was higher among cases than controls, but this difference did not appear to pre-date the onset of chemical sensitivity (Table 2). Scores on the SCL-90 questionnaire revealed more frequent symptoms of anxiety and depression and a greater tendency to report physical symptoms among patients with chemical sensitivity. Structured interviews revealed higher prevalence of current (within the last month) diagnosis for each disorder examined. Patients with multiple chemical sensitivity had many more physical symptoms judged to be "medically unexplained" by the somatization section of the interview. Psychiatric morbidity among patients with chemical sensitivity, however, was not universal. Twenty-three of 41 cases had no current psychiatric diagnosis, and 10 of those had SCL-90 anxiety and depression scores less than one standard deviation above the normal population mean (that is, no statistically significant current distress). When analysis was confined to symptoms that predated the onset of chemical sensitivity (or occurred before an analogous date for controls), the two groups showed similar prevalence of preexisting anxiety or depressive disorder. Cases, however, reported a markedly higher number of somatization symptoms preceding the onset of chemical sensitivity symptoms. When all symptoms beginning after the onset of chemical sensitivity were eliminated, 9 of 34 cases (and no controls) satisfied DSM-IIIR criteria for somatization disorder.

Mean neuropsychologic performance scores for cases and controls fell within an average range (±1 SD) for age, with few differences noted between the two groups (Table 3). Patients with chemical sensitivity showed slightly poorer immediate verbal recall, but the portion of initially memorized information remembered after a 30-minute delay (83%) was essentially identical for cases and controls. Cases also showed slightly poorer performance on one of the five initial trials (data not shown) and on the postdistraction trial of the Rey Auditory Verbal Learning test. For all other measures of attention, visual memory, visuomotor speed, and mental flexibility, case and control performances were indistinguishable. When analysis of covariance was used to adjust neuropsychologic performance scores for level of psychologic distress (SCL-90 anxiety and depression scores), case-control differences in cognitive function were no longer apparent (data not shown).

The technique described above for evaluating temporal trends in measured values of interleukin-1 generation was repeated for psychiatric and neuropsychologic measures. Measures of psychiatric morbidity tended to decrease over time in the entire sample but showed no temporal trends within the case or control group, suggesting a case-control difference rather than a temporal change in methods. Neuropsychologic measures showed no relationship to date of evaluation.

Discussion

The design of our study addresses some of the methodologic shortcomings of previous work. Patients with

chemical sensitivity were systematically selected from a defined population and compared with an appropriate medically ill control group. Structured psychiatric assessment and use of self-report measures reduced the potential for interviewer bias in ascertainment of psychiatric disorder. Controlled and blinded laboratory evaluation avoided the potential biases of previous immunologic reports.

Low response rates among cases and controls pose the greatest threat to the validity of these results. Participation was not related to age or sex, but we lack the data to determine whether nonrespondents differed clinically from those in the study sample. The results presented here may misrepresent the population of eligible patients if willingness to participate was related to psychological distress, cognitive impairment, or immunologic abnormality. This sample of patients with chemical sensitivity, however, is probably more representative of the entire population than previous samples selected from referral clinics (20), psychiatric clinics (18, 19), compensation evaluations (21), and advertisements (22). In the comparison sample, results of neuropsychologic tests were all within established normal ranges. Controls did report higher levels of psychologic distress than did most community or patient samples, but any resulting bias would act to reduce observed case-control differences.

The results of psychologic evaluations are consistent with previous reports of excess psychological morbidity among patients with multiple chemical sensitivity (18–22). Patients with chemical sensitivity showed higher levels of current psychological morbidity on every measure examined as well as a greater tendency to report "medically unexplained" physical symptoms. These findings are striking given the conservative choice of a control group likely to have increased levels of psychological distress (26). Controls in this study, in fact, reported greater prevalence of psychiatric disorder than did typical medical clinic samples (27), had higher mean SCL-90 scores (23), and more functional somatic symptoms (28) than did community samples.

These findings do not necessarily imply that anxiety or depression or both are primary causes of chemical sensitivity. The higher levels of psychologic morbidity among cases might be either causes or effects of chemical sensitivity. The finding of more current symptoms of anxiety and depression among cases is consistent with either view. Psychologic and cognitive symptoms are prominent in most case descriptions of chemically sensitive patients and were included in the selection criteria for this study. Most patients with multiple chemical sensitivity readily acknowledge symptoms of anxiety and depression but attribute these symptoms to the neurotoxic effects of chemical exposure. Finally, more than one half of the cases did not fulfill criteria for any current psychiatric diagnosis, and almost 25% showed no evidence of clinically significant psychologic distress.

Some psychological findings, however, are consistent with a pre-existing pattern of illness behavior among patients with chemical sensitivity. Cases reported more frequent episodes of seeking care for medically unexplained physical symptoms before the onset of chemical sensitivity symptoms. These results do not necessarily demonstrate a psychological cause for chemical sensitivity, but they suggest that psychological factors or health beliefs may predispose some individuals to respond to precipitating events by developing a generalized chemical sensitivity. The findings regarding preexisting symptoms or illness, however, must be interpreted cautiously. These data depend on retrospective accounts of physical and psychologic symptoms occurring years earlier. Variable recall of remote health events could bias results in either direction (29), and current psychological distress may increase the likelihood that past symptoms or health events will be recalled (30). Consequently, the higher reported prevalence of preexisting somatization symptoms among cases may simply reflect higher levels of current anxiety or depression. Alternatively, the belief that a symptom was caused by chemical sensitivity might have made case patients less likely to recall an occurrence of that symptom before the onset of multiple chemical sensi-

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Table 3. Comparison of Neuropsychological Studies, Shown as Raw Scores (±SD), in Patients with Multiple Chemical Sensitivity and Controls with Musculoskeletal Injury

Study	Normal	Cases (n = 41)	Controls (n = 34)	95% CI for Difference	P Value
Attention					
WAIS-R Digit Span*	10.0	10.6 (±2.5)	11.1 (±2.3)	(−0.6 to 1.6)	>0.2
Verbal memory					
WMS-R Logical-Immediate†	24.3	22.8 (±6.4)	26.0 (±6.3)	(1.9 to 4.5)	0.04
WMS-R Logical-Delayed†	20.5	18.9 (±7.4)	21.6 (±7.2)	(−0.4 to 6.0)	0.1
Rey Auditory Verbal‡	11.3	9.3 (±2.8)	10.5 (±2.7)	(−0.1 to 2.5)	0.06
Visual memory					
WMS-R Visual-Immediate†	32.1	32.8 (±5.0)	33.0 (±5.8)	(−2.1 to 2.5)	>0.2
WMS-R Visual-Delayed†	29.6	28.6 (±6.7)	30.3 (±7.3)	(−2.5 to 3.9)	>0.2
Visuomotor speed					
WAIS-R Digit Symbol*	10.0	10.0 (±2.7)	10.2 (±2.8)	(−1.0 to 1.4)	>0.2
Trails A, s	31.3	32.6 (±12.3)	35.6 (±15.8)	(−3.4 to 9.4)	>0.2
Mental flexibility					
Trails B, s	74.5	75.2 (±31.6)	77.6 (±31.4)	(−11.9 to 16.7)	>0.2

* Age-adjusted scale score.
† Raw score, number of items recalled.
‡ Trial VII, postdistraction.

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tivity. Such an effect would lead to underestimation of preexisting symptoms among case patients. Only a prospective study starting before the onset of chemical sensitivity symptoms could overcome these potential biases inherent in a retrospective design, but such a study would require follow-up of an impossibly large population at risk. Review of medical records might yield some data on pre-existing symptoms, but medical records rarely contain sufficient information for formal rating of psychiatric diagnoses.

The immunologic evaluation revealed no meaningful differences between patients with chemical sensitivity and those with musculoskeletal injury in the prevalence of autoantibody reactions or in lymphocyte surface marker studies. This controlled and blinded comparison did not support any of the immunologic findings reported in previous case series using similar or identical methods (3–9). Although we cannot exclude the possibility of an immunologic abnormality not detected by this evaluation, the battery of immunologic tests in this study included all those recommended for evaluation of chemical sensitivity by a laboratory prominent in this area. These findings strongly militate against the immunologic mechanisms of chemical sensitivity that have been proposed. Autoantibody and lymphocyte surface marker studies appear to have no value in the routine diagnostic evaluation of patients with chemical sensitivity.

The significance of the observed case-control difference in interleukin-1 generation by cultured monocytes remains unclear. The difference was statistically significant in this small sample even after adjustment for multiple comparisons. Examination of time trends, however, suggests that changes in laboratory methods or materials during the course of the study probably caused or contributed to the intergroup differences. In addition, no published data on interleukin-1 generation in patients with chemical sensitivity are available for comparison. With no a priori hypothesis of higher or lower interleukin-1 generation rates in chemically sensitive patients, the possibly artifactual differences observed here can only suggest hypotheses for further study.

We chose the brief neuropsychologic battery to evaluate the impaired memory and concentration often described in chemically sensitive patients. Of the nine subtests, case patients and controls differed only on measures of immediate contextual and discrete verbal memory. Cases still performed within the average range, and the two groups did not differ with respect to percentage of information retained during a period of 30 minutes. Performance by the cases on the Trails B test, regarded as highly sensitive to diffuse organic brain dysfunction, was within the average range and indistinguishable from controls. Case-control differences appear relatively minor considering the frequency of anecdotally reported cognitive impairment among patients with multiple chemical sensitivity. Resolution of these differences after adjustment for SCL-90 anxiety and depression scores suggests that these small differences in cognitive performance may reflect psychological distress.

Our findings have substantial implications for the clinical care of patients with multiple chemical sensitivity. In this sample, psychologic distress was the only factor that clearly distinguished patients with chemical sensitivity from those with musculoskeletal injuries. The anxiety and depressive symptoms identified among patients with chemical sensitivity cause suffering and disability. Although the pathophysiologic mechanism of chemical sensitivity remains controversial, the prominent role of psychological symptoms in the syndrome has been affirmed repeatedly. For lack of any more specific treatment, relief of psychological symptoms should be a central component of care for chemically sensitive patients.

The findings of this study do not directly address the utility of the strict avoidance regimens advised by some practitioners, but they do militate strongly against immunologic injury as a justification for avoidance. Strict avoidance of low-level chemical exposure may only reinforce social withdrawal and disability without actually preventing any biological injury. Although no investigation can prove the absence of any biological injury from continued low-level chemical exposure, no studies have found plausible evidence of any such effect. In the absence of such evidence, the speculative benefits of severe avoidance do not justify the accompanying disability and isolation. Short-term avoidance of specific exposures may have some role in the initial treatment of some patients with chemical sensitivity, but effective care for chemically sensitive patients should emphasize relief of symptoms and progressive return to active life.

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APPENDIX B

Dr. Edward S. Hyman
3525 Prytania Street, Suite 220
New Orleans, LA 70115

268D

Dear Dr. Hyman:

I appreaciate the treatment I received from you Dec 15-26, 1992. Because of that treatment, I have virtually gotten back to a normal routine. You in essense gave my life back to me. For that I am very thankful.

The results of that treatment showed up recently, during the annual training I went through at Camp Lejune, March 10-27, 1993. I performed 4 to 5 positions due to lack of personnel. Plus hard long hours, and was able to hold up marvously. Without the treatment I would not have held up but a couple of days. I was suprised at the stamanine I had. I owe that to you.

To give you an idea as to what I did, so that you can get an idea of what physical and mental activity was involved, I will give a little detail on Camp Lejune. First of all I am department head over the transportation and equipment side of Alpha company. In that respect I am responsible for all the personnel and equipment assigned to us. I planned and was the convoy leader from RSS Huntsville to and from Camp Lejune. I oversaw the transportation for the battalion during AT. I oversaw our project work, which moved in excess of 6,000 cubic yards of material. Embarked the whole battalion to FEX and back. Planned and estimated the Range Safety Project. Tracked app 80 pieces of equipment. Designed and supervised the making of EPA holding areas for fuel trucks. Went from 5:00 A.M. to about 8:00 P.M. Non-stop. With about a total of 5 hours sleep per night. Except during 3 days of FEX, during that time I didn't get any sleep.

Again my thanks to you for your dedication to finding out what was wrong with many of us from Desert Storm, and for treating us back to good health. I am truly indebted to you.

Sincerely,
Thomas L. Lane

Received
4/15/93

AFZN-AV-AH-A **APPENDIX C** 5 April 1993

MEMORANDUM THRU COMMANDER, A COMPANY, 1st BATTALION, 1st AVIATION REGIMENT, FORT RILEY, KANSAS 66442-5336

COMMANDER, 1st BATTALION, 1st AVIATION REGIMENT, FORT RILEY, KANSAS 66442-5336

COMMANDER, 4th AVIATION BRIGADE, 1st INFANTRY DIVISION (MECHANIZED), FORT RILEY, KANSAS 66442-5336

FOR COMMANDER, 1st INFANTRY DIVISION (MECHANIZED), FORT RILEY, KANSAS 66442-5336

SUBJECT: Request Endorsement and Approval for CW2 Craig N. Rubenstein, 214-76-4493, to Receive Medical Treatment Currently not Provided by the Army

1. I CW2 Craig N. Rubenstein, 214-76-4493, am assigned to Company A, 1-1 Aviation Regiment as an AH-64 Apache Pilot-in-command. I have a disease which is commonly referred to as "Gulf Syndrome." I am requesting approval for the treatment of this illness and the necessary funding which is not currently provided by the military.

