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HOW EFFECTIVELY ARE FEDERAL, STATE AND LOCAL GOVERNMENTS WORKING TOGETHER TO PREPARE FOR A BIOLOGICAL, CHEMICAL OR NUCLEAR ATTACK?

HEARING

BEFORE THE

SUBCOMMITTEE ON GOVERNMENT EFFICIENCY, FINANCIAL MANAGEMENT AND INTERGOVERNMENTAL RELATIONS

OF THE

COMMITTEE ON GOVERNMENT REFORM

HOUSE OF REPRESENTATIVES

ONE HUNDRED SEVENTH CONGRESS

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CONTENTS

	Page
Hearing held on March 25, 2002	1
Statement of:	
Bakas, Nicholas S., chief public safety officer, city of Albuquerque	127
Busboom, Stanley L., division leader, Security and Safeguards Division, Los Alamos National Laboratory	140
Castleman, Ron, Regional Director, Region VI, Federal Emergency Management Agency	61
Dean, Steven M., Assistant Special Agent in Charge, Albuquerque, NM, Federal Bureau of Investigation	71
English, Thomas L., cabinet secretary, New Mexico Department of Public Safety	123
Horn, Brigadier General Randall E., Adjutant General, New Mexico National Guard	133
Johnsen, John-Olav, Senior Technical Advisor for Bioscience, National Nuclear Security Administration, U.S. Department of Energy	95
Nokes, K. David, director, systems assessment and research center, Sandia National Laboratories	52
Resnick, I. Gary, program manager, biothreat reduction programs, Los Alamos National Laboratories	6
Roth, Paul B., M.D., University of New Mexico Health Sciences Center, associate vice president for clinical affairs, dean, school of medicine, professor, emergency medicine	147
Sewell, Charles Mack, M.D., State epidemiologist, public health division, New Mexico Department of Health	155
Yim, Randall A., Managing Director, National Preparedness, General Accounting Office	27
Letters, statements, etc., submitted for the record by:	
Bakas, Nicholas S., chief public safety officer, city of Albuquerque, prepared statement of	129
Busboom, Stanley L., division leader, Security and Safeguards Division, Los Alamos National Laboratory, prepared statement of	142
Castleman, Ron, Regional Director, Region VI, Federal Emergency Management Agency, prepared statement of	64
Dean, Steven M., Assistant Special Agent in Charge, Albuquerque, NM, Federal Bureau of Investigation, prepared statement of	74
English, Thomas L., cabinet secretary, New Mexico Department of Public Safety, prepared statement of	125
Horn, Brigadier General Randall E., Adjutant General, New Mexico National Guard, prepared statement of	136
Horn, Hon. Stephen, a Representative in Congress from the State of California, prepared statement of	3
Johnsen, John-Olav, Senior Technical Advisor for Bioscience, National Nuclear Security Administration, U.S. Department of Energy, prepared statement of	97
Nokes, K. David, director, systems assessment and research center, Sandia National Laboratories, prepared statement of	54
Resnick, I. Gary, program manager, biothreat reduction programs, Los Alamos National Laboratories, prepared statement of	9
Roth, Paul B., M.D., University of New Mexico Health Sciences Center, associate vice president for clinical affairs, dean, school of medicine, professor, emergency medicine, prepared statement of	150
Sewell, Charles Mack, M.D., State epidemiologist, public health division, New Mexico Department of Health, prepared statement of	157

Page

Letters, statements, etc., submitted for the record by—Continued
Yim, Randall A., Managing Director, National Preparedness, General Accounting Office, prepared statement of 30

HOW EFFECTIVELY ARE FEDERAL, STATE AND LOCAL GOVERNMENTS WORKING TOGETHER TO PREPARE FOR A BIOLOGICAL, CHEMICAL OR NUCLEAR ATTACK?

MONDAY, MARCH 25, 2002

HOUSE OF REPRESENTATIVES,
SUBCOMMITTEE ON GOVERNMENT EFFICIENCY, FINANCIAL MANAGEMENT AND INTERGOVERNMENTAL RELATIONS,
COMMITTEE ON GOVERNMENT REFORM,
Albuquerque, NM.

The subcommittee met, pursuant to notice, at 8:30 a.m., in the University of New Mexico Continuing Education Building Auditorium, Hon. Stephen Horn (chairman of the subcommittee) presiding.

Present: Representatives Horn, Wilson and Udall.

Staff present: J. Russell George, staff director and chief counsel; and Justin Paulhamus, clerk.

Mr. HORN. A quorum being present, this hearing of the Subcommittee on Government Efficiency, Financial Management and Intergovernmental Relations will come to order.

We are delighted to be in the territory of Representative Heather Wilson. She is one of our outstanding legislators and an eloquent speaker. I've watched her, without a note in front of her, make a very cogent argument on the floor of the House.

And I'm glad to see Tom Udall here. Both of you are fine representatives from the State of New Mexico.

On September 11, 2001, the world witnessed the most devastating attacks ever committed on the United States. Despite the damage and enormous loss of life, the attacks failed to cripple this Nation. To the contrary, Americans have never been more united in their fundamental belief in freedom and their willingness to protect that freedom.

The diabolical nature of these attacks, and then the deadly release of anthrax, sent a loud and clear message to all Americans: We must be prepared for the unexpected. We must have the mechanisms in place to protect this Nation and its people from further attempts to cause massive destruction.

The aftermath of September 11th clearly demonstrated the need for adequate communications systems and rapid deployment of well-trained emergency personnel. Yet despite billions of dollars in spending on Federal emergency programs, there remain serious doubts as to whether the Nation is equipped to handle a massive chemical, biological or nuclear attack.

Today, the subcommittee will examine how effectively Federal, State and local agencies are working together to prepare for such emergencies. We want those who live in the great State of New Mexico, and the good people of Albuquerque, to know that they can rely on these systems should the need arise.

We are fortunate to have witnesses today whose valuable experience and insight will help the subcommittee better understand the needs of those on the frontlines. We want to hear about their capabilities and their challenges. And we want to know what the Federal Government can do to help.

We welcome all of our witnesses, and we look forward to their testimony.

But before that, I would yield time for Ms. Wilson, and also Mr. Udall. So, if you have any comments you'd like to make, Heather, why, go ahead.

[The prepared statement of Hon. Stephen Horn follows:]

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Opening Statement
Chairman Stephen Horn
Subcommittee on Government Efficiency,
Financial Management and Intergovernmental Relations
March 25, 2002

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The aftermath of September 11th clearly demonstrated the need for adequate communications systems and rapid deployment of well-trained emergency personnel. Yet despite billions of dollars in spending on federal emergency programs, there remain serious doubts as to whether the nation's public health system is equipped to handle a massive chemical, biological or nuclear attack.

Today, the subcommittee will examine how effectively federal, state and local agencies are working together to prepare for such emergencies. We want those who live in the great State of New Mexico and the good people of Albuquerque to know that they can rely on these systems, should the need arise.

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We welcome all of our witnesses and look forward to their testimony.

Mrs. WILSON. Mayor Chavez, I wondered if you wanted to—I'd yield my time to you, to welcome folks.

Mr. CHAVEZ. Thank you very much.

Mr. HORN. We are delighted to have you here.

Mr. CHAVEZ. Chairman Horn, Congresswoman Wilson, Congressman Udall, we want to thank you for coming to Albuquerque. We've ordered up a little of everything; we had a little snow overnight and by this afternoon, it will be a beautiful spring afternoon. So you're seeing the best of our community.

We are the 28th largest community in the United States, larger than San Francisco, larger than Miami. People sometimes forget that. And importantly for your consideration today, the repository of some of the best technologies that we will need going into this new age, post September 11th.

I'm very pleased, on behalf of Albuquerque, to welcome all of you here. I want to make sure your deliberations and your hearings are as successful as possible. While we're a large city, we're still a small town, so I'm at City Hall during the day. If there is anything you or your staff need, please call on us. We want to make sure that we do everything we can to assure your success here today.

Thank you very much.

Mr. HORN. Well, thank you very much, from all of us, because you've had such hospitality here. What a wonderful facility this is for a hearing, so we might come back here again. Everybody has been very happy with trying to accommodate to us. Thank you very much for coming here. If you'd like to stay, you're certainly welcome.

Mrs. WILSON. Thank you, Mr. Chairman.

I appreciate your coming here and bringing the subcommittee here. I understand that this is part of a nationwide series of hearings, in different cities across the country, to look at how Federal, State and local governments, and private business, as well, are working together to strengthen our capacity to respond to terrorist attacks.

I think there is a lot to be learned here in New Mexico, because we have some unique strengths in combating terrorism and working together. Of course, we have Los Alamos National Laboratories to the north, Sandia National Laboratories here; Kirtland Air Force Base; the hub of a very strong research and development community. The the University of New Mexico and University of New Mexico Hospital, which has the Centers for Emerging and Infectious Disease, which does some of the country's best research on emerging disease. In addition, we have a State health department that's integrated and co-located with many of the other facilities we have here.

From that perspective, I hope there are things that can be learned here, from New Mexico, that can apply in other parts of the country, and maybe highlight how special New Mexico is. When anthrax was confirmed in the House of Representatives, in two of our buildings, this last fall, after the House was closed for testing, the laboratories on the East Coast were kind of overwhelmed with the anthrax attacks, and other cities on the East Coast, as well. The Speaker of the House, his office, on a Saturday afternoon, called me and said, "Look, we are stretched to the limit for detec-

tion capability and decontamination capability, and we need some more help. Can you get ahold of the labs, or anyone else in New Mexico, to see if you can help us?"

That's how well regarded New Mexico's capability is, and New Mexico came to the aid of the Nation at a very difficult time. The House has passed bioterrorism legislation; the Senate has, as well, and we're now working in Conference Committee to work out the final details of a bioterrorism bill that I think will strengthen our ability to combat bioterrorism and to detect people's attempts to use disease as a weapon of warfare or weapon of terror before people get sick.

I think that's one the great advantages that Sandia and Los Alamos have to offer. They've been working for several years on continuous monitoring of contaminants in the water, so they can detect, in water systems around the country, whether there has been contamination before the water gets in the pipes to your home.

They have developed surveillance research, surveillance of disease, at Sandia, the RSVP project. And there's a grant program in the bill, giving a preference for Federal matching funds for combined laboratories, for these medical investigators, public health departments and universities, so that the people who are doing the job are working together.

I look forward to hearing from the witnesses today, learning more about what works here and what we need to do elsewhere, and what the Federal Government can do to assist. I thank the chairman, again, for holding this hearing, and I particularly thank my colleague from northern New Mexico, Tom Udall, for coming down to join us today.

Mr. HORN. Mr. Udall.

Mr. UDALL. Thank you very much. Chairman Horn, Congresswoman Wilson, and Mayor Chavez, it's great to have you here today.

Mr. Chairman, I know that you're on a very aggressive national schedule; I note you're stopping at two of the bigger cities, San Francisco and you're also going to Arizona. We are very pleased you've decided to make a stop here in New Mexico and highlight the issues that are before your Government Reform subcommittee. We very much appreciate you holding the hearing here in New Mexico, and I'm glad that this distinguished panel will have the opportunity to tell the Congress what they are doing to make New Mexico and the United States safer for our constituents.

Thank you, all of you, for being here.

Since last September, the importance of the issues we are about to discuss here today have been rightly brought to the forefront of national debate and consciousness. Multiple layers of government authority have begun to undertake the massive project of integrating their information, infrastructure and communication system into a cohesive unit that will ultimately provide for the safety and health of our citizens. As this effort progresses, it's important for the Congress to provide oversight and to offer as much assistance as possible to those who are working to prepare for the unthinkable.

I am glad that several representatives of local government and law enforcement have combined with their Federal colleagues to

provide testimony in today's hearings. As Heather noted, we have Los Alamos witnesses on the panel today, and I can tell you that I am very proud of Los Alamos and the role that it has played, not only in the identification of the genetic code of anthrax, which Heather referred to, but also goods coming into this country. There's a huge threat in terms of things making it in here that we don't want to come in here, and they are doing the kind of research at Los Alamos, and applying the technology, that I think is going to make us a lot safer.

The key to all of this, obviously, are local first-responders, and the role of these first-responders in the response to any attack is central to the successful fulfillment of the government's duty to serve and protect. I'm eager to hear about their preparations. The cooperation of the Federal Government with local first-responders is crucial in the first minutes and hours after an attack. It is absolutely necessary that our local first-responders have the information, training and equipment they need to do their jobs, and this information and training often come from the Federal level.

Without a centralized clearinghouse of information and a unified decisionmaking structure, however, the efforts of our first-responders will not be as effective as they might otherwise be. For this reason, I'm eager to hear testimony today regarding efforts at the Federal level to establish protocols and procedures, to ensure that the information provided to first-responders is properly analyzed and dispersed to those who need it, when they need it.

Again, Mr. Chairman, thank you for being here, and I'm eager to hear the testimony of this panel.

Mr. HORN. Well, I think both of your representatives do a wonderful job in Washington.

Panel one, we will begin with Mr. Gary Resnick, the Program Manager, Biothreat Reduction Programs at the Los Alamos National Laboratories. We all know that is one of the great laboratories of the world. It developed the atomic bomb and worked with the University of California on a number of research matters.

With panel one and panel two we will swear in all the witnesses, because this is an investigating subcommittee. And that's not that you won't tell the truth, but this is the way we operate on all of our subcommittees on Government Reform. So, if you wouldn't mind standing up, and putting your right hands up.

[Witnesses sworn.]

Mr. HORN. The clerk will note there are six witnesses, and they have confirmed the oath.

Now, the way we operate is we start down the line with Mr. Resnick, and the minute we call your name, your full document goes into the hearing record. So you don't have to ask us to do it. It's just automatic. So, with that, Mr. Resnick, we're delighted to have you here. So please give us your thoughts.

STATEMENT OF I. GARY RESNICK, PROGRAM MANAGER, BIOTHREAT REDUCTION PROGRAMS, LOS ALAMOS NATIONAL LABORATORIES

Mr. RESNICK. Thank you, Mr. Chairman. Representatives Wilson and Udall, it is a pleasure to be here representing Los Alamos today. As you mentioned, my name is Gary Resnick, and I am the

Program Manager of the Biothreat Reduction Programs at Los Alamos National Laboratory. I personally have over 20 years of experience working to reduce the biological threat.

First, the word on Los Alamos. Los Alamos is operated by the University of California for the Department of Energy's National Nuclear Security Administration [NNSA]. The core of our mission at Los Alamos has been and continues to be the nuclear weapons stockpile, but it's important to note that during the lab's nearly 60 years of existence, our work on nuclear weapons has enabled us to develop tremendous expertise in complementary areas, such as nuclear nonproliferation and biological and chemical threat reduction.

We didn't start thinking about countering the effects of terrorism on September 12th; rather, this is something that we have been focused on for decades. Because of our years of work, we have been able to provide technologies, people and research to the response of September 11th.

Today, I'll reflect on three main areas of response: Reducing the global threats of nuclear terrorism; protecting the Nation's critical infrastructure; and reducing the threats of chemical or biological attacks.

Los Alamos and the NNSA have been working for the past decade to reduce the dangers posed by the threat, in the former Soviet Union, of lost or stolen nuclear weapons and materials by working with our Russian colleagues to secure nuclear weapons and materials at their source, build detection systems at borders and transit points, and detect and intercept smuggled nuclear materials at U.S. borders and entry points.

Despite these best efforts, if there were ever a nuclear threat to this country, the NNSA and Los Alamos stand ready to respond. Los Alamos is active in the Nuclear Emergency Support Team, or NEST, the group that would be called to respond in the case of a nuclear-related terrorist attack or accident.

Los Alamos also has significant efforts underway to help protect the Nation's critical infrastructure. One that I'd like to mention is a joint program with Sandia that Congresswoman Wilson is very familiar with, the National Infrastructure Simulation and Analysis Center or NISAC. NISAC ties together the Nation's largest scientific computational capabilities to enable the continuous, reliable operation of our interdependent infrastructures, consisting of electric power, oil and gas, transportation, water, communications, and emergency services, law enforcement, health services, and others.

Last, I'd like to discuss Los Alamos's efforts in biological threat reduction, most of which in support of NNSA's Chemical and Biological National Security Program, the CBNP. Los Alamos was immediately called upon to provide expertise in identifying the strains of anthrax, as Representative Udall has mentioned. Los Alamos technology has been applied both in the field and in the laboratory, throughout the anthrax investigation, and some technologies have already been transferred to Federal authorities.

Second, long before last year's anthrax attacks, Los Alamos had been working with Lawrence Livermore National Laboratory, in California, to develop a system to detect biological attacks. The result, the Biological Aerosol Sentry and Information System, or BASIS, was deployed as part of the security network at the 2002

Winter Olympics in Salt Lake City. The BASIS deployment at the Olympics is a prime example of technologies being developed at the Federal level and then implemented at the State and local level; in this case, with the Utah Department of Health.

Last, I'd like to highlight a program with an Albuquerque focus, called B-SAFER. It's a joint effort of Los Alamos, the University of New Mexico School of Medicine, in cooperation with the New Mexico State Department of Health. Short for "Bio-Surveillance Analysis, Feedback, Evaluation and Response System," B-SAFER is designed to detect an emerging biological threat, whether naturally occurring or the result of a terrorist attack. The system combines the collection of clinical data, such as signs and symptoms; temperature, cough and rash, or laboratory results, with demographic data and analytical tools designed to provide early warning to the medical and public health community in the event of an unusual occurrence.

I, once again, would like to thank you, in conclusion, Chairman Horn, and the subcommittee, for inviting me to testify. As you have heard, the Los Alamos National Laboratory is heavily engaged in America's efforts to counter-threats of terrorism and ensure the security of the homeland. We appreciate the continued support of the U.S. Congress in our efforts, and look forward to serving the Nation further in these important endeavors. Thank you.

[The prepared statement of Mr. Resnick follows:]

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Program Manager for Biothreat Reduction Programs

Los Alamos National Laboratory

March 25, 2002

Author(s): I. Gary Resnick, Ph.D.

Submitted to: United States House of Representatives
Committee on Government Reform
Subcommittee on Government Efficiency, Financial Management and Intergovernmental Relations
Albuquerque Field Hearing on Federal Government Assistance to State and Local Governments in Preparing for Terrorist Attacks

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NATIONAL LABORATORY

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FORM 836 (10/96)

Introduction

Mr. Chairman, Congresswoman Wilson and members of the Subcommittee, I would like to take the opportunity to thank you for inviting me here today to testify on the topic of how the Federal government is assisting state and local governments to prepare for a potential terrorist attack involving chemical, biological or nuclear agents.

I am Gary Resnick, Program Manager of the Biothreat Reduction Programs at the Department of Energy's Los Alamos National Laboratory. At Los Alamos, I am responsible for managing the Laboratory's programs designed to reduce threats posed by biological agents that might be used by terrorist groups or rogue nations. I personally have over twenty years of experience in working to reduce biological threats, including many years working for the Department of Defense.

In my testimony today, I would like to provide you with an overview of some of Los Alamos' efforts in support of Homeland Defense and the war against terrorism—efforts that address the threats posed by weapons of mass destruction: chemical, biological and nuclear. I also will describe in greater detail the efforts of Los Alamos that I oversee that are part of the DOE National Nuclear Security Administration's Chemical and Biological National Security Program (CBNP).

The topic of the hearing is focused on how federal agencies are supporting state and local governments in the fight against potential terrorism. There are several instances of this support that I will discuss. However, I should point out that much of our research and other efforts, which are directed and funded by the federal government, remain at a federal level. This is not to say, though, that our work does not have a profound impact on state and local agencies. Through our work, we are able to develop technologies and systems that ensure the safety of our nation—its states, its cities and counties and its citizens.

Overview of Los Alamos National Laboratory

Los Alamos National Laboratory is a Government-owned, Contractor-Operated Laboratory. Los Alamos is operated by the University of California for the Department of Energy's National Nuclear Security Administration (NNSA). Los Alamos is one of the nation's three nuclear weapons laboratories, also including Sandia National Laboratories,

whom you will also hear from today, and Lawrence Livermore National Laboratory in California.

Los Alamos' mission is to ensure the safety and reliability of the U.S. nuclear deterrent, reduce the global threat of weapons of mass destruction and solve national problems in energy, environment, infrastructure and health security.

Los Alamos currently has a budget of approximately $1.6 billion, employing around 7,000 scientists, technicians and administrative staff. The Laboratory is made up of hundreds of facilities—laboratories, office buildings and user facilities—spread across 43 square miles on the Pajarito Plateau in Northern New Mexico, approximately two hours north of here.

Los Alamos was established in 1943 as a key part of the Manhattan Project, which developed the world's first nuclear weapon. Following the conclusion of World War II and continuing today, Los Alamos National Laboratory has served as a nuclear weapon design laboratory, designing the majority of the nuclear weapons that make up the current U.S. stockpile. While the Laboratory's role has evolved as the world has changed, our core mission remains to ensure the safety and reliability of the U.S. nuclear weapons stockpile, a task that is more challenging in a no-test environment. The NNSA, in concert with Los Alamos National Laboratory and the other weapons laboratories, is conducting science-based stockpile stewardship to ensure the safety and reliability of the stockpile. The stockpile stewardship program relies upon sophisticated computing and simulation, both small and complex integrated experimental science, as well as work with the existing data from previous weapons tests.

Threat Reduction: Countering Threats of Terrorism, Promoting Homeland Security

In addition to the Laboratory's primary mission of stockpile stewardship, Los Alamos has a decades-long history of working to reduce threats posed by nuclear, biological and chemical weapons. These activities currently reside in the Threat Reduction Directorate, with an approximately $400 million budget and around 1,300 employees.

Threat Reduction provides an important part of the nation's technical base and scientific expertise to address tomorrow's national security challenges. The Directorate's cooperative threat reduction programs, national and international nuclear safeguards and

security activities, threat monitoring and analysis efforts, and related research contribute to dissuading and deterring possible threats, including threats from weapons of mass destruction. Research and development on behalf of the Department of Defense and other agencies is aimed at defeating enemies that do emerge, ranging from technologies to detect and defeat terrorists, to cutting-edge technologies to support and equip our conventional military forces. Finally, the Threat Reduction Directorate is pursuing research on methods to defeat or respond to attacks on the United States' homeland from whatever source, employing any type of weapon.

Since the horrific acts of September 11, many people ask Laboratory leadership, "What is Los Alamos doing to respond to the terrorist attacks?" The answer is "a lot," but it's important to note that Los Alamos had been actively engaged in counterterrorism and threat reduction research activities long before September 11. In fact, we have been able to provide technologies, people and research to the response to 9/11 thanks to the decades of research that had already been devoted to this topic.

As I've stated, my expertise is in the area of biothreat reduction, but I do want to provide for the Subcommittee a brief overview of the broad range of Laboratory efforts in the area of counterterrorism and homeland security.

Responding to September 11

There are three main areas where Los Alamos is working to reduce threats of potential terrorist attacks:

- Reducing global threats of nuclear terrorism
- Protecting the nation's critical infrastructure
- Reducing threats of attacks using chemical and biological agents

Reducing global threats of nuclear terrorism

Los Alamos and the other two NNSA laboratories have for many years developed tools to guard against a nuclear accident or a surreptitious nuclear weapon threat to the homeland from an adversary state. Following September 11, however, we need to take more seriously the possibility that terrorists will attempt to attack the United States with a stolen weapon, an improvised nuclear explosive device using stolen weapons material, or,

more likely, a radiological dispersal device (RDD), also known as a "dirty bomb," designed to spread harmful nuclear contamination.

One of the best ways to reduce the chances of a terrorist group or a rogue state using a nuclear weapon or a "dirty bomb" is to secure nuclear materials at their original location and then to create layers of security and checkpoints, known as "defense in depth." With that in mind, and because Russia has significant quantities of nuclear materials, NNSA and its laboratories have worked closely during the past decade with our Russian counterparts on programs designed to do just that.

To put the amounts of materials in perspective, NNSA estimates that there is approximately 850 metric tons of weapons-usable nuclear material located at 95 sites in the Former Soviet Union that are in need of security upgrades. This is enough material to make approximately 51,000 nuclear devices—according to International Atomic Energy Agency definitions. In the wake of 9/11, there is a greater recognition that these efforts need to be extended to cover radiological sources and other non-weapons materials that could be used in a terrorist "dirty bomb."

As an example of our efforts, we have been working with the Russians for several years now to secure nuclear weapons and materials through the National Nuclear Security Administration's Materials Protection, Control, and Accounting Program. Additional efforts include blending down highly enriched uranium to use in nuclear reactors and installing sensors at designated border crossings. Since 1995, over 119 metric tons of highly enriched uranium has been blended down to low enrichments for use in nuclear reactor fuel—this equates to 4,500 nuclear weapons.

The border crossings are addressed through the Second Line of Defense program (MPC&A being the first line), which is working to establish detection systems at borders and transit points in Russia and the former Soviet countries to detect smuggled nuclear material. In addition, new layers of depth are being developed through implementation of nuclear detection equipment at borders and other transit points (e.g., airports, ports). Radiation monitors have been installed at five priority sites in Russia and installation is underway at six additional sites. Los Alamos has developed many of the technologies that are employed in this program, including pedestrian and vehicle monitors, as well as handheld detectors. While the focus in the SLD program is on weapon-usable materials,

these same systems with some modest modifications would also be effective against smuggled radiological sources, since the radiation signatures from such sources is generally much stronger than from uranium and plutonium.

Los Alamos continues to be a leader in this program with development, evaluation, and testing of new detection equipment that addresses these technical challenges. The Laboratory is also engaged in equipment deployment at sites across Russia, site prioritization for future deployments, and with plans for improving defenses within the countries of the former Soviet Union. There is a continuing need for robust equipment suitable for use in a variety of environments and remote locations, effective for inspection of individual cargo containers, and capable of identifying multiple materials and isotopes. Los Alamos' unique expertise in nuclear measurement instrumentation, and experience in deployment of such equipment under a variety of conditions has been an important component in the success of the SLD Program.

What is in effect the third line of defense consists of efforts to detect and intercept smuggled nuclear materials at U.S. borders and entry points. Many U.S. customs agents and emergency response teams in large cities have hand-held radiation sensors based on technology developed at Los Alamos that can detect large radiological sources generally more easily than weapon-usable materials. But better technology is needed to detect and intercept nuclear materials, including radiological sources, concealed in luggage, packages, or shipping containers. Los Alamos has developed a package monitor capable of detecting HEU and plutonium that is scheduled for testing with the U.S. Customs in the near future. Additional efforts are underway to detect highly enriched uranium in large cargo containers or trucks.

The main focus of the above programs is to prevent terrorists or others from ever obtaining nuclear materials or weapons that they might use to harm others and to prevent terrorists from bringing such materials in the United States. However, the United States also needs to be prepared to deal with the worst-case scenario—the possibility that terrorists might defeat these efforts to secure materials and weapons and threaten to use or actually detonate a nuclear weapon or radiological device.

NNSA and its laboratories are active in this area as well through participation in the Nuclear Emergency Support Team, or NEST. NEST is the group that would be called

upon in case of a nuclear-related terrorist attack or accidents involving U.S. weapons. NEST consists of multiple capabilities ranging from searching for a nuclear device to protection of people and the environment from radiological harm whether the cause is accidental or deliberate. We are very proud of the men and women of NEST, who in large part are experts from the national labs. In addition to supporting field response, these technical experts bring knowledge from their other programmatic responsibilities, such as support of the Stockpile Stewardship Program, that help prepare for a response. This includes developing technology, assessment methodologies and training personnel from other federal agencies.

Beyond our current efforts in prevention, deterrence and response, Los Alamos is working with the NNSA and others to encourage the creation of a new program in NNSA to act aggressively to develop technologies to meet the specific threats posed by terrorists, and to strengthen our broad capabilities to meet nuclear and radiological threats; the creation of a new Nuclear and Radiological National Security Program (NRNSP) at NNSA would ensure that state-of-the-art technologies will be available for the specific needs of DOE and all federal agencies.

This program would provide centralized, sustained funding for core technological advances needed for countering nuclear terrorism threats. It will significantly improve the following US capabilities through R&D and through Domestic Demonstration and Application Programs (DDAPs). R&D would focus on prediction and prevention, detection and assessment, mitigation and attribution and "nuclear foundations," research into the critical underpinnings in this area. DDAPs would focus on port and border protection, city-wide protection, consequence mitigation systems and crisis response. Additionally, the NRNSP program would address the need to strategically focus nuclear counter terrorism R&D funds, which has been difficult because existing programs can be pressured to spend their funds on operational activities or emergencies rather than invest in R&D for future contingencies.

This new proposed NRNSP program would parallel the Chemical and Biological National Security Program (CBNP) program that I will discuss in more detail below.

Protecting the nation's critical infrastructure

America's security and quality of life rely on the continuous, reliable operation of a complex set of interdependent infrastructures. As the terrorist attacks in New York and Washington demonstrated, disruptions in any one system can have widespread effects that can degrade many other elements of the infrastructure. Many of these systems are known to be vulnerable to physical and cyber threats from terrorists.

The NNSA labs are merging their infrastructure research and development activities in the National Infrastructure Simulation and Analysis Center (NISAC). This program ties together the nation's largest scientific computational capabilities to provide a massive, fundamentally new analytical tool. Through complex simulation and modeling efforts, NISAC will enable national, state and local leaders to quantify uncertainties, set priorities and develop approaches for a robust, layered, affordable national defensive system for the entire U.S. infrastructure.

Much of the NISAC simulation and modeling is based on the efforts at Los Alamos in the late 1990s to develop a transportation modeling system for the Department of Transportation, called TRANSIMS. This system enables the modeling of entire metropolitan areas, down to the movements of individual motorists. The technology represented in TRANSIMS has been transferred to the private sector where it is being deployed in Portland, Oregon to aid city and regional planners. Los Alamos worked with PricewaterhouseCoopers to take TRANSIMS and create products that can be deployed to metropolitan planning agencies nationwide.

Reducing threats of attacks using chemical and biological agents

In this last area, my area of expertise, I would like to provide you with an overview of what Los Alamos is doing as well as discuss some program highlights. In these discussions, I will primarily focus on Los Alamos' efforts through NNSA's Chemical and Biological National Security Program.

Chemical and Biological National Security Program

The CBNP program was established by the Nunn-Lugar-Domenici legislation of 1996 and the program began formal operations in 1997 as part of the U.S. Department of Energy. The program has four primary technology areas of focus:

- Biological Foundations—to provide essential biological information and detection and medical countermeasures.
- Detection—To provide early warning, identify people to treat, and identify contaminated areas with high sensitivity and low false alarms.
- Modeling and Prediction—To develop predictive modeling tools for urban environments, both inside and outside of facilities.
- Decontamination—To quickly restore civilian facilities in the unfortunate event of contamination from biological agents.

CBNP has been a very successful program and is leading the homeland security efforts to provide protection against potential chemical and biological threats. The national laboratories, Los Alamos in particular, is well situated to work within the CBNP program due to the breadth and depth of our overall science programs, as well as the work environment that we have on site that enables work in a secure area. We believe that the CBNP program provides a strong nucleus upon which to build further efforts to meet future challenges in this area.

In addressing current and future challenges, Los Alamos relies on a multi-pronged strategy to get our technological advances into the hands of end-users, such as state and local responders. The strategy involves demonstration projects, such as the BASIS implementation described below, and technology transitions to federal agencies. Additionally, the Laboratory works with industrial partners to commercialize Laboratory-developed technologies and get them into the field.

Los Alamos Biothreat Efforts Post-9/11

Following the autumn 2001 anthrax attacks, which killed four people, detecting and dealing with bio-terrorism has become a national priority. It is also a major technical challenge. Los Alamos has been a key player in several areas that I'd like to highlight.

Responding to the anthrax attacks

Immediately following the anthrax attacks, researchers at Los Alamos were called upon to provide expertise that they had developed over the previous decade in analyzing and identifying strains of anthrax, or more precisely *Bacillus anthracis*. Los Alamos research into *B. anthracis* over the past several years has led to a wealth of information on the *B. anthracis* genome sequence, as well as cutting-edge technologies for detecting and identifying the organism down to its precise DNA fingerprint.

Los Alamos technologies have been applied both in the field and in the laboratory throughout the anthrax investigation and some technologies have already been transferred to federal agencies with national responsibilities for investigating and resolving anthrax diagnoses. Specialty analysis of the DNA sequence can reveal similarities or differences among the *B. anthracis* found in various cases of infection. The degree of relatedness among different samples can also be determined, in much the same way that human DNA fingerprinting is used to establish family relationships.

From the experience developed in responding to the anthrax attacks of last year, one point is clear. We have made a great deal of progress, but much additional research in this area is needed. The House of Representatives took a step in this direction when it passed H.R. 3448 in December 2001. The bill calls for DOE and NNSA to "expand, enhance, and intensify research relevant to the rapid detection and identification of pathogens likely to be used in a bioterrorism attack or other agents that may cause a public health emergency." This legislation soon will go before a conference committee to reconcile differences with the related Senate bill.

Detection and identification of pathogens that could be used in terrorist attacks, as referenced in the House legislation, will be greatly aided by pathogen sequencing efforts. Sequence data on different strains of pathogens and on their near neighbors will speed up signature and assay development, enhance our ability to detect genetic manipulations and open the door for rapid development of targeted vaccines and therapeutics. The sequencing and informatics capabilities at the DOE and Joint Genome Institute Laboratories (Los Alamos, Lawrence Berkeley and Livermore) represent extraordinary assets for the country that are being mobilized to provide enhanced support for counter

terrorism. A sequencing program has begun which will provide the fundamental information needed to counter the biological threat.