2. BACKGROUND. I served in Desert Storm with the 1st Infantry Division from January to May of 1991. Upon returning to the U.S. I had a cough when I got off the plane and it persisted for over a month. Finally, the cough seemed to go away. It was about four months later when I noticed my hair was starting to fall out, and it seemed I was extremely fatigued, constantly.

3. I have always been an athlete, but suddenly, I no longer had the energy to lift weights or to run. I started going to doctors, both military and civilian, but no physician could diagnose my problem. Normal thyroid tests were conducted and no problems existed at this time. I continued in this physically degraded mode for about five more months until my thyroid gland failed. Major Harston, a Flight Surgeon at TMC #9 initially diagnosed Hypothyroidism as my problem and referred me to Major Loyola, Internal Medicine at Irwin Army Hospital, Ft. Riley, Kansas. I began thyroid replacement therapy in May 91 and must continue this treatment indefinitely.

4. The flight surgeon explained to me that the symptoms I previously experienced were the result of my thyroid failure. Several months went by and my extreme fatigue, hair loss, and aching joints did not subside. It has been 10 months since my thyroid levels have been back to normal, with no significant improvement in my symptoms. It became apparent to

APPENDIX C

me that there was something else wrong. I have seen many doctors including Major Rhonda Cornum at Lyster Army Hospital at Fort Rucker. I also saw Major Magill, Chief of Infectious Diseases at Walter Reed. None of them could diagnose anything significant, however, Doctor Magill suspected some type of blood parasite. He also cautioned me that if an underlying disease can cause one gland failure, then it can cause other types of gland failures, such as adrenal, pancreas, or liver failure. Based on this knowledge, I feel it's imperative that I receive treatment as soon as possible.

5. My parents sent me newspaper articles from the Washington Post with stories about other Desert Storm Veterans with physical symptoms "just like mine." This unexplained illness was being called "Desert Storm Syndrome" and "The Desert Storm Mystery Illness." Nevertheless, no military doctor has been able to identify the cause of the sickness, including Doctor Magill, Head of Infectious Diseases at Walter Reed. However, Major Cornum, one of U.S. Army Aviation's most prominant Flight Surgeons, and Major Magill both hypothesized that my thyroid failure was most likely caused by an underlying illness, stating, "thyroid failure in a 24 year old male is extremely rare. It normally occurs in older women."

6. Recently, (Feb 93), I heard on CNN that there was a physician in New Orleans named Doctor Edward Hyman who successfully treated 3 Desert Storm veterans who had the syndrome. I immediately contacted his office and verified the story. His office sent me two urine sample bottles with instructions. I sent the samples, and Dr. Hyman found that both samples were positive for this illness. Dr. Hyman is willing to treat me immediately, however, his treatment requires a hospital stay of approximately two weeks, and being active duty, there is no insurance to cover my stay in a civilian hospital.

7. Dr. Hyman has been successful three out of three times for Desert Storm veterans and has treated many civilians with the same disease. At the current time, he offers the only treatment/cure available. Because "The Desert Storm Syndrome" is a newly discovered disease, with very little or no documentation, the military has not yet developed any test or treatment. The absoute bottom-line is, "there is now a treatment available and I deserve the oportunity to receive it."

8. I first became ill in October 1991. I've endured 18 months of sickness with periodic remissions, but generally no improvement. For these reasons I request approval and funding for treatment by Dr. Hyman and I am willing to accept all risks that may come with civilian treatment.

9. POC for this action is the undersigned at AV 856-3166, Commercial (913) 239-3166. The attached enclosure includes other points of contact.

Craig N. Rubenstein

ENCL

CRAIG N. RUBENSTEIN
CW2, USA

DEPARTMENT OF THE ARMY
USA MEDICAL DEPARTMENT ACTIVITY
FORT RILEY, KANSAS 66442-5037

APPENDIX C

REPLY TO ATTENTION OF

HSXX-CDR

7 May 1993

MEMORANDUM FOR Commander, 4th Brigade, 1st Infantry Division (Mech), Fort Riley, KS 66442-5090

SUBJECT: Medical Care of CW2 Craig N. Rubenstein

1. I have extensively reviewed CW2 Craig N. Rubenstein's medical case and his request for authorization to have treatment by Dr. Edward Hyman in a civilian institution at government expense. I recommend that this authorization not be granted and 1st Infantry Division (Mech) funding not be allocated for this purpose.

2. Dr. Edward Hyman's treatment of Gulf War veterans has been extensively investigated by the Office of the Surgeon General, U.S. Army. The Medicine Consultant to the Surgeon General, COL Arlene Zaloznic, has spoken directly with Dr. Hyman and finds that there is no scientific merit to his proposed treatment (Encl 1).

3. Members of my staff, MAJ (Dr.) David Loyola, Chief, Internal Medicine Clinic and LTC (Dr.) Edward Huycke, Deputy Commander for Clinical Services, have spoken with CW2 Rubenstein to offer a more extensive evaluation at Fitzsimons Army Medical Center. CW2 Rubenstein has turned both offers down.

4. CW2 Rubenstein's medical problems have been and are of great interest and concern to me. I and my staff are committed to ensuring that he gets the best evaluation and most competent treatment available today, civilian or military. However, Dr. Hyman's evaluation and treatment of the Gulf War Syndrome cannot be considered good medical care by any standard of today's medical practice. I cannot condone exposure of any soldier to medical care below accepted standards. Further, to allow an individual with a complicated or poorly understood medical condition to undergo therapy of unproven, poorly documented benefit that may even be deleterious, risks confusing future diagnostic measures or degrading proven therapeutic efforts.

5. I recommend that CW2 Rubenstein undergo an exhaustive evaluation at Fitzsimons Army Medical Center to determine, if possible, the nature of his illness and treat it.

James W. Kirkpatrick

Encl

JAMES W. KIRKPATRICK
COL, MC
Commanding

CF:
1st ID Surgeon

DEPARTMENT OF THE ARMY
USA MEDICAL DEPARTMENT ACTIVITY
FORT RILEY, KANSAS 66442-5037

APPENDIX C

REPLY TO ATTENTION OF

HSXX-CDR

9 July 1993

MEMORANDUM FOR Commander, 4th Brigade, 1st Infantry Division (Mech), Fort Riley, KS 66442-5090

SUBJECT: Follow Up on the Medical Care of CW2 Craig W. Rubenstein

1. Reference Memorandum, HSXX-CDR, dtd 7 May 93, Subject: Medical Care of Craig W. Rubenstein.

2. From 16 to 27 May 1993, CW2 Rubenstein underwent an extensive inpatient evaluation at the Walter Reed Army Medical Center in order to attempt to determine a cause for his medical complaints. The results of this evaluation failed to determine a specific medical cause for CW2 Rubenstein's symptoms.

3. The results of CW2 Rubenstein's evaluation does not alter my opinion of Dr. Hyman's evaluation and treatment of the Gulf War Syndrome as outlined in the referenced memorandum.

4. I have reconsidered CW2 Rubenstein's request for authorization to have treatment by Dr. Hyman in a civilian institution at government expense in light of his negative evaluation at Walter Reed Army Medical Center. My recommendation, as outlined in the referenced memorandum, that authorization not be granted and funding not be allocated is unchanged.

JAMES W. KIRKPATRICK
COL, MC
Commanding

CF:
1st Inf Div (M) Surgeon

DEPARTMENT OF THE ARMY **APPENDIX C**
HEADQUARTERS, 1ST INFANTRY DIVISION (MECH) AND FORT RILEY
FORT RILEY, KANSAS 66442-5000

REPLY TO
ATTENTION OF

AFZN-AV-CDR 15 July 1993

MEMORANDUM THRU

FIRST ADDRESSEE COMMANDER, 1ST BATTALION, 1ST AVIATION REGIMENT, FORT RILEY, KANSAS 66442-5336

SECOND ADDRESSEE COMMANDER, A COMPANY, 1ST BATTALION, 1ST AVIATION REGIMENT, FORT RILEY, KANSAS 66442-5336

FOR CW2 Craig N. Rubenstein, A Company, 1st Battalion, 1st Aviation Regiment, Fort Riley, Kansas 66442-5336

SUBJECT: Reply to request for Endorsement and Approval to Receive Civilian Medical Treatment

1. Reference: Memorandum dated 5 April 1993, SAB; Memorandum, from COL James Kirkpatrick dated 7 May 1993, subject: Medical care of CW2 Rubenstein; Conference of 11 May 1993 with the undersigned, COL Kirkpatrick, LTC Huycke, and LTC Veiga; Memorandum from COL James Kirkpatrick dated 9 July 1993, subject: Follow up on the Medical Care of CW2 Craig W. Rubenstein.

2. This will serve as a formal reply to your request for authorization to obtain treatment by Dr. Edward Hyman in a civilian medical institution at Government expense. At the time of our conference of 11 May 1993, you were advised that the treatment protocol of Dr. Hyman had not been approved by the Office of the Surgeon General and that, as such, funding for this care would not be allocated. As an alternative, it was recommended that you undergo evaluation at an Army Medical Center. It is my understanding that you underwent evaluation at Walter Reed Army Medical Center (WRAMC), as per the recommendation of COL Kirkpatrick, from 16-27 May 1993. I further understand that prior to notification as to the final lab results from WRAMC, you took leave to undergo treatment with Dr. Hyman in Louisiana.

3. After consulting with COL Kirkpatrick, I have been advised that all of the lab work has now been analyzed with no determination of a specific medical cause for your symptoms. As per COL Kirkpatrick's memorandum of 9 July 1993, a copy of which is attached, there is no basis upon which to change the original decision to disapprove your request for Government funding.

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4. As COL Kirkpatrick is the approval authority for entitlements questions, as outlined in AR 40-3, Table 15-1, your request for endorsement and approval to receive civilian medical care at Government expense is denied.

Thomas M. Crews

Enclosures
as

THOMAS M. CREWS
COL, AV
Commanding

APPENDIX D

Reviewer #1

MS 070

A computer algoritm offers a comprehensive view of quantitiative bacteriuria

Hyman ES

accepted with minor changes

There is no relationship between what Ed Kass studied and reported 35 years ago and the present day interpretation of his work. Sadly, the interpretation of the meaning of bacteria in the urine, as currently occurs at the bedside, has little or no relation to the evidence. Mistakes are made daily - and sometimes with dire consequences for the patient.

A hurrah for Dr. Hyman. How refreshing is his approach! How simple! and how sensible! It deserves a wide audience, and should be available on the wards for the enlightenment of students and house staff (and those who teach them).

Needless to say this reviewer likes the approach and the message. My concern is: will it be read by the wide audience that should read it? And can the message get across better by improving the manuscript? I struggled with this for a week or two, and could not myself answer it.

Minor Point: lines 1-16.

Would VE and VF not be better written V_E and V_F?

To me, TV means total volume. The abbreviation T is for time (min), and V ises describing the time taken for the bladder to refill after emptying, Would T_R be less confusing?

RESPONSES BY THE
CENTERS FOR DISEASE CONTROL AND PREVENTION (CDC)
TO QUESTIONS SUBMITTED BY
HONORABLE LANE EVANS, CHAIRMAN
SUBCOMMITTEE ON OVERSIGHT AND INVESTIGATIONS
COMMITTEE ON VETERANS' AFFAIRS
U.S. HOUSE OF REPRESENTATIVES

HEALTH CONCERNS OF PERSIAN GULF WAR VETERANS
AND RELATED ISSUES

JUNE 9, 1993

QUESTION 1

During the Persian Gulf War, and for months afterwards, were military and civilian personnel exposed "to concentrated, uncontrolled amounts of toxic petroleum materials, their by-products and numerous other chemical compounds utilized in the procurement and processing of crude oil?"

ANSWER

It is not likely that many military personnel were exposed to concentrated, uncontrolled amounts of toxic petroleum materials, their by-products and numerous other chemical compounds utilized in the procurement and processing of crude oil.

To study the exposure of military personnel, at the request of the U.S. Army, the Centers for Disease Control and Prevention (CDC) laboratory analyzed blood samples collected at three different times from a small number of soldiers. Their blood was sampled while in Germany before leaving for Kuwait, after two months in Kuwait, and after leaving Kuwait and returning to Germany. Compared to measurements of volatile organic compounds in U.S. residents, the levels of these same compounds were not elevated among these soldiers. The one exception was tetrachloroethylene, which was elevated. Exposure to this chemical most likely resulted from its use as a degreaser by the soldiers.

Air monitoring data from the Kuwait Environmental Protection Department demonstrated that the quality of air during April in Kuwait City was comparable to that in many American cities.

Civilian personnel, such as fire fighters, may have had more exposure to petroleum and petroleum by-products. CDC conducted a cross-sectional study of exposure of American fire fighters to 33 volatile organic compounds in October 1991. Samples of blood from 40 fire fighters were collected, typically within two hours after they left the oil fields, and analyzed. Compared to a sample of 114 U.S. residents, these fire fighters had higher blood concentrations of some volatile organic compounds in their

blood. These chemicals remain in the blood for only a short period of time before being excreted. We do not know the long-term health effects of very short-term exposures such as these.

QUESTION 1A

To what compounds and by-products were U.S. troops exposed? How long did this exposure last? How many U.S. troops were so exposed?

ANSWER

Information relating to the exact compounds and by-products to which the troops may have been exposed can be obtained from the National Oceanographic and Atmospheric Administration (NOAA) and the U.S. Environmental Protection Agency (EPA). We understand that the U.S. Army has specific information on the number of troops that may have been exposed and the length of that exposure.

QUESTION 2

Please identify the chemical and toxic substances to which Gulf War veterans were exposed during their deployment in the Persian Gulf War theatre.

ANSWER

NOAA and EPA collected this information immediately after the war ended using air monitoring stations and aerial flights near the burning oil wells, as well as downwind of the fires. They should be able to provide information and appropriate interpretations.

QUESTION 3

How and when were the environmental conditions in the Persian Gulf War theatre assessed and measured? By whom? What were the results of those assessments? Are those results accurate?

ANSWER

On March 10, 1991, an Interagency Air Assessment Team lead by EPA was deployed in the Persian Gulf area. The mission of this team was to assess the conditions through air sampling and monitoring in oil fields and other areas to determine the effect on public health. The EPA document entitled "Kuwait Oil Fires: Interagency Interim Report," dated April 2, 1991, describes the results of the work. EPA is in the best position to discuss the results and their accuracy of the findings.

UESTION 4

lease explain why you agree or disagree with Dr. Hinshaw's tatement that the mysterious illness afflicting Persian Gulf eterans is multiple chemical sensitivity which has been induced r triggered by exposure to hydrocarbon compounds derived from etrochemicals.

NSWER

e cannot comment on Dr. Hinshaw's statement that the mysterious llness afflicting Persian Gulf veterans is multiple chemical ensitivity which has been induced or triggered by exposure to ydrocarbon compounds derived from petrochemicals. Our hysicians have not examined any Gulf War veterans nor have we ad the opportunity to review their medical records; therefore, or us to make statements concerning the cause or nature of llnesses afflicting these veterans would be inappropriate.

August 23, 1993

Mr. Lane Evans
Chairman
Subcommittee on Oversight and Investigations
U.S. House of Representatives
Committee on Veterans' Affairs
335 Cannon House Office Building
Washington, D.C. 20515

1. **How many Persian Gulf War veterans have you examined? What health care problems have these veterans reported to you? What have you concluded based on your examination of Persian Gulf War veterans?**

A. I am an Assistant Professor in Environmental and Occupational Medicine at The University of Texas Health Science Center at San Antonio and have been asked by the VA to examine approximately fifteen Persian Gulf veterans at the Houston VA Regional Referral Center for the Persian Gulf veterans. This is a very select group of veterans--individuals who had been evaluated in their own local VA hospitals and had been referred to the referral center in Houston for in-depth evaluation. Most have been extremely complex cases--patients with multiple symptoms involving multiple organ systems with prior thorough, but inconclusive, medical evaluations. The health care problems these veterans have reported to me are several: (1) Being referred to too many doctors and specialists in a fragmented way; (2) difficulty obtaining a referral to the regional center; (3) disincentives to reporting medical problems while they were in service.

Based upon my examination of these Gulf War veterans, I feel there is no clear, unifying, conventional diagnosis for all of their conditions. Some have headaches, some have respiratory difficulties, others have gastrointestinal complaints. However, the majority do report fatigue and memory and concentration difficulties along with multi-system symptoms. This constellation of symptoms is strikingly similar to symptoms reported by individuals who say they became sensitized to chemicals following many different kinds of environmental exposures, for example, to a sick building, a pesticide, solvent or combustion products. Many of the Gulf veterans I have seen or spoken with report intense personal exposures to similar classes of chemicals, for example, combustion products from tent heaters, pesticides used in the Gulf, solvents and paints used to re-coat vehicles, etc. A minority of the veterans I have seen report a major exposure to the oil well fires, the exposure most widely recognized from television accounts of the war.

2. **How many Persian Gulf veterans have you treated?**

A. My role in seeing Persian Gulf veterans has been as a consultant. In a few cases, I have discussed specific treatments with the VA staff, but, for the most part, my role has been to evaluate veterans to determine whether their illness might be consistent with chemical sensitivity and to collect detailed exposure histories from them, including their exposures while in the Gulf, occupational exposures, home and hobby exposures, etc. I have had the opportunity to spend several hours with each veteran discussing their complaints, their exposures, and their experiences. Many have symptoms consistent with chemical sensitivity observed in other demographic groups, however, there is no adequate approach available to the VA at this time to establish such a diagnosis definitively. An environmentally-controlled medical unit is needed in order to determine whether veterans who are ill may be sensitive to low levels of common environmental exposures.

Until such fundamental clinical studies are conducted, it will not be possible to know whether chemical sensitivity is what the veterans are experiencing, what mechanism is involved in their illnesses, or what treatment methods are likely to be effective. Thus, for the problem of chemical sensitivity, prescribing treatment at this time is somewhat premature. However, I have discussed with most of the veterans the importance of observing whether their symptoms seem to become worse when they are exposed to heavy traffic exhaust, gasoline vapors, etc. This is about all that can be done currently. The environmental medical unit would allow us to begin to understand this problem, as well as to treat those veterans who were evaluated in the unit. Through such an evaluation, it can be determined which exposures (chemicals or foods) might be responsible for particular symptoms. If such sensitivities were demonstrated, to some degree veterans could avoid those exposures that cause the greatest problems. We can also move closer to determining a mechanism for this illness, thus allowing us to target our therapies. Not every veteran could be evaluated in such a specialized unit, but what we would learn from those veterans who underwent such an evaluation would greatly enhance our ability to help others.

3. **What are the results of the treatment you've provided to Persian Gulf War veterans?**

Are the results of the treatment you've provided to Persian Gulf War veterans permanent or temporary? If temporary, how long do the beneficial results of your treatment last?

How much does this treatment cost?

A. See number 2. My role is strictly as a consultant as described above. Approaches to therapies for chemical sensitivity will depend upon determining whether the illness is primarily physiological or psychological in origin and what mechanisms are involved.

4. **What are the most likely causes of the health care problems reported by Gulf War veterans?**

A. Chemical sensitivity has been described in the medical literature for over forty years, but forty years ago only a small fraction of the population seemed to have such symptoms. Most physicians remain unaware of this potential illness because nothing about it is taught in medical schools or the subject of journal articles. Little scientific work has been done on this problem. It is only recently that there have been several national meetings on this subject, but the findings of those meetings have not yet reached most of the medical community. In medical school, physicians are taught that the more symptoms patients complain of, the less likely there is anything to their illness. In other words, the diagnosis is likely to be a psychological one. When patients have multi-system complaints, particularly with mood, memory and concentration difficulties, physicians are likely to label their problems as "psychosomatic" or caused by depression or other underlying psychiatric problems. Physicians are unlikely to consider that chemicals could produce such symptoms, even if a patient might report a preceding exposure. Olfactory-limbic sensitization by chemicals is a possible mechanism for chemical sensitivity, but the majority of physicians are not familiar with this concept. Although most physicians know about the limbic system, the clinical manifestations of limbic dysfunction related to chemical exposure are not well understood. Much knowledge needs to be disseminated to VA physicians and other professionals who see Persian Gulf War veterans. In addition, fundamental studies, including double-blinded, placebo-controlled challenges in a controlled environment are needed to establish definitively

whether such symptoms could be the result of chemical exposures, instead of, or in addition to, psychological factors.

5. **Are the health problems you've treated in Gulf War veterans communicable?**

A. Not that I am aware of. I have seen two veterans whose wives also became ill about the same time their own symptoms grew worse. In these cases, the homes of these veterans were being remodeled or recarpeted, and there were potentially intense sources of exposure to volatile organic chemicals present in their homes to which the whole family was exposed. In both cases, the veterans had been somewhat ill upon returning from the Gulf, but became markedly worse following their in-home exposures. Unless we develop a fundamental, broad-based understanding of the problem of chemical sensitivity, we may miss important exposures that could be contributing to our patients' problems. Certainly, chemical exposures occurred in the Gulf, but they also occur in patients' workplaces, homes and hobbies. Conceivably, any of these exposures might lead to sensitization or increase limbic sensitization.

6. **Identify the available evidence which supports exposure to chemical or toxic substance(s) during Gulf War service as a cause of health problems reported by Gulf War veterans.**

A. The evidence which supports exposure to chemicals as a cause of health problems reported by the Gulf War veterans is threefold: (1) The close temporal relationship between identifiable, intense personal exposures [diesel exhaust, diesel fuel, pesticides, etc.] and onset of symptoms in certain veterans; (2) the fact that similar symptoms developed among individuals sharing the same kinds of exposures, e.g., in a particular unit; (3) historical evidence that exposures such as those described by the veterans have been linked, in other population groups [industrial workers, sick building occupants, etc.], to symptoms similar to those reported by Gulf War veterans. [See my testimony from the hearing which compares symptoms reported by Persian Gulf veterans and symptoms reported by patients reporting chemical sensitivities following exposure to remodeling of a building or to a pesticide.]

7. **Because of wartime stress are Persian Gulf veterans more likely to suffer from environmental illness? Describe the connection, if any, between stress and environmental illness.**

A. There are strong, experimental links between stress and environmental exposure leading to illness. Traumatic events, wartime stress, and unfamiliar situations, may increase the vulnerability of the limbic system to sensitization or themselves directly sensitize the limbic system above and beyond sensitization stemming from environmental chemical exposure. Olfactory-limbic sensitization has been demonstrated in animals exposed to pesticides, solvents, and other chemicals, as well as to various nonchemical stressors. The olfactory nerves provide the most direct link between the human brain and the external chemical environment. Sensitization, once it occurs, could lead to symptoms such as depression, difficulty concentrating, memory problems, etc., symptoms frequently reported both by Persian Gulf veterans and individuals who say they are chemically sensitive. Either stress or environmental chemicals (or both together) may disrupt the neurochemistry of the limbic area, conceivably altering critical levels of various neurotransmitters. Stress and/or chemicals might produce these changes and the consequences of either would look the same clinically. This is because the brain has only a limited repertoire of responses, e.g., irritability, depression, dizziness, memory

72-939 O – 94 – 16

difficulties, etc. Such symptoms tell us nothing about their etiology. Thus, either or both environmental chemicals and stress may lead to similar kinds of symptoms involving the brain. Only controlled, low level chemical challenges in an environmental medical unit will tell us whether certain individuals are sensitive to low level exposures.

8. **Can multiple chemical sensitivity be successfully treated? How?**

A. A wide variety of therapies have been proposed for treating chemical sensitivity, yet no therapies have shown efficacy in peer-reviewed, scientific studies. To some degree, this may be because such studies have not been funded in the past, in part because of skepticism in the medical community about the possible existence of chemical sensitivity. Among approximately 200 patients reporting chemical sensitivity whom we surveyed at The University of Texas Health Science Center at San Antonio, the most successful treatment, according to the patients, was avoidance of food or chemical exposures that provoke symptoms. Therefore, what the majority of patients report as the most successful treatment, i.e., avoidance, could be implemented following a careful diagnostic workup in an environmental unit.

Identify federal government agencies which recognize multiple chemical sensitivity as a disability.

A. It is my understanding that HUD recognizes chemical sensitivity as a disability. I believe that different states have different policies with regard to compensation for this condition. Ms. Mary Lamielle directs the National Center for Environmental Health Strategies (1100 Rural Avenue, Voorhees, New Jersey 08043, [609] 429-5358) and would have more information concerning this subject. Many federal agencies are confronted with the same dilemma the VA faces as to how to deal with chemical sensitivity. In the past two years, national meetings sponsored by the ATSDR, the EPA, and held by the National Academy of Sciences, have been the first professional forums to recognize chemical sensitivity as a potential illness, one that does not fit usual diagnostic codes and that has some unique characteristics that distinguish it from other known medical illnesses. The EPA, ATSDR, NIEHS, VA, DOD, and other agencies are increasingly taking note of this condition, and, to varying degrees, are interested in further inquiry in this area.

Is chemical sensitivity communicable?

As mentioned previously, chemical sensitivity is not communicable per se, however, persons sharing the same workplace or home might become ill at about the same time by virtue of their sharing the same exposures, such as the installation of new carpeting, a "sick" building, a fire, use of a pesticide, etc. This may make the illness appear to be communicable when, in fact, the individuals are not transmitting it to each other, but are responding to the same environmental exposures.

9. **Individuals with no military service have reportedly become sensitive following chemical exposure. For Persian Gulf War veterans, how can it be determined if their health care problems are related to chemical/toxic substance(s) exposure which occurred during military service? Which tests, if any, can accurately detect exposure to a particular chemical/toxic substance months or years after exposure?**

How long (hours, days, weeks, etc.) after exposure, can individual exposure to chemical or toxic materials be accurately assessed?

A. For Gulf War veterans the way to determine whether their health problems are related to chemical sensitivities would be to evaluate them in an environmental medical unit. I discussed this approach in my testimony. I and many other scientists familiar with chemical sensitivity, who have been involved in the NAS, ATSDR, and EPA meetings on this subject, feel that the unit is the key to establishing etiology. Most of the substances to which Gulf War veterans may have been exposed, such as solvents, organophosphate or carbamate pesticides, combustion products, etc., leave no long-term "footprints". That is, they leave the body or are metabolized relatively quickly, in comparison with a heavy metal, such as lead, or a chlorinated pesticide, such as DDT. Thus, residuals or deposits in the body cannot be detected in any meaningful way for most chemicals to which veterans were exposed, especially if tests are conducted months or years after exposure. What can be determined is whether veterans now are sensitized to extremely low levels of common, everyday chemicals, and whether this sensitivity is responsible for their continuing symptoms. There are two separate scientific questions that need to be addressed:

(1) Did exposures in the Gulf cause chemical sensitization in certain veterans?

(2) Are these veterans' symptoms now being triggered by extremely low levels of common environmental chemicals?