Fielding a Biodetection System at the Salt Lake City Olympics

Long before last fall's anthrax attacks, scientists at Los Alamos and Livermore national laboratories were developing a system to rapidly detect the criminal use of biological agents. The results of their work, known as the Biological Aerosol Sentry and Information System (BASIS) were deployed as part of the security network at the 2002 Winter Olympics in Salt Lake City.

The BASIS deployment at the Olympics is something we're very proud of and it was a prime example of technologies being developed at the federal level and then implemented at the state and local level in close coordination with authorities on site. NNSA and officials from the two laboratories worked closely with Utah Department of Health officials in the implementation of the system and subsequent monitoring during the Olympics.

BASIS consists of a network of sampling units, similar to those used by the Environmental Protection Agency to monitor air quality, to collect and check aerosols. Filters capture aerosols and are then collected for analysis several times a day. At the heart of BASIS is a transportable field laboratory where collected samples are analyzed using the most reliable and sensitive identification techniques available. The samples are analyzed using DNA-based techniques that have been validated with the Centers for Disease Control and Prevention.

Prior to systems like BASIS, public health procedures have traditionally relied on observation and surveillance of symptoms displayed by infected individuals for detecting and tracking outbreaks of disease such as those that might result from a biological attack. However, with BASIS, the time for detecting a bioagent release is significantly reduced from days or weeks to less than a day, allowing public health officials to have much more rapid warning. The early detection could mean the difference between life and death for people in the contaminated area.

BASIS provides a starting point for the type of work that needs to be done in the future to more completely assess and detect threats from biological agents. A next logical

step will be to examine multiple streams of data, beyond the environmental sampling data that BASIS provides, to develop a more complete picture, and therefore a more advanced warning, of a potential biological attack.

One important point to note with the BASIS project is that it was developed deliberately and methodically over the course of a few years. As we work to make our nation and our communities safe from the threats of biological and other types of terrorism, we need to make sure that technologies that are being deployed in the field are reliable and trustworthy.

B-SAFER—Developing a web-based system that detects emerging biological threats

The Bio-Surveillance Analysis, Feedback, Evaluation, and Response System (B-SAFER) is a joint effort of Los Alamos National Laboratory and the University of New Mexico School of Medicine in cooperation with the New Mexico State Department of Health. B-SAFER is a developmental, distributed, web-based system designed to detect an emerging biological threat, whether naturally occurring or the result of a terrorist attack. The system combines the collection of clinical data, such as signs and symptoms (e.g. temperature, cough, rash), or laboratory results with demographic data and analytical tools designed to provide early warning and situational awareness to the medical and public health community in the event of an unusual occurrence. B-SAFER will be expanded over the next year to increase demographic coverage in Albuquerque. Non-traditional data sources will also be incorporated, such as nurse hotline calls or over-the-counter prescription drug sales, which have the potential to identify an unusual occurrence before patients show up at hospitals. Analytical tools will also be expanded so B-SAFER will be better able to identify unusual events with less expert input. The eventual goal is to develop a modular, scalable information system that can be integrated into a national surveillance system such as the National Electronic Disease Surveillance System (NEDSS).

Additional Facilities to Better Counter Biological Threats

One of the many strengths I mentioned that Los Alamos brings to issues of biothreat reduction is its depth and breadth of science, coupled with secure facilities. At Los

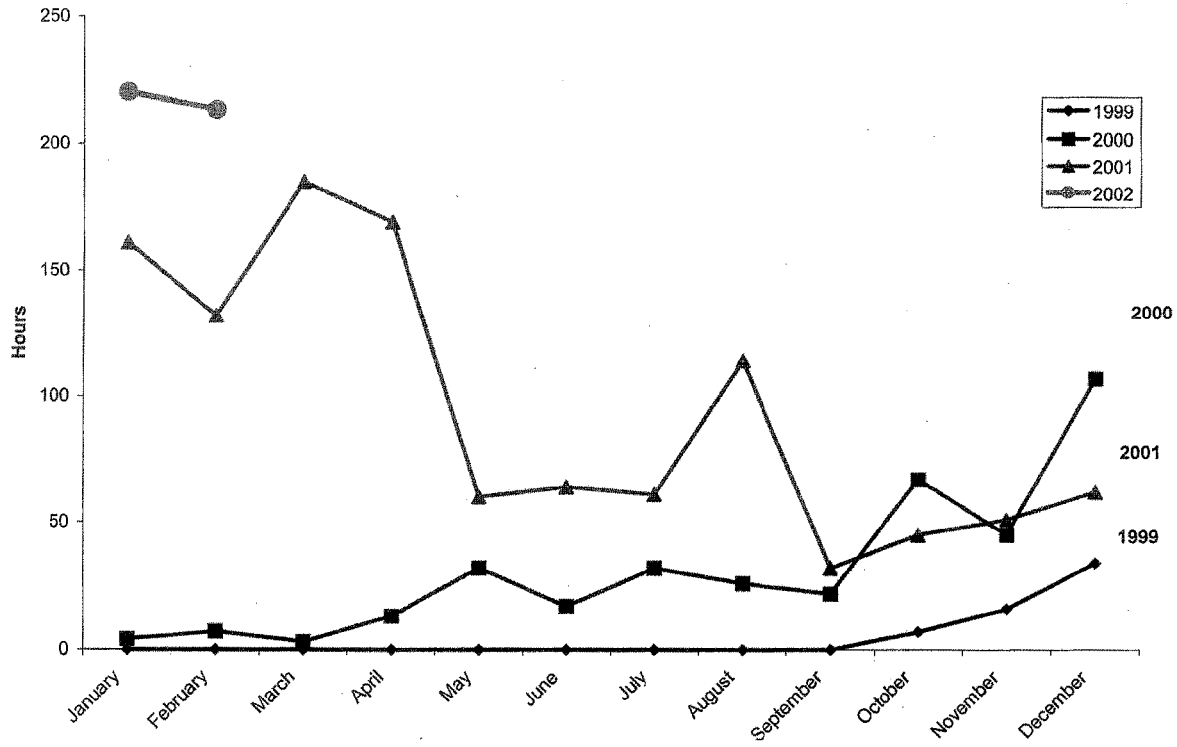
Alamos, we are in the process of taking this one step further through the construction of a Biosafety Level-3 laboratory. DOE recently announced a "Finding of No Significant Impact" with regard to the Environmental Assessment of the proposed facility.

Once constructed, the BSL-3 facility will allow Los Alamos researchers to handle, with appropriate safety procedures, organisms that are potential threat agents. The facility will enhance our ability to develop advanced detection and analytical capabilities, as well as support creation of better protective strategies by enabling research on how these organisms cause disease.

Conclusion

In conclusion, I would once again like to thank Chairman Horn and the Subcommittee for inviting me to testify today. As you have heard, Los Alamos National Laboratory is heavily engaged in America's efforts to counter threats of terrorism and ensure the security of the homeland. We are very proud at Los Alamos of the work that our researchers and staff have been doing both before and after 9/11. We appreciate the continued support of the U.S. Congress in our efforts and we look forward to serving the nation further in these important endeavors.

Number of Forced Openings, All ABQ Hospitals, by Year
(Figure 1)



New Mexico Collaborations in Bioterrorism Training, Planning, and Response

(Attachment 1)

1) **Response and planning programs**
   a) Domestic Terrorism Working Group (DTWG)
      i) Led by:
         (1) FBI-Albuquerque
         (2) NM Department of Public Safety (DPS), Special Investigations Division
      ii) UNM main and HSC campuses
      iii) U.S. Secret Service
      iv) U.S. Customs Service
      v) U.S. Bureau of Land Management
      vi) Immigration and Naturalization Service
      vii) U.S. Forest Service
      viii) Albuquerque Police Department
      ix) NM Poison and Drug Information Center
      x) Bernalillo County Sheriff's Department
      xi) Bureau of Alcohol, Tobacco, and Firearms
      xii) Bureau of Indian Affairs Law Enforcement
      xiii) Defense Threat Reduction Agency
      xiv) Federal Protective Service
      xv) Albuquerque International Airport
      xvi) NM Highway and Transportation Department
      xvii) Internal Revenue Service
      xviii) Kirtland AFB Security Forces
      xix) Los Alamos National Labs
      xx) NM Attorney General's Office
      xxi) NM Army National Guard
      xxii) U.S. Air Force Office of Special Investigations
      xxiii) U.S. Attorney's Office
      xxiv) Department of Defense
      xxv) Department of Energy
      xxvi) U.S. Park Service
      xxvii) U.S. Marshal's Service
      xxviii) Sandia National Labs
      xxix) Lovelace Respiratory Research Laboratories
      xxx) Department of Energy Counterintelligence Agency
      xxxi) U.S. Drug Enforcement Agency
      xxxii) Numerous local and county law enforcement agencies

b) **Weapons of Mass Destruction Working Group (WMDWG)**
   i) Led by:
      (1) FBI-Albuquerque
      (2) NM DPS Office of Emergency Management
   ii) Now includes Public Health Bioterrorism Working Group
   iii) Many of the agencies listed in 1(a), above, plus:
      (1) Bernalillo County Local Emergency Planning Committee
      (2) American Red Cross
      (3) NM State Police
      (4) Federal Emergency Management Agency
      (5) Federal Aviation Administration
      (6) National Guard 64th Civil Support Team
      (7) NM Department of Health public Health Preparedness Unit
      (8) Office of the Medical Investigator
      (9) Department of Energy Emergency Operations Academy
      (10) 239 total NM agencies
      (11) 137 other agencies (primarily other states, federal agencies)

c) **National Pharmaceutical Stockpile Program**
   i) NM DOH Emergency Preparedness Unit, lead agency
   ii) Numerous agencies listed above
   iii) VA Clinical Research Trials Center

d) **Critical Infrastructure Assurance Council (CIAC)**
   i) Includes 'InfraGard' cyberterrorism network
   ii) Agencies listed in 1(a) and 1(b) above, plus:
      (1) Public Service Company of NM
      (2) Verizon Telecommunications
      (3) Qwest Telecommunications
      (4) Burlington Northern & Santa Fe Railway
      (5) NM State Engineer's office
      (6) Multiple utilities, co-ops, etc. around NM representing the eight critical infrastructure areas:
         (a) Emergency Services
         (b) Government Services
         (c) Information and Communications
         (d) Electrical Power
         (e) Gas, oil production, transport
         (f) Banking and finance
         (g) Transportation

(h) Watersupply

e) **National Disaster Medical System – Albuquerque Area Division**
   i) Area emergency response agencies, primarily:
      (1) Albuquerque Fire Department
      (2) Bernalillo County Fire Department
      (3) Albuquerque Ambulance Service
   ii) UNM HSC
   iii) Presbyterian Hospitals
   iv) St. Joseph's Hospitals
   v) Lovelace Hospital
   vi) Healthsouth Rehabilitation Center
   vii) Integrated Specialty Hospital
   viii) Heart Hospital of NM
   ix) Veteran's Administration Medical Center
   x) NM State Defense Force
   xi) Office of the Medical Investigator
   xii) DMAT

2) **Training programs**
   a) *Domestic Preparedness* (Nunn-Lugar-Domenici Act)
      i) Approximately 300 instructors trained, to include:
         (1) Responder Awareness
         (2) Responder Operations
         (3) Hospital Operations
      ii) Hospitals got no equipment
      iii) Initially Department of Defense, now Department of Justice program
   b) Annual NM WMDWG training conference
   c) American College of Emergency Physicians
   d) American College of Surgeons
   e) Metropolitan Medical Response System
      i) Co-chaired by UNM HSC and AFD
      ii) Hospitals to get ~ $200,000 in equipment
      iii) Training includes videotapes, other sustainable educational efforts
      iv) Funded through DHHS
   f) Association of Professional Infection Control Nurses
   g) Department of Energy – Waste Isolation Pilot Plant (WIPP)
      i) Hazardous Materials for Hospital Operations course
      ii) Emergency Operations EMS Teleconference
      iii) Chemical, biological, nuclear terrorism responders EMS course
   h) UNM Department of Emergency Medicine

i) Hazardous Materials for EMS Responders course
i) Joint Commission on the Accreditation of Healthcare Organizations
j) Texas A & M University's TEEX programs
k) Advanced Hazardous Materials Life Support program
l) National Guard Civil Support Team WMD team training

Mr. HORN. Thank you.

We now go with another regular witness with this subcommittee, and that's Dr. Randall A. Yim, the Managing Director, National Preparedness Group for the U.S. General Accounting Office. The GAO, as we say, is the forces that we depend upon, as Congress, and that we give them months in advance to tell us how to put together all of these matters and what's the best type of thing that can be done, in terms of the hands that we all have to look at in the private sector, the States and the cities.

And we have Mr. Yim here, and we'd like your summary of your—because the documents put out by the General Accounting Office are often 50 and 100 pages, and we can't do all that today, but we can get a good idea of the particular. They have put dozens of terrorism documents out for the Congress, and we can't get into all of them, but we can start with one.

STATEMENT OF RANDALL A. YIM, MANAGING DIRECTOR, NATIONAL PREPAREDNESS, GENERAL ACCOUNTING OFFICE

Mr. YIM. Thank you very much, Mr. Chairman, for your confidence in GAO.

Chairman Horn, Congresswoman Wilson, Congressman Udall, Mayor Chavez, members of the committee, on behalf of Comptroller General David Walker of the U.S. General Accounting Office, I thank you for allowing me to address this critical committee on these issues of utmost national importance. I applaud your efforts in arranging these regional hearings, to hear directly about the concerns of our State and local government officials and from representatives of the private sector in our communities.

My messages today, are simple to state, but the goals they articulate remain difficult to accomplish. First, although we can never be 100 percent secure from terrorist attack nor 100 percent prepared to respond, we can be better prepared and more secure.

Second, to become better prepared and become more secure, we will need a comprehensive national strategy that builds upon the tremendous courage and resolve demonstrated by our Nation's people following September 11th, and which binds together all levels of government with the private sector and the people that the government serves, to form an interlocking shield against terrorism and a mutually supportive quick-reaction response team should another attack occur. Everyone cannot do everything, and everyone cannot and should not do the same things. Instead, we must augment, foster and maintain what particular governments do best, and what the private sector and local communities do best. Third, to fashion such a strategy, we will need to identify the right questions to ask and discover those key enablers to the creation and implementation of our national strategy. Is this better information sharing in IT architectures? This is perhaps one of the most critical enablers. Is it recapitalization of specific critical infrastructure, such as power distribution grids or our transportation systems? Is it a focus on future capital needs, so that we begin to create the type of skill sets we will need in the future to effectively fight terrorism?

We will need to discover those roadblocks that must be overcome or mitigated along the way. We will need to discover an investment

strategy that maximizes the use of the finite fiscal and human capital resources, so that our national strategy is both supportable and sustainable. Unfortunately, as we all know, this war against terrorism will not be won in a single battle nor in a few short years.

Fourth, we must acknowledge that any national strategy lacking measurable objectives, measurable performance indicators, and accountability mechanisms is not sustainable. As noted by Kennedy School of Government Professor Richard Falkenrath, who is now a key member of the Office of Homeland Security, this is because of a lack of performance indicators to private policymakers of the information they need to make rational resource allocations, and program managers are prevented from measuring progress.

Fifth, we need to be mindful of the consequences of the actions we have and will take to prevent further attacks, and to respond to attacks should they occur. We must not only look at the direct costs of our actions, but at the secondary impacts that result. For example, we can measure and budget the cost of new irradiation equipment for our postal offices, but can we measure and budget for those secondary impacts, such as the elimination of mail-order film processing or mail shipments of pharmaceuticals? We must look to whether our well-intended actions will cause what the terrorist attacks could not.

For example, it is hard to blowup every post office in the United States, but perhaps not so hard to weaken the financial position of the U.S. Postal Service and perhaps more effectively attack such a critical service provider. We must analyze our efforts for greater security with a mind for their impacts upon our quality of life, our precious civil liberties, our rights to privacy and the freedom to travel and worldwide commerce that we value, and which form a vital part of the fabric of the greatness of this country.

As I stated, these goals are simple to say, but hard to accomplish. We have not yet even identified all of the questions that need to be asked, and clearly, we do not have all of the answers. But although many things are not crystal clear, one thing is certain: State and local governments, private sector and local communities, all play key roles and must intimately be involved in the preparation of our national strategy.

Hearings such as this one today will allow all of us to hear how the Federal Government can effectively aid our State and local governments and communities and the private sector, so that we design a national strategy that truly serves the needs of real first-responders, those actually on the frontline, should another attack occur, and those upon whom it will depend to take those initial actions. It is only by this close coordination with our State and local communities can we begin to address the question on the minds of many: Are we winning this war on terrorism?

But remember, this is not a pass-fail test; this is not a quick fix, nor a single victory that will end our efforts. Let me suggest that the better question is not are we winning, but rather how secure and prepared are we, and how secure and prepared should we be?

In conclusion, Mr. Chairman, let me emphasize the commitment of the U.S. General Accounting Office to assist Congress to the best of our abilities, in whatever ways we can, on this issue of critical national importance. We hope that GAO can assist the entire Nation in answering these key questions and meeting the challenges ahead. Thank you very much, and I stand ready to answer questions.

[The prepared statement of Mr. Yim follows:]

United States General Accounting Office

GAO

Testimony

Before the Subcommittee on Government Efficiency, Financial Management, and Intergovernmental Relations, Committee on Government Reform, House of Representatives

For Release on Delivery
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COMBATING TERRORISM

Critical Components of a National Strategy to Enhance State and Local Preparedness

Statement of Randall A. Yim
Managing Director, National Preparedness

GAO-02-548T

Mr. Chairman and Members of the Subcommittee:

I appreciate the opportunity to be here in Albuquerque to discuss issues critical to successful federal leadership of, assistance to, and partnerships with state and local governments in the area of preparedness for terrorist events. As you know, Mr. Chairman, federal, state, and local governments have a shared responsibility in preparing for catastrophic terrorist attacks. But the initial responsibility falls upon local governments and their organizations—such as police, fire departments, emergency medical personnel, and public health agencies—which will almost invariably be the first responders to such an occurrence. For its part, the federal government historically has principally provided leadership, training, and funding assistance. In the aftermath of the September 11th attacks, for instance, about one-quarter of the $40 billion Emergency Response Fund was dedicated to homeland security, including funds to enhance state and local government preparedness.

Because the national security threat is diffuse and the challenge is highly intergovernmental, national policymakers must formulate strategies with a firm understanding of the interests, capacity, and challenges facing those governments in addressing these issues. My comments today are based on a body of GAO's work on terrorism and emergency preparedness and policy options for the design of federal assistance,[1] as well as on our review of many other studies.[2] In addition, we draw on ongoing work for this subcommittee; pursuant to your request we have begun a review to examine the preparedness issues confronting state and local governments in a series of case studies over the next several months. We will examine the state and local perspective on these issues and thereby help the Congress and the executive branch to better design and target programs and strategies.

In my testimony, I reiterate GAO's call, expressed in numerous reports and testimonies over the past years, for development of a national strategy that will improve national preparedness and enhance partnerships between federal, state and local governments to guard against terrorist attacks. The

[1] See attached listing of related GAO products.

[2] These studies include the Advisory Panel to Assess Domestic Response Capabilities for Terrorism Involving Weapons of Mass Destruction, *Third Annual Report (Arlington, VA: RAND*, Dec. 15, 2001) and the United States Commission on National Security/21st Century, *Road Map for Security: Imperative for Change*, February 15, 2001.

creation of the Office of Homeland Security under the leadership of Tom Ridge is an important and potentially significant first step. We recognize that the President, in his proposed 2003 budget, has announced that the Office of Homeland Security will propose such a plan later this year. As it comes together, we believe that key aspects of this strategy should include:

- A definition and clarification of the appropriate roles and responsibilities of federal, state, and local entities. Our previous work has found fragmentation and overlap among federal assistance programs. Over 40 federal entities have roles in combating terrorism, and past federal efforts have resulted in a lack of accountability, a lack of a cohesive effort, and duplication of programs. As state and local officials have noted, this situation has led to confusion, making it difficult to identify available federal preparedness resources and effectively partner with the federal government.
- The establishment of goals and performance measures to guide the nation's preparedness efforts. The Congress has long recognized the need to objectively assess the results of federal programs. For the nation's preparedness programs, however, outcomes of where the nation should be in terms of domestic preparedness have yet to be defined. Given the recent and proposed increases in preparedness funding as well as the need for real and meaningful improvements in preparedness, establishing clear goals and performance measures is critical to ensuring both a successful and a fiscally responsible effort.
- A careful choice of the most appropriate tools of government to best implement the national strategy and achieve national goals. The choice and design of policy tools, such as grants, regulations, and partnerships, can enhance the government's capacity to (1) target areas of highest risk to better ensure that scarce federal resources address the most pressing needs, (2) promote shared responsibilities by all parties, and (3) track and assess progress toward achieving national goals.

Since the attacks of September 11th, we have seen the nation unite and better coordinate preparedness efforts among federal, state, and local agencies, as well as among private businesses, community groups, and individual citizens. Our challenge now is to build upon this initial response to further improve our preparedness in a sustainable way that creates both short- and long-term benefits. We applaud the subcommittee's interest in addressing this issue now and urge that it continue its efforts to oversee the efficiency and effectiveness of these key intergovernmental relationships to define and best achieve the necessary level of national preparedness.

Background

Because of such emergencies as natural disasters, hazardous material spills, and riots, all levels of government have had some experience in preparing for different types of disasters and emergencies. Preparing for all potential hazards is commonly referred to as the "all-hazards" approach. While terrorism is a component within an all-hazards approach, terrorist attacks potentially impose a new level of fiscal, economic, and social dislocation within this nation's boundaries. Given the specialized resources that are necessary to address a chemical or biological attack, the range of governmental services that could be affected, and the vital role played by private entities in preparing for and mitigating risks, state and local resources alone will likely be insufficient to meet the terrorist threat.

Some of these specific challenges can be seen in the area of bioterrorism. For example, a biological agent released covertly might not be recognized for a week or more because symptoms may only appear several days after the initial exposure and may be misdiagnosed at first. In addition, some biological agents, such as smallpox, are communicable and can spread to others who were not initially exposed. These characteristics require responses that are unique to bioterrorism, including health surveillance, epidemiologic investigation, laboratory identification of biological agents, and distribution of antibiotics or vaccines to large segments of the population to prevent the spread of an infectious disease. The resources necessary to undertake these responses are generally beyond state and local capabilities and would require assistance from and close coordination with the federal government.

National preparedness is a complex mission that involves a broad range of functions performed throughout government, including national defense, law enforcement, transportation, food safety and public health, information technology, and emergency management, to mention only a few. While only the federal government is empowered to wage war and regulate interstate commerce, state and local governments have historically assumed primary responsibility for managing emergencies through police, fire-fighting, and emergency medical personnel.

The federal government's role in responding to major disasters is generally defined in the Stafford Act,[3] which requires a finding that the disasters is

[3] *The Robert T. Stafford Disaster Relief and Emergency Assistance Act*, (P.L. 93-288) as amended establishes the process for states to request a presidential disaster declaration.

so severe as to be beyond the capacity of state and local governments to respond effectively before major disaster or emergency assistance from the federal government is warranted. Once a disaster is declared, the federal government—through the Federal Emergency Management Agency (FEMA)—may reimburse state and local governments for between 75 and 100 percent of eligible costs, including response and recovery activities.

There has been an increasing emphasis over the past decade on preparedness for terrorist events. After the nerve gas attack in the Tokyo subway system on March 20, 1995, and the Oklahoma City bombing on April 19, 1995, the United States initiated a new effort to combat terrorism. In June 1995, Presidential Decision Directive 39 was issued, enumerating responsibilities for federal agencies in combating terrorism, including domestic terrorism. Recognizing the vulnerability of the United States to various forms of terrorism, the Congress passed the Defense Against Weapons of Mass Destruction Act of 1996 (also known as the Nunn-Lugar-Domenici program) to train and equip state and local emergency services personnel who would likely be the first responders to a domestic terrorist event. Other federal agencies, including those in the Department of Justice, Department of Energy, FEMA and Environmental Protection Agency, have also developed programs to assist state and local governments in preparing for terrorist events.

The attacks of September 11, 2001, as well as the subsequent attempts to contaminate Americans with anthrax, dramatically exposed the nation's vulnerabilities to domestic terrorism and prompted numerous legislative proposals to further strengthen our preparedness and response. During the first session of the 107th Congress, several bills were introduced with provisions relating to state and local preparedness. For instance, the Preparedness Against Domestic Terrorism Act of 2001, which you co-sponsored, Mr. Chairman, proposes the establishment of a Council on Domestic Preparedness to enhance the capabilities of state and local emergency preparedness and response.

The funding for homeland security increased substantially after the attacks. According to documents supporting the president's fiscal year 2003 budget request, about $19.5 billion in federal funding for homeland security was enacted in fiscal year 2002.[4] The Congress added to this

[4] *"Securing the Homeland, Strengthening the Nation."* For the complete document, see the Web site: http://www.whitehouse.gov/homeland/homeland_security_book.html

amount by passing an emergency supplemental appropriation of $40 billion dollars.[5] According to the budget request documents, about one-quarter of that amount, nearly $9.8 billion, was dedicated to strengthening our defenses at home, resulting in an increase in total federal funding on homeland security of about 50 percent, to $29.3 billion. Table 1 compares fiscal year 2002 funding for homeland security by major categories with the president's proposal for fiscal year 2003.

Table 1: Homeland Security by Major Funding Categories for Fiscal Year 2002 and Proposed for Fiscal Year 2003

Dollars in millions

Major funding category	FY2002 enacted	Emergency supplemental	FY2002 total	The president's FY2003 budget request
Supporting first responders	$291	$651	$942	$3,500
Defending against biological terrorism	1,408	3,730	5,138	5,898
Securing America's borders	8,752	1,194	9,946	10,615
Using 21st century technology for homeland security	155	75	230	722
Aviation security	1,543	1,035	2,578	4,800
DOD homeland security	4,201	689	4,890	6,815
Other non-DOD homeland security	3,186	2,384	5,570	5,352
Total	**$19,536**	**$9,758**	**$29,294**	**$37,702**

Source: FY 2003 president's budget document, "Securing the Homeland, Strengthening the Nation."

A National Strategy Is Needed to Guide Our Preparedness Efforts

We have tracked and analyzed federal programs to combat terrorism for many years and have repeatedly called for the development of a national strategy for preparedness. We have not been alone in this message; for instance, national commissions, such as the Gilmore Commission, and other national associations, such as the National Emergency Management Association and the National Governors Association, have advocated the establishment of a national preparedness strategy. The attorney general's Five-Year Interagency Counterterrorism Crime and Technology Plan, issued in December 1998, represents one attempt to develop a national strategy on combating terrorism. This plan entailed a substantial interagency effort and could potentially serve as a basis for a national preparedness strategy. However, we found it lacking in two critical elements necessary for an effective strategy: (1) measurable outcomes and

[5]2001 *Emergency Supplemental Appropriations Act for Recovery from and Response to Terrorist Attacks on the United States*, (P.L. 107-38).

(2) identification of state and local government roles in responding to a terrorist attack.[6]

In October 2001, the president established the Office of Homeland Security as a focal point with a mission to develop and coordinate the implementation of a comprehensive national strategy to secure the United States from terrorist threats or attacks. While this action represents a potentially significant step, the role and effectiveness of the Office of Homeland Security in setting priorities, interacting with agencies on program development and implementation, and developing and enforcing overall federal policy in terrorism-related activities is in the formative stages of being fully established.

The emphasis needs to be on a national rather than a purely federal strategy. We have long advocated the involvement of state, local, and private-sector stakeholders in a collaborative effort to arrive at national goals. The success of a national preparedness strategy relies on the ability of all levels of government and the private sector to communicate and cooperate effectively with one another. To develop this essential national strategy, the federal role needs to be considered in relation to other levels of government, the goals and objectives for preparedness, and the most appropriate tools to assist and enable other levels of government and the private sector to achieve these goals.[7]

Roles and Missions of Federal, State, and Local Entities Need to Be Clarified

Although the federal government appears monolithic to many, in the area of terrorism prevention and response, it has been anything but. More than 40 federal entities have a role in combating and responding to terrorism, and more than 20 federal entities in bioterrorism alone. One of the areas that the Office of Homeland Security will be reviewing is the coordination among federal agencies and programs.

Concerns about coordination and fragmentation in federal preparedness efforts are well founded. Our past work, conducted prior to the creation of

[6] See U.S. General Accounting Office, *Combating Terrorism: Linking Threats to Strategies and Resources*, GAO/T-NSIAD 00 218 (Washington, D.C.: July 26, 2000).

[7] Another important aspect of enhancing state and local preparedness is risk management. Risk management is an important tool for prioritizing limited resources in the face of uncertain threats. For more information on risk management, see U.S. General Accounting Office, *Homeland Security: Risk Management Can Help Us Defend Against Terrorism*, GAO-02-208T (Washington, D.C.: October 31, 2001).

the Office of Homeland Security, has shown coordination and fragmentation problems stemming largely from a lack of accountability within the federal government for terrorism-related programs and activities. There had been no single leader in charge of the many terrorism-related functions conducted by different federal departments and agencies. In fact, several agencies had been assigned leadership and coordination functions, including the Department of Justice, the Federal Bureau of Investigation, FEMA, and the Office of Management and Budget. We previously reported that officials from a number of agencies that combat terrorism believe that the coordination roles of these various agencies are not always clear. The recent Gilmore Commission report expressed similar concerns, concluding that the current coordination structure does not provide the discipline necessary among the federal agencies involved.

In the past, the absence of a central focal point resulted in two major problems. The first of these is a lack of a cohesive effort from within the federal government. For example, the Department of Agriculture, the Food and Drug Administration, and the Department of Transportation have been overlooked in bioterrorism-related policy and planning, even though these organizations would play key roles in response to terrorist acts. In this regard, the Department of Agriculture has been given key responsibilities to carry out in the event that terrorists were to target the nation's food supply, but the agency was not consulted in the development of the federal policy assigning it that role. Similarly, the Food and Drug Administration was involved with issues associated with the National Pharmaceutical Stockpile, but it was not involved in the selection of all items procured for the stockpile. Further, the Department of Transportation has responsibility for delivering supplies under the Federal Response Plan, but it was not brought into the planning process and consequently did not learn the extent of its responsibilities until its involvement in subsequent exercises.

Second, the lack of leadership has resulted in the federal government's development of programs to assist state and local governments that were similar and potentially duplicative. After the terrorist attack on the federal building in Oklahoma City, the federal government created additional programs that were not well coordinated. For example, FEMA, the Department of Justice, the Centers for Disease Control and Prevention, and the Department of Health and Human Services all offer separate assistance to state and local governments in planning for emergencies. Additionally, a number of these agencies also condition receipt of funds on completion of distinct but overlapping plans. Although the many federal assistance programs vary somewhat in their target audiences, the potential

redundancy of these federal efforts warrants scrutiny. In this regard, we recommended in September 2001 that the president work with the Congress to consolidate some of the activities of the Department of Justice's Office for State and Local Domestic Preparedness Support under FEMA.[8]

State and local response organizations believe that federal programs designed to improve preparedness are not well synchronized or organized. They have repeatedly asked for a one-stop "clearinghouse" for federal assistance. As state and local officials have noted, the multiplicity of programs can lead to confusion at the state and local levels and can expend precious federal resources unnecessarily or make it difficult for them to identify available federal preparedness resources. As the Gilmore Commission report notes, state and local officials have voiced frustration about their attempts to obtain federal funds and have argued that the application process is burdensome and inconsistent among federal agencies.

Although the federal government can assign roles to federal agencies under a national preparedness strategy, it will also need to reach consensus with other levels of government and with the private sector about their respective roles. Clearly defining the appropriate roles of government may be difficult because, depending upon the type of incident and the phase of a given event, the specific roles of local, state and federal governments and of the private sector may not be separate and distinct.

A new warning system, the Homeland Security Advisory System, is intended to tailor notification of the appropriate level of vigilance, preparedness and readiness in a series of graduated threat conditions. The Office of Homeland Security announced the new warning system on March 12, 2002. The new warning system includes five levels of alert for assessing the threat of possible terrorist attacks: low, guarded, elevated, high and severe. These levels are also represented by five corresponding colors: green, blue, yellow, orange, and red. When the announcement was made, the nation stood in the yellow condition, in elevated risk. The warning can be upgraded for the entire country or for specific regions and economic sectors, such as the nuclear industry.

[8] U.S. General Accounting Office, *Combating Terrorism: Selected Challenges and Related Recommendations*, GAO-01-822 (Washington, D.C.: September 20, 2001).

The system is intended to address a problem with the previous blanket warning system that was used. After September 11th, the federal government issued four general warnings about possible terrorist attacks, directing federal and local law enforcement agencies to place themselves on the "highest alert." However, government and law enforcement officials, particularly at the state and local levels, complained that general warnings were too vague and a drain on resources. To obtain views on the new warning system from all levels of government, law enforcement, and the public, the Attorney General, who will be responsible for the system, provided a 45-day comment period from the announcement of the new system on March 12th. This provides an opportunity for state and local governments as well as the private sector to comment on the usefulness of the new warning system, and the appropriateness of the five threat conditions with associated suggested protective measures.

Performance and Accountability Measures Need to Be Included in National Strategy

Numerous discussions have been held about the need to enhance the nation's preparedness, but national preparedness goals and measurable performance indicators have not yet been developed. These are critical components for assessing program results. In addition, the capability of state and local governments to respond to catastrophic terrorist attacks is uncertain.