The second question can be addressed via challenges in a controlled environment. The first question is more difficult to answer with certainty. However, with careful collection of historical data regarding personal exposures, we may be able to learn what kinds of exposures may have been contributory, which interventions may be helpful in the future (work practices, respirators, alternative materials, etc.), and which individuals are more likely to become sensitized. Clearly, not everyone who is exposed becomes ill. Human susceptibility to chemical exposures varies enormously. In addition, an individual's prior exposure experiences may make that person more vulnerable to subsequent exposures. One case of possible chemical sensitivity that I have seen involved a veteran with two consecutive exposures to Saudi trucks spraying what was probably pesticides. The individual experienced immediate, acute illness and subsequent sensitivities. Other veterans say they became ill over a period of months, possibly related to being in a tent with diesel-fired heaters, or after many weeks of exposure to solvents. Thus, in some cases it may be easier to make a probable link between exposure and illness, while in other cases, it may be much more difficult, particularly if multiple exposures occurred over a protracted period. Most of the chemicals the veterans were exposed to were hydrocarbons (diesel fuel, combustion products, etc.) whose residence time in the body is relatively short, a matter of hours or days, generally speaking.

10. **Please comment on Dr. Hinshaw's statement that the mysterious illness afflicting Persian Gulf veterans is multiple chemical sensitivity which has been induced or triggered by exposure to hydrocarbon compounds derived from petrochemicals.**

Dr. Hinshaw's statement is based upon his experience and observations working with many patients who report being chemically sensitive. Most of the medical community, especially academic physicians, including many who are on staff at VA hospitals throughout the country, do not share Dr. Hinshaw's outlook or experiences. Yet his point of view is one that exiges rigorous scientific study, because the

consequences of such an illness, if it is real, are indeed major for our nation. The Gulf War veterans are only the latest population group to report such difficulties. Similar symptoms have been noted among persons exposed in "sick" buildings, for example, the EPA headquarters in Washington, D.C., around Superfund hazardous waste sites, in industry, and in numerous other settings. The National Academy of Sciences' workshop on chemical sensitivity, which was attended by physicians and scientists expressing divergent points of view, reached consensus that careful research was needed to define this problem. This workshop took place more than two years ago and its published recommendations emphasized the need for challenge studies using an environmental medical unit. The use of an environmental unit for research purposes was first proposed by myself and Nicholas Ashford, Ph.D., J.D., Professor of Technology and Policy at the Massachusetts Institute of Technology, in a report on chemical sensitivity to the New Jersey State Department of Health in 1989. We made that recommendation after interviewing physicians and researchers on all sides of this question and found there was overwhelming agreement regarding this approach. That was almost four years ago, and yet we continue to struggle with the same problem--lack of scientific data regarding possible chemical etiologies. Unfortunately for the veterans and the VA, scientific knowledge in this area is lagging far behind the pressing health care needs of the veterans. I see no way that this situation is likely to improve without implementation of controlled challenge studies in an environmental unit. Epidemiological studies do not resolve the fundamental question--are symptoms reported by the veterans psychological or physiological in origin, or some combination of the two? When scientists have surveyed the veterans, they have found that the veterans complain of fatigue, depression, irritability, memory and concentration problems, etc. Skeptics continue to conclude that such symptoms are caused by depression, not by chemicals. Thus, the debate continues. What is needed are studies to define the etiology of these complaints, i.e., use of an environmental unit and low level challenges.

11. **According to one news report, you believe one-third of the population is sensitive to chemical exposure. Is that report accurate?**

A. My statement that approximately one-third of the population reports sensitivities to certain chemicals comes from the EPA's own published, in-house survey and study of approximately 4,000 EPA employees. EPA employees were asked whether they considered themselves "especially sensitive" to any of a list of common chemicals in indoor air, e.g., paint vapors, odor of new carpeting, etc. Approximately one-third of the 4,000 employees responded affirmatively to this question. Other researchers have found similar kinds of results in populations they have studied. I consider these self-reported sensitivities, some of which may be relatively minor, to be the potential iceberg of which multiple chemical sensitivity may be the tip. Severely affected chemically sensitive individuals probably are relatively small in number and there is a wide range of degrees of sensitivity in the population as a whole. To illustrate why some individuals may be much more sensitive than others, levels of particular enzymes for detoxifying environmental chemicals may vary by several orders of magnitude.

The kinds of problems that patients with multiple chemical sensitivity report include depression, asthma, and migraine headaches. It is noteworthy that these are medical conditions that are known to be increasing in the American population as a whole over the past several decades. Fatigue, the number

one complaint of both chemically sensitive patients and the Gulf War veterans, has been increasing in the general population (as has Chronic Fatigue Syndrome), and is the most frequent complaint physicians encounter in primary care. Patients who report problems with fatigue, migraines, depression, or asthma, are exposed to the same classes of volatile organic compounds that chemically sensitive patients say trigger their symptoms. These are such common and costly medical conditions that if even a fraction of patients with these conditions were in fact sensitive to environmental chemicals, it would be important to address this potential cause. Support for the notion that chemical exposure may be involved in some of these conditions is the fact that the majority of patients with asthma say that their condition is exacerbated by common chemical exposures; likewise many migraine patients report their headaches are triggered by smoke, solvent vapors and other such exposures. The environmental medical unit is an essential tool for assessing the existence of chemical sensitivity, and it will provide a clinical tool which will allow physicians to determine whether the problems experienced by their patients with asthma, migraine, depression, fatigue, etc., could be related to low level environmental chemical exposures. The environmental unit would allow physicians to evaluate series of patients with asthma, migraines, or other such conditions, to determine how many of them have their conditions on the basis of environmental exposures. It is critical that we address these important questions in order to perform meaningful risk assessment in the environmental area and to curb rising health care costs if such exposures indeed do play a major role. Currently, billions of dollars have been spent cleaning up Superfund waste sites, and billions more have been spent to resolve and litigate indoor air quality problems, yet little hard evidence is available concerning the impact of low level environmental chemical exposures such as these on human health. Unfortunately, animal studies have provided little help in this area. Subjective symptoms, such as headache, depression, nausea, and difficulty concentrating, cannot be assessed adequately in animals. We need to assess these possible consequences of low level chemical exposure in humans.

Can someone be sensitive to a substance, but suffer no measurable ill effects?

A. Yes, someone can be sensitive to a substance but suffer no measurable ill effects. However, in the survey of EPA employees, respondents likely were referring to illness they had experienced with particular exposures. In the case of an allergy, involving IgE antibodies, there may be foods to which an individual is *sensitized*, that is, the person has IgE antibodies against that food, yet they may eat that food with impugnity. In fact, the antibodies may perform some kind of protective role, as yet undefined. However, the person's immune system is "sensitized" to the food. From a clinical standpoint, such sensitivity would be of little practical significance. With regard to the veterans, we are dealing with overt, believable, and, in many cases, disabling symptomatology. There is no question in my mind that these veterans are ill. The questions noted above are what we need to explore: Were veterans sensitized as a result of exposures in the Gulf, and, are their current health problems due to continuing chemical sensitivities?

NATIONAL ASSOCIATION OF RADIATION SURVIVORS

1993

Sept. 7, 1993

Representative Lane Evans
U.S. House of Representatives
2335 - Rayburn House Office Building
Washington, D.C. #20515

Reference: Persian Gulf War Veterans

Attn: Pam Parker

In response to your fax of Sept. 3, 1993 and your question:-

What available evidence supports your testimony that Persian Gulf War Veterans are experiencing a higher rate of miscarriage and genetically damaged children?

At the time that I gave testimony on June 9, 1993, the high rate of miscarriages and children being born with defects from post-Gulf pregnancies was anecdotal information received from Gulf War-based organizations especially from the Military Families Support Network. Michael Ange, a Gulf War veteran and a member of our board of directors, phone AC919-892-9315, offered this information to us and would be able to provide you with the exact information that you require.

Sincerely,

Jean Ralph, President &
Director of Atomic Widows
409 Indiana Avenue
Streator, Il. #61364

Home Phone AC815-672-9230

PO BOX 278, LIVE OAK, CA 95953
(800)798-5102 (Toll Free)
(916)846-5990 (Telephone & Fax)

QUESTIONS SUBMITTED BY
HONORABLE LANE EVANS, CHAIRMAN
SUBCOMMITTEE ON OVERSIGHT & INVESTIGATIONS
COMMITTEE ON VETERANS' AFFAIRS

HEALTH CONCERNS OF PERSIAN GULF WAR VETERANS
AND RELATED ISSUES

August 27, 1993

ANSWERS SUBMITTED BY DR. CHARLES T. HINSHAW, JR., PRESIDENT
AMERICAN ACADEMY OF ENVIRONMENTAL MEDICINE

1. How many Persian Gulf War veterans have you examined? What health care problems have these veterans reported to you? What have you concluded based on your examination of Persian Gulf War veterans?

   Ans: I assume you are referring to the number of veterans reported in my testimony before the House Sub-Committee on Oversight & Investigations. The answer is 25. If by "health care problems" you are referring to symptoms, the five most common symptoms reported are skin rash, fatigue, joint pain, loss of short term memory and headache. Approximately forty additional symptoms have been reported by the veterans, but none with great consistency. Additional symptoms of possible significance include changes in visual acuity, difficulty breathing, irregular heartbeat, and gastrointestinal symptoms such as constipation, diarrhea, and bloating. My conclusion based on examination of Persian Gulf War veterans, is that these veterans are suffering from Multiple Chemical Sensitivity induced by environmental exposures which occurred in the Persian Gulf, primarily induced to exposures to hydrocarbons resulting from burning oil well fires, but also from hydrocarbon exposures from internal combustion engines, tent heaters and contaminated bathing water.

2. How many Persian Gulf veterans have you treated? What are the conditions for which you've treated Persian Gulf War veterans. Describe the treatment you've provided for these conditions.

   Ans: Twenty-five veterans have been treated. The Persian Gulf veterans have been treated primarily for Multiple Chemical Sensitivity, but also for intestinal candidiasis, food allergy and allergic rhinitis. The treatment provided for the Persian Gulf veterans is principally treatment for Multiple Chemical Sensitivity. The primary treatment factor for MCS is avoidance of exposure to chemicals, primarily hydrocarbons, to as complete a degree as possible. This requires considerable efforts of education, with changes in lifestyle required. These environmental control measures are essential to the stabilizing and subsequent recovery from this illness. Part of treating chemical sensitivity is to treat for the occurrence of excess intestinal yeast, if this is present. The reason for this is believed to be related to the production of toxins, including acetaldehyde by the yeast. The treatment for the yeast syndrome includes the use of an antifungal agent, usually nystatin powder, U.S.P. 100%, 500,000 units four times daily, as well as a diet restricted in carbohydrates and with avoidance of yeast contained within foods. Additional treatment measures include the use of dietary supplements. These are used for two reasons. First, the importance of adequate nutrition is well recognized in medicine, and is critical for the best healing possible. In addition, the detoxication pathways for most foods and chemicals are within the liver. When these pathways are

overutilized specific deficiencies in certain vitamins and minerals can occur. Efforts are made to assure that the body has adequate supplies of these vitamins and minerals. At times, the most efficacious route of providing vitamin and mineral supplements is intravenous. In most instances, supplementation can be adequately obtained through oral routes. Various types of allergies are treated, as indicated in each individual veteran. Food allergies can be an unsuspected problem, possibly related to patients who have the yeast syndrome. Immunotherapy specifically directed against certain chemicals is used when indicated. Finally, the most severe cases will benefit by depuration sauna therapy. In this form of therapy fat soluble organic chemicals can be carried to the body surface dissolved in skin oils. Showering then washes these chemicals off of the body, and by this route the body load of these chemicals can be gradually reduced.

3. What are the results of the treatment you've provided to Persian Gulf War veterans? Are the results of the treatment you've provided to Persian Gulf War veterans permanent or temporary? If temporary, how long do the beneficial results of your treatment last? How much does this treatment cost?

   Ans: In every instance known to me, bearing in mind that not all patients have been fully evaluated at this date, the veterans have responded to treatment with a reduction in symptoms and partial recovery. Some of those participating in the study which I am reporting have reported 90%+ recovery of health. Others report levels of recovery ranging from about 50% up to the mentioned 90%. At this stage, it is too early to know if the results of treatment are permanent or temporary. However, the experience in treating chemical sensitivity shows that permanent results can be obtained, so long as the patients being treated are able to exercise good environmental controls. In my experience, and the experience of others, chemical sensitivity tends to persist at a low level throughout the life of the patient who has acquired this condition. However, in most cases, the patients are able to achieve a reduction in sensitivity which enables them to participate in a relatively normal lifestyle and participate in most occupations. However, I caution, patients with chemical sensitivity will not consistently tolerate large exposures to chemicals derived from hydrocarbons, and therefore must be cautious in their lifestyle. With this caveat, the results of treatment are expected to be lifetime. The cost of this treatment varies depending on the severity of illness. If simple avoidance is sufficient, the costs incurred are those of the initial workup and diagnosis, with costs ranging from about $725, without professional fees, and approximately $1,200 if professional fees are included. There is no cost incurred in avoidance of chemical exposures, unless the veteran needs to make modifications in his place of employment or home. These costs can usually be moderated, except in the most severe cases. The cost of treating the yeast syndrome ranges from $50 to $100 per month. The cost of recommended dietary supplements, for vitamins and minerals taken orally, averages $30 to $50 per month. Intravenous vitamins and minerals cost $75 to $100 per treatment. The cost of treating food allergy is nothing if food avoidance is followed; if immunotherapy is used, the cost per month ranges from $25 to $50. The cost of treating inhalant allergies ranges from $30 to $60 per month, for immunotherapy. If drug therapy is used, the costs range from $30 to $100 per month. Sauna depuration therapy under close medical supervision costs $100 per day; the usual duration of treatment is four to six weeks.