At the federal level, measuring results for federal programs has been a longstanding objective of the Congress. The Congress enacted the Government Performance and Results Act of 1993 (commonly referred to as the Results Act). The legislation was designed to have agencies focus on the performance and results of their programs rather than on program resources and activities, as they had done in the past. Thus, the Results Act became the primary legislative framework through which agencies are required to set strategic and annual goals, measure performance, and report on the degree to which goals are met. The outcome-oriented principles of the Results Act include (1) establishing general goals and quantifiable, measurable, outcome-oriented performance goals and related measures; (2) developing strategies for achieving the goals, including strategies for overcoming or mitigating major impediments; (3) ensuring that goals at lower organizational levels align with and support general goals; and (4) identifying the resources that will be required to achieve the goals.

A former assistant professor of public policy at the Kennedy School of Government, now the senior director for policy and plans with the Office

of Homeland Security, noted in a December 2000 paper that a preparedness program lacking broad but measurable objectives is unsustainable.[9] This is because it deprives policymakers of the information they need to make rational resource allocations, and program managers are prevented from measuring progress. He recommended that the government develop a new statistical index of preparedness,[10] incorporating a range of different variables, such as quantitative measures for special equipment, training programs, and medicines, as well as professional subjective assessments of the quality of local response capabilities, infrastructure, plans, readiness, and performance in exercises. Therefore, he advocated that the index should go well beyond the current rudimentary milestones of program implementation, such as the amount of training and equipment provided to individual cities. The index should strive to capture indicators of how well a particular city or region could actually respond to a serious terrorist event. This type of index, according to this expert, would then allow the government to measure the preparedness of different parts of the country in a consistent and comparable way, providing a reasonable baseline against which to measure progress.

In October 2001, FEMA's director recognized that assessments of state and local capabilities have to be viewed in terms of the level of preparedness being sought and what measurement should be used for preparedness. The director noted that the federal government should not provide funding without assessing what the funds will accomplish. Moreover, the president's fiscal year 2003 budget request for $3.5 billion through FEMA for first responders—local police, firefighters, and emergency medical professionals—provides that these funds be accompanied by a process for evaluating the effort to build response capabilities, in order to validate that effort and direct future resources.

FEMA has developed an assessment tool that could be used in developing performance and accountability measures for a national strategy. To ensure that states are adequately prepared for a terrorist attack, FEMA was directed by the Senate Committee on Appropriations to assess states'

[9] Richard A. Falkenrath, *The Problems of Preparedness: Challenges Facing the U. S. Domestic Preparedness Program (Cambridge, Mass: John F. Kennedy School of Government, Harvard University,* December 2000).

[10] It was recommended that this index be classified so as to avoid calling attention to the country's most vulnerable areas.

response capabilities. In response, FEMA developed a self-assessment tool—the Capability Assessment for Readiness (CAR)—that focuses on 13 key emergency management functions, including hazard identification and risk assessment, hazard mitigation, and resource management. However, these key emergency management functions do not specifically address public health issues. In its fiscal year 2001 CAR report, FEMA concluded that states were only marginally capable of responding to a terrorist event involving a weapon of mass destruction. Moreover, the president's fiscal year 2003 budget proposal acknowledges that our capabilities for responding to a terrorist attack vary widely across the country. Many areas have little or no capability to respond to a terrorist attack that uses weapons of mass destruction. The budget proposal further adds that even the best prepared states and localities do not possess adequate resources to respond to the full range of terrorist threats we face.

Proposed standards have been developed for state and local emergency management programs by a consortium of emergency managers from all levels of government and are currently being pilot tested through the Emergency Management Accreditation Program at the state and local levels. Its purpose is to establish minimum acceptable performance criteria by which emergency managers can assess and enhance current programs to mitigate, prepare for, respond to, and recover from disasters and emergencies. For example, one such standard is the requirement that (1) the program must develop the capability to direct, control, and coordinate response and recovery operations, (2) that an incident management system must be utilized, and (3) that organizational roles and responsibilities shall be identified in the emergency operational plans.

Although FEMA has experience in working with others in the development of assessment tools, it has had difficulty in measuring program performance. As the president's fiscal year 2003 budget request acknowledges, FEMA generally performs well in delivering resources to stricken communities and disaster victims quickly. The agency performs less well in its oversight role of ensuring the effective use of such assistance. Further, the agency has not been effective in linking resources to performance information. FEMA's Office of Inspector General has found that FEMA did not have an ability to measure state disaster risks and performance capability, and it concluded that the agency needed to determine how to measure state and local preparedness programs.

Appropriate Tools Need to Be Selected for Designing Assistance

Since September 11th, many state and local governments have faced declining revenues and increased security costs. A survey of about 400 cities conducted by the National League of Cities reported that since September 11th, one in three American cities saw their local economies, municipal revenues, and public confidence decline while public-safety spending is up. Further, the National Governors Association estimates fiscal year 2002 state budget shortfalls of between $40 billion and $50 billion, making it increasingly difficult for the states to take on expensive, new homeland security initiatives without federal assistance. State and local revenue shortfalls coupled with increasing demands on resources makes it more critical that federal programs be designed carefully to match the priorities and needs of all partners—federal, state, local and private.

Our previous work on federal programs suggests that the choice and design of policy tools have important consequences for performance and accountability. Governments have at their disposal a variety of policy instruments, such as grants, regulations, tax incentives, and regional coordination and partnerships, that they can use to motivate or mandate other levels of government and private-sector entities to take actions to address security concerns.

The design of federal policy will play a vital role in determining success and ensuring that scarce federal dollars are used to achieve critical national goals. Key to the national effort will be determining the appropriate level of funding so that policies and tools can be designed and targeted to elicit a prompt, adequate, and sustainable response while also protecting against federal funds being used to substitute for spending that would have occurred anyway.

Grants

The federal government often uses grants to state and local governments as a means of delivering federal programs. Categorical grants typically permit funds to be used only for specific, narrowly defined purposes. Block grants typically can be used by state and local governments to support a range of activities aimed at achieving a broad national purpose and to provide a great deal of discretion to state and local officials. Either type of grant can be designed to (1) target the funds to states and localities with the greatest need, (2) discourage the replacement of state and local funds with federal funds, commonly referred to as "supplantation," with a maintenance-of-effort requirement that recipients maintain their level of previous funding, and (3) strike a balance between accountability and flexibility. More specifically:

- Targeting: The formula for the distribution of any new grant could be based on several considerations, including the state or local government's capacity to respond to a disaster. This capacity depends on several factors, the most important of which perhaps is the underlying strength of the state's tax base and whether that base is expanding or is in decline. In an August 2001 report on disaster assistance, we recommended that the director of FEMA consider replacing the per-capita measure of state capability with a more sensitive measure, such as the amount of a state's total taxable resources, to assess the capabilities of state and local governments to respond to a disaster.[11] Other key considerations include the level of need and the costs of preparedness.
- Maintenance of effort: In our earlier work, we found that substitution is to be expected in any grant and, on average, every additional federal grant dollar results in about 60 cents of supplantion.[12] We found that supplantation is particularly likely for block grants supporting areas with prior state and local involvement. Our recent work on the Temporary Assistance to Needy Families block grant found that a strong maintenance of effort provision limits states' ability to supplant.[13] Recipients can be penalized for not meeting a maintenance-of-effort requirement.
- Balance accountability and flexibility: Experience with block grants shows that such programs are sustainable if they are accompanied by sufficient information and accountability for national outcomes to enable them to compete for funding in the congressional appropriations process. Accountability can be established for measured results and outcomes that permitting greater flexibility in how funds are used while at the same time ensuring some national oversight.

Grants previously have been used for enhancing preparedness and recent proposals direct new funding to local governments. In recent discussions, local officials expressed their view that federal grants would be more effective if local officials were allowed more flexibility in the use of funds. They have suggested that some funding should be allocated directly to local governments. They have expressed a preference for block grants,

[11] U.S. General Accounting Office, *Disaster Assistance: Improvement Needed in Disaster Declaration Criteria and Eligibility Assurance Procedures*, GAO-01-837 (Washington, D.C.: August 31, 2001).

[12] U.S. General Accounting Office, *Federal Grants: Design Improvements Could Help Federal Resources Go Further*, GAO-AIMD-97-7 (Washington, D.C.: December 18, 1996).

[13] U.S. General Accounting Office, *Welfare Reform: Challenges in Maintaining a Federal-State Fiscal Partnership*, GAO-01-828 (Washington, D.C.: August 10, 2001).

which would distribute funds directly to local governments for a variety of security-related expenses.

Recent funding proposals, such as the $3.5 billion block grant for first responders contained in the president's fiscal year 2003 budget, have included some of these provisions. This matching grant would be administered by FEMA, with 25 percent being distributed to the states based on population. The remainder would go to states for pass-through to local jurisdictions, also on a population basis, but states would be given the discretion to determine the boundaries of sub-state areas for such a pass-through—that is, a state could pass through the funds to a metropolitan area or to individual local governments within such an area. Although the state and local jurisdictions would have discretion to tailor the assistance to meet local needs, it is anticipated that more than one-third of the funds would be used to improve communications; an additional one-third would be used to equip state and local first responders, and the remainder would be used for training, planning, technical assistance, and administration.

Regulations

Federal, state and local governments share authority for setting standards through regulations in several areas, including infrastructure and programs vital to preparedness (for example, highways, water systems, public health). In designing regulations, key considerations include how to provide federal protections, guarantees, or benefits while preserving an appropriate balance between federal and state and local authorities and between the public and private sectors (for example, for chemical and nuclear facilities). In designing a regulatory approach, the challenges include determining who will set the standards and who will implement or enforce them. Five models of shared regulatory authority are:

- Fixed federal standards that preempt all state regulatory action in the subject area covered;
- Federal minimum standards that preempt less stringent state laws but permit states to establish standards that are more stringent than the federal;
- Inclusion of federal regulatory provisions not established through preemption in grants or other forms of assistance that states may choose to accept;
- Cooperative programs in which voluntary national standards are formulated by federal and state officials working together;
- Widespread state adoption of voluntary standards formulated by quasi-official entities.

Any one of these shared regulatory approaches could be used in designing standards for preparedness. The first two of these mechanisms involve federal preemption. The other three represent alternatives to preemption. Each mechanism offers different advantages and limitations that reflect some of the key considerations in the federal-state balance.

Tax Incentives

To the extent that private entities will be called upon to improve security over dangerous materials or to protect vital assets, the federal government can use tax incentives to encourage and enforce their activities. Tax incentives are the result of special exclusions, exemptions, deductions, credits, deferrals, or tax rates in the federal tax laws. Unlike grants, tax incentives do not generally permit the same degree of federal oversight and targeting, and they are generally available by formula to all potential beneficiaries who satisfy congressionally established criteria.

Regional Coordination and Intergovernmental Partnerships

Promoting partnerships between critical actors (including different levels of government and the private sector) facilitates the maximizing of resources and also supports coordination on a regional level. Partnerships could encompass federal, state, and local governments working together to share information, develop communications technology, and provide mutual aid. The federal government may be able to offer state and local governments assistance in certain areas, such as risk management and intelligence sharing. In turn, state and local governments have much to offer in terms of knowledge of local vulnerabilities and resources, such as local law enforcement personnel, available to respond to threats in their communities.

Since the events of September 11th, a task force of mayors and police chiefs has called for a new protocol governing how local law enforcement agencies can assist federal agencies, particularly the FBI, given the information needed to do so. As the United States Conference of Mayors noted, a close working partnership of local and federal law enforcement agencies, which includes the sharing of intelligence, will expand and strengthen the nation's overall ability to prevent and respond to domestic terrorism. The USA Patriot Act provides for greater sharing of intelligence among federal agencies. An expansion of this act has been proposed (S1615, H.R. 3285) that would provide for information sharing among federal, state and local law enforcement agencies. In addition, the Intergovernmental Law Enforcement Information Sharing Act of 2001 (H.R. 3483), which you sponsored Mr. Chairman, addresses a number of information sharing needs. For instance, this proposed legislation provides that the Attorney General expeditiously grant security clearances to Governors who apply for them, and state and local officials who

participate in federal counter-terrorism working groups or regional terrorism task forces.

Local officials have emphasized the importance of regional coordination. Regional resources, such as equipment and expertise, are essential because of proximity, which allows for quick deployment, and experience in working within the region. Large-scale or labor-intensive incidents quickly deplete a given locality's supply of trained responders. Some cities have spread training and equipment to neighboring municipal areas so that their mutual aid partners can help. These partnerships afford economies of scale across a region. In events that require a quick response, such as a chemical attack, regional agreements take on greater importance because many local officials do not think that federal and state resources can arrive in sufficient time to help.

Mutual aid agreements provide a structure for assistance and for sharing resources among jurisdictions in response to an emergency. Because individual jurisdictions may not have all the resources they need to respond to all types of emergencies, these agreements allow for resources to be deployed quickly within a region. The terms of mutual aid agreements vary for different services and different localities. These agreements may provide for the state to share services, personnel, supplies, and equipment with counties, towns, and municipalities within the state, with neighboring states, or, in the case of states bordering Canada, with jurisdictions in another country. Some of the agreements also provide for cooperative planning, training, and exercises in preparation for emergencies. Some of these agreements involve private companies and local military bases, as well as local government entities. Such agreements were in place for the three sites that were involved on September 11th— New York City, the Pentagon, and a rural area of Pennsylvania—and provide examples of some of the benefits of mutual aid agreements and of coordination within a region.

With regard to regional planning and coordination, there may be federal programs that could provide models for funding proposals. In the 1962 Federal-Aid Highway Act, the federal government established a comprehensive cooperative process for transportation planning. This model of regional planning continues today under the Transportation Equity Act for the 21st century (TEA-21, originally ISTEA) program. This model emphasizes the role of state and local officials in developing a plan to meet regional transportation needs. Metropolitan Planning Organizations (MPOs) coordinate the regional planning process and adopt a plan, which is then approved by the state.

Mr. Chairman, in conclusion, as increasing demands are placed on budgets at all levels of government, it will be necessary to make sound choices to maintain fiscal stability. All levels of government and the private sector will have to communicate and cooperate effectively with each other across a broad range of issues to develop a national strategy to better target available resources to address the urgent national preparedness needs. Involving all levels of government and the private sector in developing key aspects of a national strategy that I have discussed today - a definition and clarification of the appropriate roles and responsibilities, an establishment of goals and performance measures, and a selection of appropriate tools—is essential to the successful formulation of the national preparedness strategy and ultimately to preparing and defending our nation from terrorist attacks.

This completes my prepared statement. I would be pleased to respond to any questions you or other members of the Subcommittee may have.

Contacts and Acknowledgments

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Related GAO Products

Homeland Security

Homeland Security: Challenges and Strategies in Addressing Short- and Long-Term National Needs. GAO-02-160T. Washington, D.C.: November 7, 2001.

Homeland Security: A Risk Management Approach Can Guide Preparedness Efforts. GAO-02-208T. Washington, D.C.: October 31, 2001.

Homeland Security: Need to Consider VA's Role in Strengthening Federal Preparedness. GAO-02-145T. Washington, D.C.: October 15, 2001.

Homeland Security: Key Elements of a Risk Management Approach. GAO-02-150T. Washington, D.C.: October 12, 2001.

Homeland Security: A Framework for Addressing the Nation's Issues. GAO-01-1158T. Washington, D.C.: September 21, 2001.

Combating Terrorism

Combating Terrorism: Considerations for Investing Resources in Chemical and Biological Preparedness. GAO-01-162T. Washington, D.C.: October 17, 2001.

Combating Terrorism: Selected Challenges and Related Recommendations. GAO-01-822. Washington, D.C.: September 20, 2001.

Combating Terrorism: Actions Needed to Improve DOD's Antiterrorism Program Implementation and Management. GAO-01-909. Washington, D.C.: September 19, 2001.

Combating Terrorism: Comments on H.R. 525 to Create a President's Council on Domestic Preparedness. GAO-01-555T. Washington, D.C.: May 9, 2001.

Combating Terrorism: Observations on Options to Improve the Federal Response. GAO-01-660T. Washington, D.C.: April 24, 2001.

Combating Terrorism: Comments on Counterterrorism Leadership and National Strategy. GAO-01-556T. Washington, D.C.: March 27, 2001.

Combating Terrorism: FEMA Continues to Make Progress in Coordinating Preparedness and Response. GAO-01-15. Washington, D.C.: March 20, 2001.

Combating Terrorism: Federal Response Teams Provide Varied Capabilities; Opportunities Remain to Improve Coordination. GAO-01-14. Washington, D.C.: November 30, 2000.

Combating Terrorism: Need to Eliminate Duplicate Federal Weapons of Mass Destruction Training. GAO/NSIAD-00-64. Washington, D.C.: March 21, 2000.

Combating Terrorism: Observations on the Threat of Chemical and Biological Terrorism. GAO/T-NSIAD-00-50. Washington, D.C.: October 20, 1999.

Combating Terrorism: Need for Comprehensive Threat and Risk Assessments of Chemical and Biological Attack. GAO/NSIAD-99-163. Washington, D.C.: September 7, 1999.

Combating Terrorism: Observations on Growth in Federal Programs. GAO/T-NSIAD-99-181. Washington, D.C.: June 9, 1999.

Combating Terrorism: Analysis of Potential Emergency Response Equipment and Sustainment Costs. GAO-NSIAD-99-151. Washington, D.C.: June 9, 1999.

Combating Terrorism: Use of National Guard Response Teams Is Unclear. GAO/NSIAD-99-110. Washington, D.C.: May 21, 1999.

Combating Terrorism: Observations on Federal Spending to Combat Terrorism. GAO/T-NSIAD/GGD-99-107. Washington, D.C.: March 11, 1999.

Combating Terrorism: Opportunities to Improve Domestic Preparedness Program Focus and Efficiency. GAO-NSIAD-99-3. Washington, D.C.: November 12, 1998.

Combating Terrorism: Observations on the Nunn-Lugar-Domenici Domestic Preparedness Program. GAO/T-NSIAD-99-16. Washington, D.C.: October 2, 1998.

Combating Terrorism: Threat and Risk Assessments Can Help Prioritize and Target Program Investments. GAO/NSIAD-98-74. Washington, D.C.: April 9, 1998.

Combating Terrorism: Spending on Governmentwide Programs Requires Better Management and Coordination. GAO/NSIAD-98-39. Washington, D.C.: December 1, 1997.

Public Health

Bioterrorism: The Centers for Disease Control and Prevention's Role in Public Health Protection. GAO-02-235T. Washington, D.C.: November 15, 2001.

Bioterrorism: Review of Public Health and Medical Preparedness. GAO-02-149T. Washington, D.C.: October 10, 2001.

Bioterrorism: Public Health and Medical Preparedness. GAO-02-141T. Washington, D.C.: October 10, 2001.

Bioterrorism: Coordination and Preparedness. GAO-02-129T. Washington, D.C.: October 5, 2001.

Bioterrorism: Federal Research and Preparedness Activities. GAO-01-915. Washington, D.C.: September 28, 2001.

Chemical and Biological Defense: Improved Risk Assessments and Inventory Management Are Needed. GAO-01-667. Washington, D.C.: September 28, 2001.

West Nile Virus Outbreak: Lessons for Public Health Preparedness. GAO/HEHS-00-180. Washington, D.C.: September 11, 2000.

Need for Comprehensive Threat and Risk Assessments of Chemical and Biological Attacks. GAO/NSIAD-99-163. Washington, D.C.: September 7, 1999.

Chemical and Biological Defense: Program Planning and Evaluation Should Follow Results Act Framework. GAO/NSIAD-99-159. Washington, D.C.: August 16, 1999.

Combating Terrorism: Observations on Biological Terrorism and Public Health Initiatives. GAO/T-NSIAD-99-112. Washington, D.C.: March 16, 1999.

Disaster Assistance	*Disaster Assistance: Improvement Needed in Disaster Declaration Criteria and Eligibility Assurance Procedures.* GAO-01-837. Washington, D.C.: August 31, 2001. *Federal Emergency Management Agency: Status of Achieving Key Outcomes and Addressing Major Management Challenges.* GAO-01-832. Washington, D.C.: July 9, 2001. *FEMA and Army Must Be Proactive in Preparing States for Emergencies.* GAO-01-850. Washington, D.C.: August 13, 2001.
Budget and Management	*Results-Oriented Budget Practices in Federal Agencies.* GAO-01-1084SP. Washington, D.C.: August 2001. *Managing for Results: Federal Managers' Views on Key Management Issues Vary Widely across Agencies.* GAO-01-0592. Washington, D.C.: May 2001. *Determining Performance and Accountability Challenges and High Risks.* GAO-01-159SP. Washington, D.C.: November 2000. *Managing for Results: Using the Results Act to Address Mission Fragmentation and Program Overlap.* GAO/AIMD-97-156. Washington, D.C.: August 29, 1997. *Government Restructuring: Identifying Potential Duplication in Federal Missions and Approaches.* GAO/T—AIMD-95-161. Washington, D.C.: June 7, 1995. *Government Reorganization: Issues and Principals.* GAO/T-GGD/AIMD-95-166. Washington, D.C.: May 17, 1995.
Grant Design	*Grant Programs: Design Features Shape Flexibility, Accountability, and Performance Information.* GAO/GGD-98-137. Washington, D.C.: June 22, 1998. *Federal Grants: Design Improvements Could Help Federal Resources Go Further.* GAO/AIMD-97-7. Washington, D.C.: December 18, 1996. *Block Grants: Issues in Designing Accountability Provisions.* GAO/AIMD-95-226. Washington, D.C.: September 1, 1995.

Mr. HORN. Thank you.

The next witness, I've asked Representative Wilson to interview him. She's a scientist and he's a scientist, and a very distinguished one. So I want a scientist talking to a scientist.

Mrs. WILSON. Mr. Chairman, while I survived a bachelor of science degree as an undergraduate, I would not call myself a scientist, although I am a science fair mom.

It is my pleasure to introduce David Nokes, who is an amazing man, and he has made tremendous contributions to this country and to our security. Mr. Nokes was laboratory manager of the year in 1994, and has also been involved in running the Cooperative Measures Program, working with the former Soviet Union, trying to secure nuclear materials and other things in the former Soviet Union.

But I think probably the greatest measure of his real contribution in this area is in the aftermath of the September 11th attack, he was named as the single point of contact for Sandia National Laboratories for getting Sandia technologies where they were needed, whatever part of government, wherever they needed to go, and made tremendous contributions to the community and to the country.

It's really a pleasure to have you here.

STATEMENT OF K. DAVID NOKES, DIRECTOR, SYSTEMS ASSESSMENT AND RESEARCH CENTER, SANDIA NATIONAL LABORATORIES

Mr. NOKES. Thank you, Congresswoman Wilson, Mr. Chairman, Representative Udall. It's a pleasure to be here, and I appreciate the opportunity to testify.

Sandia is one of the three NNSA laboratories, along with Los Alamos and Lawrence Livermore, and we bring to the table a great deal of national security research and development, and that's what I'll talk about today.

First, Sandia was privileged to be able to provide technology to some of the important homeland security problems that emerged post September 11th. We had over 100 requests from the government to provide technology, and we responded to most of those. And the list of people who came to our door is almost everyone in government. There's the military, for help in Afghanistan; the CIA, for technical support for all of the technical problems that emerged post September 11th; the post office, to talk about anthrax remediation; the EPA; and of course, the DOE and NNSA.

We provided vulnerability assessments, in the week after the attack, for all of the DOE and NNSA facilities, trying to understand if there were particular vulnerabilities that would be susceptible to terrorist attacks on the Nation like on September 11th.

It is worth noting that most of the technologies we offer are the result of work done well before the tragic events of September 11th. They were the result of the national security focus of the laboratory and the continuing support of these activities by NNSA and DOE, by other government sponsors through our "Work for Others" program, and by the investments made by Sandia management in our energy-directed research and development.

On the back table, you will see a number of the results of this investment strategy with our internal focus on research. We have foams that were used to remediate the House buildings. There is a detector that is used with commercial explosive systems to allow a commercial product to have enough sensitivity to work in airport environments. And there are nuclear sensors. We have worked for many, many years to try to understand how one can detect nuclear material and detectors that would be a threat to our country, and those devices also were provided by not only Work for Others sponsors and DOE, but also our internal research.

Unlike other problem areas, such as treaty verification, arms control, and energy research, no government agency has a focus on investments for homeland security technology. The investments that are made are all tactical, trying to serve current problems, very near-term problems, harvesting and exploiting the tech-base of the laboratories, but they don't extend it. And then, there is the longer-term, high-payoff and perhaps high-risk work that will have to be done if we're going to have adequate homeland security that's affordable.

It's been suggested that the NNSA become a resource to the Office of Homeland Security in this mission. It's consistent with other R&D of NNSA, and would align well with the missions and capabilities of the laboratories and NNSA.

Another point I'd like to make is the ease with which we work across government agencies. One of the fundamental problems we have is transitioning technology to the problems of government; the tech transfer, if you will, within the government. Right now, about a quarter of Sandia's work is for other government agencies, and sometimes the processes that allow this to happen are clumsy, cumbersome, and could be improved, and we'd like to be able to respond to Governor Ridge's top priorities more easily.

Finally, I'd like to point out that Sandia works closely with State and local governments in the transfer of technology. We have a group that designs technology to render safe bombs, including terrorist bombs. We have made that equipment available to first-responders, and we have trained over 600 local first-responders, including about 20 bomb technicians here in Albuquerque. We also participate with the local emergency planning group, and at Los Alamos, we have our NEST and other groups available, through the emergency response structure of the country, to respond to nuclear incidents.

Thank you for my opportunity to testify today, and I'd be happy to answer any questions.

[The prepared statement of Mr. Nokes follows:]

Statement of
K. David Nokes
Sandia National Laboratories

United States House of Representatives
Committee on Government Reform
Subcommittee on Government Efficiency, Financial Management, and Intergovernmental Relations

March 25, 2002

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INTRODUCTION

Mr. Chairman and distinguished members of the committee, thank you for the opportunity to testify today. I am Dave Nokes, Director of Sandia's Systems Research Center and, on special assignment, Coordinator for Homeland Security and Combating Terrorism at Sandia National Laboratories.

Sandia is managed and operated for the National Nuclear Security Administration (NNSA) of the U.S. Department of Energy (DOE) by Sandia Corporation, a subsidiary of the Lockheed Martin Corporation. Sandia is one of the three NNSA laboratories with research and development responsibility for nuclear weapons. We design, develop, qualify, and certify nearly all of the non-nuclear subsystems of nuclear warheads. Our responsibilities include arming, fuzing, and firing systems; safety, security, and use-control systems; engineering support for production and dismantlement of nuclear weapons; field support to the military; and surveillance and support of weapons in stockpile. We perform substantial work in programs closely related to nuclear weapons including intelligence, nonproliferation, and treaty verification technologies. As a multiprogram national laboratory, Sandia also conducts research and development for DOE's energy and science offices, as well as work for other government agencies when our special capabilities can make significant contributions.

I will begin my statement by describing Sandia's vision to assist the nation in solving national security challenges and then summarize Sandia's contributions to homeland security and the war on terrorism. I will conclude with a short discussion of our ability to work effectively with multiple government agencies at the Federal, state and local level.

Sandia's Vision: Helping our nation secure a peaceful and free world through technology

At Sandia National Laboratories, we perform our scientific and engineering work with the mission in mind—never solely for its own sake. We are a science ***and*** engineering laboratory that develops technical solutions to the most challenging problems that threaten peace and freedom.

Sandia's unique philosophy of research and development—which derives from its heritage of fifty years under industrial management—yields significant results for its

sponsors. As a result of our philosophy, we have been and are in a unique position to contribute to Homeland Security and the War on Terrorism.

Contributions to Homeland Security and the War On Terrorism

Like most Americans, the people of Sandia National Laboratories responded to the atrocities of September 11, 2001, with newfound resolve on both a personal and professional level. As a result of our own strategic planning and the foresight of many sponsors to invest resources toward emerging threats, Sandia was in a position to immediately address some urgent needs.

Sandia has been working for a number of years in technical areas that were relevant to this crisis. Our work is primarily supported by the DOE/NNSA, a premier government supporter of national security technology research and development, and additional federal sponsors through our "Work for Others" program. We have also systematically invested some of our own discretionary monies to develop capabilities that could be used in just such a situation. As a result of this disciplined effort, Sandia is well-positioned to support the nation's highest priorities as articulated by Governor Ridge.

Some of our efforts were quick-response efforts in the wake of the attacks. For example, five Sandia employees who were part of the New Mexico Urban Search and Rescue Task Force assisted with the search for victims, removal of debris, and stabilization of the Pentagon building structure. This work was coordinated by FEMA through the State of New Mexico's Emergency Operations Center, and Sandians briefed local emergency planning groups afterward on the activities and lessons learned.

Very shortly after the attacks, Sandia conducted a vulnerability assessment of all DOE facilities, to determine the risks of similar attacks on the varied sites within the DOE complex. In the ensuing weeks, technical experts from the Labs were temporarily assigned to work in other government agencies, including the Post Office and the Intelligence Community.

As another example, by September 15, a small Sandia team had instrumented the K-9 rescue units at the World Trade Center site to allow the dogs to enter spaces inaccessible to humans while transmitting live video and audio to their handlers. This relatively low-tech but timely adaptation was possible because of work we had done for the National Institute of Justice to instrument K-9 units for SWAT situations.

You may not be aware that a decontamination formulation developed by Sandia chemists was one of the techniques used to help eliminate anthrax in the Hart, Dirksen, and Ford buildings on Capitol Hill and at contaminated sites in New York and in the Postal Service. Sandia developed the non-toxic foam and licensed it for industrial production.

Farther abroad, Sandia-developed technology is being used in Afghanistan to provide real time, high-quality radar images of terrain, structures, and moving vehicles through any weather or lighting conditions. This technology, called synthetic aperture radar (SAR), is a wonderful example of how Sandia has developed a capability over several decades that is important to the war on terrorism. We began working on miniature radars based on synthetic aperture concepts in 1983 in the nuclear weapons program. In 1985 we became involved in a special-access DoD program to develop a one-foot resolution, real-time SAR suitable for use in unmanned aircraft. Sandia flew the first real-time, one-foot-resolution, SAR prototype in 1990.

Follow-on work sponsored by DoD continued to improve the system, and through a collaborative effort with a private company, we developed the technology into the field-deployable systems used in Afghanistan. Sandia designed, built and operated a SAR radar system to produce maps with unprecedented fidelity of the 2002 Winter Olympics site and of other locations for the DoD, Federal Emergency Management Agency, and law enforcement agencies.

In addition to our contributions to the military toolbox for counter-terrorism, Sandia has responded to urgent needs in the arena of homeland security. An array of devices invented by explosives experts at Sandia have proved to be effective for safely disarming several types of terrorist bombs. These devices have become the primary tools used by bomb squads nationwide to remotely disable terrorist bombs while preserving their pieces for forensic analysis. For the past several years, our experts have conducted training for police bomb squads around the country in the techniques for using these devices for safe bomb disablement. Started as a local program called Operation Albuquerque, Sandia's advanced bomb squad training program has been expanded to a regional program called Operation America. The program includes instruction, demonstrations, and lifelike training scenarios focused on emerging bomb-disablement techniques and technologies. Participants include local and federal law enforcement agencies, and have included antiterrorism organizations from some of the world's terrorism hot spots. This program has trained over 600 law enforcement bomb technicians, including 20 in Albuquerque, NM.

Detecting explosives is a concern at airports, military bases, government facilities, and border crossings. We have developed and successfully tested a prototype vehicle portal that detects minute amounts of common explosives. The system uses a Sandia-patented sample collection and preconcentrator technology that has previously been licensed to industry for use in screening airline passengers for trace amounts of explosives. The Technical Support Working Group and DOE's Office of Safeguards and Security funded this research.

Sandia has a long-standing nuclear materials detection program that has been turned to the problem of preventing terrorist attacks by nuclear or radiological, so called dirty nuclear weapons. This program, sponsored by DOE/NNSA and our internal research funding, addresses the problem of detecting nuclear material concealed within normal commercial activities. We have temporarily deployed prototype systems at U.S. border crossings, shipping terminals, and airports.

Sandia is a partner with Argonne National Laboratory in the PROTECT program (Program for Response Options and Technology Enhancements for Chemical/Biological Terrorism), jointly funded by DOE and the Department of Justice. PROTECT's goal is to demonstrate systems for protecting people in public facilities, such as subways and airports, from chemical attacks. For more than a year, a Sandia-designed chemical detector testbed has been operating in the Washington Metro. The system can rapidly detect the presence of a chemical agent and transmit readings to an emergency management information system. We successfully completed a demonstration of the PROTECT system at a station on the Washington D.C. Metro; now we're working to accelerate its capability in multiple metro stations. DOE has also been asked to implement a PROTECT system for the Metropolitan Boston Transit Authority.

Another homeland security risk is sabotage against municipal water supplies. Working with the American Water Works Association Research Foundation and the Environmental Protection Agency, Sandia developed a security vulnerability assessment methodology for city water utilities. This tool has been used to evaluate

security and mitigate risks at several large water utilities. In fact, immediately after September 11, we received a number of requests from major cities to assess their systems' vulnerabilities and developed a video-based training tool to help cities do some of their own evaluations. We have used similar methods to evaluate risks for other critical infrastructures such as water dams, nuclear power-generation plants, and chemical storage sites.

There are a number of specific Sandia technologies and programs that can be adopted by federal, state, and local agencies to help them prepare for chem/bio/nuclear terrorist attacks.

Sandia collaborated with the New Mexico Department of Health to develop the Rapid Syndrome Validation Project (RSVP), a biological attack early warning system that provides health care workers real-time geographical and temporal displays of reported syndromes. RSVP has been deployed in southern New Mexico and has already proven useful in identifying outbreaks of FluType-A and RSV. Quicker than traditional reporting methods, RSVP tracks outbreaks of signs and symptoms rather than positive diagnoses of specific diseases; the right combination of symptoms automatically notifies public health officials by pager, fax, and e-mail. If used across the public health system, RSVP could contribute to bioterrorism-response initiatives and biological weapons nonproliferation by quickly tracking illness outbreaks before they become a major threat.

The New York City Police Department is one of many federal, state, and local government agencies licensing Sandia's RAMPART (Rick Assessment Method – Property Analysis and Ranking Tool) software. Developed in response to a General Services Administration request, RAMPART can help assess a facility's risk from natural hazards, crime, or terrorism by compiling facts about construction, security, and location.

The National Institute of Justice's Center for Civil Force Protection (CCFP), which is managed by Sandia, provides state and local law enforcement agencies, government officials, public safety officials, community leaders, and school officials with security and technology expertise generally not available to them. The CCFP provides advice on ways to improve security against terrorism and mitigate an attack while it is occurring. We consult with and train people on hardening buildings against attack, detecting and mitigating explosives or chem-bio warfare agents, and assessing vulnerability and consequences of a facility's physical security. In addition, Sandia trains people from across the country on security techniques and technology.

Sandia works with government agencies, professional associations, and universities to examine the vulnerabilities of structures and identify changes in architectural designs, building codes, and construction standards so future structures might better withstand structure-stressing events such as terrorist attacks. Already Sandia engineers have applied a range of architectural surety tools to the problem of creating safer, more secure, and more reliable buildings and city infrastructures. To identify weaknesses and study building performance during under stress, Sandia has developed set of computer-linked instruments that records subtle structural movements. Last year Sandia security experts advised the architect of the new federal courthouse in Albuquerque on ways to make the building more resistant to terrorist attack.

We also maintain relationships with a number of local and state emergency management organizations, such the City of Albuquerque/Bernalillo County Local Emergency Planning Committee (LEPC) and regularly participate with them in assessments of systems and technologies that may improve their effectiveness.

These and other contributions to homeland security and the war against terror are possible because of early investment in the capabilities that were needed to respond to emerging threats. The outstanding technology base supported by NNSA for its core missions is the primary source of this capability.

We also made strategic decisions to invest laboratory-directed research and development funds (LDRD) in the very things that we knew were urgent needs: items to the Afghanistan theater, the decontamination foam, the sensors we have deployed, and special-purpose robotics that we have developed.

Because of this foundation, requests for Sandia services from federal agencies other than DOE for work in emerging areas of need have increased. Approximately twenty-eight percent of our total laboratory operating budget is provided by federal agencies other than DOE. We anticipate this percentage increasing in the future.

I hope these examples show you how Sandia helping to combat terrorism at the federal, state, and local level. Now let me summarize a few issues that are critical for labs like Sandia to continue to contribute in this manner.

Laboratory-Directed Research and Development

One reason Sandia has been able to make ready contributions to combating terrorism is that we've had technology programs underway for several years in a number of relevant areas. As a multiprogram laboratory, we've been able to build broad and deep capabilities in materials, sensors, systems engineering, signal processing, and modeling and simulation that provide us the means to be of assistance. One of the key programs critical for developing and maintaining this foundation is the Laboratory-Directed Research and Development (LDRD) program.

As you know, LDRD program was authorized by the 1991 Defense Authorization Act to allow the DOE lab directors to invest in important research that strengthens the competencies of their institutions. That program allows us to develop our capabilities for strategic, long-term mission needs.

Several independent studies have affirmed the importance of exploratory research directed by the laboratories' technical management. Sandia's ability to respond effectively to many of the challenges of homeland security and terrorism was strengthened by investments we made with LDRD funds in years past. The LDRD program has been challenged in the past as allowing the Labs too much autonomy. But, in fact, it is extremely well-managed and it results in technologies that address national emerging threats and mission needs.

Working as a truly national laboratory

Another issue of importance is the ability to work as a truly national laboratory. Because of our capabilities, we can often provide unique assistance to other federal laboratories, not just the NNSA. Our mission as an NNSA laboratory will always be first and foremost. But this work for other agencies complements and exercises our capabilities and can be extremely gratifying and energizing for staff as well, who get to see their efforts result in tangible advances.

The Executive Order establishing the Office of Homeland Security (OHS) assigns responsibility for DOE's interaction to the Secretary and the Deputy Secretary of

Energy. There is no formal role for the NNSA or its administrator. Yet expertise of importance to OHS exists within NNSA and its labs. The lack of formal standing for NNSA's interactions has lessened the efficiency of its support. Legislation to elevate the role of NNSA in OHS planning should be considered.

As I mentioned earlier, 28% of our funding comes from agencies other than the DOE. However, the processes to establish "work for others" programs and funding are inefficient and frustratingly slow, especially for the agency that needs work done, sometimes in real time. While some steps have been taken by NDOE/NNSA to facilitate work for other government agencies performed by the Laboratories, more streamlined processes are needed that allow us to be responsive to the urgent needs of the government. We would be happy to provide suggested improvements to the "work for others" process, upon request.

Conclusion

For the people that constitute Sandia National Laboratories, I want to emphasize our commitment to the NNSA mission to strengthen United States security through the military application of nuclear energy and by reducing the global threat from terrorism and weapons of mass destruction. It is also our goal to be of national service to agencies other than NNSA, at any level, when there are technological problems that require our capabilities. Your continuing support to allow the laboratories to engage in R&D to meet future challenges and to work efficiently and effectively for agencies other than DOE/NNSA is critical. It is our highest goal to be a national laboratory that delivers technology solutions to the most challenging problems that threaten peace and freedom.

Mr. HORN. Thank you.

Our next presenter is Mr. Ron Castleman. He has appeared before this subcommittee, and he has a broad governmental look at the floods and all of the rest of the things that go with the Federal Emergency Management Administration. And he is the responsible regional director, appointed by President Bush, in June 2001, and his States are Arkansas, Louisiana, New Mexico, Oklahoma, and Texas. And he comes out of the private sector, especially from the computer language research groups, and others. So he has great experience on a lot of these problems.

So, Mr. Castleman, we're glad to see you again.

STATEMENT OF RON CASTLEMAN, REGIONAL DIRECTOR, REGION VI, FEDERAL EMERGENCY MANAGEMENT AGENCY

Mr. CASTLEMAN. Good morning, Mr. Chairman, and Congressmen Udall and Wilson. We're glad to be here.

As you said, I'm Ron Castleman, Regional Director for Region VI of the Federal Emergency Management Agency. It's a pleasure to be here today to discuss how FEMA is assisting State and local governments to prepare for potential terrorism attacks.

FEMA's mission is to lead the Nation in preparing for, responding to, and recovering from disasters. Our success requires close coordination with local, tribal, State and Federal agencies and volunteer organizations. The Federal response plan outlines the process by which Federal departments and agencies respond as a cohesive team to all types of disasters in support of State, tribal and local governments. This plan has been tested on numerous occasions since its adoption in 1992, and the Federal Response Plan again worked well in response to the terrorist events of September 11, 2001.

FEMA's preparedness programs provide financial, technical, planning, training, and exercise support to State, local and tribal governments. The programs are designed to strengthen capabilities to protect public health, safety, and property, both before and after disaster strikes.

As you know, the Gilmore Commission issued its second report in December 2000, stressing the importance of giving States and first-responders a single point of contact for Federal training, exercises, and equipment assistance. The commission's third report included recommendations to address the lack of coordination, including proposals to consolidate Federal grant program information and application procedures and to include first-responder participation with Federal preparedness programs. These findings and recommendations have been echoed in other commissions and GAO reports, by the first-responder community, and by State and local governments.

On May 8, 2001, the President tasked FEMA Director Joe Allbaugh with creating the Office of National Preparedness within FEMA. The ONP mission is to provide leadership in the coordination and facilitation of all Federal efforts and to assist State and local first-responders and emergency management organizations with planning, equipment, training and exercises to build and sustain our capability to respond to any emergency or disaster, including a terrorist event.

The President's formation of the Office of Homeland Security further provides the coordination of Federal programs and activities aimed at combating terrorism. FEMA is working closely with Director Ridge, the OHS, and other agencies, to identify and develop the most effective ways to quickly build and enhance domestic preparedness for terrorist attacks.

This January, the President took another important step to strengthen first-responder efforts to prepare for and respond to incidents of terrorism. The First Responder Initiative in the President's 2003 budget calls for $3.5 billion, most of which will be distributed to States and local jurisdictions for planning efforts, critical equipment, and to train and exercise personnel. FEMA's Office of National Preparedness will administer these grants.

The ONP will also work with our Federal and State partners to coordinate all terrorism-related first-responder programs, to begin addressing some of the lessons the first-responder community learned on September 11th. The ONP will develop national standards for interoperability and compatibility in a number of areas, including training, equipment, mutual aid, and exercising. The first-responder grants, coupled with these standards, will balance the needs for both flexibility and accountability at the State and local level.

With respect to New Mexico, we continue to work closely with the New Mexico Department of Public Safety in all hazard emergency management. FEMA provides grant funds to assist the State with planning, training, and exercising for natural and technological hazards, as well as incidents of terrorism. We have delivered our Comprehensive Hazardous Materials Capability Development Program to nine New Mexico communities, including several Indian pueblos.

Last year, our regional office recognized the need to take terrorism preparedness training and exercises to communities that did not make the Nunn-Lugar-Domenici population criterion. We worked with the city of Las Cruces and Dona Ana County, and will continue this activity with another New Mexico community this year. Both our HAZMAT and terrorism preparedness activities are designed to bring together a cross-section of first-responders, fire and rescue, emergency medical, police and sheriff's departments, as well as emergency managers and hospital staff.

As you are aware, New Mexico is home to some very unique Federal resources: Los Alamos and Sandia National Laboratories, the Nimitz Nuclear Weapons School, and the Waste Isolation Pilot Project, among others. We have partnered with these organizations in the past and look for more opportunities to combine our efforts in support of community readiness in New Mexico, and across the country.

In conclusion, FEMA is well prepared and equipped to respond to terrorist disasters. We are strengthening our preparedness efforts now, so that State, tribal and local governments and first-re-

sponders are well prepared for all disasters and emergencies, including incidents of terrorism. Continued coordination among all levels of government will ensure a safer America.

Thank you for your time, and I'd be happy to answer any questions.

[The prepared statement of Mr. Castleman follows:]

STATEMENT OF

RON CASTLEMAN

REGIONAL DIRECTOR

REGION VI

FEDERAL EMERGENCY MANAGEMENT AGENCY

BEFORE THE

SUBCOMMITTEE ON GOVERNMENT EFFICIENCY, FINANCIAL

MANAGEMENT AND INTERGOVERNMENTAL RELATIONS

COMMITTEE ON GOVERNMENT REFORM

U.S. HOUSE OF REPRESENTATIVES

MARCH 25, 2002

Introduction

Good morning, Mr. Chairman. I am Ron Castleman, Regional Director, Region VI of the Federal Emergency Management Agency (FEMA). It is a pleasure for me to be here today to discuss the pressing matter of how FEMA is assisting State and local governments to prepare for a potential terrorist attack involving biological, chemical or nuclear agents. I will describe how FEMA works with other agencies and our State and local partners, our programs related to terrorism, and new efforts to enhance preparedness and response.

FEMA's Coordination Role

FEMA is the Federal Agency responsible for leading the nation in preparing for, responding to and recovering from disasters. Our success depends on our ability to organize and lead a community of local, State, and Federal agencies and volunteer organizations. We know whom to bring to the table when a disaster strikes in order to ensure the most effective management of the response. We provide management expertise and financial resources to help State and local governments when they are overwhelmed by disasters.

The Federal Response Plan (FRP) forms the heart of our management framework and lays out the process by which interagency groups work together to respond as a cohesive team to all types of disasters. This team is made up of 26 Federal departments and agencies, and the American Red Cross, and is organized into interagency functions based on the authorities and expertise of the members and the needs of our counterparts at the State and local level.

Since 1992, and again in response to the terrorist events of September 11, 2001, the FRP has proven to be an effective and efficient framework for managing all phases of disasters and emergencies. The FRP is successful because it builds upon existing professional disciplines, expertise, delivery systems, and relationships among the participating agencies. FEMA has strong ties to the emergency management and fire service communities and we routinely plan, train, exercise, and operate together to remain prepared to respond to all types of disasters.

State and Local Relationship

Much of our success in emergency management can be attributed to our historically strong working relationship with our State and local partners. Through our preparedness programs we provide the financial, technical, planning, training, and exercise support to give State, local and Tribal governments the capabilities they need to protect public health, safety and property both before and after disaster strikes. Our programs foster the partnerships that are so critical to creating a strong comprehensive national emergency preparedness system. Terrorism consequence management is just one component of our overall emergency management effort. For example, after September 11, Governor Ridge and Director Allbaugh agreed that there was a need to quickly assess State

capabilities to effectively respond to acts of terrorism. FEMA assembled an interagency team with members from Department of Defense, Department of Education, Health and Human Services, Department of Justice and Environmental Protection Agency to visit the 50 States and territories to assess their readiness against 18 criteria and to identify priorities and shortfalls. We examined several categories such as critical infrastructure, personnel, plans, equipment and supplies communications and related capabilities. The results were provided in a classified report to Governor Ridge right before Thanksgiving.

Meeting The Challenge Ahead – Creating the Office of National Preparedness

On May 8, 2001, the President tasked the Director with creating the Office of National Preparedness within FEMA to "coordinate all Federal programs dealing with weapons of mass destruction consequence management within the Departments of Defense, Health and Human Services, Justice, and Energy, the Environmental Protection Agency, and other federal agencies." Additionally, the ONP was directed to "work closely with state and local governments to ensure their planning, training, and equipment needs are met."

The mission of the Office of National Preparedness (ONP) is to provide leadership in coordinating and facilitating all Federal efforts to assist State and local first responders (including fire, medical and law enforcement) and emergency management organizations with planning, training, equipment and exercises. By focusing on these specific areas, we can build and sustain our nation's capability to respond to any emergency or disaster, including a terrorist incident involving chemical, biological or nuclear weapons of mass destruction and other natural or manmade hazards.

FEMA has made the following changes to support this expanded mission to support the Office of Homeland Security:

- Realigned preparedness activities from the Readiness, Response and Recovery Directorate to ONP;
- Realigned all training activities into the U.S. Fire Administration to allow greater coordination between training for emergency managers and training for firefighters;
- Moved the authority for credentialing, training and deploying Urban Search and Rescue teams from the Readiness, Response and Recovery Directorate to the U.S. Fire Administration.

ONP Organization

The ONP is organized in FEMA Headquarters under a Director (reporting directly to the FEMA Director) and supported by a Management Services Unit and four Divisions to carry out key its functions to coordinate and implement Federal programs and activities

aimed at building and sustaining the national preparedness capability. The divisions and their functional responsibilities include the following:

- **Administration Division** – Provide financial and support services, and management of the grant assistance activities for local and State capability building efforts.
- **Program Coordination Division** – Ensure development of a coordinated national capability involving Federal, State, and local governments, to include citizen participation, in the overall efforts to effectively deal with the consequences of terrorist acts and other incidents within the United States.
- **Technological Services Division** – Improve the capabilities of communities to manage technological hazard emergencies- whether accidental or intentional-and leverage this capability to enhance the capability for dealing with terrorist attacks.
- **Assessment and Exercise** – Provide guidance, exercise, and assess and evaluate progress in meeting National goals for development of a domestic consequence management capability.

We continue to work with all 55 states and territories and Federally recognized Indian Tribes and Alaskan Native Villages to implement our current and other grant programs to assist State, Tribal and local government to enhance their capabilities to respond to all types of hazards and emergencies such as chemical incidents, incidents involving radiological substances, and natural disasters.

The Approach to Biological and Chemical Terrorism

We recognize that biological and chemical scenarios would present unique challenges to the first responder community. Of these two types of attacks, we are, in many ways, better prepared for a chemical attack because such an incident is comparable to a large-scale hazardous materials incident.

In such an event, EPA and the Coast Guard are well connected to local hazardous materials responders, State and Federal agencies, and the chemical industry. There are systems and plans in place for response to hazardous materials, systems that are routinely used for both small and large-scale events. EPA is also the primary agency for the Hazardous Materials function of the Federal Response Plan. We are confident that we would be able to engage the relevant players in a chemical attack based on the hazardous materials model.

Bio-terrorism, however, presents the greater immediate concern. With a covert release of a biological agent, the 'first responders' will be hospital staff, medical examiners, private physicians, or animal control workers, instead of the traditional first responders such as police, fire, and emergency medical services, with whom we have a long-term relationship. While I defer to the Departments of Justice and DHHS on how biological scenarios would unfold, it seems unlikely that we would have much forewarning of a calculated strike in this realm.

In exercise and planning scenarios, the worst-case scenarios begin with an undetected event and play out as widespread epidemics, rapidly escalating into a national emergency. Response would likely begin in the public health and medical community, with initial requests for Federal assistance probably coming through health and medical channels to the Centers for Disease Control and Prevention (CDC).

DHHS leads the efforts of the health and medical community to plan and prepare for a national response to a public health emergency and is the critical link between the health and medical community and the larger Federal response. FEMA works closely with the Public Health Service of DHHS as the primary agency for the Health and Medical Services function of the Federal Response Plan. We rely on the Public Health Service to bring the right experts to the table when the Federal Response Plan community meets to discuss biological scenarios. We work closely with the experts in DHHS and other health and medical agencies, to learn about the threats, how they spread, and the resources and techniques that will be needed to control them.

By the same token, the medical experts work with us to learn about the Federal Response Plan and how we can use it to work through the management issues, such as resource deployment and public information strategies. Alone, the Federal Response Plan is not an adequate solution for the challenge of planning and preparing for a deadly epidemic or act of bioterrorism. It is equally true that, alone, the health and medical community cannot manage an emergency with biological causes. We must work together.

In recent years, Federal, state and local governments and agencies have made progress in bringing the communities closer together. Exercise Top Officials (TOPOFF) 2000 conducted in May 2000 involved two concurrent terrorism scenarios in two metropolitan areas, a chemical attack on the East Coast followed by a biological attack in the Midwest. This was a successful and useful exercise and we continue to work to implement the lessons learned.

In January 2001, the FBI and FEMA jointly published the U.S. Government Interagency Domestic Terrorism Concept of Operation Plan (CONPLAN) with DHHS, EPA, and the Departments of Defense and Energy, and these agencies have pledged to continue the planning process to develop specific procedures for different scenarios, including bioterrorism. The Federal Response Plan and the CONPLAN provide the framework for managing the response to an act of bioterrorism, but we need to continue to practice our response to events of this kind.

The Approach to Nuclear Terrorism

There are 63 commercial nuclear power plant sites in the United States, located in 33 States. These states and their local governments have radiological emergency response plans for the 10 miles surrounding the plants and 36 states have plans for the 50 miles radius surrounding the plants.

The Federal response to a nuclear power plant incident is documented in the Federal Radiological Emergency Response Plan (FRERP), which has 17 Federal agency signatories. The Nuclear Regulatory Commission (NRC) is the lead Federal agency for coordinating the overall response and FEMA is responsible for coordinating non-radiological support.

The FEMA Radiological Emergency Preparedness (REP) Program also routinely tests and evaluates the individual site plans, the 10-mile plans for the 63 sites are tested at biennial exercises (approximately 32 exercises per year) and the 50-mile plans for the 36 States are exercised once every six years (approximately six exercises per year).

The events of September 11 have now horrifically demonstrated that these plans needed to be expanded further. When September 11 showed us how a commercial jetliner can be used as a weapon of mass destruction, the NCR and FEMA began to work jointly on the preparation of protocols and procedures for dealing with the consequences of a similar attack on a nuclear power plant – a scenario previously not addressed. While some amendments to the emergency response plans may result from this review, it is important to note that the current plans are a valid approach to any nuclear power plant incident, regardless of the cause: terrorism, human error, technological failure, or a natural hazard.

The Federal Radiological Preparedness Coordinating Committee (FRPCC) has also conducted tabletop exercises of the FRERP in order to determine Federal agency resources for responding to a terrorist attack, or multiple attacks, with a radiological component. In addition, the FRPCC is evaluating the nuclear/radiological threat posed by Improvised Nuclear Devices and Radiological Dispersal Devices and the preparedness of FRPCC member departments and agencies to deal with these threats.

In addition, the Federal Response Subcommittee of the FRPCC has developed information on radiological terrorist devices--such as radiological dispersion devices, improvised nuclear devices, and radiological exposure devices--for the use of the Federal Bureau of Investigation as background and public information.

Finally, FEMA's Technological Services Division of the Office of National Preparedness has asked the FEMA Regions to provide (1) information on what the Region has done to review and modify State and local REP plans for a response to a sudden catastrophic event; (2) recommendations on improving the realism of REP exercises; and (3) recommendations on how to improve/enhance public education within the REP planning zones. This request is due by April 15, 2002.

We are also working with our Canadian neighbors through *the Agreement between the Government of the United States of America and the Government of Canada on Cooperation in Comprehensive Civil Emergency Planning and Management.* In the past, our collaboration under this agreement has focused on natural and technological hazards. The Agreement does, however, include language regarding "deliberate acts" and "undeclared hostilities including armed enemy attack".

Since September 11, both countries are applying the broadest interpretation of those aspects of the Agreement. The United States Government and Canada seek to strengthen cross border planning and management against the possibility of future chemical, biological, radiological, nuclear events and/or incendiary attacks targeted on either of our countries or on both of our countries simultaneously. To that end, FEMA participated in a US Department of State-Canada Solicitor General sponsored Senior Level Workshop that was held in Ottawa on 4-5 February 2002. FEMA is also working with Canada's Office of Critical Infrastructure Protection and Emergency Preparedness (OCIPEP) to help improve existing communications and operational levels for all disaster situations including terrorism.

Conclusion

It is FEMA's responsibility to ensure that the national emergency management system is adequate to respond to the consequences of catastrophic emergencies and disasters, regardless of the cause, and that all catastrophic events require a strong management system built on expert systems for each of the operational disciplines.

Terrorism presents tremendous challenges. We rely on our partners in Department of Health and Human Services to coordinate the efforts of the health and medical community to address biological terrorism, as we rely on EPA and the Coast Guard to coordinate the efforts of the hazardous materials community to address chemical terrorism and the NCR to address nuclear events. And we relay on our partners at the state and local level. Without question, they need support to further strengthen capabilities and their operating capacity.

FEMA must ensure that the national system has the tools to gather information, set priorities, and deploy resources effectively in a biological scenario. In recent years we have made tremendous strides in our efforts to increase cooperation between the various response communities, from fire and emergency management to health and medical to hazardous materials. And now, we need to do more.

The creation of the Office of National Preparedness and our emphasis on training, planning, equipment, and exercises will enable us to better focus our efforts and will help our nation be better prepared for the future.

Thank you, Mr. Chairman. I would be happy to answer any questions you have.

Mr. HORN. Thank you very much.

And I'd now ask Representative Wilson to introduce our next presenter, Mr. Dean.

Mrs. WILSON. Thank you, Mr. Chairman.

It's a real pleasure to have Steven Dean with us here. He's been in Albuquerque as the Assistant Special Agent in Charge of the FBI for a little over a month.

We are very happy to have you here, even though you are formerly a Marine Corps officer. Thank you very much for coming today.

STATEMENT OF STEVEN M. DEAN, ASSISTANT SPECIAL AGENT IN CHARGE, ALBUQUERQUE, NM, FEDERAL BUREAU OF INVESTIGATION

Mr. DEAN. Thank you, Congresswoman Wilson. Good morning, Chairman Horn, Congressman Udall, and members of the subcommittee. I appreciate the opportunity to appear before you this morning, and discuss terrorism preparedness, including terrorism threats posed by attacks including nuclear, biological and chemical agents. I'll also describe measures taken by the FBI and our law enforcement partners to address these threats.

As Attorney General John Ashcroft stated recently, "We must develop a seamless relationship with State and local law enforcement." The FBI in Albuquerque, which is responsible for the entire State of New Mexico, has embraced this philosophy for several years. All terrorist threats received by Albuquerque FBI are immediately disseminated to New Mexico's law enforcement community. We participate in a group comprised of the heads of the local, State and Federal law enforcement agencies in a monthly breakfast, and we discuss pertinent issues with our partners, and the issues are immense.

The State of New Mexico, as you all know, is the fifth largest State in the Nation and shares 180 miles of border with the Republic of Mexico. We possess some of the Nation's most attractive targets. Congresswoman Wilson mentioned Los Alamos and Sandia National Laboratories. White Sands Missile Range, Air Force Research Laboratory, Waste Isolation Pilot Project, the very large array, Intel, Sumitomo, and the list goes on and on.

I'd like to bring to your attention several initiatives already established in New Mexico to address these terrorist threats. They are the Weapons of Mass Destruction Working Group, the Domestic Terrorism Working Group, and the Joint Terrorism Task Force. These programs were established in concert with local, State and Federal agencies, to include the New Mexico Department of Public Safety and the Department of Health. Each agency participating in these programs participated in the development of guidelines for prevention, response, investigation and training in regards to a variety of terrorist acts.

First, the Domestic Terrorism Working Group. This group was established in 1996, with representation from 45 local, State and Federal departments and agencies. Meetings are held each month at the U.S. Customs Air Branch at Kirtland Air Force Base. Since September 22, 2001, just 11 days after the tragic attacks, these

meetings have included international terrorism information and alerts.

The Weapons of Mass Destruction Working Group was established in 1998, with representation from over 20 local, State and Federal departments and agencies. Again, meetings are held monthly. Albuquerque FBI has conducted 46 weapons of mass destruction presentations, participated in 55 weapons of mass destruction meetings, and 13 weapons of mass destruction exercises, over the past 22 months, with our local, State and Federal partners.

The Joint Terrorism Task Force, which was established in March 2001, is comprised of sworn law enforcement members of the Domestic Terrorism Working Group, with nine full-time investigators representing their agencies.

Several representatives from the above groups are currently participating in the development of the Terrorism Appendix to the State of New Mexico All-Hazard Emergency Operations Plan. This is being spearheaded by the Department of Public Safety Office of Emergency Management. The Terrorism Appendix provides guidelines for response to incidents that are determined to be terrorism-related.

To establish a seamless communication path with various agency heads, our office recently met with Mr. Tom English, who is New Mexico's Director of Homeland Defense, and David Iglesias, who is the U.S. Attorney. Last week, I joined the Joint Terrorism Task Force members to provide a presentation to Martin Chavez, the mayor of Albuquerque.

As you are well aware, each FBI Division has a Weapons of Mass Destruction coordinator, whose taskings are to maintain liaisons with fire, HAZMAT, law enforcement, public and emergency health personnel, whose role is to respond to incidents resulting from weapons of mass destruction terrorism. We actively participate in the education of all personnel who share the FBI's mission to prevent, deter and to detect acts of terrorism. Therefore, first-responder personnel should not only be trained on how to effectively respond to weapons of mass destruction incidents, but also on how to recognize weapons of mass destruction proliferation.

We've enlisted the help of the former chief of police of the Oklahoma City Police Department. He's been in New Mexico at least five times to discuss lessons learned in preparedness from the Oklahoma City bombing. The former fire chief of the Oklahoma City Fire Department has also been to New Mexico, when New Mexico hosted a fire officials conference. He's also discussed lessons learned from the Oklahoma City bombing. And an FBI bomb technician spoke at the same conference about lessons learned from first World Trade Center bombing. We believe these sessions have helped, can help throughout the State, to put us all on the same preparedness page.

Last year, the Weapons of Mass Destruction Working Group provided four training symposiums to first-responders on recognition and effective response to acts of terrorism, including chemical agents, biological agents, nuclear and radiological agents, and large explosives. They have established a secure Web site, whereby infor-

mation regarding training, exercises, meetings, and news articles are posted.

I have a lot more information on the Weapons of Mass Destruction Working Group, and I realize I've run out of time, Mr. Chairman, but I'll be happy to answer any questions you may have. Thank you.

[The prepared statement of Mr. Dean follows:]

Testimony of

STEVEN M. DEAN
Assistant Special Agent in Charge, ALBUQUERQUE, FBI

before the

HOUSE COMMITTEE ON GOVERNMENT REFORM, SUBCOMMITTEE ON GOVERNMENT EFFICIENCY, FINANCIAL MANAGEMENT AND INTERGOVERNMENTAL RELATIONS

March 25, 2002

Good morning Chairman Horn, members of the Subcommittee and distinguished members of the New Mexico Delegation. I appreciate the opportunity to appear before you and discuss terrorism preparedness, including threats posed by attacks involving biological, chemical or nuclear agents. I will also describe measures taken by the Federal Bureau of Investigation (FBI) and our law enforcement partners to address these threats.

Introduction

As Attorney General John Ashcroft stated recently, "we must develop a seamless relationship with state and local law enforcement." FBI Director Mueller emphasized this goal when he spoke to the International Association of Chiefs of Police and said that it is his belief that "law enforcement is only as good as its relationships, that our combined resources and expertise and ideas are far beyond the sum of their parts, and that the potential for greater successes through mutual cooperation and respect is boundless." The FBI, Albuquerque, which is responsible for the state of New Mexico, has embraced this philosophy for several years. All terrorist threats

received by Albuquerque FBI (NLETS, NTWS, etc.) are immediately disseminated to New Mexico's law enforcement community.

The Albuquerque Division of the FBI

The Albuquerque Division of the Federal Bureau of Investigation (FBI) is headquartered in Albuquerque, New Mexico, with five resident agencies in Gallup, Farmington, Santa Fe, Roswell and Las Cruces. The Division has a funded staffing level of 95 Special Agents and 76 Professional Support Employees. The territory covered by the Albuquerque Division is the state of New Mexico.

The state of New Mexico is the fifth largest state in the nation in area and shares 180 miles of border with the Republic of Mexico. New Mexico possesses some of the nation's most attractive targets for terrorists. FBI, Albuquerque, is responsible for liaison with state and local agencies, as well as other federal entities to ensure that acts of terrorism are prevented. New Mexico's key assets are Los Alamos National Laboratory, Sandia National Laboratory, Air Force Research Laboratory, White Sands Missile Range, the Waste Isolation Pilot Project, the State Department's Anti-terrorism Center, the Very Large Array, Intel, Sumitomo, Kirtland Air Force Base, Holloman Air Force Base, Cannon Air Force Base, Ft. Bliss Army Base and the San Juan Basin Natural Gas and Production Hub. (See Attachment A)

We would like to bring to your attention several initiatives already established in New Mexico to address terrorist threats. They are the Weapons of Mass Destruction Working Group (WMDG), Domestic Terrorism Working Group (DTWG) and the Joint Terrorism Task Force (JTTF).

These programs were established in concert with local, state and federal agencies, to include the New Mexico Department of Public Safety, (DPS) and the Department of Health. Each agency participating in these programs participated in the development of guidelines for prevention, response, investigation and training in regards to a variety of terrorist acts.

The DTWG was established in 1996 with representation from 45 local, state and federal departments and agencies. Meetings are held each month at the United States Customs Air Branch on Kirtland Air Force Base. Since September 22, 2001, these meetings have included international terrorism information and alerts.

The WMDG was established in 1998 with representation from over 20 local, state and federal departments and agencies. Meetings are held monthly.

The JTTF, established in March of 2001, is comprised of sworn law enforcement members of the DTWG, with nine full-time investigators representing their agencies. Meetings are held monthly.

Attached to my statement for the record is information regarding each of these established groups. (See Attachment B: JTTF; Attachment C: DTWG; Attachment D: WMDWG)

Several representatives from the above groups are currently participating in the development of the Terrorism Appendix to the State of New Mexico All-Hazard Emergency Operations Plan, which is spearheaded by the DPS Office of Emergency Management. The Terrorism Appendix provides guidelines for response to incidents that are determined to be terrorism related.

Since September 11, 2001, interest and participation has grown in all three programs. After this catastrophic attack, the Special Agent in Charge (SAC) established a command post to handle any investigation or response within our jurisdiction. This command post was manned 24 hours a day, 7 days a week, for approximately 3 months. This command post was staffed by the FBI and 16 outside federal, state, and local agencies including the previously mentioned JTTF, DTWG, and WMDWG. The U.S. Attorney's Office provided and continues to provide support in an "on call" capacity. The command post received in excess of 1600 leads which resulted in approximately three times that number of interviews. The information received by the command post has been extremely valuable in the FBI's threat assessment for the state of New Mexico.

To establish a seamless communication path with various agency heads, the SAC met with Gary Johnson, Governor of New Mexico, and various functions within law enforcement and civilian arenas. I recently met with Tom English, New Mexico's Director of Homeland Defense; David C. Iglesias, U.S. Attorney; Larry Gomez, First Assistant United States Attorney; and Paula Burnett, head of the Anti-Terrorism Task Force. Last week, I joined the JTTF members to deliver briefings on these programs to Martin Chavez, Mayor of Albuquerque, New Mexico.

The Albuquerque FBI looks forward to a continuation of the ongoing efforts concerning the protection of our state and cities with all levels of government and law enforcement.

WMD

As you are well aware of by now, each FBI Division has a WMD Coordinator whose taskings are

to maintain liaison with fire, haz-mat, law enforcement, public and emergency health personnel whose role is to respond to incidents resulting form WMD terrorism. By liaison, I mean to actively participate in the education of all personnel who share the FBI's mission to prevent, detect and deter acts of terrorism. Therefore, first responder personnel should not only be trained on how to effectively respond to WMD incidents but also on how to recognize WMD proliferation.