4. What are the most likely causes of the problems reported by

Gulf War veterans?

Ans: The most likely causes of the problems reported by Gulf War veterans are exposure to hydrocarbon fumes from the burning oil wells, from vehicle exhaust, from tent heaters, and from contaminated bathing water.

5. Are the health problems you've treated in Gulf War veterans communicable?

Ans: No.

6. Identify the available evidence which supports exposure to chemical or toxic substances during Gulf War service as a cause of health problems reported by Gulf veterans.

Ans: Evidence which supports exposure to chemical or toxic substances during Gulf War service as cause of health problems reported by Gulf veterans is available from the American Academy of Environmental Medicine and from Major Richard Haines. This evidence includes a detailed history of each veteran's exposures, correlations to onset of illness and symptoms. This evidence is almost overwhelming to the objective observer.

7. Because of wartime stress are Persian Gulf veterans more likely to suffer from environmental illness? Describe the connection, if any, between stress and environmental illness.

Ans: All stressors, whether psychological or physiological may result in a disruption of homeostasis within the human organism. So long as the stresses produced by the psychological or physiological factors can be met by adaptation of the organism, symptoms are minimal or do not occur. When psychological or physiological stressors exceed the ability of the organism to adapt, illness results. Multiple Chemical Sensitivity occurs in patients who have no stress identifiable or similar to the wartime stresses of the Persian Gulf. However, there is no reason to believe that the wartime stresses of the Persian Gulf are not a factor in the development of the chemical sensitivity seen in these veterans. It is important to remember, however, that patients with Multiple Chemical Sensitivity portray a wide range of symptoms, including symptoms referable to the central nervous system. The central and peripheral nervous systems are prime targets in MCS. Some of the symptoms referable to the central nervous system can be documented by physiologic testing, while other of these systems can be documented by psychological tests.

8. Can Multiple Chemical Sensitivity be successfully treated? Identify federal government agencies which recognize Multiple Chemical Sensitivity as a disability. Is chemical sensitivity communicable?

Ans: Multiple Chemical Sensitivity can be successfully treated. The essentials of treatment are avoidance of exposure, environmental control, identification and treatment of related factors including the yeast syndrome, food allergy and inhalant allergies, neutralization of chemical reactions when indicated and correctly identified, and depuration sauna therapy in the most extreme cases. Federal government agencies which recognize Multiple Chemical Sensitivity as a disability include the Social Security Administration, Housing and Urban Development and the Department of Justice. Provisions for Multiple Chemical Sensitivity are found in the Americans With Disabilities Act. Chemical sensitivity is not communicable.

9. Individuals with no military service have reportedly become sensitive following chemical exposure. For Persian Gulf War veterans, how can it be determined if their health care problems are related to chemical/toxic substance(s) exposure which occurred during military service? Which tests, if any, can accurately detect exposure to a particular chemical/toxic substance months or years after exposure? How long (hours, days, weeks, etc.) after exposure, can individual exposure to chemical or toxic materials be accurately assessed?

   Ans: The health care problems of the Persian Gulf War veterans can be related to their exposures which occurred during military service by careful review of their medical records, prior to their service in the Persian Gulf area. If there is no prior history of symptoms suggestive of Multiple Chemical Sensitivity, it is prima facie evidence that the illness did not exist prior to their service in the Persian Gulf theater. The only test which we have found to consistently detect evidence of chemical sensitivity related to hydrocarbon exposures in the Persian Gulf veterans is the challenge or provocation test in which the veterans are exposed to the chemicals related to the Persian Gulf theater or to chemically similar substances. These tests, challenge or provocation tests, can be done in a single blind testing environment or at a few sites can be performed in a double blind test protocol. In a non-environmental medicine setting, simple avoidance of chemicals, followed by re-exposure to chemicals will usually provoke symptoms, and thus demonstrate the patient's MCS. As long as the patient has the illness, we would expect that he or she would test positively to these test methods, even years after exposure. Biologic measurements of individual exposure to chemicals or toxic materials cannot be accurately assessed when the materials questioned have been eliminated from the body. Some of the hydrocarbons are highly fat soluble and are retained in body fat for years. However, the concentrations are extremely low and it is difficult to separate some of these exposures from the levels found in the general population. Multiple Chemical Sensitivity is the result of chemical exposures, although frequently the chemicals involved have long since been eliminated from the body. However, the effects of these chemicals, Multiple Chemical Sensitivity, linger or persist for years. The persistence of chemicals may range from hours to years, depending on the type of chemical.

10. Please comment on Dr. Miller's statement that there are no diagnostic markers or laboratory tests for chemical sensitivity nor is there a generally accepted case definition. If you disagree with this statement, please explain the nature of your disagreement.

    Ans: There are a number of tests which can be considered diagnostic markers for chemical sensitivity. The tests which have been routinely positive in the Persian Gulf veteran are the provocation tests mentioned above. A number of laboratory tests are routinely done for chemical sensitivity. These tests include the measurement of specific antibodies against offending agents, measurement of autoantibodies which are frequently induced by chemical exposures, and measurements of certain immune cell functions, particularly with emphasis on activited T-lymphocyte cells. Other useful tests include, but are not limited to, measurement of the actual levels of offending chemicals in urine, blood and body fat. These tests are well-known, well-documented, and used routinely in evaluation of patients with possible multiple chemical sensitivity, by physicians active in the Academy of Environmental Medicine. Efforts to discredit physicians

practicing environmental medicine, to denigrate the techniques of environmental medicine, and to deny the existence of Multiple Chemical Sensitivity are well recognized and ongoing. I think Dr. Miller's statements were made in an attempt to sound reasonable, and perhaps to sound acceptable by those who attempt to discredit the diagnosis of chemical sensitivity. Dr. Miller's agenda obviously includes efforts to secure funding for an environmental control unit. Dr. Miller has minimal experience in treating patients with Multiple Chemical Sensitivity. She has accumulated modest experience in making this diagnosis. There are no great differences in defining Multiple Chemical Sensitivities among those who are authoritative in this field. The most widely accepted definition of Multiple Chemical Sensitivities was offered by Mark R. Cullen, M.D., from the Department of Internal Medicine, Yale University School of Medicine. His definition, published in Occupational Medicine, State Of The Art Reviews, in 1987, is: "Multiple Chemical Sensitivities (MCS) is a acquired disorder characterized by recurrent symptoms referable to multiple organ systems occurring in response to demonstrable exposure to many chemically unrelated compounds at doses far below those established in the general population to cause harmful effects."

11. Why has it been possible to complete "protocols" for only six Desert Storm patients? When do you expect "protocols" to be completed for 100 Desert Storm patients?

    Ans: It has been very difficult to complete the protocols on the Desert Storm patients, primarily because of a lack of financing. In addition, active duty personnel have been actively discouraged by the military medical establishment from complaining about this illness, or for that matter, about most other illnesses. Threats of demotion and discharge overhang active duty personnel who complain of the symptoms related to chemical sensitivity. I do not expect that we will be able to complete the protocols for 100 Desert Storm patients unless outside funding is obtained, supporting patients who are in the Reserve or are no longer associated with the Armed Forces. I am hoping that we will be able to complete 30 or 40 protocols by October 19, 1993.

12. Provide the basis for your conclusion that, "The mysterious illness afflicting the Persian Gulf veterans is Multiple Chemical Sensitivity" when according to your own testimony "the number of protocols which have been totally completed to date numbers only six."

    Ans: As stated in my testimony, 25 out of 25 patients tested by the provocation testing method reacted to hydrocarbons. This test is a marker for chemical sensitivity, hence my conclusion that, "The mysterious illness afflicting the Persian Gulf veterans is Multiple Chemical Sensitivity".

13. Please identify the tests which are used to identify the presence of inhalant allergies, increased chlorinated and aromatic hydrocarbons, positive antinuclear antibodies and changes in immune system.

    Ans. The tests used to identify inhalant allergies were allergen specific tests by the Modified RAST method. This is a test done on blood, is highly reproducible, and is very accurate for such diagnoses. The tests for chlorinated and aromatic hydrocarbons were performed at Accu-Chem Laboratories, 990 North Bowser, Suite 800, Richardson, Texas, 75081. This is a highly sophisticated test performed on blood. Levels detected are in the parts per billion range. Tests for antinuclear antibodies are routinely

performed in laboratories throughout the world. There is nothing unique or unusual about these tests. Tests detecting changes in the immune system were performed at Immunosciences Laboratory, Ind., 1801 La Cienega Blvd, Suite 302, Los Angeles, California, 90035. These tests are highly sophisticated. This laboratory is experienced in performing these tests, is federally licensed, and performed the tests at no charge because of their interest in the Persian Gulf War illness and their support of the Persian Gulf War veterans.

14. Which vitamin and mineral supplements can be used to reduce sensitivity to chemicals and what doses of which vitamins and minerals are needed to reduce sensitivity to chemicals? What dose of each is needed to reduce sensitivity to chemicals?

Ans: Good nutrition is essential to health and recovery from illness. Due to processing of foods, depletion of soils, and nutrient losses through overwork of the xenobiotic (chemical) detoxication pathways, hidden nutrient deficiencies are normally found in chemically sensitive patients. When funding is available, these deficiencies can be tested for, and frequently demonstrated. According to Sherry Rogers, M.D., in testing 2,000 environmentally ill patients, the most common deficiencies, in approximate order of occurrence, are magnesium, zinc, copper, vitamin B-1, molybdenum, iron, folic acid, chromium, selenium, potassium, vitamin B-12, vitamin A and vitamin B-6. It is most important to correct the mineral levels, since the activity of the enzymes involved in the detoxication pathways hinges on them. They are also the most difficult to correct. Correction in difficult cases does respond best initially to intravenous administration of the nutrients. Vitamin levels are next in order. The vitamins to correct include vitamin C, vitamin E, vitamin A, vitamin B-6, vitamin B-1, vitamin B-12 and folic acid, vitamin B-3, vitamin B-2, PABA, and vitamin K. Following the correction of mineral and vitamin deficiencies, amino acids and essential fatty acids also merit consideration and correction when indicated. The levels of supplements used can vary, and in the most severely ill patients will respond best to correction of identified deficiencies. However, a mineral and vitamin cocktail approach is often successful. Most patients will respond to oral administrations, albeit the response may be slower than the response to intravenous administration. When specific deficiencies are not identified, the cocktail or shotgun approach is generally at levels within the range of one recommended dietary allowance (RDA) or low multiples of the RDAs. However, vitamin C is frequently given at somewhat higher doses, ranging from 500 mg to 3,000 mg per day.

15. Why do many medical insurance companies not recognize a diagnosis of MCS?

Ans: You should ask medical insurance companies why they do not recognize the diagnosis of MCS. I suspect that their answer would be that MCS is not a recognized medical diagnosis, that the condition is not backed by adequate research, and therefore that it is experimental. A more basic reason might be that their advisors on this issue will be found to be traditional allergists. Traditional allergists do not recognize MCS as a legitimate diagnosis nor do they recognize the specialty of Environmental Medicine. This issue at its base, becomes a turf battle between general allergy and environmental medicine.

16. How long would it take you to teach VA hospitals to diagnose and treat chemically sensitive patients?

Ans: We could teach the medical staff and technicians from VA hospitals to diagnose and treat chemically sensitive patients in 15 hours. This would include lectures on environmental history taking, the immunopathology of chemical sensitivity, metabolic abnormalities, the use of diagnostic and physiologic tests, and treatment. A portion of the treatment instruction would involve instructions on provocation/neutralization. This mini-course on chemical sensitivity would allow VA personnel to adequately diagnose and treat the Persian Gulf veterans. This would not be a complete course in chemical sensitivity. The more severely ill patients are difficult to manage and will prove to be quite a challenge, I am sure, for physicians not experienced in treating MCS.

CHAIRMAN EVANS TO MG BLANCK, DEPARTMENT OF DEFENSE

1. How many service members with Gulf War theater service have reported health problems? Including active, Guard and Reserve units, which units have the largest number of members who have reported health problems?

ANSWER

I can't say with certainty how many servicemembers have reported health problems following the Persian Gulf War because there is no central repository of such data. If this question refers only to those individuals who have had chronic ill-defined health problems, we can estimate that number. The Army, Navy, and Air Force all have a surveillance program for such cases seen at their active duty military health care facilities. As of July 93 there were 84 Army cases (70 involving active duty soldiers), 39 Navy cases and no Air Force cases. Since the spring of 1992 there have been several case clusters reported by several reserve military units. I am aware of 8 such clusters in the Army (7 Army Reserve, one ANG). In addition I am aware of a single cluster each for the Navy and Air Force, both among reserve personnel. The total number of affected individuals in these clusters approximates 500. The first and largest cluster has been seen among units within the 123rd ARCOM in Indiana. We have not seen similar reports among active duty units indicating multiple cases.

2. You acknowledged DOD has encountered some difficulty in diagnosing the health problems reported by some Persian Gulf veterans.

What diagnosis have been made most frequently by VA for Gulf War veterans.

ANSWER

The answer to that question would best come from the Department of Veterans Affairs.