The New Mexico Weapons of Mass Destruction Working Group, (WMDWG) is the forum for education, training exercises and information sharing regarding WMD in the state of New Mexico. It was established in 1998. It is co-hosted by the Albuquerque FBI, New Mexico Department of Public Safety and the New Mexico Department of Health. Last year, the WMDWG provided four training symposiums to first responders on recognition and effective response to acts of terrorism involving: Chemical Agents, Biological Agents, Nuclear and Radiological Agents, and Large Explosives. The WMDWG has a secure website whereby information regarding training, exercises, meetings, news articles, etc. are posted. After Sept. 11, 2002, the FBI in New Mexico responded to over 1300 calls and incidents regarding mail suspected of containing anthrax. The WMDWG established guidelines to effectively handle suspicious packages and letters in order to reduce panic and man hours for all involved. The guidelines require the FBI and the New Mexico Department of Health to determine, through logical investigation, if a package/letter presents a credible threat. If a threat is deemed credible, the guidelines direct how it will be screened by haz-mat teams, how it will be transported by law enforcement and where it will be analyzed. The guidelines were disseminated to all law enforcement agencies in New Mexico. The FBI's close coordination with law enforcement, haz-

mat and public health ensure effective and coordinated response by law enforcement and public health throughout New Mexico.

The FBI's WMD Coordinator provides training not only to state and local police, sheriff, fire, public health and emergency manager conferences, but also to county and city, agencies, departments and committees throughout the state of New Mexico.

The FBI in New Mexico also has the responsibility for conducting investigations and liaison at facilities in New Mexico that research and/or store nuclear and biological weapons. These facilities include the Los Alamos National Laboratories, Sandia National Laboratories, University of New Mexico, Kirtland Air Force Base and the Waste Isolation Pilot Project. All these facilities are recipients of the FBI's outreach effort which includes alerts, information sharing and training.

INFRAGARD PROGRAM

The FBI's InfraGard Program is a community outreach program in which Special Agents maintain liaison with the owners and operators of the critical infrastructures (Transportation, Telecommunications, Natural Gas Transmission lines, Electrical Energy production and transportation networks, Emergency Management assets, Water and Financial institutions). The program provides alerts and warnings via secure Internet communications. On February 1, 2002, the FBI formerly introduced the InfraGard Program to representatives from approximately 150 organizations in New Mexico. The program establishes a local communications network in which threat information can

received and disseminated in a timely manner.

JTTF

MISSION

The mission of the NMJTTF is to identify and target for prosecution terrorists and terrorist organizations planning or carrying out terrorist acts occurring in or affecting the State of New Mexico and to apprehend individuals committing such acts. The organizations to be investigated will be specifically identified and agreed upon before hand by the NMJTTF member agencies. All parties agree to abide by Attorney General Guidelines. The NMJTTF will enhance the effectiveness of federal/state/local law enforcement resources through a well-coordinated effort seeking the most effective investigative/prosecutive avenues by which to convict and incarcerate dangerous offenders.

As mandated by U.S. Attorney General John Ashcroft, U.S. Attorneys offices throughout the country have recently established an Anti-Terrorism Task Forces (ATTF). Albuquerque FBI ensures that the activities of it's JTTF are coordinated with the New Mexico U.S. Attorneys Office ATTF in order to avoid duplication of effort and to facilitate the exchange of information regarding counterterrorism objectives. Through the New Mexico U.S. Attorneys Office, the FBI in New Mexico is aggressively pursuing the prosecution of mailed WMD threats.

In order to enhance prosecutions of WMD use and/or other terrorist threats on a state level, the FBI recently collaborated with the New Mexico Attorney General's Office in the formulation of state terrorism legislation which was presented recently as House Bill 339 at the 45th Legislature

of New Mexico.

The FBI in New Mexico has provided its JTTF members with training in Domestic and International Terrorism. Training has also been provided in source development and administration at the FBI's Training Academy in Quantico, Virginia and at the field office in Albuquerque. Additionally, FBIHQ and DOJ are sponsoring state and local anti-terrorism training. Conferences are being provided across the country which started January 30, 2002. The JTTF will be attending when this becomes available in this region. Finally, the JTTF members provide training to other state and local investigators.

ATTACHMENT A

NEW MEXICO KEY ASSETS

1. **Los Alamos National Laboratory** is located north of Santa Fe, NM, approximately an hour and a half drive from Albuquerque, NM. Los Alamos is a DOE weapons research lab with approximately 6,800 employees and 2,888 contractor personnel.

2. **Sandia National Laboratory** is located on Kirtland Air Force Base in Albuquerque, NM. Sandia is a DOE lab which provides science and engineering support for nuclear weapons stockpile, as well as other aspects of national security, such as preventing the spread of nuclear, chemical, and biological weapons.

3. **Air Force Research Laboratory** is located on Kirtland Air Force Base in Albuquerque, NM. The laboratory is working on the Space Vehicles Directorate which researches military satellites and manned spacecraft.

4. **White Sands Missile Range** is located in the Las Cruces, NM, RA area. It is a Department of Defense missile range and test facility with capabilities used by the Army, Navy, Air Force and NASA.

5. **The Waste Isolation Pilot Project** (WIPP) is located

near Roswell, NM (Las Cruces RA). It is the world's first licensed underground nuclear repository of transuranic radioactive waste from the production of nuclear weapons.

6. **The State Department's Anti-terrorism Center** is located in Albuquerque, NM. The State Department's **Explosives Training facility** is located in Socorro, NM. The State Department's **Law Enforcement Training Center** is located in Roswell, NM (Las Cruces RA). All three facilities regularly train delegations from foreign countries, including Yemen and UAE.

7. **The Very Large Array** (VLA) (the world's premier space research and satellite communications facility) is located near Socorro, NM, in a remote section of east central New Mexico (covered by Albuquerque).

8. **Intel and Sumitomo** have some of the world's largest computer chip production facilities which are located in the Albuquerque area.

9. Three Air Force bases are located in New Mexico. **Kirtland Air Force Base** (Albuquerque), **Holloman Air Force Base** (southern, NM), and **Cannon Air Force Base** (eastern NM) maintain fighter jet squadrons and train pilots from foreign nations.

10. **Ft. Bliss Army Base**, although based out of Texas, has many facilities located in eastern New Mexico. This base is the home of the U.S. Army Air Defense Artillery Command, which includes Patriot missiles. The German Army maintains a significant presence at the base.

11. **The San Juan Basin Natural Gas and Production Hub** which is located in central New Mexico (covered by Albuquerque) serves the southwestern United States and California).

ATTACHMENT B

FBI ALBUQUERQUE DIVISION

Joint Terrorism Task Force

Approved March 2001

Meetings held every first Tuesday of each month

Comprised of sworn law enforcement officers only

New members continue to be solicited

Full Time Members

New Mexico Department of Public Safety

1. - Special Investigations Division
2. - Motor Transportation Division
3. United States Customs

U.S. Department of Interior

4. - Bureau of Land Management

5. - U.S. Fish and Wildlife Service

6. U.S. Secret Service

7. New Mexico Attorney General's Office

8. Federal Bureau of Investigation

Part- Time Members

9. Albuquerque Police Department

10. Albuquerque TVI - Security

11. Bernalillo County Sheriff's Office

12. Bureau of Alcohol, Tobacco and Firearms

13. Bureau of Indian Affairs Office of Law Enforcement

14. Burlington Northern Santa Fe Railroad

15. Drug Enforcement Agency

16. Defense Threat Reduction Agency

17. Dona Ana County Sheriff's Department

18. Farmington Police Department

19. Federal Protective Service

20. Immigration and Naturalization Service

21. Internal Revenue Service

22. Kirtland Air Force Base, Office of Special Investigations

23. Kirtland Air Force Base, Security Forces

New Mexico Department of Public Safety

24. - State Police Division

25. Rio Rancho Department of Public Safety

26. Ruidoso Police Department

27. Santa Ana Pueblo Police Department

28. Santa Fe Police Department

29. Sandoval County Sheriff's Department

University of New Mexico

30. - Emergency Management

31. - Police Department

32. U.S. Attorney's Office

U.S. Department of Interior

33. - National Park Service

34. U.S. Forest Service

35. U.S. Marshal's Office

36. U.S. Postal Inspection Service

37. U.S. Secret Service

ATTACHMENT C

FBI ALBUQUERQUE DIVISION

Domestic Terrorism Working Group

Established in 1996

Meetings held every third Tuesday of each month

All city, county, state, federal and corporate agencies/departments with a nexus to counterterrorism are solicited to join.

Currently the 41 members are:

1. Air Force Operational Test and Evaluation Center
2. Albuquerque Police Department
3. Albuquerque TVI
4. Bernalillo County Sheriff's Office
5. Bernalillo County Fire Department
6. Bureau of Alcohol, Tobacco and Firearms
7. Bureau of Indian Affairs Office of Law Enforcement
8. Burlington Northern Santa Fe Railroad
9. Drug Enforcement Agency
10. Defense Threat Reduction Agency
11. Dona Ana County Sheriff's Department
12. Farmington Police Department
13. Federal Bureau of Investigations

14. Federal Protective Service

15. Internal Revenue Service

16. Immigration and Naturalization Service

17. Kirtland Air Force Base Security Forces

18. Los Alamos National Labs

19. New Mexico Army National Guard

20. New Mexico Attorney General's Office

21. New Mexico Gaming Control Board

22. New Mexico Department of Public Safety

    - Special Investigations Division

    - State Police Division

    - Motor Transportation Division

    - Technical and Emergency Support Division

23. Rio Rancho Department of Public Safety

24. Ruidoso Police Department

25. Santa Ana Pueblo Police Department

26. Santa Fe Police Department

27. Sandoval County Sheriff's Department

28. University of New Mexico

    - Emergency Management

- Police Department

29. U.S. Air National Guard

30. U.S. Air Force Office of Special Investigations

31. U.S. Attorney's Office

32. U.S. Customs

33. U.S. Department of Defense

34. U.S. Department of Energy

35. U.S. Department of Interior

- Bureau of Land Management

- National Park Service

36. U.S. Fish and Wildlife Service

37. U.S. Forest Service

38. U.S. Marshal's Office

39. U.S. Secret Service

40. U.S. Department of Agriculture

41. U.S. Postal Inspection Service

ATTACHMENT D

FBI ALBUQUERQUE DIVISION

Weapons of Mass Destruction Working

Group

Established in 1998

Meetings held every third Tuesday of each month

All city, county, state, federal and corporate agencies/departments with a response role to incidents involving chemical, biological and/or nuclear/radiological terrorism are solicited to join.

1. New Mexico Department of Public Safety

a. New Mexico Office of Emergency Management

b. New Mexico State Police

c. New Mexico Motor Transportation Division

2. New Mexico Department of Health

a. New Mexico Office of Epidemiology

b. New Mexico Scientific Laboratory (Chemical and Biological Departments)

3. University of New Mexico

a. Office of the Medical Examiner

b. University of New Mexico Emergency Management Division

4. Albuquerque Police Department

5. Sandia National Laboratories Emergency Management

6. Los Alamos National Laboratories Emergency Management

7. Bureau of Indian Affairs

8. New Mexico National Guard

9. New Mexico National Guard Civil Support Team

10. Fifth U.S. Army - Region 6 Emergency Preparedness

11. Bernalillo County Fire and Rescue

12. Sandoval County Fire and Rescue

13. DOD Defense Threat Reduction Agency Defense Nuclear Weapons School

14. U.S. Department of Energy

15. County of Bernalillo Environmental Health

16. New Mexico Environment Department

17. New Mexico American Red Cross

18. City of Albuquerque Environmental Health Dept.

19. U.S. Department of Veterans Affairs

Mr. HORN. Well, I want to thank the FBI in your other role as looking at the computer security matters of the Federal Government, and your people at the laboratories have just been tremendous. They've brought witnesses to us from around the world, and a lot of good things have come from that. So thanks for what else you're doing.

I'm going to ask our colleague here to introduce Mr. Johnsen, and he's the Senior Technical Advisor for Bioscience, National Nuclear Security Administration, in the Albuquerque operations.

Mrs. WILSON. Thank you, Mr. Chairman. Our Albuquerque Operations Office here at the Department of Energy has a tremendous expertise in these areas, and that's the office that's responsible for coordinating and guiding things that happen at both of our national laboratories here in New Mexico. We're very pleased to have Mr. Johnsen here today. Thank you.

STATEMENT OF JOHN-OLAV JOHNSEN, SENIOR TECHNICAL ADVISOR FOR BIOSCIENCE, NATIONAL NUCLEAR SECURITY ADMINISTRATION, U.S. DEPARTMENT OF ENERGY

Mr. JOHNSEN. Thank you, Congresswoman Wilson. And Chairperson Horn, thank you very much for allowing us the opportunity to present some testimony today.

The Department of Energy and the National Nuclear Security Administration have been active in bioscience research at both of the national laboratories here in New Mexico for many years, and this, of course, includes the predecessor agencies of the Department of Energy. This work has been going on, in effect, since the days of the Manhattan Project. With the increasing emphasis and the anticipated increase in work in bioscience research and development work, the Albuquerque operations office, early in 2000, initiated what is now known as its Biosurety Program.

"Biosurety" was a term that was coined to define and emphasize, as a single operational concept, the integration of biological safety, laboratory security and protection of biological agents, emergency response and community and intergovernmental relations and liaison. Biosurety, as both a concept and as an operational approach is now moving out to other DOE sites, and is a central tenet of the DOE Headquarters Biosafety Working Group, of which I am the chairman.

The working group acts as a national coordination and information-sharing body, ensuring consistency of approaches to similar issues across the DOE complex, and works to ensure increased cooperation between the department and other Federal agencies in the area of bioscience. Both Los Alamos National Laboratory and Sandia National Laboratories are addressing security of laboratories and protection of biological agents in their site security plans, and are also addressing the related emergency response issues in their respective emergency response planning.

Again, as a central tenet of the biosurety approach, these plans, as applicable to local law enforcement and emergency response agencies and groups, are to be made fully available, so that the fullest and most effective cooperation and coordination is in place with local, tribal, State, and other Federal agencies potentially affected by such work at these national laboratories. Policies are in

place or are being developed by the department to ensure that this occurs.

Albuquerque Operations has issued a directive that addresses the specific issues and requirements associated with the safe handling, transferring, and receiving of certain biological agents at contractor sites. This policy reflects a higher-level policy that was issued by the Department of Energy in the fall of 2001, and provides additional clarification and details specific to biological science activities using certain biological agents of concern by Los Alamos National Laboratory and Sandia National Laboratories.

The emphasis by the department is that it provides expectations and guidance to the laboratories, which in turn will develop the operational procedures and site-specific policies to meet these expectations. The department adamantly holds that the fullest coordination and cooperation between the national laboratories and local, State, and Federal authorities is critical to ensuring not only that public trust is maintained, but in ensuring that affected authorities and the public are notified and involved in the department's protection and emergency response planning for events that could result from its biological science research and development efforts.

Thank you very much for this opportunity, on behalf of the Albuquerque Operations Manager, John Arthur. I appreciate your having me here.

[The prepared statement of Mr. Johnsen follows:]

John-Olav Johnsen
Senior Technical Advisor for Bioscience
NNSA Albuquerque Operations

Oversight Field Hearing of the House Subcommittee on Government Efficiency, Financial Management and Intergovernmental Relations
March 25, 2002
University of New Mexico Continuing Education Building Auditorium

"The Department of Energy and National Nuclear Security Administration have been active in bioscience research at both Los Alamos National Laboratory and Sandia National Laboratory for many years. With the increasing emphasis and anticipated increase in work in bioscience research and development work, the Albuquerque Operations Office, in early 2000, initiated what is now known as its Biosurety Program.

"Biosurety" defines and emphasizes, as a single operational concept, the integration of biological safety, laboratory security and protection of biological agents, emergency response, and community/intergovernmental relations and liaison. Biosurety as both a concept and an approach is now moving out to other DOE sites and is a central tenant of the DOE Headquarters Biosafety Working Group, of which I am the Chair.

This Working Group acts as a coordination and information sharing body, ensuring consistency of approaches to similar issues across the DOE Complex and working to ensure increased cooperation among the Department and other federal agencies. Both Los Alamos National Laboratory and Sandia National Laboratories are addressing security of laboratories and protection of biological agents in their site security plans and also addressing the related emergency response issues in their respective emergency response planning.

Again, as a central tenant of the Biosurety approach, these plans, as applicable to local law enforcement and emergency response agencies and groups, are to be made fully available so that the fullest and most effective cooperation and coordination is in place with local, state, and other federal agencies potentially affected by such work at these National Laboratories. Policies are in place to ensure that this occurs.

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U.S. Department of Energy

Albuquerque Operations Office

SUPPLEMENTAL DIRECTIVE

AL SD 450.7

Approved: 12-16-01
Review: 12-16-03

SUBJECT: THE SAFE HANDLING, TRANSFERRING, AND RECEIVING OF ETIOLOGIC AGENTS AT ALBUQUERQUE OPERATIONS (AL) CONTRACTOR FACILITIES ("AL BIOSURETY PROGRAM")

1. PURPOSE. This Supplemental Directive (SD) establishes the Department of Energy (DOE)/National Nuclear Security Administration (NNSA)/Albuquerque Operations Office (AL) Biosurety Program and contractor requirements for the safe handling, transferring, and receiving of etiologic agents ("any viable microorganism or its toxin which causes or may cause human disease") at AL contractor facilities that are to be integrated into existing site programs and operations. It implements, and expands upon, basic requirements contained in DOE Notice 450.7 "The Safe Handling, Transfer, and Receipt of Biological Etiologic Agents at Department of Energy Facilities". The AL Biosurety Program ("Biosurety") defines an integrated approach to the management of hazardous biological materials and activities. This includes those areas of safety, security, environmental protection, emergency management, and community relations related to activities involving etiologic agents, including select agents. NNSA/AL oversight responsibilities include ensuring safety of contractor operations with etiologic agents, including select agents, and associated activities.

2. CANCELLATION: None.

3. APPLICABILITY.

   a. NNSA/AL Elements. This SD applies to any NNSA/AL-owned or -leased facilities and field elements that may transfer, use, or receive, through any means, an agent as defined in 42 CFR 72.1 as an etiologic agent. For purposes of this SD, "etiologic agents" are defined as Risk Group 2 or higher agents as defined by the National Institutes of Health (NIH) "Guidelines on Recombinant DNA" (October 1997) and/or, per 42 CFR 72.6, as a "select" agent.

   b. Contractors. The Contractor Requirements Document (CRD), Attachment 1 and semi-annual report form, Attachment 2, of this SD applies to activities and facilities at Los Alamos National Laboratory (LANL) and the Sandia National Laboratories (SNL) that conduct activities with or involving the transfer, use, or receipt, through any means, of an agent as defined in 42 CFR 72.1 as an etiologic agent. For purposes of this SD, "etiologic agents" are defined as Risk Group 2 or higher agents as defined by the NIH "Guidelines on Recombinant DNA" (October 1997) and/or, per 42 CFR 72.6, as a "select" agent.

   c. For the purposes of this Directive: NNSA/AL-owned or -leased facility means any single site that may transfer, use, or receive through any means etiologic agents.

4. EXCLUSIONS. This SD does not apply to AL contractor clinical laboratories certified under the Clinical Laboratory Improvement Amendment (CLIA) of 1988 (42 United States Code (U.S.C.) 263a) that utilize etiologic biological agents for diagnostic, reference, verification, or proficiency testing purposes.

5. OBJECTIVES. The objectives for AL's Biosurety Program are directed towards achieving compliance with requirements applicable to activities and operations involving etiologic agents at AL contractor sites through:

   a. Integration of Public Health Service (PHS)/U.S. Department of Health and Human Services (HHS) requirements, as administered by the Centers for Disease Control and Prevention (CDC), for the safe handling, transferring, using, or receiving of etiologic agents into existing DOE/NNSA AL directives and guidance documents and into the contractor's Integrated Safety Management Systems.

   b. Implementation of efficient and cost effective guidance in support of the requirements set forth in 42 CFR 72.

   c. Establish criteria and procedures for concurrent notification of contractor Biosafety Level (BSL) - 2 laboratory registration and for review and authorization of cognizant contractor request(s) for programmatic start or restart of -BSL-3 biological laboratories and/or programmatic operations.

   d. Establishment of specific requirements for AL organizations regarding roles and responsibilities between those organizations with contractor line or program responsibilities which include contractor work with etiologic agents, biosurety issues, and to establish authorities for authorizing programmatic start or restart of CDC registered BSL-3 biological laboratories at LANL and SNL.

   e. Establishment of contractor reporting criteria for etiologic.

6. REQUIREMENTS.

   a. NNSA/AL Field Elements shall:

      (1) Ensure all work involving etiologic agents is performed in accordance with all applicable regulatory requirements and as part of a biosurety program established within the contractor's Integrated Safety Management System (ISMS).

      (2) Ensure that proposed work involving etiologic agents, complies with the applicable requirements of the National Environmental Policy Act (NEPA).

      (3) Ensure full awareness by cognizant Field Element line organizations of programmatic bioscience operations and etiologic agents present at contractor BSL-2 and higher laboratories.

      (4) Authorize operation of new or restart CDC registered BSL-3 biological laboratories.

(5) Where contractor employees are represented for collective bargaining by a labor organization, NNSA/AL field elements must cooperate with the contractor to amend the contract or CRD language, consistent with any applicable Federal labor laws.

7. RESPONSIBILITIES.

a. Field Manager for NNSA Operations, AL is responsible for implementing the responsibilities and requirements contained within this SD.

b. Director, Office of Safety Support (OSS), AL is responsible to the Field Manager for NNSA Operations, AL to perform and/or ensure performance of the following:

(1) Supervise the AL Biosurety Program and establish and supervise the position of AL Senior Technical Advisor for Bioscience, OSS/AL.

(2) Provide overall Biosurety Program management and direction in accordance with this SD and related directives and regulations.

(3) Ensure environment, safety, and health (ES&H) requirements associated with the handling, transferring, and receiving of etiologic agents at AL contractor facilities are integrated with cognizant AL program management elements, AL Biosurety staff, and Office of Site Operations to ensure risk, if any, associated with proposed work with etiologic agents is understood and concurred with by Office of Site Operations line management prior to such projects being accepted by cognizant Office of Complex Readiness (OCR) divisions for funding and work authorization. The primary process for Office of Site Operations line management to understand and concur with such work shall be through federal representation on the contractor Institutional Biosafety Committee (IBC) or similar safety review process.

(4) Provide assistance to the Office of Site Operations and cognizant OCR divisions in implementing biosurety requirements and providing biosurety technical program direction for work involving etiologic agents and associated activities and facilities.

(5) Provide, in the absence of the Office of Los Alamos Site Operations (OLASO) member and/or Office of Kirtland Site Operations (OKSO) member on the LANL and/or SNL IBC or similar safety review process, respectively, a federal representative with requisite biological science technical expertise and training as an alternate non-voting member on the LANL and SNL IBC or similar safety review process. This federal representative shall act for the cognizant Office of Site Operations and will report IBC or similar safety review process decisions directly to the cognizant Office of Site Operations Director. This federal staff member will be the AL Senior Technical Advisor for Bioscience unless otherwise designated. Concurrence with IBC or similar safety review process decisions by the federal staff member representative may, at the discretion of the cognizant Office of Site Operations Director, constitute delegated risk acceptance and approval of work by the cognizant Office of Site Operations Director. This delegation shall be established by memorandum from the cognizant Office of Site Operations Director to the federal IBC or similar safety review process representative,

with copies to the Director, OSS/AL, the AL Senior Science Advisor for Bioscience, and the cognizant contractor IBC or similar safety review process.

(6) Assist OLASO and OKSO in developing and maintaining a central file or database of Centers for Disease Control and Prevention (CDC) laboratory select agent registration; copies of each CDC Form EA-101 "Transfer of Select Agent" submitted by a contractor transferor site or facility and the semiannual and other reporting required by the Contractor Requirements Document (CRD) in this SD.

(7)

a) Assist OLASO and OKSO in reviewing contractor registration documentation submitted by contractors to the CDC for BSL-2 biological laboratories and/or operations involving etiologic agents.

b) Review and provide recommendations for or against approval to the Field Manager for NNSA Operations, AL for authorization of programmatic start or restart of CDC registered BSL-3 biological laboratories and/or operations at LANL and SNL. Such programmatic approval will be required subsequent to CDC registration but prior to commencing operations for newly registered facilities or for facilities that have not operated at BSL-3 for greater than one year. Programmatic approval will constitute authorization for all subsequent activities in the BSL-3 laboratory involving etiologic agents appropriate for BSL-3. Approval and authorization for start or restart of operations will be based upon satisfactory demonstration that the specific requirements for the safe handling, transferring, and receiving of etiologic agents as delineated in 42 CFR 72 which incorporates by reference the guidelines in the CDC/NIH "Biosafety in Microbiological and Biomedical Laboratories" (BMBL); HHS publication no. (CDC) 93-8395; of bloodborne pathogens as delineated in 29 CFR 1910.1030 "Occupational Exposures to Bloodborne Pathogens"; and of toxins as delineated in 29 CFR 1910.1450 "Occupational Exposure to Hazardous Chemicals in the Workplace" have been met. Site-specific documentation establishing the safety basis of a facility developed by the contractor will form the basis for BSL-3 authorization provided these documents incorporate, as a minimum, the applicable requirements of 42 CFR 72 (with BMBL by reference), 29 CFR 1910.1030, and 29 CFR 1910.1450.

(8) Review requests for exemptions and/or equivalencies from non-regulatory safety criteria for operations and activities at BSL-3 contained in this SD and related directives that are transmitted to OLASO and OKSO; coordinate with cognizant OCR and OSS divisions with programmatic and safety responsibilities; and provide recommendations to the Director, OLASO or OKSO and to the Field Manager for NNSA Operations, AL. The Field Manager for NNSA Operations, AL is the approval authority for exemptions and/or equivalencies for operations at BSL-3.

(9) Provide overall management and direction through the AL Biosurety Program to evaluate and ensure the safe handling, transferring, and receiving of etiologic agents at AL contractor facilities.

(10) Ensure procedures and standards are established for planning and conducting ES&H assessments of operations and activities involving etiologic agents, for reporting the results of such assessments, and for evaluating the adequacy of corrective actions.

(11) Ensure that proposed changes to safety procedures that may impact biosurety activities or operations, or biological science facilities, are coordinated through the cognizant Office of Site Operations and OCR divisions.

(12) Establish guidelines and procedures for training and qualifying personnel who assess programs and activities affecting the safe handling, transferring, and receiving of etiologic agents at AL contractor facilities and biosurety and associated actions and facilities used for these activities and operations. Coordinate training requirements with Office of Human Resources and Training (OHRT).

(13) Transmit the contractor semi-annual etiologic agent report to cognizant AL Divisions and HQ elements with programmatic or line management responsibilities involving contractor work with etiologic agents.. This contractor report, forwarded through the cognizant Office of Site Operations, will list the inventory of etiologic agents in use or storage at AL contractor facilities. The report will be distributed to ensure that all AL and HQ elements are apprised of the status of such agents.

c. Director, Office of Security Support, AL is responsible to the Field Manager for NNSA Operations, AL to perform and/or ensure performance of the following:

(1) Ensure security requirements associated with the handling, transferring, and receiving of etiologic agents at AL contractor facilities are integrated with cognizant AL program management elements, AL Biosurety staff, and Office of Site Operations to ensure security issues associated with proposed work with etiologic agents is understood and concurred with by Office of Site Operations line management prior to such projects being accepted by cognizant OCR divisions for funding and work authorization. The primary process for Office of Site Operations line management to understand and concur with such work shall be through the federal representative on the contractor Institutional Biosafety Committee (IBC) or similar safety review process. Concurrence with IBC or similar safety review process decisions by the federal representative may, at the discretion of the cognizant Office of Site Operations Director, constitute delegated risk acceptance and approval of work by the cognizant Office of Site Operations Director.

d. Director, Office of Complex Readiness (OCR), AL is responsible to the Field Manager for NNSA Operations, AL to perform and/or ensure performance of the following:

(1) Ensure risk associated with proposed work involving etiologic agents is understood and concurred with by Office of Site Operations line management prior to such proposed projects being accepted by cognizant OCR divisions for funding and work authorization. Such proposed work will not proceed without the cognizant Office of Site Operations Director's understanding and acceptance of the associated risk, if any, and which shall be communicated to cognizant OCR divisions. Concurrence with IBC or similar safety process decisions by the federal representative to the IBC or similar safety process may, at the discretion of the cognizant Office of Site Operations

Director, constitute delegated risk acceptance and approval, or rejection, of work and will be communicated to cognizant OCR divisions.

(2) Authorize and manage research projects involving etiologic agents at LANL and SNL for which OCR has programmatic responsibility in compliance with existing DOE/NNSA orders and directives including DOE Order 412.1. Ensure that authorization documentation associated with specific projects contains a statement indicating IBC or similar safety process and Office of Site Operations review, approval, and acceptance of associated risk, if any; this may take the form of a check block on the Determination and Certifications (D&C) form or similar procedure by cognizant OCR divisions with project authorization and management responsibility.

(3) Confirm, in coordination with the cognizant Office of Site Operations, that proposed AL contractor work with etiologic agents will not violate restrictions or constraints on the use of DOE/NNSA facilities and that the contractor is in compliance with ES&H requirements.

(4) Coordinate with the Senior Technical Advisor for Bioscience, OSS/AL, other cognizant AL divisions, and the cognizant Office of Site Operations to ensure that the contractor is conducting programmatic activities involving etiologic agents within established ISMS boundaries.

(5) Enforce work delays and stop work actions, if necessary, upon formal notification from the cognizant Office of Site Operations of unacceptable risk associated with any portion of the research activities with etiologic agents being proposed or conducted by the contractor, or upon notification that approved authorization basis documentation for such work does not meet established ISMS requirements.

e. Director Office of Human Resources and Training (OHRT), AL is responsible to the Field Manager for NNSA Operations, AL to perform and/or ensure performance of the following:

(1) Ensure ORTD coordinates with Office of Site Operations and AL biosurety staff to determine biosurety training and qualification requirements.

(2) Provide qualification training to Office of Site Operations biosurety staff and other cognizant Office of Site Operations and AL staff. In cooperation with the Senior Technical Advisor for Bioscience, OSS/AL, develop processes for training and qualifying biosurety personnel who assess programs and activities affecting the safe handling, transferring, and receiving of etiologic agents at AL contractor facilities and associated activities and facilities working with etiologic agents.

f. Director, Office of Los Alamos Site Operations OLASO and Director, Office of Kirtland Site Operations OKSO are responsible to the Field Manager for NNSA Operations, AL to perform and/or ensure performance of the following:

(1) Develop and issue procedures and guidelines necessary to implement this SD and to ensure that the contractor safely handles, transfers, and receives etiologic agents and establishes, or has in place, a biosurety program the meets all applicable regulatory requirements and the contractor requirements contained as Attachment 1 to this SD.

(2) Establish an Office of Site Operations Biosurety staff position for a federal incumbent with the requisite biological science technical expertise and training.

(3) Ensure that the Office of Site Operations Biosurety staff is assigned as the non-voting federal staff member representative on the contractor IBC or similar safety process or, in the absence of the Office of Site Operations representative, that the AL Senior Technical Advisor for Bioscience, OSS/AL is matrixed to support Office of Site Operations IBC or similar safety process representation. Concurrence with IBC or similar safety process decisions by the federal staff member representative may constitute delegated risk acceptance and approval of work by the cognizant Office of Site Operations Director; this delegation, if concurred with by the cognizant Office of Site Operations Director, shall be established by memorandum from the cognizant Office of Site Operations Director to the federal staff member IBC representative, with copies to the Assistant Manager, OSS/AL, the AL Senior Science Advisor for Bioscience, and the cognizant contractor IBC or similar safety process.

(4) Perform, in coordination with the AL Senior Technical Advisor for Bioscience, OSS/AL and the cognizant OCR division, safety review(s) and provide timely risk acceptance concurrence for proposed contractor work projects involving the use of etiologic agents, as a precondition for such projects or work being accepted by cognizant OCR divisions for funding and work authorization. The contractor IBC or similar safety process, with federal representation, may be the primary mechanism to which such review and acceptance concurrence is delegated.

(5) Develop and maintain a central file or database of CDC laboratory select agent registrations at the contractor site, copies of each CDC Form EA-101 "Transfer of Select Agent" submitted by contractor receiver or transferor site or facility, and copies of the semiannual reporting required by the CRD in this SD.

(6)

a) Ensure an information copy of CDC registration form(s) is received from the cognizant contractor for programmatic start or restart of CDC registered BSL-2 biological laboratories. Such programmatic notification will be provided by concurrence copy of the subject CDC registration request. Registration of a contractor laboratory by CDC will be recognized by NNSA/AL as authorization for laboratory operation at BSL-2. Existing CDC registered BSL-2 laboratories in operation at the time of issuance of this SD will require a baseline safety review by the contractor within 90 days of issuance of this SD. The results of this safety review will be copied to the cognizant Office of Site Operations Director with a copy to the Senior Technical Advisor for Bioscience, OSS/AL.

b) Review and forward contractor request(s) for programmatic start or restart of CDC registered BSL-3 biological laboratories and/or operations biological laboratories and/or operations to the Senior Technical Advisor for Bioscience, OSS/AL. The Field Manager for NNSA Operations, AL is the approval authority for authorization of start or restart of BSL-3 biological laboratories and/or operations. Registration by CDC and authorization by NNSA/AL for operations at BSL-3 is based upon satisfactory demonstration that laboratory construction and

equipment, and personnel training and qualifications, meet the requirements for the safe handling, transferring, and receiving of etiologic agents as delineated in the CDC/NIH BMBL; HHS publication no. (CDC) 93-8395, latest edition (incorporated by reference in 42 CFR 72.6); of bloodborne pathogens as delineated in 29 CFR 1910.1030 "Occupational Exposures to Bloodborne Pathogens"; and of toxins as delineated in 29 CFR 1910.1450 "Occupational Exposure to Hazardous Chemicals in the Workplace". Site-specific documentation establishing the safety basis of a facility developed by the contractor will form the basis for authorization provided these documents incorporate the minimum requirements of the BMBL, 42 CFR 72 (with BMBL by reference), 29 CFR 1910.1030, and 29 CFR 1910.1450.

(7)

a) Review and approve requests for exemptions and/or equivalencies from non-regulatory safety criteria contained in this SD for CDC registered operations at BSL-2. Coordinate such requests for exemptions and/or equivalencies with the Senior Technical Advisor for Bioscience, OSS/AL and the cognizant OCR and OSS division(s) with programmatic and safety advisory responsibilities.

b) Review and forward, with recommended action(s), cognizant contractor request(s) for exemptions and/or equivalencies from non-regulatory safety criteria for operations and activities contained in this SD and related directives for operations at BSL-3 to the Senior Technical Advisor for Bioscience, OSS/AL. The Field Manager for NNSA Operations, AL is the approval authority for exemptions and/or equivalencies for operations at BSL-3.

(8) Implement biosurety oversight procedures and standards and establish processes to monitor the conduct of operations with etiologic agents and associated biosurety activities for compliance with applicable requirements. This oversight will include periodic observation of operations and activities involving etiologic agents, conducting periodic operational awareness activities such as review of program documentation and IBC or similar safety process operations, conducting an annual review during the cognizant Contractor Performance Appraisal Process (CPAP) review, and incorporation of biosurety into the annual contractor laboratory appraisal.

(9) Direct work delays and stop work actions upon discovery of any unauthorized deviation from approved safety documentation requirements associated with any portion of the etiologic agent research activities being proposed or conducted by the contractor, or upon determination that approved authorization documentation for such work does not meet established ISMS requirements. Concurrently notify the cognizant OCR division with project management responsibility for the research activity.

(10) Ensure that cognizant AL OSS and AL OCR divisions are apprised of changes to safety and security procedures, proposed by the contractor, which may affect or impact biosurety activities, operations, or facilities.

(11) Ensure that Office of Site Operations biosurety staff who assess contractor programs and activities affecting the safe handling, transferring, and receiving of etiologic agents are trained and qualified. Coordinate training requirements and needs with AL HRTD.

(12) Submit initial contractor the semi-annual contractor reports of etiologic agents, as required by this SD and the attached CRD, to the Senior Technical Advisor for Bioscience, OSS/AL for consolidation and forwarding to HQ.

(13) Ensure that AL is apprised of the status of receipt and disposition of all select agents at the respective National Laboratory through the submission of a copy of the associated Form EA-101 to AL OSS (Attention: Senior Technical Advisor for Bioscience, OSS/AL). The cognizant Office of Site Operations shall make this submission within 5 calendar days of receipt of the Form EA-101.

8. REFERENCES.

a. DOE Notice 450.7 *The Safe Handling, Transfer, and Receipt of Biological Etiologic Agents at Department of Energy Facilities*

b. CDC/NIH *Biosafety in Microbiological and Biomedical Laboratories* (a.k.a. BMBL). HHS publication no. (CDC) 93-8395, latest edition. (http://www.cdc.gov/ncidod/dvbid/Biosafety_manual_rev_1994.pdf)

c. National Institutes of Health (NIH) *Guidelines on Recombinant DNA*, October 1997. (http://nihitsii.od.nih.gov/oba)

d. Public Health Service 42 CFR 72 *Interstate Shipment of Etiologic Agents*. (http://www.cdc.gov/od/ohs/lrsat/42cfr72.htm)

e. Public Health Service 42 CFR 72.6 *Additional Requirements for Facilities Transferring or Receiving Select Agents* (http://www.cdc.gov/od/ohs/lrsat.html)

f. Occupational Health and Safety Administration Title 29 CFR1910.1030 *Occupational Exposures to Bloodborne Pathogens* (http://www.osha-slc.gov/OshStd_data/1910_1030.html)

g. Occupational Health and Safety Administration Title 29 CFR 1910.1450 *Occupational Exposure to Hazardous Chemicals in the Workplace* (http://www.osha-slc.gov/OshStd_data/1910_1450.html)

h. Clinical Laboratory Improvement Amendment (CLIA) of 1988 (42 United States Code (U.S.C.) 263a)

i. DOE Order 412.1 *Work Authorization System*.

j. DOE Notice 450.7 *The Safe Handling, Transfer, and Receipt of Biological Etiologic Agent at Department of Energy Facilities*.

k. CONTACTS.

(a) Biosurety Manager, OLASO.

(b) Biosurety Manager, OKSO.

(c) Senior Technical Advisor for Bioscience, OSS/AL.

ATTACHMENT 1

CONTRACTOR REQUIREMENTS DOCUMENT

Directions for implementation of Biosurety and the safe handling, transferring, and receiving of etiologic agents at Albuquerque Operations (AL) contractor facilities

Biosurety is an integrated approach to the management of etiologic agents, including select agents. Biosurety includes and integrates safety, security, environmental protection, emergency management, and community relations in defining, managing, and communicating the potential hazards associated with such work. These hazards are associated with etiologic agents such as bacteria, viruses, rickettsieae, and fungi, as well as the toxins that may be produced by microbes and by genetic material potentially hazardous by itself or when introduced into a suitable vector. An etiologic agent is a viable microorganism or its toxin that causes, or may cause, human disease (42 CFR 72.1 *Definitions*). For purposes of this Contractor Requirements Document, "etiologic agents" are Risk Group 2 or higher agents as defined by the National Institutes of Health (NIH) "Guidelines on Recombinant DNA" (October 1997) and/or, per 42 CFR 72.6, as a "select" agent.

The Contractor shall:

1. Ensure that the laboratory's Integrated Safety Management System includes a biosurety program or process. The biosurety program shall address the safe handling of etiologic agents, including select agents. Work shall be performed in accordance with all applicable requirements, including those listed in Appendix C to the BMBL.

2. Establish an internal safety review process to address the safe handling of etiologic agents. If established as an Institutional Biosafety Committee (IBC) it shall be in accordance with the applicable guidelines of the NIH "Guidelines for Research Involving Recombinant DNA Molecules". The IBC or similar safety review process shall include one federal staff member from the cognizant Office of Site Operations or AL. The Office of Site Operations or AL federal staff member will participate fully in all aspects of the IBC's (or safety review process) actions with the exception of voting with other members to approve or disapprove specific work proposals. The Office of Site Operations or AL membership on the IBC or similar safety review process establishes an unambiguous information pathway between Laboratory management and Department senior management with regard to work involving etiologic agents. While not specifically required for institutions not involved in work with recombinant DNA, an IBC has been shown at other sites to be an effective mechanism for coordinating institutional biological work, ensuring that requirements are met, and dealing effectively with public concerns.

3. Implement, as appropriate, guidelines and best practices as the contractor may determine are applicable to biological research activities.

4. Maintain an inventory and status of etiologic agent(s) and/or organisms and provide the cognizant Area Manager, through the laboratory IBC or similar safety review process, with a semi-annual report of etiologic agents by October 1 and April 1 of each year. This report will list the etiologic agents present at the site at the time of the report. The report will specify the agent(s) being cultivated and/or stored on-site; will include inventory information in accordance with IBC or contractor parameters for quantities and types of etiologic agent(s)

and/or organism(s); the location (building/room) of the etiologic agent(s) and/or organisms; the name(s) of the responsible individual/manager for the etiologic agent(s) and/or organisms; and any facility-specific physical or administrative changes potentially affecting biosurety since the previous report. No association of any etiologic agent(s) and/or organisms to specific research, sponsor, and/or mission requirements shall be made in this report. The semi-annual report shall be marked "For Official Use Only". Only such information as is determined to be unclassified in accordance with guidelines contained in CG-CB-1 (or most recent version) "Classification Guide for Chemical/Biological Nonproliferation Program" and/or other applicable classification guidance will be reported; information determined to be classified by a Derivative Classifier will be available for review by appropriately cleared Federal staff on a need-to-know basis as determined by the cognizant Office of Site Operations Director and/or the Manager, AL. The format for the semi-annual report is attached (Attachment 2).

5.

a) The contractor shall provide the cognizant Office of Site Operations with a concurrent information copy of CDC registration request(s) for programmatic start or restart of CDC registered BSL 2- biological laboratories. Registration of a contractor laboratory by CDC will be recognized by NNSA/AL as authorization for laboratory operations with allowable Risk Group 2 and/or select agents at BSL-2. Existing CDC registered BSL-2 laboratories in operation at the time of issuance of this SD will require a baseline safety review by the contractor within 60 days of issuance of this SD. The results of this safety review will be copied to the cognizant Area Manager with a copy to the Senior Technical Advisor for Bioscience, OSS/AL.

b) The contractor shall request authorization for programmatic start or restart of CDC registered BSL-3 biological laboratories. This request shall be made through the cognizant Office of Site Operations to the Field Manager for NNSA Operations, AL who is the approval authority for authorization of start or restart of BSL-3 biological laboratories and/or operations. For BSL-3 laboratories that have not operated at the registered biosafety level for greater than one year, the contractor shall request approval from NNSA/AL for restart. Authorization for start or restart will constitute approval for all allowable activities in the laboratory involving etiologic agents appropriate for the approved biosafety level of the laboratory and for the period of CDC registration. Approval and authorization for start or restart of operations will be based upon satisfactory demonstration that laboratory construction and equipment, and personnel training and qualifications, meet the requirements for the safe handling, transferring, and receiving of etiologic agents as delineated in the CDC/NIH "Biosafety in Microbiological and Biomedical Laboratories" (BMBL), HHS publication no. (CDC) 93-8395, latest edition; 42 CFR 72.6; of bloodborne pathogens as delineated in 29 CFR 1910.1030 "Occupational Exposures to Bloodborne Pathogens" and of biotoxins per 29 CFR 1910.1450 "Occupational Exposure to Hazardous Chemicals in the Workplace". Site-specific documentation establishing the safety basis of a facility developed by the contractor will form the basis for authorization provided these documents incorporate the minimum requirements of the BMBL (incorporated into 42 CFR 72 by reference), 29 CFR 1910.1030, and 29 CFR 1910.1450.

6. Copy the cognizant Office of Site Operations with each CDC Form EA-101 "Transfer of Select Agents" upon:

   a) receipt of the Form EA-101 returned with the requested select agent from a vendor or other supplier.

   b) transferring a select agent to another registered requesting facility

   c) final disposition and/or destruction of the select agent.

   All copies shall be submitted within 10 calendar days of the completion of the appropriate portion of the form.

7. Ensure that the site security plan includes and addresses the security and accountability of etiologic agents and ensure that the site emergency management program addresses response to events involving etiologic agents, as outlined in Appendix F, BMBL.

8. Establish an immunization policy for personnel working with and/or potentially exposed to etiologic agents in accordance with Appendix B of the BMBL. Specific immunization actions should be based on an evaluation of the risks and benefits of immunization. Medical surveillance for employees is generally described in the BMBL, including considerations for "at-risk" employees.

9. Give labor organizations timely notice of the development and implementation of procedures under this CRD, and of any changes to those procedures when contractor employees are represented for collective bargaining by a labor organization. The requirements of the CRD do not supersede contractor's obligation to bargain with labor organizations consistent with Federal law.

10. The contractor shall request authorization from NNSA/AL for exemptions and/or equivalencies from non-regulatory safety and reporting criteria contained in this SD; such requests shall be submitted by memorandum to the cognizant Office of Site Operations Director with a copy to the Senior Technical Advisor for Bioscience, OSS/AL. The cognizant Director, Site Operations Office is the approval authority for exemptions and/or equivalencies for CDC registered BSL-2 biological laboratories and/or operations; the Field Manager for NNSA Operations, AL is the approval authority for exemptions and/or equivalencies for CDC registered BSL-3 biological laboratories and/or operations.

11. The Contractor shall ensure that proposed work involving etiologic agents complies with the applicable requirements of the National Environmental Policy Act (NEPA).

12. Confirm in a written statement to the cognizant Director, Site Operations Office, within 60 days of incorporation of this CRD into the contract, compliance with the requirements of this supplemental directive

FOR OFFICIAL USE ONLY

NATIONAL NUCLEAR SECURITY ADMINISTRATION – ALBUQUERQUE OPERATIONS OFFICE
SEMI-ANNUAL ETIOLOGIC AGENT REPORT (RISK GROUP 2 and HIGHER AGENT AND/OR SELECT AGENT)
(insert name of laboratory)
(insert date of report)

AGENT / ORGANISM	INVENTORY	LOCATION TECH AREA / BLDG. / ROOM NO.	CULTIVATED AND/OR STORED ON-SITE (Y / N?)	RESPONSIBLE MANAGER / INDIVIDUAL	BIOSAFETY LEVEL

Transmit to: Director, (insert cognizant Office of Site Operations and address), ATTN: Biosurety
cc: Senior Technical Advisor, Bioscience, OSS/AL

Mr. HORN. Well, thank you very much.

And now we'll go to questions. And I've just got a couple of questions on a broad front, and then I'm going to let my colleagues be the real questioners.

Mr. Resnick, I'm curious in terms of how would you rate the response to the anthrax attacks, and what do you know about this and how many worries we should have?

Mr. RESNICK. I think the Nation has taken on a much greater appreciation for the threat from biological agents, pathogens and toxins, and it's now putting that into a biosecurity and threat context. I think there has been a lot of progress since September 11th, but there is certainly an awful lot of progress that needs to be made.

I would say the challenge is very great, but the good news is that the technology opportunity to now bring against that challenge, I believe, will measure up to it, and with the full spectrum of interventional planning, I think we will develop a level of threat reduction that the American populace is comfortable with.

Mr. HORN. As you know, when this all started, particularly with the post office and our various offices of the Congress, there was a lot of contradictory information at the outset, and also, the steps taken to protect postal workers was very strongly criticized, some happenstance. What could you tell us about that? And what have we learned about?

Mr. RESNICK. I would join in some of the earlier comments, that the thing we have to do first is to know what we know and to make that knowledge available to all planners and responders. I think that is our first priority, to gather up every piece of information that's in every laboratory and provide that through information technology, so it is real-time available. But once again, I think there's an awful lot of progress that could be made there.

Mr. HORN. Let me move to another; this is worldwide, but you're involved, Mr. Resnick, and also Mr. Johnsen and Mr. Nokes. Your written testimony notes the challenges associated with nuclear material stored in the former Soviet Union. I feel very strongly, and I did from day one in Congress, that if we don't involve Russia with Europe and with the United States, it will be the biggest diplomatic mistake we've made. And as we see, President Bush has a very good relationship with President Putin of Russia.

And what we worry about are scientists going to some of these nations and what we're doing in terms of sufficiently melting down the atomic warheads that we have on our side and their side. And what—is there a threat here and being addressed and is it being addressed sufficiently by those with the responsibilities of the issue?

Mr. RESNICK. A very important question. I personally have visited several of the ex-Soviet Union biological warfare facilities, and I think there is a very real problem here, from the proliferation of pathogens and toxins, as well as the concepts of use outside of Russia. I think Dr. Olav Johnsen's comments about the concepts of biosecurity, are very important, and I think we can take those concepts that are evolving in the United States and share that with Russia to secure their pathogens and toxins, and make an overall increase in global security a realty.

Mr. HORN. Mr. Johnsen, got any thoughts on that?

Mr. JOHNSEN. I'm in full agreement with the need for increased cooperation. In fact, predating September 11th, in October 2000, there were—I believe it was approximately 26 very senior Russian, Georgian, Cossack senior science, bioscience researchers and administrators visited Sandia National Laboratories for a 4-day session looking at, specifically, security—increasing security for the biological agents that they had and have at their various sites in the former Soviet Union.

So this is certainly something that is recognized as a problem, potential problem, and as a pressing need, and the national laboratories here in New Mexico, and certainly within the NNSA complex, are able to and have been working with their colleagues in the former Soviet Union, to the extent able, that we're able to try to limit the proliferation of these materials. It remains a concern. There is much work yet to be done.

Mr. HORN. Mr. Nokes.

Mr. NOKES. Yes, I'd make a comment. I think it's not true that the Russians don't care about the security of their materials and weapons, because they clearly do. I think what has happened is, under the Soviet system, the insider was not a threat. You couldn't steal a weapon or material and sell it, because there was no market. That is no longer true. And so they have to change their entire concept of securing materials and weapons.

The labs have been very active in a government program to safeguard weapons and materials in Russia since about 1992. A great deal of work needs to be done, because they're changing their entire philosophy of security. And I think great progress is being made, but there is still enormous work to be done. And I really support what began as the nonnuclear initiative and continues today in the safeguarding of Russian materials and weapons.

Mr. HORN. Well, along that line, and I think you've touched on it, and that's after the second world war, we luckily were able to get Werner von Braun and his German scientists on our side, and I think one of them went to the Soviet union. And where are we now? We had a wonderful experience with NASA and the space capsule, and so forth, and that certainly got us working together in a partnership, and are there other ways that we could get the scientists of Russia, so they aren't going off to Iran, or wherever it is? And how are we doing on that?

Mr. NOKES. Let's see; the Russian scientists that I have met, and during the time that I was managing that type of program at the laboratory, are as worried about Iran and Iraq and other countries as we are. But the practical matter is, sometimes they've made offers they can't refuse. Working with the Russian scientists has become more difficult at the laboratories in the last 2 years, because of other, almost unrelated circumstances around counterintelligence and Dr. Lee and the perception that the laboratories working with foreign scientists was not in our national interest.

I think that it is important that we collaborate with the Russian scientists and give them a reason to stay on the side of the good guys, and I think that program can be strengthened.

Mr. HORN. Going back a minute to some of the ways that it can happen, that it hurt a city, a region, whatever, and that is the tox-

ins that can be spread by airplane. And some of the terrorists, that we know about, in terms of Florida's school and all of that, and I wonder to what degree do we feel there is a real problem there and what do we do about it, because there's a lot of ranchers, also, and farmers, that they need it to get these certain things in their lettuce fields, or whatever it is.

Mr. RESNICK. I think you underscore the ubiquitous nature of the threat. It's very broad and very decentralized. And it's not a very simple solution to put a fence around. Clearly, it is quite feasible to disseminate, from crop dusters, biological threat agents. It's been done fairly routinely for testing detection systems at proving grounds. I think, once again, it points to the need for a very comprehensive approach to identify all of the potential choke points. If we look at the overall weaponization scheme that an aggressor would have to go through, start to target each step and look for the vulnerabilities that the aggressor has to interrupt at each critical node.

Mr. HORN. Any other comments on that?

If not, I'll ask Representative Wilson to pursue the rest of the questions, along with Mr. Udall.

Mrs. WILSON. Thank you, Mr. Chairman.

There are a couple of things that kind of came to mind as I was listening to your testimony.

David, you mentioned the processes for other governments, governing agencies, to be able to get rapid access to the research and document done at our laboratories. They are, I think the words you used were "clumsy and inefficient." What needs to be changed in order for other government agencies, or State and local government, or whoever needs it in a crisis, or even preferably in advance of a crisis, to be able to get rapid access to that technology? What do we need to do?

Mr. NOKES. Well, see, the position we find ourselves in is when the post office calls and says, "Please help," and if we don't have funds in the door earmarked for the post office, we're prohibited from answering that call until we do the paperwork.

Now, there has been a good step forward, because Albuquerque Area Office has provided breach funding. So if someone in the government looks them in the eye and says, "I'm going to want this work done, and I'll make good on the money," their labs can start the work. That's a good start, to begin.

The problem is that the most important work is not urgent. I mean, it's important for us to react quickly and do the urgent things that solve a "today" problem. The more strategically important thing is doing a tech transfer from the tech-base we have to the longer-range problems that make this whole system come out well, because we cannot just pour money into it; we can't hire more guns and guards. We have to find ways to identify the critical points, the nodes, and with a technology-based solution, make security affordable so commerce goes on and we have good security at various places in the country.

It seems to me that one way to answer your question is to have NNSA as a broker for other government issues, as they do for treaty verification and arms control; they sponsor the basic research that provides that technology to the Nation. You can imagine

NNSA having that mission, of making the labs available to other government agencies, solving problems that are, in fact, common across the Nation. I would like to see something of that nature.

Mrs. WILSON. One of the criticisms that we hear, from time to time, and I know the committee has heard it in other places, has to do with law enforcement's access to information; intelligence, if you will, from other jurisdictions and from the Federal Government. And I wonder, Mr. Dean, if you can comment on that and whether that's gotten any better; what else needs to be done, so that when a State policeman pulls somebody over, for a taillight being out, between Albuquerque and Santa Fe, they're able to run the number and find out if there's more than a taillight out.

Mr. DEAN. I think we've made some positive strides in that area. We've enabled chiefs of police and heads of investigative agencies to get background investigations, where we provide that information to them. We've also been able to add some information on terrorists in one of our data bases, called the violent terrorist file, which would give the information to patrolmen stopping somebody. It will tell them this person is not just a regular Joe. It's called the "Big Talk" file. It's not a perfect file, but it does identify a person with some potential terrorist leanings.

There are still some limitations; some of the information that we do provide to a chief of police or head of an agency is law enforcement sensitive, and because of the way Federal law is written, he possibly could not share that with his boss. The law does not allow us to—we're limited; it's secret information that we get, to normally only be disseminated within the law enforcement community.

Mrs. WILSON. One of the things I'm concerned about is that we have the intelligence community saying things are intelligence-source protected; we have the law enforcement community saying they're law enforcement sensitive; and the military doing the same thing, so that we're not able to put together a picture that will allow us to—one of the greatest assets we have in the war against terrorism is information and the ability to manipulate it and share it when it needs to be shared.

Are there things that need to be changed in the law to allow that to happen among agencies more, so that you can tell your boss, or even more importantly, you can tell the cops on the street in Atlanta who to be looking for, in a way that's systematic and that doesn't require a phone call from one guy to another guy.

Mr. DEAN. I think it's going to require a change in the law. We are able to filter through some intelligence-sensitive information, and pass it on to law enforcement, but it's limited. So it is going to require some change in the law in what we can put out and provide to our law enforcement officers.

Mr. HORN. Can I comment on this?

Before leaving for this trip, I sat down with Mr. Sensenbrenner, the chairman of Judiciary, who has joint authority with our government reform on this issue, and I have put a bill in, and Mr. Sensenbrenner told me he certainly was going to give it a hearing, and that he was all for it. We might just have it sent to the floor without even a hearing. When we get back to the district, from the constituency, we will be acting on that. They wanted to act on it on the early homeland bill, and just for some reason, it didn't happen.

But using the FBI, we want, obviously, to have a person in the police departments, let's say, to start with, and the chief of police of any city ought to designate one individual, and obviously, the FBI would have to do an investigation to see if that person is worthy of the intelligence that would be used from the FBI. If you have somebody who's not a very good policeman, we need to know that before we give them the intelligence. But we are making progress on that, and hopefully, we will get that done in the next month or so.

Mr. DEAN. I think that would be very helpful, sir.

Mr. HORN. And I'd like to have my colleagues join me on this.

Mrs. WILSON. I'd be very happy to join you on that. I think, also, it's not just law enforcement information that needs to be shared and passed up. We have 14 national intelligence agencies; we have Immigration and Naturalization Service; we have the U.S. Customs Service; we have 56 FBI offices, and access to information is our first line of defense. And I hope that we can work out some of these issues. Having formerly served on the House Select Committee on Intelligence, I know how hard it is to even share between government intelligence agencies. I think we need to get beyond it, so we can protect ourselves and not just our sources. And I look forward to seeing that move forward.

Mr. Johnsen, I have a question for you. I'm very interested in this concept of biosurety, and particularly looking at the continuing biological safety, laboratory security, protection of biological agents, and then the response, so it's not just proactive. On biological agents, frankly, we really haven't paid much attention to it before the anthrax situation on the East Coast. And I wonder, from your perspective, what needs to be done in order to strengthen that capacity, not necessarily at our DOE labs, although you may want to use those as an example, but nationwide.

I was struck when we had the anthrax incidents, the first question that the FBI, of course, asked is, "Well, how many laboratories across the country have this strain of anthrax?" And the answer was, "We don't know," because there's no requirement to even register the various strains of toxins identified by the CDC. From your perspective, what needs to be done to strengthen the system?

Mr. JOHNSEN. First off, from a security standpoint, it's very easy to take the lessons that everyone is comfortable with, from protection of nuclear materials or physical property, and try to apply it to biological materials. But the fact is that the ubiquitous nature of these materials—they're commonly available; they're natural materials; they self-replicate, in many cases—means that security, as applied to the biological laboratory and to the biological agents that are contained therein, really present a fairly unique set of challenges.

The initial reaction of bar-coding vials to keep track of an inventory, for instance, is fairly meaningless when you can extract a small amount of material from inside that vial and you still have your vial accounted for, but not that material. The fact is that there is a chain of custody procedure for a set of biological agents, known as "select agents," that is codified in law. Centers for Disease Control has the Select Agent Rule, and certain materials, only in the last few years, have to be accounted for as they're trans-

ferred around between laboratories. But that's only a subset of a much larger group of materials.

Also, the fact is that we have no laws on the books regulating these materials, from a security standpoint. The only guidelines—and I emphasize, they are guidelines or recommendations—that exist for laboratory security, biological laboratory security, exist as an appendix to the safety manual issued by the CDC, which is, in fact, the international gold standard that is used for laboratory safety. But nonetheless, the security recommendations are contained within the safety manual; it's a good set of recommendations, but it's very broad. It lacks some of the specificity that's needed. So work needs to be done to strengthen that.

There is an interagency working group that has been looking at the security of agents since January 2001. And Sandia, in fact, has been heavily involved in supporting that. The lead agency for that has been the USDA. And they have come up with some models that have been put into—or tested, I believe, at a couple of their biological facilities, the USDA's facilities. But again, a lot of work remains to be done.

Legislation would be helpful, but it needs to be educated, carefully thought-out legislation. There are examples in the international community where security requirements have been put into place, in one Nation, that are so restrictive that research has suffered tremendously, and yet, real security has not been enhanced: Specifically, putting a guard in the laboratory to watch the scientists, but a guard who has no biological knowledge. And it really is a meaningless gesture.

Those are the kinds of things we need to avoid, while recognizing that there are real concerns, real threats that can be addressed. But they need to be addressed in a very careful manner.

Mrs. WILSON. Thank you, Mr. Johnsen.

Mr. HORN. Along that line, are there certain laws that we haven't mentioned—I mentioned the one with Mr. Sensenbrenner, that was a letter from myself and Mr. Shays, who has the international part on Government Reform. Are there other areas where we should have a way to get that information to the people that are the responders, the police, the firemen, and so forth? Anything we're missing, like a privacy law? Does that hurt us from getting the information and doing something about it?

Mr. JOHNSEN. Privacy Act considerations could come into play when you're dealing with immunization protocols and this sort of thing. But I don't know that would directly affect law enforcement, as much as just looking at the actual security of materials.

Biological safety, biological security of biological materials, while separate, are also so interrelated that it is difficult to separate them. They are definitely separate, but again, part of our biosurety concept is, in the past, we have seen that these items, these areas of safety and security and emergency response, tend to be pigeonholed; they tend to be off in their own wells. And we felt, as an operational concept, it was important to start pulling these together, thinking of them under a single organizational or operational umbrella——

Mr. HORN. Are we able to put that into the record, or is that a classified document?

Mr. JOHNSEN. That is not classified.

Mr. HORN. Back to Mr. Yim. What do you have on this, because I know the General Accounting Office has done a lot of work on it.

Mr. YIM. I think this is one of the areas, Mr. Chairman, in which we have to look at not only the experiences from the private sector and security of our laboratories, but we also need to look at our laws and whether they've kept pace with the technology. Unlike, for example, nuclear material, where you're actually physically moving an agent, sometimes from the biological aspect, we get tremendous advancements in that community and be able to transfer code, as opposed to the actual agent, itself, and cause the same impact. Hopefully, that's not occurring, but that is an area where laws need to keep pace with changes in technology, to maintain security, not only now, but over time.

The transfer of select agents, for example, there may be some simple fixes, such as requiring prior approval of transfers, and having, in that prior approval process, a cross-check with intelligence information as to the recipients of those materials being transferred. I think that one of the issues for us is that it doesn't have to be an evil purpose. I mean, there are well-intentioned researchers that may be requesting agents for legitimate research purposes that unknowingly may be creating exposures for us.

So I think the laboratory security issues and the proliferation of both human disease and also agents that can affect our food production chains, I think, is an area of critical importance.

Mr. HORN. Representative Udall.

Mr. UDALL. Thank you very much, Chairman Horn.

One of the things that I think would make the fight against terrorism work very, very well is if citizens are involved in it, and involved in it in a significant way. I mean, in a very real sense, our citizens can be the eyes and ears out there and help detect things. But one of the things that I hear from my constituents, in doing town hall meetings or having meetings with them, is that they ask about the current alert system that we have in place, where we go on this overall alert, terrorist alert. And I know the attorney general has now refined this, and they're broken down into categories.

But I'm wondering what—any of the members of the panel that have any thoughts on this, are we utilizing our citizens to the best we could, in terms of being eyes and ears out there; what's the best type of alert system; are we doing public outreach and letting the public know the kind of information that the law enforcement and other agencies need?

It seemed to me that there was one incident that played out. It was where, in California, there was one of the bridges that was going to be—there was supposed to be a terrorist incident with a bridge, and the California Governor was given that information, and he put that information out there. And clearly, a citizen, under those circumstances could, if they're driving across the bridge or near the bridge or hear somebody talking, they can then supply information.

So I guess I have a couple of questions for you, really: What do you think of the alert system we have now? Can it be improved on? How do we really get citizens into this fight, in terms of getting

them involved and being able to provide law enforcement agencies with the very best information?

Mr. CASTLEMAN. Well, certainly, Governor Ridge recently put out the program for a new alert system, and that's getting feedback right now. It's not finalized yet. But we're hoping that from the information that we—the feedback that is received, that system will be refined so that it will become second nature to people, as to where we are and how to understand the alert system.

The other point, I guess——

Mr. UDALL. Ron, is there any more—I know there's a graduated tier on there, but is there any more information being given to the public under this tiered system that's out there? Is that the intention of going to different tiers, is to give more information to the public?

Mr. CASTLEMAN. I think, so that there is a more clear understanding, certainly, we're—this proposed system is being reviewed with States and the local first-responder community, and other parties that can help make decisions about this. So we're getting feedback that way. We won't be putting that out until it's finalized, of course, but it is being tested right now. I think there is still some work to be done to refine that. So I don't think we're there yet, but I think we will get there.

The other point that you made was how can citizens get involved, and there is an effort, that's just begun, with Citizen Corp, which, I believe, will—the more citizens we get involved with those programs, such as Neighborhood Watch and FEMA, certain programs, we'll be able to align them with the alert system, be in a better position than we are now. We've got a long way to go, but we have some things in place that, I think, are the foundation for where this will all get better.

Mr. HORN. If I might give you an example in relation to Representative Udall's question, it was recently revealed that Federal officials had withheld information of a potential nuclear threat from city and State officials in New York. Is that justifiable, to not inform them of what they should worry about in their harbor, and everything else? Now, I know the Coast Guard was on alert to look at some of the cargo that was coming in, with shipments from Europe and all over the world. Is that justifiable, or should the norm be, whether it's secret or not secret, or that it's not a real threat, because you ought to get all that focus on it, with the State, city, and all the others. What do you think?

Mr. CASTLEMAN. Well, I'm not sure that I'm in the best position to comment on that, but I believe that one of the problems may have been the lack of a good system that every law enforcement person and emergency management person and every citizen will understand. And I'm only assuming that part of the problem in that information not being delivered was a weak alert system. So it's my opinion, only, that perhaps this system is to try to counter that kind of problem in the future. That's my own personal speculation.

Mr. HORN. Any thoughts, Mr. Dean?

Mr. DEAN. Mr. Chairman, I don't know the specifics of that particular incident, so I would only have to assume that the information wasn't passed because of the law not allowing it to be passed.

And I would say that's a faulty and outdated law, that type of information has to be passed, when there's a threat of a nuclear attack. It has to be passed.

In response to Mr. Udall's question, since September 11th, I think citizens have stepped up to information that not only the FBI, the Federal and State government have put out, through the media, with alerts, with requests for citizens to be more watchful, be more vigilant. Post September 11th, we received thousands of calls to our command post, from citizens, that we probably wouldn't have received. So I think citizens are more mindful, more aware, more careful, and they are participating more in assisting law enforcement with potential problems.

Mr. UDALL. Do you think if they had more specific information, they'd be able to help you more? And of course, we don't want to get into methods and sources and those kinds of things, but it seems to me, when you put people on a general alert, you're going to get a lot of calls that maybe aren't very relevant to whatever it is that you're looking into. But if you're able to somehow use and give specific information, you may get a lot better information back.

Mr. DEAN. I think so. I think the general alerts are very general and very vague. And I think if specific information was disseminated, then we probably would receive more relevant calls from the public, yes.

Mr. HORN. Mr. Nokes, what's your thinking on this?

Mr. NOKES. Well, I was going to make the comment that one of the problems I think the government has is that you don't get crystal clear indications that an attack is going to happen; you get inferences. So someone has to make a judgment, is this credible and should this be raised to a higher alert. And I think that, in the case of New York, the judgment was made that the information wasn't particularly credible. And I think that's going to be a continuing challenge, particularly as you get more and more information, get citizens reporting. Someone has to be in a position to assess the credibility and the seriousness of the threats that are being posed.

Mr. HORN. Mr. Yim.

Mr. YIM. I think, also, Mr. Chairman, and Mr. Udall, one of the things that's important on the tiered-threat system is not only a better definition or common understanding of what information to share, but because the system is modeled on the Department of Defense tiered system, and under the Department of Defense system, at each tier, certain additional nondiscretionary action needs to be taken; for instance, at each military installation, as you move from Alpha to Bravo to Charlie, there are additional steps. I think that would be very helpful, during the public comment period on this system, to begin to define exactly what additional steps State and local government should be taking as the threat levels rise, and then perhaps that would then augment the capabilities of the local governments to respond as threats ratchet up.