3. How many Persian Gulf veterans who have been treated by DoD have not received treatment which has helped them.

ANSWER

This is quite difficult to answer precisely. Most Persian Gulf War veterans with health problems who have been seen in our medical treatment facilities have conditions which are easily diagnosed and treated. Only a small number have chronic, ill-defined health problems. This would include most of the cases reported in the special surveillance programs maintained by the Army, Navy, and Air Force.

In addition to trouble in making a diagnosis, what else would explain DOD treatment not being helpful in some cases?

ANSWER

This is somewhat speculative on my part, but if the servicemember doesn't trust the system or is frustrated by the inability to make a diagnosis, the treatment may not be successful.

In cases where establishing a diagnosis has proven difficult, does DOD still provide treatment?

ANSWER

Yes, even though a specific diagnosis cannot be established in some cases, most medical providers would offer therapy to reduce or eliminate adverse symptoms such as headaches, joint pains, and diarrhea.

Has the DOD contracted or considered contracting with one or more other health care providers to provide a diagnosis for the Persian Gulf Veterans for whom DOD has encountered some difficulty in making a diagnosis? If not, why not?

ANSWER

Yes, outside civilian consultation has been requested and received by DOD to assist us in our deliberation about specific clinical cases (for example from the Johns Hopkins University and the University of Texas at San Antonio) and about post- Persian Gulf health problems in general. I will cite three examples of the latter. The Army convened a special panel of civilian experts from academia and industry in August 1992 to evaluate claims that exposure to petrochemicals in the Persian Gulf War was causing ill-defined health problems among some veterans. This panel of experts reviewed several case reports of servicemembers hospitalized at Walter Reed Army Medical Center and concluded that petrochemical toxicity was not a likely explanation for their illnesses. Their conclusion was based on their low level exposure to the petrochemicals, the variability of their symptoms and the late onset of symptoms following exposure. Another example of consultation is that DOD, acting jointly with the DVA, has requested the assistance of the National Academy of Sciences, Medical Follow Up Agency (MFUA) to evaluate our current studies and our efforts directed at these Post-Persian Gulf health issues. They plan to conduct a 3 year study with considerable input from both the lay and professional community in addressing these issues. Moreover, they will also be evaluating the adequacy of both the DOD and DVA Persian Gulf registries. Thirdly, I have contracted the services of a civilian physician of international stature to assemble a task force of civilian experts and military specialists to review a large number of clinical case histories of Gulf War veterans with ill-defined health problems. I am hopeful that this review may lead to the establishment of one or more case definitions for these post-Persian Gulf health problems. This also will greatly aid us in developing standard nomenclature for disability processing and in conducting epidemiological studies in the future.

4. How can DOD improve the treatment it provides to Gulf War veterans.

ANSWER

A great deal of attention is already being focused on the care of Gulf War veterans with ill-defined health problems. Naturally if a specific environmental agent, be it physical, chemical, or biological becomes evident as a cause of post-Persian Gulf war health problems, we will adjust our diagnostic and therapeutic approaches accordingly.

5. Nearly 50,000 British an French Troops reportedly served in the Persian Gulf during Operation Desert Storm/Shield. Are British and French troops who served in the Gulf reporting health problems like those reported by u.S. servicemembers who served in the Gulf?

ANSWER

To my knowledge, no. We have been in contact and have reviewed reports from the British Government which indicate that they do are not having a similar problem with post-Persian Gulf War ill-defined health problems among their veterans. They are unaware of a single case among their forces that cannot be explained by conventional diagnosis. However they are investigating 8 soldiers who claimed to have unexplained health problems. Although we have not heard directly from the French, we reviewed documents from the British which have indicated that the French

Minister of Defense reports no unexplained illness among any of their military personnel who served in the Persian Gulf.

Would British and French troops who served in the gulf be less likely to experience the health problems reported by U.S. servicemembers who served in the Gulf.

ANSWER

Until we know what, if any, exposures may be linked to these post- Persian Gulf War ill-defined health problems, I cannot give you a definitive answer. We do know that the British and French military forces were widely scattered throughout the region and would presumably be exposed to similar military and environmental hazards. Naturally, since they had less than 1/10 the number of soldiers that we had in the Gulf, their number of personnel reporting problems would be proportionately less than ours.

6. Many more veterans than active duty servicemembers have apparently reported health problems possibly related to deployment in the Persian Gulf. What explanation can you offer for the variation.

ANSWER

I can only speculate that access to health care may be a factor. Unless a veterans' medical problem can be linked with their military service they are currently not eligible for medical care or compensation by the DVA. In situations where the chronic medical problem might be perceived by the veteran to be service-connected, there would seem to be some incentive to report it in order to obtain access to care or compensation by the DVA. Also there may be a reluctance by some active duty personnel to report medical problems during a time of downsizing.

7. How many Gulf War theater veterans have received medical disability?

ANSWER

Each of the military services have their own disability processing system. I will address this question from the Army perspective. The Army is presently validating its data base of all soldiers deployed to Southwest Asia (SWA). Currently there are 1010 cases of all categories registered in this SWA disability data base.

Can a service member be retired from the Armed Forces on disability without the nature of the disability being diagnosed?

ANSWER

No. There must be some diagnosis or medical condition established in order for a servicemember to be properly rated for disability.

Of the Gulf War theater veterans who have received medical disability, how many had an undiagnosed disability?

ANSWER

All of those receiving disability have had some diagnosis or medical condition identified.

Is multiple chemical sensitivity (MCS) recognized as a disability by DoD or any service?

ANSWER

To date there has been no specific guidance from OSD regarding this entity. There have been three recent Army disability cases referencing multiple chemical sensitivity syndrome as the problem. One was found fit, two were found unfit for service. Which, if any, diagnostic tests used by any services detects MCS?

ANSWER

I am not aware of any specific test available within the DoD or in the civilian sector which can be used to establish a diagnosis of MCS.

8. Were nerve or biological agents used against U.S. Troops in the Persian Gulf War?

ANSWER

To my knowledge no biological or chemical warfare agents was used against coalition forces during the Persian Gulf War. I believe that, if this were not true, we would have had evidence to the contrary. For example, we would have had patients within our combat hospitals with evidence of chemical contamination or presenting with a clinical picture consistent with anthrax or botulism. No such cases were seen. The capability to detect chemical agents on the battlefield was available within our chemical units operating in the Persian Gulf, yet I am not unaware of a single instance in which chemical agents were identified.

Given possible Iraqi use of chemical, biological or nuclear warfare, how and when did the U.S. begin to monitor chemical, biological or nuclear warfare by Iraq?

ANSWER

I must defer the answer to this question to the intelligence community.

9. Were all medications and vaccines administered or provided to U.S. servicemembers during their Gulf War service recorded in the service medical record of each individual servicemember?

ANSWER

It is DoD policy to document all vaccines administered to an individual in the yellow "shot" record and the individual's medical record. It is my understanding that most units who received immunizations while in the Persian Gulf had them recorded on a temporary record which was then supposed to be transcribed or filed in their official medical records upon return to their home base. Regarding medications, if a physician or physician assistant prescribes a drug, it is entered into the medical record (including the field medical file). However, if military troops are issued medication as part of doctrinal protection, it would not be entered in the medical record. For example if a soldier was issued malaria pills or pyridostigmine bromide tablets (chemical warfare agent protestant) they would not necessarily be recorded in their medical record or even in the field medical file.

10. Was the efficacy of one or more medications or vaccines tested on servicemembers during the Persian Gulf War, as has been suggested?

ANSWER

Absolutely not. All medications and vaccines used in the Persian Gulf War were thoroughly safety tested prior to their use among our forces. All but one vaccine administered were FDA licensed. The one vaccine that was considered investigational, botulinum toxoid, had been in use for several decades. It was fully tested for safety and had been given safely to approximately 3000 volunteer lab workers over those years. It would be virtually impossible to conduct efficacy trials with this vaccine since there is no human population where the disease occurs in sufficient numbers to show statistical reduction during a placebo-controlled vaccine trial. Naturally it would be unethical to expose persons to the deadly botulism in order to test protection with the vaccine.

Since these studies cannot be conducted and there is no real commercial market for botulinum toxoid vaccine, no pharmaceutical company would wish to work with DoD to apply to the FDA for its licensure. The sole purpose in administering this vaccine to our military forces was to protect them from the potentially lethal effects a biological agent that could have been used against our forces.

11. How many U.S. servicemembers are estimated to have inhaled or ingested oxidized depleted uranium during the Persian Gulf War?

Answer:

This cannot be answered with great precision. There were 29 U.S. vehicles which were affected by DU contamination, but, there were an untold number of Iraqi vehicles which were struck by DU penetrators. Damaged Iraqi vehicles may have been entered to collect items of interest to intelligence officers; they may have been entered by munitions specialists to assess the effectiveness of the munitions; and they may have been entered by those in search of souvenirs. Of the 29 U.S. vehicles, there may have been as many as 200 crewmembers (4 per Abrams (14) and 10 per Bradley (15)) who might have had some degree of contact with DU contamination. In addition, there were battle damage assessment teams, vehicle recovery teams, maintenance teams, and retrograde teams, all of which may have had some degree of contact with DU contamination. I am confident that we have identified those soldiers who had the greatest potential to receive the largest exposures to DU contamination and we are evaluating their exposure as "sentinel" populations. If any member of the sentinel populations is shown to have a significant uptake of DU contamination through ingestion or inhalation, then we will broaden our medical surveillance to include others who may have received less significant exposures to DU contamination. I would point out that none of the soldiers in the sentinel population, to date, has shown evidence of a clinically significant uptake of DU contamination through ingestion or inhalation.

12. Are there gender or racial differences among Gulf War veterans who have reported health problems?

Answer:

Based on the largest surveillance data base available relating to post-Persian Gulf War health problems, namely ours in the U.S. Army, there does not appear to be a striking maldistribution of cases by gender or race. For example, of the 84 Army cases, the distribution was 86% male; 14% female; 67% caucasian; 13% black, 5% hispanic; and 15% unknown racial category. This is roughly in line with the gender and racial distribution of the force.

13. Can you tell us to what extent the various inoculations given to the soldiers in the Gulf were tested and what reasons you had for feeling that they were safe to use? Can you provide us with information on the history of these inoculations and the testing done?

Answer

Let me assure you that no United States military personnel involved in Operations Desert Shield/Storm were given untested immunizations. The safety and health of our military personnel are of paramount concern to the military leadership and the Army Medical Department.

For protection against infectious diseases endemic to Southwest Asia, the Army Medical Department recommended that personnel receive the following immunizations: polio, typhoid, diphtheria-tetanus, influenza, and meningococcal disease. In addition, soldiers were given immune serum globulin to protect against infectious hepatitis and some soldiers were given chloroquine chemoprophylaxis to protect against malaria. All of the above are licensed by the Food and Drug Administration (FDA).

In addition, two vaccines were available to our military forces for protection against biological threat agents. Individuals and units determined to be at risk for exposure to biological agents were given the added protection of vaccination to supplement their protective clothing and protective mask. These vaccinations could be lifesaving in the battlefield setting.

One vaccine, "Anthrax Vaccine, Adsorbed," was licensed by the FDA in 1970 and has been used safely for many years in individuals occupationally exposed to anthrax spores.

The second, "Botulinum Toxoid," has been used over the past 25 years to protect over 3,000 laboratory workers and others occupationally exposed to botulinum toxin. While it is not FDA licensed, it has been thoroughly safety tested and used safely in compliance with FDA regulations. Ordinarily, the FDA requires signed informed consent by the recipient prior to use; however, the Department of Defense requested waiver of the requirement because of time and logistical constraints and to ensure operational readiness of the entire force. The FDA waived the requirement for informed consent in the Desert Shield/Storm theater of operations.

14. I was informed that the British Government had conducted a study on DU and contacted the British Embassy here in Washington to learn more. I was told that the report was classified and that I should contact the Joint Chiefs of Staff. Are you familiar with this report? Have you seen it? If so, can you furnished this to the Committee or to the members.

Answer:

I am aware of the report but I haven't seen it.

15. We have all heard other possible explanations such as exposure to DU, pesticides, contaminated supplies, diesel in heaters, etc. I place stock in these claims and feel they should be thoroughly examined. Have you done research in this area, or do you plan to?

The issue of greatest concern to DoD was exposure to Kuwait well fire smoke. That is why the Dod leadership requested the assistance of the U.S. Army Environmental Hygiene Agency to conduct a comprehensive study of this problem as outlined in my written testimony.

The oil well smoke exposure had the potential to effect a large number of DoD personnel operating in the Gulf and, of course, it was not generated as a result of usual military operations. On the contrary many of the other types of exposures that have been suggested as possibly contributing to the post-Persian Gulf War health problems occurred as part of usual military field operations and were not unique to the Persian Gulf experience. However, the door is open to investigate any exposures that could have caused subsequent health problems

I would add that, the National Academy of Sciences, Medical Follow-Up Agency (MFUA) will be assisting both the DVA and DoD in looking at the requirements for future epidemiological studies.

16. What are your views on MCS?

ANSWER

I agree with the National Academy of Sciences position that if we are going to learn more about the phenomenon of multiple chemical sensitivity (MCS), we need to support research using rigorous and established scientific methods. Much of what is known about MCS today is largely anecdotal and unsubstantiated by well designed and controlled research. I doubt that the mainstream medical community in the U.S. or in DoD will fully accept MCS as a legitimate diagnosis until more credible scientific research is conducted and then published in the peer-reviewed medical literature.

17. Many in the National Guard have their own insurance through work or private means, and so after suffering symptoms they may not necessarily to go to the VA or military facility for treatment. How will we track them?