So, again, we'll always have to balance the sharing of information, intelligence information, with the threat to the sources and methods. But if we can begin to enhance capabilities as threats arise, to respond flexibly, I think that will be the key.

Mr. HORN. Well, this is one of the questions we were going to ask, and it's relevant to this point: What's the situation that each

of you could provide for us, were the witnesses to submit for the record a list of the Federal laws that they believe—you believe inhibit the sharing of information between Federal, State and local officials? Do any particular laws come to mind on that? We know about the FBI intelligence. Is there anything beyond that?

Mr. YIM. Well, Mr. Chairman, I've heard from a lot of communities that the security classifications are a tremendous roadblock. So the legislation you've introduced, I think, will go a tremendous way in handling that problem.

One of things we have to augment, however, in addition to the classification as to who should get the information, is also the architecture, of course, to share that information quickly and effectively. And I think we're making a lot of progress in getting common data bases that can be shared, enhancing the IT infrastructure, so that information can be pumped out.

But once we solve those first two problems, getting the architecture in place and the security classifications, there needs to be some focus on the analytics of that. We're going to have to be creating a pipeline, then, that will get larger and larger as we're pumping more and more information. And I think there needs to be emphasis on the analytics of that information.

One of the things that we've heard from State and local governments is that they could be deluged with information and lack the ability, the human capability or just the basic knowledge, to analyze the volume and could not sort the wheat from the chaff. And I think that we need to have some emphasis on that, whether that will encompass legislation or not, or just straight up, some dedication and resources to augment it; I think it's more the latter than the former.

Mr. HORN. We'll hold the record over on this question for 2 weeks, and if you have some thoughts, please send it to us, so we can put it into the final report on that.

Any other questions?

Mr. UDALL. No. Thank you, Mr. Chairperson.

Mr. HORN. Ms. Wilson.

Mrs. WILSON. No.

Mr. HORN. Well, we thank you, and we will now go to the second panel. That starts with Mr. English and Mr. Bakas; Mr. Horn, no relation; Mr. Busboom; Dr. Roth; and Dr. Sewell.

We thank you for coming, and as those of you know who were here earlier, this subcommittee that I chair is an investigatory committee, and so we're going to ask you to stand, raise your hand and swear or affirm the oath.

[Witnesses sworn.]

Mr. HORN. The clerk will note that the five witnesses have accepted that, and we will ask our colleagues here to introduce a number of you, because you're close friends.

Honorable Thomas L. English, Secretary, New Mexico Department of Public Safety.

Mrs. WILSON. Thank you, Mr. Chairman.

Tom English is the cabinet secretary for the Department of Public Safety here in New Mexico. He is a former assistant U.S. attorney and was involved in the prosecution of a number of gang and violent crimes, including the Sureno 13, and a Major in the U.S.

Army Reserves, where he served as a JAG lawyer, and also, a longtime New Mexico State Police Officer.

Very glad to have you here, and look forward to hearing what you have to say.

STATEMENT OF THOMAS L. ENGLISH, CABINET SECRETARY, NEW MEXICO DEPARTMENT OF PUBLIC SAFETY

Mr. ENGLISH. Mr. Chairman, Congresswoman Wilson, Congressman Udall, first of all, I'd like to thank you for asking for the input of State and local government.

We in State government recognize the Federal role in the fight against terrorism, that to investigate and to detect. And we are well served by the Federal Government in that capacity. Likewise, the Federal Government must recognize the State and local role in this particular problem area, and primarily that of being the first-responders.

We all have the same mission, purpose, and resources, and we should seek to unify those, our mission to protect the public before, during and after attack, by having the purpose to mitigate and respond, with our resources that include both information and capacity. We are starting to improve on cooperation and coordination. We saw that start with the Oklahoma City bombing, the passage of the Nunn-Lugar-Domenici Act, the Office of Domestic Preparedness in the Department of Justice, but as I have seen this weekend, while fires ravaged Lincoln County in New Mexico, I know that we face a daunting task if we are the unfortunate recipients of a terrorist attack.

We should be well-minded that the al Qaeda network waited 8 years between their attacks. We must be ready and we must be prepared. And we will be.

Communication is the key to cooperation. Cooperation is the dynamic that powers a coordinated response to terrorism. Cooperation hasn't always been an operative term in Federal and State relations. There are two areas that we really need to look at, I believe, or I would ask you to look at. One is the recognition of roles and the second is the exchange of information.

I went to a meeting with the President and Governor Ridge at the White House in January, with the 56-some-odd Homeland Security directors. These concerns were raised, uniformly, from across our great Nation. In response, the President, Governor Ridge have proposed the first-responder program, which provides, as Mr. Castleman said, 3.5 billion in first-responder money.

I know that there will be some concerns in Congress about FEMA administering this money. I would like to point out that this weekend, FEMA responded, not within days, weeks, months or years, within hours, for a fire suppression grant for the State of New Mexico. I believe that they are well-suited to provide the strategic planning to assist us in capacity building and to pass money to local government.

I'd also like to state that this hearing is a great example of an attempt to bring us all together. As a State manager, it is not my job to dictate to local incident commanders what to do in response to an incident. Likewise, it's not for the Federal Government to dictate to State and local governments what to do. The area of infor-

mation we need access to is critical relevant information. When DOE has Q-clearances, and Department of Defense has their clearances, and Department of Justice has their clearance, we all don't stand, really, a chance in local government. Make a national security clearance, clarify the exchange of information.

I'm also reminded of the radar operator at Pearl Harbor, who thought that the information was not relevant to the attack on Pearl Harbor. I think of the information possessed before the attack on the World Trade Center. I would love to be deluged with information. Give us that information; we will use it.

Let there be no thoughts or misconceptions. We are ready to respond. But honesty is the best policy, and we have to admit there are areas for improvement. We have to look for our weaknesses so we can get better. Much like I tell my department, "We must be one," I think we all must realize we are one Nation. Thank you.

[The prepared statement of Mr. English follows:]

Committee on Government Reform
Subcommittee on Government Efficiency, Financial Management
and Intergovernmental Relations
Statement of Secretary Thomas L. English
March 25, 2002

Thank you for the opportunity to address this honorable sub-committee. It is indeed an honor to be here today. The federal government is making tremendous progress in assisting state and local governments in their preparation for potential terrorist attacks with biological, chemical, or nuclear agents. These attacks are capable of terrible destruction and the mere threat of their use can strike terror in a community. Thus it is absolutely essential that all governmental players treat this unspeakable possibility with the greatest consideration. All too common turf battles and turf struggles do not belong in an arena where the potential for drastic impact on our communities is so great. Even though federal law enforcement is far better funded and possesses critical information, it will be the local first responders that make the biggest difference should the unthinkable actually occur.

Cooperation must be the dynamic that powers any potential threat to terrorism. Cooperation has not always been the most operative term in federal and state relations. This is also true in law enforcement; however, the severity of the threat that our great country faced and still faces has served to bridge many of those gaps. While information flow remains slow there are signs of improvement. Many recent changes have greatly improved communication. As I must work with local government, the federal government must work with the states.

The President and Governor Ridge's proposed approach to Homeland Security will serve the country well. Allowing critical funding to flow quickly and efficiently through the states will ensure that these dollars are distributed where they are most needed and protect the integrity of the process. The Federal Emergency Management Agency (FEMA) has proven its ability to disperse the funds from its bank accounts in order to address these needs. The proposed first responder funding requires participation and plans that are interlocked at all levels. Again, we are all best served by combining our efforts to face severe tests of our abilities. In New Mexico, we are already working toward strategic plans that address the concerns of our communities, the state at large, and our ability to contribute to a strong national response. Congress must pass legislation to provide funding which would allow us to build capacity to respond to terrorist events. This capacity must be coordinated so that communities can help communities and states can help states. This assistance must be universal and coordinated.

Federal agencies must treat their state and local counterparts with trust and respect. Critical information must flow without hesitation or restriction. This can

be facilitated by creating nationally recognized security clearance. When federal agencies do not honor each other's security clearances, state and local governments do not stand a chance.

When a critical incident occurs, state and local first responders will be on the scene long before a federal agency. These brave individuals deserve nothing less than a full accounting of all information. The federal government must continue the improvements in communication. This will help build trust between agencies and better serve the public for whom we all work.

I would like nothing more than to tell the subcommittee that all is well and no improvements are necessary. However, this would not serve the best interests of the public and our communities. There are problems. Egos get in the way of actual contributions to improve our ability to respond to terrorist events. This has improved but positive steps must still be taken to minimize this crippling issue. Adequate funding for state and local law enforcement along with equal access to directly relevant information would be major steps. Recognition that state and local government will be the first responders and are in the best position to know the needs of the communities would be even greater steps. Federal agencies should work to assist us in our mission to protect our communities. Federal agencies should share our purpose, respecting our professionalism and dedication. Federal agencies should combine resources with state and local governments.

This hearing is an example of the spirit of cooperation that will aid all of us in overcoming the problems of intergovernmental relations. Today, we are more prepared than ever to face the unthinkable. Each day hereafter we get even better. Our greatest strength comes from unity of purpose, unity of mission and unity of resources.

Thank you for your time and consideration.

Mr. HORN. Thank you. Very eloquent.

Our next presenter is Mr. Bakas.

Mrs. WILSON. Thank you, Mr. Chairman. Nick Bakas is the Chief of Public Safety here in Albuquerque. It's a new position created under the current mayor to kind of integrate police, fire, emergency response within the city of Albuquerque, which gives him, I think, a unique perspective on the problems we face in combating terrorism. He is also a retired Albuquerque Police Department officer, the former head—cabinet secretary for public safety in New Mexico. He led State efforts during the Cerro Grande fire, and was the head of the New Mexico Urban Search and Rescue Team. He then went to the Pentagon following the attack on the Pentagon. So I think he has a unique perspective to offer this committee.

And thank you very much for coming today.

STATEMENT OF NICHOLAS S. BAKAS, CHIEF PUBLIC SAFETY OFFICER, CITY OF ALBUQUERQUE

Mr. BAKAS. Thank you. Chairman Horn, Congresswoman Wilson, Congressman Udall, good morning. Thank you for the opportunity for a perspective from the local level.

I am Secretary English's predecessor at the State level, but now, as of September 11th, numerous people have mentioned that the world has changed, the way that government, at all levels, responds to the needs of their citizens has also changed, and part of that change, as you've mentioned, Congresswoman Wilson, is that Mayor Chavez has created this new position. This is the position of Chief Public Safety Officer. My duties and responsibilities include the oversight of the police department, the fire department, corrections, and emergency management.

There is an old Japanese proverb, I believe, that I think is very operative of this position, and that proverb is that the time to dig a well is not when you're thirsty. So our—my responsibility, our responsibilities in general, is to provide that planning, provide that necessary effort, so that we're ready to respond in a time of crisis, whether that crisis is a weapons of mass destruction incident or whether we're talking nuclear, biological, or a chemical incident.

On the local level—and I know there has been much discussion about how we communicate between the various agencies; let me tell you that it is a monumental task to communicate among local agencies. Specifically, how do we break down some real barriers; how do we break down some artificial barriers; how do we—as Secretary English mentioned, how do we communicate? It's very easy to become territorial.

I know the fire department has their issues; the police department has their issues; and Lord knows that the corrections folks are the redheaded stepchild of the whole public safety process; no one ever consults, refers or gives them the time of day. And this is really not where we want to be when it comes to providing for our citizens in Albuquerque.

Once we can get by those efforts, some real, as I say, some artificial, we have special needs on the local level. I know we've been in concert with Dean Roth of the medical school. In the sense of an emergency, what is clearly apparent is that there are special needs of the very young and of the very old that we must address,

and what has also become very, very clear, and important, is that we have needs of the disabled that, in planning, we all too often forget. We've solicited and are getting the input of Art Schreiber, a local celebrity here that town, a local politician, radio announcer, who is blind and who also will be participating with us on those very issues of the disabled and how they relate to emergency planning.

Secretary English, his staff, my staff, we're now meeting on a regular basis to determine what we will need to set in place, and we are very anxious, with Governor Ridge's proposal, to distribute, I believe, $3.5 million in first-responder money. Needless to say that any of this planning, anything that we're doing here today with respect to planning is very expensive. And I would emphasize, if anyone is not aware, that the city of Albuquerque is in dire financial straits, so we are very anxious to see how this infusion of funds is going to be distributed. And with that in mind, we are in concert with our partners at the State level and our partners on the Federal level.

I know, Congresswoman Wilson, you mentioned that we, here in New Mexico, stood ready, and we stand ready, to respond to emergencies of this Nation. I would be remiss if I did not say that one of the highlights of my career, that you mentioned, was our response to the attack on the Pentagon, Flight 77. It was New Mexicans, 62 of us, that went to the Pentagon, and we did search and recovery efforts. It was fellow New Mexicans, in partnership with FEMA, in partnership with the country in general, that performed magnificently. It was New Mexicans that shored up the Pentagon, which I'm sure is a building you see regularly. The Pentagon sunk a foot. It was New Mexicans that put that beam up on the right side of that damaged area and also supported the left side of that building.

So I am truly very proud. I see some other members of that team, John Gaffney, out in the audience. I know my time is up, but I do want to thank you, Congresswoman Wilson, for presenting us the American flag and a letter, while we were camped at the grounds of the Pentagon, and that went a long way to help us in our efforts. So I would thank you, and I will conclude with that.

[The prepared statement of Mr. Bakas follows:]

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Albuquerque, New Mexico 87103
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(505) 768-3019 (Fax)
(505) 822-0378 (Home)

Educational Background:

FBI National Academy Graduate, Quantico Virginia, 191st session, 1997

FBI National Law Institute, FBI National Academy, Quantico, Virginia, 1988

Juris Doctor, University of New Mexico, 1984

Master of Arts, Public Administration, University of New Mexico, 1977

Bachelor of Arts, History/Geography, University of New Mexico, 1974

Diploma, Albuquerque High School, 1967

High School Activities: Distributive Education, Drama Club, Latin Club, Student Council, Boys State

Military Background:

New Mexico Air National Guard, 1971-1977

Albuquerque Police Department Background:

Date of Hire, April 30, 1973

Promotion to Captain, May 1994

Promotion to Lieutenant, January 14, 1989

Promotion to Sergeant, August 27, 1980

Length of Service, 26 Years (Retired October 1, 1998)

State of New Mexico Background:

Appointed Cabinet Secretary, New Mexico Dept. of Public Safety, December 6, 1999 (New Mexico Dept. of Public Safety consists of the New Mexico State Police Division, Motor Transportation Division, Special Investigations Division, Technical and Emergency Services Division, Training and Recruiting Division, Administrative Services Division and Informational Technology Division. NMDPS is an organization of 1,200 people and a budget of $100 million.)

Albuquerque Police Department Duty Assignments:

Captain, Southeast Area Command, May 1995 – October 1998
Captain, Internal Affairs, May 1994 - May 1995
Lieutenant, Field Services
Lieutenant, Officer Selection and Training/Wellness Unit
Sergeant, Field Services
Sergeant, Chief's Office, General Counsel
Sergeant, Crimestoppers Unit
Sergeant, Warrants/Fugitive Unit
Sergeant, Jail Unit
Detective, Vice Unit
Patrolman, Planning Unit
Patrolman, Field Services Unit
Cadet, Police Academy

Special Training Courses:

Community Relations Certification
Police Civil Liabilities
Pursuit Driving Instructor
Discipline Matters
Internal Auditing Seminar
Career Development Seminar
Race and Cultural Awareness
Criminal Intelligence
Field Investigator Certified
Management by Objectives
Writing Strategies
Crisis Intervention
Domestic Violence
Vice
Gangs
Police Supervisory Responsibility and Management
FBI National Law Institute
Managing Patrol Operations
Municipal Budget
Sex Crimes
First-Line Supervisor
Legal Matters for Police
One-Minute Manager
Police Photography
Sexual Harassment
Organization & Management
Computer-Related Classes
Labor Management
Internship with District Attorney's Office (Misdemeanor & Felony Divisions)

Hobbies/Interests:

Auto Paint and Body

Auto Electricity

Cabinet Making/General Construction

Antique Vehicle Restoration

Oil Painting (Portraits and Landscapes)

Personal Achievements:

Headed the New Mexico Urban Search and Rescue Team, deployed to the Pentagon in Washington D.C. as a result of the September 11, 2001 terrorist attack.

Directed the State of New Mexico emergency response efforts to the 2000 Cerro Grande Fire in Los Alamos, New Mexico.

Increased the number of New Mexico State Police Officers by 40%.

Established Citizen Police Academies throughout the state of New Mexico which are presently ongoing.

Established Public Safety Day in Santa Fe, New Mexico and various communities in the state. The primary purpose of this event is to meet the community and photograph and fingerprint children. In addition, the New Mexico Department of Public Safety is the first and at this time, the only organization to offer parents DNA kits free of charge to complement the photos and fingerprints of their children.

Established program to fingerprint all Santa Fe, New Mexico school children.

Established the New Mexico State Police Motorcycle Unit, which will be fully operational January 1, 2002.

Initiated the dedication of State Police buildings throughout the state of New Mexico in memory of officers slain in the line of duty. (The Albuquerque district office was dedicated September 13, 2001 in honor of Officer Robert Rosenbloom. The Santa Rosa building will be dedicated October 26, 2001 in honor of Officer David Coker. Eight other dedications to follow.)

Coordinator of Community Policing efforts in the Southeast Area Command (Programs and specifics upon request).

American Hellenic Educational Progressive Association (A.H.E.P.A) District 17 Governor (June 1997 to 1998. District includes chapters in NM, Colorado, Wyoming and Montana. This is a national non-profit organization devoted to community service. The local chapter 501 is primarily focused on awarding financial aid in the form of scholarships to worthy youth and establishing low income elderly housing.)

Project Manager of recently completed A.H.E.P.A elderly housing complex (108 units among two facilities) located at 6800 Los Volcanes NW with $6 million in HUD 202 funds.

Successfully headed the 1986 Fugitive Investigative Strike Team operation in coordination with the U.S. Marshal's Service.

Developed extensive history of the Albuquerque Police Department (1800-Present) for articles and civic group presentations.

1999 Albuquerque High School Distinguished Graduate

Personal Achievements continued:

Distributive Education, Student of the Year

U.S. Citizenship by way of naturalization as a result of refugee status from Greece.

Bilingual-Greek and English. Native speaker on file as translator with U.S. Immigration Services.

Building of residence, acting as general contractor.

Married 31 years to Diana Bakas with two children: Christopher Bakas, presently a Sergeant with the Albuquerque Police Department, Carrie Bakas-Gordon, 1998 graduate of the University of New Mexico, with a BA in Sociology and History, and grandson Jason Bakas Gordon.

Organizations:

American Hellenic Educational Progressive Association (A. H. E. P. A.)

Albuquerque Police Officers Association

Fraternal Order of Police

Kiwanis

El Greco Society of New Mexico

St. George Orthodox Church Steward

Awards and Commendations:

Medal of Excellence, awarded by General Jackson, Commanding General of the District of Washington D.C. in recognition of Pentagon Search and Rescue efforts.

New Mexico Medal of Merit, among other New Mexico State Legislature and private awards and commendations for directing emergency response during the 2000 Cerro Grande Forest Fire in Los Alamos, New Mexico.

2000 Ahepan of the Year

Albuquerque High School Alumni Association Outstanding Graduate Award, August 5, 2000.

Crimestopper Certificate of Appreciation, 1991

Scores of awards and commendations for community service and excellence in job performance from supervisors and citizens of Albuquerque.

Community Service:

Elderly Housing Project Manager, 6800 Los Volcanes, NW, Albuquerque, NM

City of Albuquerque Department of Senior Affairs Advisory Board member

APD Community-Oriented Policing Steering Committee member

Children's Safe House Advisory Board member

Project Safe Task Member (Alcohol Detoxification Center advocacy group)

Albuquerque Job Corps Advisory Council

Albuquerque Police Department Domestic Violence Task Force

Member, Southeast area Command Food Drive

Law Enforcement Torch Run to benefit Special Olympics

Mr. HORN. Go ahead.

Mrs. WILSON. Thank you very much, Nick. That was a—it was kind of a moving experience to go over and meet with you and your team there at the Pentagon, in those days following that attack, and their determination to help was heartwarming.

When we're looking at emergency response, there's no way that any of us can ignore the National Guard. When things go wrong, every Governor in this country, one of the first things they do is call out the Guard. And the Guard is among us and with us; they are part of our communities. And when New York and Washington were attacked on September 11th, it was Guard units that were in the air to help protect us.

Since then, the National Guard has flown 18,000 sorties, providing air cover over this country, continuous air cover over New York and Washington, and rotating air cover around the country. The 150th Tactical Fighter Wing, the Tacos, have been a part of that.

In addition, there is this irony that Mikey Rice, who is the head of civil air—in his civilian capacity, the Head of Air Transportation and Civil Aviation for the State of New Mexico, is also a brigadier general in the Air Guard, who rotates, about every 6 weeks, through Tampa, to be the general who is responsible for making those orders, if there is another attack on the United States. So there is a certain irony about the Guard and the places people come from and the expertise that they bring.

The New Mexico Guard has sent security police overseas and has been protecting our Air Force, our bases here in New Mexico, in concert with the civil authorities and with the active duty Air Force. And the New Mexico Guard also is one of the States that has the civil response team which is set up and trained to respond to emergencies involving biological and chemical attacks. And I have to say that when the Speaker's office called me that Saturday, one of the people that I called was the Guard and General Horn. And his people were very helpful in figuring out what capabilities might be available in the State Guard units, including those in Maryland, Virginia, Pennsylvania, and New York, that might be able to help Washington. That's a measure of the strength of the National Guard in our communities.

General Horn is a former fighter pilot who is now the head of the New Mexico National Guard. He's the adjutant general here in New Mexico.

And I thank you very much for joining us, sir.

STATEMENT OF BRIGADIER GENERAL RANDALL E. HORN, ADJUTANT GENERAL, NEW MEXICO NATIONAL GUARD

General RANDALL HORN. Mr. Chairman, Representative Wilson, Representative Udall, thank you for the opportunity to speak with you today concerning Federal support for the preparations we are making in the face of chemical, biological, radiological and nuclear threat.

I've broken my presentation into distinct areas, to try to make it easier for you to distinguish between the types of support and coordination that we're seeing.

The first area of concern is federally funded missions, that have been identified, supported by the New Mexico National Guard since

September 11th. First, we support the airport security mission, with 47 Army and Air National Guard personnel, at four locations around the State, to include Albuquerque, Roswell, Santa Fe, and Farmington. The FAA has been involved with the training of these troops, and in our estimation, has done a very good job. I would comment that it is important that this operation stay on the current plan for transition to the civilian sector, currently scheduled for the end of May.

New Mexico Army National Guard has recently mobilized 19 National Guardsmen to Title 10 Federal status for the Border Sentinel mission, in support of the U.S. Border Patrol at ports of entry on the southern New Mexico border with Mexico. The U.S. Army is our primary interface for this mission, and there are issues concerned with this mission that I'll address a little bit later.

The New Mexico Air National Guard contains the 150th Fighter Wing, the infamous Tacos. We currently have more than 200 New Mexico Air National Guard personnel deployed to New Jersey, flying F–16s and operating over the city of New York in support of Operation Noble Eagle. This mission is planned to continue for the next 60 days.

Mr. Chairman, those are the missions that we have taken on as the direct result of the terrorist attacks on September 11th. Let me tell you just a little bit about some of the things we were doing before September 11th, in preparation for terrorist type of activities.

New Mexico National Guard has one of the Weapons of Mass Destruction Civil Support Teams, as they are usually referred to. This 22-person team was recently certified, and the CST aids civil responders in identifying chemical, nuclear and biological threats as they evolve. The 64th Civil Support Team conducted a series of joint training exercises with communities throughout New Mexico, on 10 through March 17th of this year, the primary objective being, was to incorporate CST response assets with local and State WMD response agency assets. This team has setup a display in the front lot, and I would invite you to come by after the hearing today to visit with them and understand a little bit more about what they do.

The New Mexico National Guard also operates the 100-person counter-drug mission on the Mexico-New Mexico border. This program is directly aimed as stopping the flow of illegal drugs; however, it obviously has a spillover effect to the apprehension of people and products who might be trying to bring weapons of mass destruction into the State, as well.

Mr. Chairman, that's a thumbnail sketch of the types of operations we currently work with, with regard to prevention of chem/bioattacks. I would like to spend just a few moments to outline areas where I think the Federal Government could help us perform our jobs just a little bit better.

Our intrastate terror efforts will include planning, training and participation in regular exercises. The National Guard, along with other State agencies, is presently focused on a comprehensive interagency planning and implementation process to help us seamlessly address threats and interface with Federal agencies. We are evaluating our communications capabilities and finding them a little bit weak. We will be asking for Federal assistance to upgrade our com-

munications systems to make us more compatible with other State agencies.

Another area of constant concern is the chronic underfunding of counter-drug program. As you remember, I told you that is the 100-person team that works with Border Patrol agencies on the Mexico border. The Governors' State Plans are the mechanism identified by Congress to list the programs and missions the State wishes to conduct in support of their war on drugs and to identify and request those Federal funds necessary to execute the program. The return to full funding in FY03 will allow New Mexico Guardsmen to become more effective to counter illicit drug and terrorist activities.

I would also like to address the following issue concerning the 22-person Civil Support Team. This team is made up of unique capabilities, and right now, we do not have the capability to backfill any of those positions ahead of time. If we lose a radiological doctor, or somebody with those kinds of capabilities, it's very difficult to bring someone in behind that person in a timely fashion, to keep that CST team going. So we'd request that you entertain the possibility of giving us a little backup support, so that we can fill in behind and be ready to respond to any kind of danger that would be there.

Mr. Chairman, in conclusion, I would state that, in general, I am pleased with the support we've received from the Federal Government regarding our role in the fight against terrorism. We in the New Mexico National Guard are very proud of our part, and we look forward to continue the efforts to protecting the country that we all love. Mr. Chairman, that concludes my remarks.

[The prepared statement of General Horn follows:]

Statement By Major General Randall E. Horn to the House Subcommittee on Governmental Reform
Held at Albuquerque, New Mexico, March 25, 2002

How is the Federal Government doing in Assisting State and Local Governments Prepare for a Potential Attack involving Biological, Chemical or Nuclear Agents?

Let me first tell you how we are employed. The New Mexico National Guard has directly and indirectly responded with increased readiness, training and support.

We continue to augment airport security at four locations in the state, Albuquerque, Roswell, Santa Fe and Farmington with 47 Army and Air National Guard personnel assigned. This mission is beginning to draw down in increments beginning at the end of March and ending all operations by the end of May.

We have recently mobilized 19 National Guard personnel to Title 10 Federal Status for the Border Sentinel Mission in support of the US Border Patrol at ports of entry on the southern New Mexico border with Mexico.

We continue at an increased self-protection threat level (currently Force Protection Condition Bravo) that has necessitated increased physical access restriction at all our locations as well as increased guard forces.

We currently have more than 200 New Mexico Air National Guard personnel deployed to New Jersey flying F-16 air patrol sorties for Operation Noble Eagle.

Our Weapons of Mass Destruction Civil Support Team, recently certified operationally ready by the Department of Defense, aids civil responders in identifying Chemical, Nuclear and Biological threats. It is also involved in a comprehensive series of exercises designed to train local response teams and to familiarize them with available threat identification and communication availability. The 64th Civil Support Team conducted a series of joint training exercises with communities throughout New Mexico on 10-17 March 2002. The primary objective of this training event was to incorporate CST response assets with local and state WMD response agency assets.

The New Mexico National Guard is a planned integral part of New Mexico Department of Public Safety (DPS) and Department of Health (DOH) strategy to respond in the event of an actual terrorism attack especially in the event of a biological or chemical agent. We have worked closely in the planning process with FEMA, EPLO, and NMDPS-DOH on Pharmaceuticals Distribution. Our Military Support Officer started the NM Department of Public Safety/Department of Health stockpile effort. This coordinated effort has evolved to DPS hiring a contractor to write a plan and our facilities and personnel are heavily tasked in this concept of operations statewide.

The New Mexico National Guard has a good working relationship with FEMA, under the umbrella of the Governor's Chief of Staff, having conducted agency assessment for National Guard as well as other NM State cabinet secretaries. Completed was identification of status for emergency plans, communication capabilities and manpower strengths and weaknesses.

Specifically Federal assistance is needed for communications equipment as well as some items that are not available through standard military issue documents such as electrical generators.

The NM Guard has participated in the Emergency Planning Liaison Officer (EPLO) process by providing critical infrastructure analysis to 5th United States Army. Most of our work is coordination with the EPLO working at the NMNG to insure we have coordinated our planning and response efforts with federal needs. We have also participated in joint exercises with 5th Army.

What do we still need to do?

We need to refine planning, increase training and then participate in regular exercises of planned responses at varied events in several different sized communities throughout the state. This is a NM Department of Public Safety lead but we are an integral player. The National Guard, along with other state agencies, is presently focused on a comprehensive inter-agency planning and implementation process to seamlessly address threats and interface with federal agencies. We are evaluating our communications capabilities with the probable necessity of requesting federal assistance to upgrade systems.

Other Federal Issues that Impact Our Response:

Counter Drug Program Funding Shortfall

The Counter-drug program of the New Mexico National Guard has been in a steady state of decline over the past four years. The primary reason for this decline is the continuous erosion of Congressional appropriations to the Governors' State Plans. The Governors' State Plans are the mechanism identified by Congress to list the programs and missions the states wish to conduct in support of their war on drugs and to identify and request those federal funds necessary to execute their programs. The federal budget for the state plans has shrunk from $176 Mil in FY98 to $156 Mil for FY02.
The federal budget for drug interdiction support to our law enforcement agencies and prevention support to our schools in New Mexico has spiraled down from $5.6 Mil in FY98 to $4.3 Mil in FY02. This loss of funding has caused personnel reductions from 119 in FY98 to 84 in FY02. These reductions have severely impacted our ability to fully support the critical prevention and interdiction missions the governor deems essential to reduce the overall impact of illicit drugs in the state of New Mexico.

The return to full funding, $200 Mil, in FY03, will allow New Mexico Guardsmen to become more effective to counter illicit drug and terrorist activities at our Ports of Entry, our US Border Patrol Checkpoints, and in our schools. These soldiers serve as a deterrent to those engaged in undermining the basic values of this country. They serve as a highly visible role model for the young people in our schools who long for someone to respect, to look up to, to talk to about their everyday concerns.

Lack of Sufficient Personnel and Equipment in Our Weapons of Mass Destruction Civil Support Team

I would like to address the following issues affecting staffing requirements for the Civil Support Teams:

The lack of specialized team members adversely affects the response capabilities of the Civil Support Teams. These shortfalls are the lack of force structure, such as an Explosive Ordnance Disposal (EOD) section; the limitation to one uniquely trained individual in areas such as modeling and laboratory analysis; and the overall lack of manpower reserve throughout the Command, Operations, Communications, and Logistics Sections.

The inclusion of an EOD section in the Civil Support Teams is critical. In most situations that involve radiological, biological, or chemical agents – there is the presence of explosives – either as a dispersal charge or as secondary device targeting First Responders. There are usually highly trained EOD personnel assigned with the local police or fire departments – but these individuals frequently lack the skills or equipment to operate safely in a Chemical, Biological, or Radiological (CBR) environment.

Besides the absence of a properly trained EOD section, the CST also suffers from the limitation of one uniquely trained individual in several areas, especially the modeling and laboratory analysis areas. Absent is any depth in critical Team positions. The original design only provided the Teams with minimum essential personnel assigned. Unfortunately this does not provide an adequate trained reserve to allow the team to sustain itself if personnel become unavailable.

The Teams could also be bolstered by the addition of personnel in the Command, Operations, Communications, and Logistics Sections – which are only two Team members deep. These sections face the almost insurmountable task of sustaining operations for 72 hours. These undermanned sections not only support the Team as a whole but also serve as the critical interface between the Team and its civilian counterparts. These sections provide the delicate links that enable uninterrupted communication with local, state, and federal authorities and agencies. Not only does the Team interface with authorities via phone, fax, and Internet; the CST also provides face-to-face liaisons that allow the Team to become fully integrated into Incident Response.

Even if all the requested additional personnel were authorized and filled with qualified persons, it is still a daunting task to retain them. The majority of the Team spends over a third of their enlistment in training – **one year** devoted to individual training – attending highly specialized WMD and HAZMAT classes that make them very knowledgeable and very attractive to industry. One method that would address both the recruitment and retention difficulties would be to provide a pay incentive to CST members. This pay incentive could be in the form of a special duty assignment pay that is commonly offered to Special Forces, EOD technicians, and Recruiters.

Placement of Border Sentinel Personnel on Title 10 vs. Title 32 Status

We are concerned about the activation of our Border Sentinel Personnel in a Title 10 status that bars them from being armed. Our personnel need to be able to respond to any emergency situation that puts them or their fellow soldiers in danger. We have given our troops the tools to protect themselves should the need arise just as they are able to do in the Airport Security Mission and other call-ups. Our Guard members should have the same weapons available to them as their Customs and Border Patrol counterparts. Our personnel receive the

same firearms training as the NM State police. Once they've been federalized they belong to 5th Army but as the NM TAG, I feel uncomfortable putting them in a dangerous situation without the tools to protect themselves. The borders have become more dangerous. Border Patrol agents get shot at everyday. If our Guard members are fired upon they have no way to defend themselves. They are trained to handle weapons they should be able to do their job 100% without any handicaps.