ANSWER

The DVA's Persian Gulf War Veterans Registry is designed to do just that. This DVA registry is open both to veterans still in the active reserves as well as those who are no longer serving in the reserve component. This registry will keep track of all those wish to participate. Information in the DVA registry will be compatible with information in the DoD exposure registry. In the future, if some new medical finding or study reveals that Gulf War Veterans are at some increased risk of illness, then this DVA registry, with current addresses of its participants, will permit this information to be fed back to them.

18. Why wasn't any action taken to warn or protect the troops from possible expose to DU on the battlefield?

ANSWER

There were several technical manuals and bulletins that provided information on the presence of DU in battlefield systems and on procedures which should be used in performing maintenance on equipment which contains DU and in responding to accidents which involved DU. However, when we began getting questions from the field indicating that not everybody was aware of DU issues, a message was sent to the field from the Armament and Munitions Command (ARCCOM). This message contained information about the nature of DU and the appropriate precautions necessary in dealing with DU during battlefield scenarios, including recovery operations.

19. How can the military be certain that DU is safe to use?

ANSWER

We believe that the proper use of depleted uranium armament poses no significant health risk to military user. I would hasten to

point out that any small risk associated with working in and around depleted uranium must be balanced against the great protective advantage provided to our soldiers by this DU armor. In other words DU contributes little to the total risk associated with participation in combat yet significantly improves the crewmember's chance of surviving that combat.

20. If the Government felt that an Albany, NY munitions plant should be closed because of the risk of exposure to citizens of NY, and the military has built a facility in South Carolina to decontaminate our tanks that were hit by our own DU rounds, or "friendly fire", then how can you not take precautions to protect troops, specifically those sent to clear the battlefield? Don't you agree that the actions in Albany and the construction of the facility in South Carolina suggest that somebody felt like DU was a threat?

ANSWER

It not appropriate to compare state regulations, and environmental standards that exist at U.S. installations during peacetime to battlefield conditions in a combat theater of operations. I do agree that the Army did not do an adequate job in educating our soldiers about the proper procedures relating to the clean-up of our vehicles damaged by DU munitions. I can't speculate on the answer to the second part of this question regarding the actions to close the facility at Albany and move to South Carolina. As you are aware, often these decisions are made because of considerations other than strictly health reasons. It is also true that decisions are sometimes made because of a perceived health threat. Unfortunately, that perception is sometimes based on irrational fears.

21. Were notation of inoculations kept in soldiers' medical records? If not, why not? How will we do follow-up down the road?

ANSWER

It is military policy to document all vaccines administered to an individual in the yellow "shot" record and the individuals medical record. It is my understanding that most units who received immunizations while in the Persian Gulf had them recorded on a temporary record which was then supposed to be transcribed or filed in their official medical records upon return to their home base.

Kimo S. Hollingsworth
819 Lynn Court
Rockville, MD 20850

August 11, 1993

Congressman Lane Evans
U.S. House of Representatives
335 Cannon House Office Building
Washington, D.C. 20515

Dear Congressman Evans:

In response to your written questions, I submit the following in the format you requested.

1. Q. Please identify each diagnosis you received from a private sector or VA physician prior to receiving treatment from Dr. Hyman. Please identify the diagnosis you were given by Dr. Hyman.

A. In January of 1993 I went to a local doctor in Rockville, MD for my illness. After numerous tests, he indicated that he did not know what illness I had or what could be the cause. I then registered with the Persian Gulf registry and was given a complete physical and numerous tests. The VA physician at the Washington, D.C. VA hospital notified me via mail that I was physically fit. My next move was to contact Dr. Hyman. He administered a urinalysis and informed me that I tested positive for a bacterial infection.

Q. Describe the inpatient and outpatient treatment which you have already received form Dr. Hyman.

A. The inpatient treatment I received from Dr. Hyman was twelve days of intensive antibiotics. The outpatient treatment I received and am currently receiving is daily doses of oral antibiotics and periodic urinalysis.

Q. Describe the inpatient treatment you are continuing to receive from Dr. Hyman.

A. I am currently not receiving inpatient treatment, but I am receiving the outpatient treatment as described above.

Q. Describe the results of the treatment you've received from Dr. Hyman. Are these results temporary or permanent?

A. The results I have received from Dr. Hyman are remarkable. There is a night and day difference in my health. Prior to treatment my symptoms included: severe muscle and joint aches, fever, headaches, blurred vision, pain in the center chest, coughing of dark green sputnum, fatigue and plain lack of motivation. My health was such that my physical fitness program stopped, I could not pull myself from bed, I would sleep constantly and my performance at work suffered. Presently, I am awake before the sun rises, work long hours, exercise three times a week, participate in the Marine Corps Reserves and conduct many personal projects at home.

Currently, my results have been permanent. In early July I had a relapse. Dr. Hyman quickly changed my medication and it subsided. I still periodically have mild symptoms; however, the symptoms and frequency are becoming less and less. Dr. Hyman explained to me that this would happen. The illness is behaving the way he said it would.

2. Q. What evidence supports a conclusion that your health problems were incurred or aggravated due to your military service in the Persian Gulf War theatre?

A. Prior to my deployment to the Persian Gulf, I was in excellent physical condition. I had never experienced symptoms or had an illness that compared to the Persian Gulf illness. Also, members from my unit were experiencing similar symptoms.

3. Q. How can VA care to Persian Gulf War veterans be improved?

A. The entire VA system can be improved by not having a veteran prove his/her illness, but instead have the VA disprove the illness. Also, the VA should give Dr. Hyman a grant to conduct his research. Alot of taxpayers money will be spent on pursuing Multiple Chemical Sensitivities with Dr. Hinshaw and his team. Presently, the patients they have treated and the patients all others have treated have not gotten better, but have gotten worse. Dr. Hyman has treated seven Persian Gulf veterans with success. All seven veterans are better! Also, the VA can help by keeping administrators from making medical decisions. Dr. Mather, General Blank and others are not practicing physicians. I respect their positions; however, Dr. Hyman has been practicing and researching medicine in a hands on fashion for over thirty years. I fully understand that if Dr. Hyman is right (I know he is by the results), it will revolutionize modern medicine. In other words, if he is right then we have been misteaching medicine for over forty years. Everyone must put their foolish pride aside and get the job done.

Questions Submitted By
Honorable Lane Evans, Chairman
Subcommittee On Oversight & Investigations
Committee On Veterans Affairs.

1. Identify the available evidence to support your testimony that nerve or biological agents were used against U.S. Troops during the Persian Gulf War.

Our testimony stated that the concerns of environmental manipulation were largely based on observations of the Public Television "Nova" program where television cameras accompanied the United Nations inspection teams and found some thirty (30) Scud Missiles loaded with Nerve and Biological agents. This information, combined with the personal reports of herds of animals dying overnight in the neutral zone (December, 1990), and the reports of Scud Missiles exploding over the Daharan / Al Jubayl areas without being fired on by Allied Forces, it appears the concerns of Environmental Manipulation are valid. The conclusion of our statement was that the possibility of minimal usage of Nerve and Biological agents by both sides is quite feasible.

The United Nations, on December 4, 1990 passed a resolution specifically prohibiting attacks on nuclear facilities. Yet when the war began the next month, General Schwarzkopf said that nuclear, biological and chemical weapons factories were primary bombing targets. On January 23, 1991, General Colin Powell said "Iraq's two operating reactors are both gone, They're down. They're finished." On January 30, 1991 Schwarzkopf said allied forces had attacked 18 chemical, 10 biological and three nuclear plants. (New York Times, January 24, 1991, New York Times, January 31, 1991).

As early as January 22, 1991, a Czechoslovakian antichemical unit found traces of chemical weapons agents, later identified as the Nerve Agent "SARIN", that bombing may have released. On Febuary 4, 1991, a French military spokesman said that chemical fallout was being detected throughout Iraq.(Financial Times, February 4, 1991, NET Report Background Papers, July 1991). Other bombed plants also released toxins. For example, International Study Teams found chemical fallout from bombed asbestos factories, a sponge and rubber factory and many textile mills. These bombed sites released sulfur, carbon dioxide and nitrous oxide into the atmosphere for at least thirty (30) days after they were hit. (Testimony by Ross Mirkarimi, Persian Gulf Project Coordinator of the Arms Control Research Center in San Francisco, at Los Angeles Commission of Inquiry hearing, September 15, 1991).

Acceptance of U.S. Government credibility in reguards to the exposures of Allied Military personnel and other participants in the Persian Gulf is fast reaching rock bottom levels. Washington Times, January 22, 1991. "Sorry Sir," the Lieutenant replied, on hearing the name of my newspaper. "We are under orders not to talk to the media." When told we were not interested in asking about operational matters but only inquiring about our own safety, the U.S. officer kept repeating the same phrase. Interestingly the Americans we encountered were the only allied nationals that treated us with suspicion.

When the inter=allied radio alert system told us that the French chemical alarm had just been triggered and that Czechoslovak anti-chemical-warfare specialist were on location. A French officer told me precisely what had happened. The Czechs confirmed that chemical agents were indeed in the the air but not in lethal doses. They assumed that U.S. bombers must have destroyed a large stockpile of chemical shells on the other side of the border.

The real chemical scare came when we returned to base after several hundred miles of front-line touring. The order to don masks and chemical protection suites came six times between 10:pm and dawn. We kept checking the stick-on beige paper square on our left sleeve for any change in color. The color code was inscribed two inches up the sleeve: "brown=nerve gas; red = blister; green = nerve (N type)." Mercifully, the tiny sticker remained beige. More conventional non-chemical Scuds had fallen in the desert, but they were not mentioned in the U.S. briefing we heard on BBC.

A letter from the Honorable Richard Shelby, United States Senator, states, " I was astonished to learn during the testimony of two veterans of the Gulf conflict that they believe they were subject to a chemical attack. Articles in the Birmingham News, my personal conversations with other servicemen who served in the Persian Gulf, and reports that Czech soldiers detected increased concentrations of mustard gas and nerve agents in the atmosphere, have all raised the speculation that American Troops may have been subject to chemical exposure during their Gulf service. It is my understanding that the Czechs sent samples of the chemicals to military laboratories in the United States.

A letter from an English mother comments: "I understand that on or about the night of 20th January, 1991, Sharon was woken by a loud bang (which in retrospect apparently sounded similar to an explosion they later heard when a SCUD was taken out by a Patriot over the sea near the port). This was followed by the air raid sirens and they donned their NBC suites. My son-in-law had apparently seen a flash of light just before the bang. They were then informed over the tannoy that chemicals had been detected in four places.

1. The Port.
2. A near by Army Camp.
3. A sports stadium used by the Americans.
4. Near the boundry of their accomodation complex at Al Jubayl.

They stayed in their suites until the all clear and no futher information was given until the following day. They were then told that the chemical warning devices had been activated bt fuel or oil leaking from a damaged Bronco aircraft flying back to base. At the time this seemed to be a plausible explanation, but having seen this newspaper report and given the matter some thought, they are now of the opinion that the aircraft must have flown a strange route back to have covered the four areas mentioned. (Enclosed Copy of a letter from an English mother.)

These statements, combined with the statement of the Czech unit commander that he notified Central Command of the exposures, combined with statements by MG Ronald R. Blanck like "The Army's response to health issues prior to, during and after the Persian Gulf War was- and continues to be- aggressive, open and proactive," when he will not address the investigational drugs other than pyrodostigmine bromide and botulinum-toxoid vaccine. The fact that the Pentagon purchased drugs that were still on experimental status with the FDA, and the statements that "Other" investigational drugs were fielded during Desert Storm, (Military Medicine, 157.8:404,1992, HSC Mercury, July 1993, Boston Sunday Herald, October 4, 1992) lends credence to the concerns of credibility. The question of why the Department of Defense and the Department of Weteran Affairs has denied even the possibility of nerve and biological exposure to our troops. When they knew that the possibility existed in 1991.

Will the veterans of Operation Desert Shield / Desert Storm have to wait Fifty (50) Years for the Department of Defense to admit that there was an exposure, like the veterans of World War II? Will the Department of Weteran Affairs deny the Operation Desert Shield / Desert Storm veterans treatment for possible exposures and allow these veterans to suffer for Fifty Years?

The problem is not whether Allied troops had Nerve and Biological agents used against them. The question is if they were exposed to those substances? The Operation Desert Shield / Desert Storm Association, (International) believes that they were, and that the Department of Defense and the Department of Weteran Affairs know's it!

Questions Submitted By
Honorable Lane Evans, Chairman
Subcommitte On Oversight & Investigations
Committee On Weteran Affairs.

2. According to your prepared statement, "During the Persian Gulf conflict, and for months afterwards, there were situations that resulted in the exposure of military and civilian personnel to concentrated, uncontrolled amounts of toxic petroleum materials, their by-products and numerous other chemical compounds utilized in the procurement and processing of crude oil." To what compounds and by-products were U.S. Troops exposed? How long did this exposure last? How many U.S. Troops were exposed?

To begin with, remembering that the oil fields of Kuwait were pumping out 10 million barrels of oil per day into the environment, (Kuwait Institute of Scientific Research) the normal medical hazardous standards of exposure to crude oil and its by-products are also multiplied.

Crude Oil produces Hydrogen Sulfide Gas, it may also contain Benzene and Radon, a natually occuring radioactive gas. Hydrogen Sulfide Gas, (H_2S) warnings include: Avoid liquid, mist and vapor contact, wash thoughly after handling, may be harmful if inhaled or absorbed through the skin. Avoid breathing vapors or mist. Use only with adequate ventilation, a flammable, irritating and highly toxic gas may be present, vapor or liquid penetration of skin can cause central nervous system depression and/or systemic effects. Harmful or fatal if swallowed, contains petroleum distillates.

Benzene is associated with Anemias and Leukemia in humans, and Polynuclear Aroma compounds (PNA"s) which have been shown to produce skin tumors on laboratory animals after prolonged and repeated skin contact. The risk of Benzene or PNA-induced cancer from short-term contact with this material is not known, but believed to be minimal. Avoid prolonged and repeated contact. The participants of Desert Shield / Desert Storm lived and worked in the mist, vapors, and oil spill residue for weeks on end, with no capability for clean-up or any of the "recommended" proceedures in many cases.

Industry experience has shown that crude oil may contain small amounts of RADON, a natually occuring radioactive gas, and its particulate decay products. Gamma Radiation above background levels, emmitted from short half-life decay products, may be detected externally at that equipment during operations but will decay to background levels within Four (4) hours after cessation of flow. What happens when the cessation of flow does not come for weeks on end? How much Gamma Radiation are the people who are continuously working and living in this environment exposed to?

Equipment emitting Gamma Radiation should be presumed to be internally contaminated with the longer-life decay products that emit Alpha Radiation, which may be a hazard if inhaled. If your assesment indicates the presense of Gamma Radiation, employee exposure potential should be minimized by limiting access near the equipment prior to maintenance on those equipment internals, stop the flow and allow a Four (4) hour delay prior to opening. Maintenance personnel should wear appropriate protective equipment to prevent skin contamination or inhalation of any residue containg Alpha Radiation.

From the beginning of the Air War until November 7, 1991 when the Emir symbolically put out the last of the oil-well fires, U.S. and Allied personnel had been exposed to the toxic materials of crude oil. Keep in mind that in many cases these troops were unable to wash, change clothes, discard their boots or gloves, which is a recommended proceedure, or obtain protective equipment that was suitable for oil field activities. We find no evidence of Radon testing being done by military personnel, the presense of any equipment to be able to do the testing or who even knew that they shoud be aware of the possiblity of Radon exposure.

The total toxic residue released into the atmosphere by the Kuwait Oil Company's definitive figure of 732 blown oil wells, will never really be known. The gag order which prohibited U.S. sponsored scientists from making all but the most innocuous statements about the war's ecological consequences. Government-imposed secrecy continued to cloud th issue until a month after Kuwait's Liberation when journalist John Horgan, writing in Scientific American, reported on the information embargo. On April 3, 1991, in the New York Times, Tom Wicker hailed Horgan's work and suggested that the U.S. information blackout was an element of a pattern based on the fear that ecological catastrophes would dampen enthusiasm for the war.

The question of whether the smoke from the burning oil wells in Kuwait presented a serious threat to global climate has been the subject of considerable scientific debate and widespead public concern. Yet the Department of Energy explicitly forbade its scientists to discuss their research with the media. In an internal department memo obtained by Scientific American senior writer John Horgan, public information officer John Belluardo specified the language that department scientists and contractors were authorized to use in public discussions of the "environmental impacts of the fires/oil spills in the Middle East." they were allowed to say: "Most independent studies and experts suggest that the catastrophic predictions in some recent news reports are exaggerated" and "We are currently reviewing the matter, but these predictions remain speculative and do not warrant any futher comment at this time."

By concentrating on a few dangerou chemicals known in the Northern industrial cities as "priority polutants," researchers investigating the smoke from Kuwait's oil-well fires were able to allay some fears about the climatological and public health implications of the oil fires. But they failed to take into account the complexity of the mixtures of chemicals and particles in the plume. It was constantly changing and evolving as it spread out from Kuwait.

Several million dollars were spent to collect this sort of information during the NCAR-University of Washington airborne research, and scientists were ready to analyze this data and unlock some of the plumes chemical mysteries. But government agencies have failed to fund the work. In Kuwait, public-health scientists deplored the limited amount of useful information released by foreign researchers.

"Imagine all the toxic chemicals that could be present in the tons of smoke from the crude oil fires," said Sami al Yakoob of the Kuwait Institute of Scientific Research. "We will never know the poisons that we were exposed to." (Against The Fires Of Hell, The Environmental Disaster of the Gulf War. T.M. Hawley, 1992.)

Definative measurements of the chemical compounds of the smoke cloud for any given period would be impossible to document with a degree of consistent accuracy. Sand storms, second and third day's of the war moved the column of smoke in every direction. However smoke fromKuwaites 500-plus flaming wellheads produced darkness at noon. (National Geographic Magazine, August 1991).

In addition to the basic contents of crude oil, many of the additional chemicals that are used in the everyday procurement and production of crude oil were present in the area and stored in many of the facilities that were destroyed. These chemicals include: Benzyl Chloride, Oxo Alcohol Distillation Residue, C5101 Amine C-12, Diethylenetriamine, Pyridine Residue, Polyols LG-56, LHT-42, LHT-34, LHT-28, C5113 Amine C-6, Isopropyl Alcohol, Kerosene, Methanol, Westvaco L-5, C5224 Surfonic N-95, C5730 Surfonic N-150, Expo#25, Nitrogen, Dodecyl-Tetradecyl-Hexadecyl-Dimethyamine, Benzoyl Peroxide-70.(Source, oil field personnel from the Permian Basin who had worked in the Persian Gulf and Kuwait oil fields prior to the Gulf War.)

Following the extent of the smoke plume and the distances that it travelled, (National Geographic, August 1991, National Geographic, February 1992, Against The Fires Of Hell, T.M.Hawley, The Fire This Time, Ramsey Clark.) we believe that any military personnel who were in the Persian Gulf were exposed to some level of chemical contaminants.

Many of the standards utilized in the determination of possible exposure problems were based on the parameters of known levels of exposure problems. The Kuwait oil fires/spills have far out-distanced those known parameters. Normal, recognized medical proceedures for dealing with oil-related chemical exposures must also be expanded to meet those expanded parameters.

The Department of Defense and the Department of Veteran Affairs have continuously referred to the levels of exposure collected by the "Interagency Task Force." This information has already been identified as a "Limited amount of useful information and innocuous statements." Gag orders and partial analysis of data cut short by lack of funding, again place a great deal of strain on the credability of the Department of Defense and the Department of Veteran Affairs when they say that they are doing everything that they can to take care of the Desert Storm Veteran.

Honorable Spencer Bachus
Questions Submitted For Record
Mr. Victor Silvester, National President
Operation Desert Shield/Desert Storm Association
Subcommittee on Oversight and Investigations
June 9, 1993.

1. You state from it's inception your organization has been collecting and researching data pertaining to service in the Persian Gulf. You state that your organization has received many calls complaining about the lack of sensitivity on the part of VA staff and difficulty in accessing the system. Please be more specific?

The Operation Desert Shield/Desert Storm Association was formed in November, 1990 after a visit to Ft. Eustis, Va.(See attached News Clipping). Data pertaining to service in the Persian Gulf and it's effects ranged from news papers, video recordings of war reports to medical reports.(See Attachments). The lack of sensitivity by VA personnel range from a Desert Storm Veteran being given a quarter and told to go call a preacher, (Alfred Johnson, Robert Larrisey) to being told that the veteran was "nuts" or playing a game to get a free lunch.(See letter attached, Merril B. Roberts). In general please see a cross section of information and complaints attached to this statement.

Honorable Spencer Bachus
Questions Submitted For Record
Mr. Victor Silvester, National President
Operation Desert Shield/Desert Storm Association
Subcommittee on Oversight and Investigations
June 9, 1993.

2. Over 500,000 military personnel served in the Gulf. How many veterans are members of your association/ What are the requirements for membership?

The initial base membership of the Operation Desert Shield/Desert Storm Association,(International) stood at 586 members, amalgamating with The Military Family Support Network and the British Trauma After Care Trust, Gulf Families Crisis Line, has now raised that figure to 3, 892 members, 21 locations where chapters have been or are in the process of being, formed and an International configuration.

Requirements for membership are as follows: **Full Membership:** Active participants of Operation Desert Shield/Desert Storm, Operation Restore Hope or any support program involving the Southwest Asian Theater. Wife of a Participant, Father and Mother of a Participant if a Participant is not married.$10,00.

Associate Membership: Family related members of Operation Desert Shield/Desert Storm, Operation Restore Hope and any support program involving the Southwest Asia Theater.Verified by Active Participant, to include Bonafide Fiance Relationship.$15.00.

Friendship Membership: For the Bonafide Friends of the Operation Desert Shield/Desert Storm, Operation Restore Hope or any support program in Southwest Asian Theater Participants. or any program where members of the Armed Services have stood in Defense of Freedom, Peace and Humanity.$15.00.

Participant: A Participant is defined as a person who was deployed to the Persian Gulf or the Southwest Asian Theater in support of Operation Desert Shield/Desert Storm, Operation Restore Hope or any support program, to include any person who was removed from their normal course of life to train for, prepare for, or provide support for, the operations in Southwest Asia.

Civilian Personnel: The Operation Desert Shield/Desert Storm Association recognizes the contribution of Civilian Government and Contractor Personnel, without whose dedication and support, the mission could not have been completed. Therefore, the Operation Desert Shield/Desert Storm Association extends the invitation for those people to stand with the men and women of the Armed Forces whom they supported as equal members of a successful team.$10.00.

Corporate Friendship Membership: For the Corporate Friends who wish to help provide a support system for the men and women of the Armed Forces who stand in the Defense of Freedom, Peace and Humanity. $200.00.

Honorable Spencer Bachus
Questions Submitted For Record
Mr. Wictor Silvester, National President
Operation Desert Shield/Desert Storm Association
Subcommittee on Oversight and Investigations
June 9, 1993.

3. You state in your testimony that your son was experiencing symptoms of illness when he returned from the Gulf. You said that you began the process of getting him into a VA facility, but did not indicate whether or not you were successful and, if so, what were your son's experiences with VA treatment?

In answer to your question, yes I was successful in getting my son treatment at a VA facility, however, I will yeild to his description of his VA treatment.

I went in to have physical to be placed in the Persian Gulf Registry. My appointment was for 8:am. I did not get called until 3:30pm. I waited outside his office for almost an hour. We started our exam and ten minutes into the exam, the doctor was called away. An hour later he came back and we started again. Another ten minutes into the exam he was called away agian. After another hour he returned and immediately proclaimed me healthy with nothing wrong and that I should go home. Boy what a doctor.

I recently found out that my name was not listed on the registry. At one point, I had an infected mole removed from my left leg. The scheduled time was 8:30am operation time. A secretary scheduled 16 people for the same Operating Room at the same time. About 1:00pm, I finally received the surgery. When I returned to have the stiches removed, the nurse left a suture in and my wound got infected. I went to a private doctor to have it looked at and cared for.

My present medical condition includes the following:
1. Slight Hair Loss.
2. Short Term Memory Loss.
3. Aching Joints.
4. Fatigue.
5. Headaches, some quite severe.
6. Loose Teeth and Bleeding Gums.
7. Easily Irritated.
8. A hard lump in my abdominal area that cannot be explained.
9. Fluctuating Weight.

James W.D. Silvester.(Statement Attatched).

Honorable Spencer Bachus
Questions Submitted For Record
Mr. Wictor Silvester, National President
Operation Desert Shield/Desert Storm Association
Subcommittee on Oversight and Investigations
June 9, 1993.

4. How many veteran cases has your organization worked on reguarding potential health effects of service in the Gulf? Of these, how many actually had problems accessing VA care, and did problems tend to be localized at a few medical centers or are Persian Gulf veterans having problems with access throughout the system?

The Operation Desert Shield/Desert Storm Association has assisted 1,363 veteran cases relating to potential health effects of service in the Gulf within the United States and 250 cases with our chapter in Britain. The American figures reflect a number of 14.26% of the total calls we have received. Assistance for these cases ranged from researching medical information and sending those packets to medical professionals. Information packets to the veterans on the latest VA information we have available, assistance in filling out paperwork, requesting official documentation and providing transportation, moral and family support.

Of thw 1,363 cases, 50 had problems accessing VA care. These problems stemmed from problems with proof of military service, National Guard and Reservist personnel and their status in reguards to VA services and their eligibility. Most cases were resolved by telephonic communications or referal to alternative military facilities. Many of our cases are in regards to veterans being unable to receive assistance without a diagnosis,for example, welfare payment, utility subsidy etc. Some of these veterans have waited months for a diagnosis and in desperate situations.

the problems concerning VA Medical Center's appears to be on a Nation-wide basis. Like all large organizations, there are problems throughout the system. The major problem area seems to be that of consistency and communication combined with the attitude that the Desert Stormer's have not yet "Paid Their Dues". Some facilities have outstanding programs, for example, the VA facility in San Antonio, Texas. Their family support program should be a model for all VA facilities and it's staff works around the clock to take care all veterans.

On the other han, facilities like Fargo, North Dakota, seem to have no concern about veterans problems. Changing appointments without notification, when veterans have travelled many hours to get there. (Tim and Carol Hoffman, 701-223-6632) The same in Ohio(Georgina Brown, 216-457-0641) Boise, Idaho(Pamala Magee, 208-322-6671) Dallas(Charles Townsend, 214-826-8461) Louisiana(Leroy Smith,318-473-0501) Florida(Susan Dillard, 904-338-7816). We can go on and on, all are examples of VA problems.

Conclusion:

The diversity of the medical problems and the fact that man's technology has out stripped man's capability to deal with medical requirements to deal with that technology when it gets out of hand, means that a new age of Weteran Care had better be on the horizon, or we are in deep trouble.