Mr. HORN. Thank you very much.

If you want to introduce Mr. Busboom, go ahead.

Mrs. WILSON. Thank you, Mr. Chairman.

Stan Busboom has more than 30 years of experience in security. He is now Division Director of Security and Safeguards at Los Alamos National Laboratories. He served in the Air Force for 26 years and retired at the rank of Colonel—although we wouldn't guess it by your haircut today.

We're very pleased to have you here.

STATEMENT OF STANLEY L. BUSBOOM, DIVISION LEADER, SECURITY AND SAFEGUARDS DIVISION, LOS ALAMOS NATIONAL LABORATORY

Mr. BUSBOOM. Or my lack of haircut.

Mr. Chairman, Congresswoman Wilson, and Congressman Udall, thank you very much for the opportunity to speak with you today. I am Stan Busboom, Director of Security at Los Alamos National Laboratory, and in today's testimony, I want to provide you with a summary of the immediate actions and on-going responses to the terrorist threat, following the events of September 11th of last year, and how we're interfacing with our State and local governments in those efforts.

On a day-to-day basis, just to give you some background, we employ over 400 uniformed officers to protect the 43-square miles of Los Alamos National Laboratory. Recruit, train and deploy a highly motivated force of men and women whose primary focus is guarding our two nuclear facilities, but as well, over 100 other security areas on the mesas of Los Alamos. The typical recruit receives more than 440 hours of intensive training before performing any duties.

Our special response team—those are the SWAT team members—receive an additional 360 hours of tactical training before they go to do anything. That special response team has over 70 members and is fully equipped with military weapons, including armored vehicles, M–60 machine guns, grenade launchers, and thermal-imaging sensors.

Along with all Federal, State and local government security agencies, we reacted immediately to the events of September 11th. I'll provide you with a summary of our actions. Vehicle screening posts were established outside of our nuclear facilities to identify personnel and to provide standoff against potential vehicle bombs. Selected roadways, paths, parking lots, and fence lines were blocked off with concrete barriers, and we began screening all trucks and commercial vehicles that were entering the site. Mail and parcel delivery were intensively screened, using both x-ray machines and explosive-detection machines.

Increased vigilance was requested of everyone on the site, and we began issuing a series of security bulletins to keep our employees informed and to direct them to take precautionary measures. I would mention that our employees are also a substantial amount of the population of Los Alamos County, so we were serving two purposes in this security measure.

Extensive consultations were conducted with the County of Los Alamos Fire and Police Departments to predetermine response to

any incidents and to establish a fresh understanding on how to implement the existing agreements for mutual aid in case of emergency. We also consulted Forest Service officials and the governments of our neighboring pueblos.

Immediate and ongoing contact was established with the Federal Bureau of Investigation, and daily reviews were conducted of intelligence from all sources. We consulted with the New Mexico Emergency Management Office and briefed them on our capabilities and our response plans.

Finally, we looked at all the potential terrorist threats against all the targets we have at the laboratory, and we revalidated our protective strategies.

I will say that one of the most challenging aspects of protecting Los Alamos National Laboratory is that we have an open site. We have taken extensive measures, since September 11th, to control our roadways and protect key facilities, but it's very manpower-intensive. In the initial weeks following September 11th, we had some guards putting in as many as 72-hours on post per week, a tremendous effort on behalf of that guard force, with some cooperation on overtime waivers from the union. We never ran into a situation where we had any post unfilled. We had plenty of volunteers. There's plenty of patriotic folks in northern New Mexico willing to step up to this job.

Having addressed our staffing issues by hiring additional people since then, we are also looking at engineering and some special solutions. We do have supplemental money this year, and by the way, we very much appreciated the supplemental appropriation we received to allow us to pay the overtime and to design some engineering solutions to our open-site difficulties. We are planning to look at two bypass roadways that will allow us to control access, and right down to fully closing the site, if we need to, similar to the way it's done at Kirtland Air Force Base.

Chairman Horn, there are additional measures that we've taken that are classified. And we'd be glad to brief you and other Members in an appropriate setting.

Thank you for the opportunity to testify today.

[The prepared statement of Mr. Busboom follows:]

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Director, Security and Safeguards Division

Los Alamos National Laboratory

March 25, 2002

Author(s): Stanley L. Busboom

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Committee on Government Reform
Subcommittee on Government Efficiency, Financial Management and Intergovernmental Relations

Albuquerque Field Hearing on Federal Government Assistance to State and Local Governments in Preparing for Terrorist Attacks

Los Alamos
NATIONAL LABORATORY

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Introduction

Mr. Chairman, Congresswoman Wilson and members of the Subcommittee, thank you for the opportunity to speak with you today. I am Stan Busboom, Director of Security at Los Alamos National Laboratory, and in that position I am responsible for the protection of the Department of Energy's (DOE) assets on our site. I have over thirty years of experience in security and law enforcement and, prior to joining the Laboratory, I served for 26 years in the United States Air Force's Security Police.

In today's testimony, I will provide you with a summary of the immediate actions and ongoing responses to the terrorist threat following the events on September 11th of last year, and how we are interfacing with our state and local governments in those efforts.

Overview of security at Los Alamos National Laboratory

On a day-to-day basis, we employ over 400 uniformed officers to protect the 43 square miles of Los Alamos National Laboratory. This service is provided through a contract with Protection Technology Los Alamos, known at the Laboratory by the abbreviation: PTLA. PTLA recruits, trains, and deploys a highly trained and motivated force of men and women whose primary focus is guarding two major nuclear facilities and over 100 other security areas spread across the site. The typical recruit receives a minimum of 440 hours of intensive training before performing any duty. Our special response team members—the "SWAT" team—receive an additional 360 hours of tactical training. That special response team has over 70 members and is fully equipped with military weapons, including armored vehicles (HMMWVs), M-60 machine guns, grenade launchers, and thermal-imaging sensors. To field this highly capable force, and to provide a wide range of other key security services across the Laboratory, requires an investment of over $100 million annually.

Responding to September 11th

Along with all Federal, State, and local government security agencies, we reacted immediately to the events of September 11th, and implemented measures appropriate to the Security Conditions—referred to as "SECONs"—as directed by the DOE. The DOE defines the terrorist threat in SECONs 1 through 5, where "1" is the highest state of alert, and "5" is normal operations. These progressive SECONs are very much analogous to the Department of Defense's use of THREATCONs.

I will provide you with a summary of the immediate actions we took under the increased SECONs:

- Vehicle screening posts were established outside of nuclear facilities to identify personnel and to provide standoff protection against vehicle bombs.
- Selected roadways, paths, parking lots, and fence lines were blocked off, reinforced with concrete barriers, and put under the surveillance of continuous random patrols.
- We began screening all trucks and commercial vehicles entering the site.
- Mail and parcel delivery was intensively screened using both x-ray and explosives-detection equipment.
- Security and Emergency Response staff members were placed on short-notice recall status.
- Increased vigilance was requested of everyone on site and we began issuing a series of security bulletins to keep our employees informed and to direct them to take precautionary measures.
- Extensive consultations were conducted with the County of Los Alamos Police and Fire Department to predetermine responses to any incidents and to establish a fresh understanding on how to implement the existing agreements for mutual aid.

- Immediate and ongoing contact was established with the Federal Bureau of Investigation and daily reviews were conducted of intelligence from all sources.
- We consulted with the New Mexico State Emergency Management Office and briefed them on our capabilities and response plans.
- Both my deputy and myself discussed Laboratory security at a wide variety of public meetings.
- We participated in the National Nuclear Security Administration's "72 Hour Study," re-looked at all potential terrorist threats against every potential target at the Laboratory, and validated our protective strategies.

Challenges and Opportunities

One of the most challenging aspects to protecting Los Alamos National Laboratory is that we have an open site. We have taken extensive measures to control our roadways and protect key facilities, but it is very manpower intensive. In the initial weeks following 9/11, we had some guards putting in as many as 72 hours a week on post. The guards' union cooperated fully in waiving overtime restrictions during this period, and we never had difficulties finding enough volunteers to staff the additional posts. PTLA has since hired and trained an additional 37 guards to alleviate this condition, and has an additional class of 42 persons now in training who are scheduled to be fully qualified by June of this year. A timely supplemental appropriation was key to our ability to pay extensive overtime costs and to recruit, hire, and train additional guards.

Having addressed our staffing issues, we are also continuing to look hard at engineering additional enhancements at our site. We are building a new truck-screening post to more effectively handle the flow of deliveries and we are looking hard at moving the Laboratory's main warehouse away from the technical areas, thus significantly reducing the presence of delivery vehicles which could represent a vehicle bomb threat. We have also begun design on a pair of by-pass roads that

will allow us to screen all traffic coming onto the site and, if necessary in the case of increased SECONs, close the site altogether.

Chairman Horn, there are additional measures we have taken that are classified, and we would be pleased to brief you and other members on those measures in an appropriate setting. Thank you for the opportunity to testify today. We appreciate the continued support of the United States Congress and the opportunity to recognize the patriotic and dedicated efforts of our security staff and guard force.

Mr. HORN. Thank you.

Mrs. WILSON. Mr. Chairman, here in New Mexico, we are blessed with having one of best medical schools in the country, and I'd also——

Mr. HORN. I might suggest that they started the new approach, and when Harvard finally got the publicity on it—that it was New Mexico that started it. And I just was telling somebody, last week, this, and what a fine school you have in medical matters.

Mrs. WILSON. See Dr. Roth grinning.

I wanted to first start by thanking Dr. Roth and his staff. This is a University of New Mexico building that we're meeting in today, and I wanted to thank you, and Robin and Kathy from your office, for helping us to arrange this on fairly short notice. I appreciate that.

We are very fortunate to have someone of Dr. Roth's caliber leading the medical school. He has 18 years of experience in disaster medicine, as well as emergency medicine. Dr. Roth created the country's first-ever civil Disaster Medical Assistance Team, the DMAT, within the National Disaster Medical System that was established in 1984, when Ronald Reagan was president, and since then, the New Mexico Disaster Medical Team has developed more experience and capability, through his leadership, than—really than any other team in the country. We now have the Center for Disaster Medicine at the University of New Mexico.

He has also played a leading role in establishing the National Center for Emerging Infectious Diseases, building on work that was done at the University of New Mexico on the Hanta virus outbreak, rapidly identifying a new disease and identifying its source and developing treatment for that.

We are very pleased to have him here as the head of our medical school and so involved in the issues surrounding chemical, nuclear and biological agents and their impact on populations.

Dr. Roth.

STATEMENT OF PAUL B. ROTH, M.D., UNIVERSITY OF NEW MEXICO HEALTH SCIENCES CENTER, ASSOCIATE VICE PRESIDENT FOR CLINICAL AFFAIRS, DEAN, SCHOOL OF MEDICINE, PROFESSOR, EMERGENCY MEDICINE

Dr. ROTH. Well, thank you, Mr. Chairman, Representative Wilson, Representative Udall. I thank you for those kind remarks. Harvard tends to copy many institutions, but prominently, the University of New Mexico, in that regard.

It's a pleasure to be here to speak to you today concerning the state of our Nation's preparedness with regard to biological, chemical and nuclear attack. As was mentioned, I'm here not only speaking to you as the dean of the medical school, but someone who has a great deal of experience with disaster response. And so I speak to you not only from a desktop background, but from firsthand experience in the field.

Just a few remarks regarding the University of New Mexico. Our Health Sciences Center and its School of Medicine have been actively involved in anti-bioterrorism planning, training, related research, and response, for several years. Most recently, we have been working very closely with the New Mexico Department of

Health in planning for the use of the new CDC and HRSA moneys. We are also rewriting our Health Science Center disaster plan to accommodate biological and chemical events by retrofitting elements of our Health Sciences Center hospital facilities to serve as a major tertiary care referral center with unique capabilities to handle these kinds of special-needs patients.

We are involved, through our Bio-Defense Center, in several collaborative projects with the State and Federal Government in both national laboratories, all of which are directed toward basic public health research in anti-bioterrorism. They involve all aspects of controlling the bioterrorist threat, including prevention, early detection, and therapeutic intervention. One such product is the Animal Development Center, which serves as the testing site for DARPA, with ties to USAMRID, and assists in the development of promising vaccines and new drug therapies.

Our Center for Emerging Infectious Diseases, that Congresswoman Wilson mentioned earlier, was created a year ago, with her support, and is focused on emerging infections to better understand the disease process.

And finally, we have established a New Mexico Consortium for Bioresearch, that has been formed to conduct collaborative and innovative research, with the main focus centered on anti-bioterrorism. The membership of the consortium includes the New Mexico Department of Health, Sandia Laboratories, and UNM.

Let me comment on some issues related to Federal, State and local efforts for preparedness, first with regard to coordination and cooperation among Federal agencies.

I would first like to commend the administration for creating the Office of Homeland Security. Although Director Ridge has a huge challenge ahead of him in assuring the safety of all Americans, the creation of this office is something that our country has needed for a long time. I know, from my personal experience in responding to natural and manmade disasters, that the primary inefficiencies in these response efforts have centered on poor coordination and communication among the responsible Federal, State and local agencies. The only way that Director Ridge can successfully assure the safety of our country's citizens is to have the authority he needs over the vast array of the agencies involved with bioterrorism preparedness and response.

We must clarify the relationship between the Office of Homeland Security and FEMA. Both of these organizations have seemingly similar missions, and it is imperative that a division of responsibility be outlined.

Next, with regard to preparation of the Federal, State and local emergency management responders to coordinate a response to a biological or chemical terrorist attack, in my view, we are only in the very early stages of developing a reasonable response. For many years, public health capacity has been gradually deteriorating, and despite much effort, still needs to be reinvigorated with substantial resources. It will take a huge effort to reverse this trend.

And finally, with regard to how Congress and the executive branch can address surge capacity in the public health system, I would like to emphasize one point, that no discussion regarding

overall healthcare surge capacity can be complete without considering hospital capacity. There currently appears to be very little attention placed on the Nation's medical and hospital infrastructure. This piece to the complex puzzle of assuring our preparedness for bioterrorist acts is, in fact, the most critical. There is no minimizing the dire straits that our country's healthcare system is in today. Every day, hospitals are at capacity and are constantly battling to keep their doors open for their patients.

In New Mexico, we are seeing a progressive deteriorating in our hospitals' abilities to admit acutely ill patients. One way we monitor our hospital capabilities is to track the number of times each hospital diverts emergency patients away to other hospitals due to the lack of in-patient beds. In our system today, this has been occurring so frequently by so many hospitals, that we have had to develop an inter-hospital agreement that forces all hospitals to open when they all go on divert. That has to occur even if patients have to remain in the emergency department for extended periods of time.

Now we track the numbers of times we must invoke this state of forced openings. Over the past 3 years, the frequency of forced openings has increased dramatically, indicating an ever-dwindling ability of our healthcare system to accommodate even the normal volume of emergency cases. In fact, Albuquerque hospitals are often on divert more hours each week than they are open.

Current hospital admissions data for the State of New Mexico shows that there are over 3,000 admissions and approximately 10,000 emergency room visits each week. Clearly then, the sudden influx of hundreds and potentially thousands more patients into this current situation, as a result of bioterrorist attack, would result in a collapse of the system, not only increasing the morbidity and mortality of these patients, but all of the patients ordinarily cared for by hospitals.

That concludes my prepared remarks, and I'd be pleased to answer any questions.

[The prepared statement of Dr. Roth follows:]

Statement of Paul B. Roth, M.D.
University of New Mexico Health Sciences Center
Associate Vice President for Clinical Affairs
Dean, School of Medicine
Professor, Emergency Medicine

March 25, 2002
Albuquerque, NM

Testimony to
Subcommittee on Government Efficiency, Financial Management and Intergovernmental Relations of the House Committee on Government Reform

"How Effectively are Federal, State and Local Governments Working Together to Prepare for a Biological, Chemical or Nuclear Attack?"

Introduction

Good morning, Mr. Chairman and Members of the Subcommittee. My name is Dr. Paul Roth and I am the Associate Vice President for Clinical Affairs at the University of New Mexico Health Sciences Center and the Dean of the School of Medicine, as well as an Emergency Medicine physician. I appreciate having the opportunity to speak to you today concerning the state of our nation's preparedness for a biological, chemical or nuclear attack. I applaud the efforts of President Bush and Congress for providing the resources our country needs to continue and enhance the efforts to prepare against acts of terrorism.

Today I will focus the majority of my remarks on the issues outlined for today's hearing. However, I would first like to briefly describe the University of New Mexico Health Sciences Center's (HSC) current efforts in bio-terrorism planning, response, training and research. The HSC and its School of Medicine (SOM) is engaged in partnership with federal, state and local governments to develop these key elements.

Planning and Response

Most recently, we are working very closely with the New Mexico Department of Health (DOH) in planning for the use of the new Centers for Disease Control (CDC) and the Health Research and Services Administration (HRSA) monies. We are also re-writing our Disaster Plan to accommodate biological and chemical events by retrofitting elements of our HSC hospital facilities to serve as a major tertiary care referral center with unique capabilities to handle these kinds of special needs patients.

Additionally, the HSC is also involved with several joint programs in bio-terrorism training, planning and response including, the New Mexico Domestic Terrorism Working Group, Weapons of Mass Destruction Working Group, the National Pharmaceutical Stockpile Program and the Critical Infrastructure Assurance Council.

Training

The over-arching 'theme' for these training groups is to devise a plan on how best to provide clinical care for the patients involved with a biological or chemical attack, while also assuring the safety of the medical personnel. We have also developed an advanced hazardous materials

response as part of the training. Supported by the Domestic Preparedness (Nunn-Lugar-Domenici Act) Program, approximately 300 instructors have already been trained.

Research

At the SOM, we are involved through our Bio-Defense Center in several collaborative projects with the State and Federal government, which are directed toward basic and public health research in anti-bio-terrorism. They involve all aspects of controlling the bio-terrorist threat, including prevention, early detection, and therapeutic intervention, as well as increasing our understanding toward the basic pathogenesis of these new emerging infections in hopes of developing new drugs and vaccines. Some of the current collaborations include:

Model Development Center
The Center is funded by the Defense Advanced Research Program Agency (DARPA) to develop early detection techniques by monitoring the changes that occur in the blood immediately after infection with links to biotechnology companies in Austin, Texas and Sandia Laboratories. It is also the testing site for DARPA with ties to USAMRIID and assists in advancing promising therapeutic projects (vaccines and therapeutics) through rigorous mouse models of infections related to bio-terrorism in order to move them toward eventual human use.

Center for Emerging Infectious Diseases (CEID)
This center was created one year ago with the support of Congresswoman Wilson and was ultimately funded by the CDC. The CEID is focused on emerging infections to better understand the pathogenesis of the disease processes.

New Mexico Consortium for Bioresearch
This Consortium has been formed to conduct collaborative and innovative research with a main focus centered on anti-bio-terrorism. The membership of the Consortium includes the NM Department of Health, Sandia National Laboratories and the University of New Mexico.

Issues related to Federal, State and Local Efforts for Preparedness

1) How can coordination and cooperation among Federal agencies be improved?

I would first like to commend the Administration for creating the Office of Homeland Security. Although Director Ridge has a huge challenge ahead of him in assuring the safety of all Americans, the creation of this office is something that our country has needed for a long time. I know from my personal experience in responding to natural and manmade disasters that the primary inefficiencies in these response efforts have centered on poor coordination and communication among the responsible agencies at the Federal, State, private and local level. Therefore, to address this topic, I believe the most important element is to increase the authority of the Office of Homeland Security. The only way that Director Ridge can successfully assure the safety of our country's citizens is to have the authority he needs over the vast array of agencies involved with bio-terrorism preparedness and response. Another important element is to clarify the relationship between the Office of Homeland Security and FEMA. Both of these organizations have seemingly similar missions and it is imperative that a division of responsibilities be outlined. Additionally, the Federal Response Plan must be updated to articulate the roles of both of these organizations. I would also like to commend Secretary Thompson for creating a new office for Public Health Preparedness. This new office is designed to coordinate the Department of Health and Human Services programs in an effort to function more effectively internally and with the Office of Homeland Security.

3. How prepared are Federal, State and local emergency management responders to coordinate a response to a biological or chemical terrorist attack?

In my view, we are only in the early stages of developing a reasonable response to a biological or chemical attack. For many years, the public health capacity has been gradually deteriorating and desperately needs to be re-invigorated with substantial resources. Part of this re-invigoration should include the establishment of a sophisticated medical surveillance system. We must also have the capability of effectively quarantining and containing populations that have been exposed to biological or chemical agents. Finally, another missing piece that is vital to the safety and security of the public is the implementation of a coordinated mass vaccination program.

In addition to implementing a public health-coordinated response, we must also have a much more effective capability to treat potentially large numbers of victims who are symptomatic from a biological or chemical attack. This speaks to the capabilities in these extreme circumstances of our pre-hospital/EMS and health care delivery systems. For well over a decade, the essential infrastructure in support of rural and urban, general and tertiary care hospitals has been eroding. Currently in New Mexico, the hospital systems can only marginally provide the level of care necessary for acutely ill or injured patients during normal circumstances. The system would surely collapse in the event of thousands of additional acutely ill patients.

4. How can Congress and the Executive Branch address surge capacity in the public health system?

Having noted the above, there are still serious problems in achieving functional surge capacity. I am particularly concerned not only about the quality and quantity of our workforce, but also about their level of preparedness. Providing adequate training to these individuals is a key element in taking steps to improve our surge capacity problems. I am hopeful that it is now possible to address the structural and systems issues thanks to the additional funding that the DOH recently received from the CDC. While these monies will help us tremendously, I still have concerns about several aspects of public health personnel educational and training issues.

No discussion regarding health care surge capacity could be complete without including hospital capacity. Perhaps most important, there currently appears to be very little attention placed on our nation's medical and hospital infrastructure. This piece to the complex puzzle of assuring our preparedness for bio-terrorists acts is, in fact, the most critical. There is no sugarcoating the dire straits that our country's healthcare system is in today. Every day, hospitals are at capacity and are constantly battling to keep their doors open for their patients. This battle is very costly, both in resources and manpower, as well as in the spirits of the medical personnel.

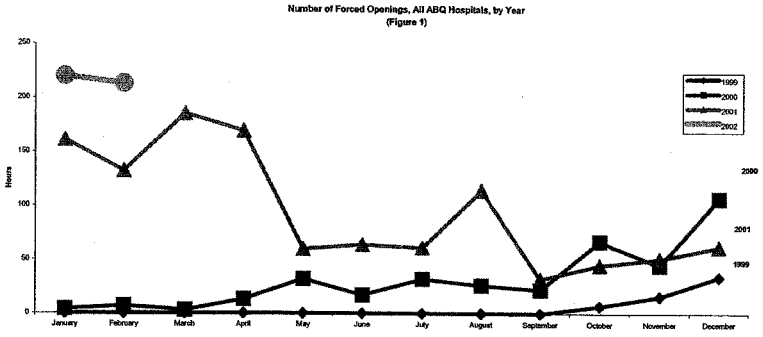
In New Mexico, we are seeing a progressive deterioration in our hospitals' abilities to admit acutely ill patients. One way we monitor our hospital capabilities is to track the number of times each hospital diverts emergency patients away to other hospitals due to lack of inpatient beds. In our system today, this has been occurring so frequently by so many hospitals that we have had to develop an inter-hospital agreement that forces all hospitals to open when they all go on divert status. This must occur even if patients have to remain in the Emergency Departments for extended periods of time due to lack of inpatient beds. Now we track the numbers of times we must invoke this state of "Forced Openings (FO) ". You can see in Figure 1, that each year over the past three years, the frequency of FOs has increased dramatically, indicating an ever-dwindling ability of our health care system to accommodate even the normal volume of emergency cases. In fact, Albuquerque hospitals are often on divert more hours each week than they are open.

Further impacting the situation with Emergency Department diverts is the number of providers available for certain specialties around the nation. When specialists are not available in adequate numbers, the hospitals become saturated with additional inpatient admissions. Additionally, the nationwide shortage of nurses exacerbates our efforts to care for our current patients, much less those in the aftermath of a terrorist act.

Clearly then, the sudden influx of hundreds or even thousands of more patients into this current situation as a result of a bio-terrorist attack would result in a collapse of the system, not only increasing the morbidity and mortality of these patients, but all of the patients ordinarily cared for by hospitals. Current hospital admissions data for the state of New Mexico shows the following alarming numbers:

- Over 3,000 admissions per week to New Mexico hospitals (excludes nursing home admissions)
- Approximately 10,000 emergency room visits per week

In conclusion, I would say that we have had a very successful beginning to a comprehensive plan that, if expanded and fully implemented, could save tens of thousands of lives in the event of a domestic chemical or biological terrorist attack. The areas of greatest need are to develop systems to assure effective coordination and communications between federal, state and local government responders and to begin focusing on an already compromised health care delivery system.


Number of Forced Openings, All ABQ Hospitals, by Year
(Figure 1)
Hours
250
200
150
100
50
0
1999
2000
2001
2002
2000
2001
1999
January
February
March
April
May
June
July
August
September
October
November
December

Mr. HORN. Dr. Sewell came in after everybody else had already been sworn in. So we can swear you in. So if you'll stand and raise your right hand.

[Witness sworn.]

Mr. HORN. Thank you.

Mrs. WILSON. Thank you, Mr. Chairman. We are also fortunate here in the State of New Mexico to have a very strong and integrated Department of Public Health and epidemiological laboratory. I know that in some States, health departments are kind of county by county. Here we have a very strong State-level Department of Health, and Dr. Sewell is the head epidemiologist for the State of New Mexico. He has been there as the State epidemiologist since 1989, and brings a wealth of experience in the study of disease.

And it is very much our pleasure to have you here today.

Dr. Sewell.

STATEMENT OF CHARLES MACK SEWELL, M.D., STATE EPIDEMIOLOGIST, PUBLIC HEALTH DIVISION, NEW MEXICO DEPARTMENT OF HEALTH

Dr. SEWELL. Good morning. Mr. Chairman, Representative Udall, Representative Wilson, it's a pleasure to be here this morning.

My name, again, is Max Sewell. I'm the State epidemiologist, Public Health Division, New Mexico Department of Health. Secretary Alex Valdez asked me to represent him today. He had prior commitments and could not be here. He extends his appreciation for the opportunity to testify before this committee.

I have been with the Department of Health here in New Mexico since 1984, and State epidemiologist since 1989. My training is in epidemiology, public health, and microbiology, and I also represent the Council of State and Territorial Epidemiologists. I'm on their executive board. This is an organization that represents epidemiologists and State and local health departments throughout the country.

I want to thank you for the opportunity to examine how the Federal Government is assisting State and local governments prepare for a potential terrorist attack involving biological, chemical or nuclear agents. The New Mexico Department of Health has been working on public health preparedness for bioterrorism for over 2 years, funded through a cooperative agreement with the Centers for Disease Control and Prevention. In that time, we have partnered with other State, local and Federal agencies in improving public health infrastructure in the State.

Contrary to the situation just a few years ago, we now work regularly with Federal agencies such as the FBI, FEMA, and our national laboratories. Historically, the New Mexico Department of Health has worked most closely with the Centers for Disease Control and Prevention, which provides funding for many of our programs.

While the action of terrorists may be hard to predict, one thing is certain: A biological attack, like the recent anthrax scare, would manifest through the medical and public health system, and severely overburden the existing public health infrastructure. The goals of terrorism are not only to harm people but also to spread

massive panic and fear throughout the population. Chemical and nuclear terrorism would also involve the medical and public health system, but would likely manifest much differently than a biological event. National experts believe that the threat of bioterrorism remains very real and necessitates and justifies the action that Congress has taken in the last few years to improve our abilities to detect and respond to any such event.

The recent anthrax episodes in Florida, Washington, DC, New Jersey, and New York were relatively small events compared to both historical examples and potential events. However, they clearly dominated the activity of the CDC, FBI, State and local health departments, hospitals, and others, for several months.

I would urge you to consider the importance of a seamless response system involving Federal, State and local agencies. The recent funding provided by Congress is essential to implementing regional and State planning, disease surveillance, laboratory capacity, information technology infrastructure, communications strategy, and training that is necessary to effectively detect and respond to any bioterrorist threat.

More importantly, the assurance of continued funding is essential to allow agencies to recruit and retain staff, build laboratory capacity, develop and exercise response plans, train medical staff, and develop essential communication plans to inform the public. Having dedicated and appropriately trained staff is the most important element of public health infrastructure for a bioterrorist response and for improving public health through other essential services.

This seamless system also needs to include FEMA, police and public safety, fire and emergency medical service personnel, so that first-responders and disaster personnel are similarly trained throughout the country. We need to have similar language and an understanding of concepts between Federal, State and local government agencies and between different disciplines, such as public health, medicine, public safety, for example.

Last, I would like to make you aware of the need to replace the existing laboratory facility that currently houses our Scientific Laboratory Division, the Office of the Medical Investigator and the Veterinary Diagnostic Laboratory. The Scientific Laboratory Division is one of five State health department laboratories in the country to have received supplemental CDC funding for chemical terrorism. The New Mexico Legislature has approved planning and design funds for a new quad laboratory building, which would house all of the existing functions, as well as the State Crime Laboratory. Replacing this aging structure, which has greatly outgrown its existing space, with a more modern and secure facility is also a priority for us.

The potential for the quad lab to become a regional reference laboratory and to serve the needs of an expanding border population is essential to public health and to national security. This laboratory can only happen with Federal support.

Thank you.

[The prepared statement of Dr. Sewell follows:]

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Education:

Dr.P.H. University of Texas School of Public Health, 1977-1982. Doctoral level training in public health. Extensive coursework in epidemiology and biometry. Additional coursework included: toxicology, zoonoses, health hazards in foods, industrial hygiene, hospital infection control, administration and program planning and management. Dissertation: research on the incidence and clinical significance of coagulase-negative staphylococci.

M.S. Colorado State University, 1971-1973. Microbiology. Graduate training in applied microbiology. Coursework included: aquatic, food, dairy, and pathogenic microbiology, biochemistry, radioisotope techniques and mathematics (calculus and statistics). Research thesis: the effect of lime treatment of sewage at low temperatures.

B.S. New Mexico State University, 1967-1971.
Biology Major. Chemistry minor.

Summer Epidemiology Institute, Johns Hopkins Bloomberg School of Public Health, 1990

Academic Appointments:

Summer, 1984 to present. Clinical Associate with the Department of Family, Community, and Emergency Medicine, The University of New Mexico School of Medicine.

Fall 1982 to Spring 1984. Adjunct Assistant Professor at the University of Texas School of Public Health.

Work Experience:

1989 to present. State Epidemiologist, Office of Epidemiology, Public Health Division, New Mexico Department of Health, Santa Fe, New Mexico 87503. Manage a staff of 50 including five physician epidemiologists, seven PhD's (6 epidemiologists, one PhD sociologist), one veterinary epidemiologist, one Epidemic Intelligence Service (EIS) officer, four nurses, and five masters-prepared epidemiologists. Full authority for administrative, management, personnel and budget decisions. Annual budget of over $7 million.

1987 to 1989. Deputy State Epidemiologist, Office of Epidemiology, New Mexico Health and Environment Department, Santa Fe, New Mexico 87504-0968. Primary areas of responsibility include communicable disease epidemiology and injury epidemiology. Review and make recommendations on legislation affecting public health and the state health department. Editor - New Mexico Epidemiology Report.

1984-1987. Epidemiologist with the New Mexico Health and Environment Department. Staff epidemiologist with responsibilities in communicable disease epidemiology and control, injury control, and occupational and environmental epidemiology. Major contributor to several grant applications. Provide daily consolation to district health officers, physicians, veterinarians, industrial hygienists, nurses and public health personnel. Participated in the design, conduct and analysis of several epidemiologic studies.

1979-1984. Hospital Epidemiologist for theVeterans Administration Medical Center, 2002 HolcombeBlvd.,Houston, TX 77211. Coordinated the hospital-wide surveillance system to detect nosocomial infections as part of the hospital infection control program. Conducted periodic microbiological evaluation of patients, staff, and environmental sources as part of team efforts to detect and prevent the spread of infectious agents within the hospital. Served as consultant to nurses, physicians, and administrative staff on infection control and occupational safety measures. Conducted various research projects. Presented in-service education programs to nursing, laboratory, and other hospital staff as necessary. Maintained liaison with city, county, and state authorities in the reporting of communicable diseases and outbreak investigation. Worked independently, under the general supervision of the chairman of the hospital infection control committee.

1978-1979. Microbiologist at Hermann Hospital, Holcombe Blvd., Houston, Texas. Responsible for all functions of the microbiology lab on the evening shift.

April, 1976 to August, 1977. Section Chief Microbiologist with the New Mexico Medical Reference Laboratory, Suite 356, Winrock Medical Plaza, Albuquerque, New Mexico 87110. Responsible for daily operation and organization of the microbiology section.

September, 1973 to November 1975. Microbiologist with the Colorado Department of Agriculture (1 year) and the Colorado Department of Health (1 year).

Publications:

Sewell CM, Clarridge JE, Young EJ, Guthrie RK: Clinical significance of coagulase-negative staphylococci. J Clin Microbiol 16:236-239, 1982.

Sewell CM, Clarridge JE, Lacke C, Weinman EJ, Young EJ: Staphylococcal nasal carriage and subsequent infection in peritoneal dialysis patients. JAMA 248:1493-1495, 1982.

Sewell CM: Editorial-Coagulase-negative staphylococci and the clinical microbiology laboratory. Eur J Clin Microbiol 3:94-95, 1984.

Young EJ, **Sewell CM**, Koza M, Clarridge JE: Antibiotic resistance patterns during aminoglycoside restriction.Am J Med Sci 290(6):223- 227, 1985.

CDC. *Plasmodium vivax* in Puerto Vallarta Tourists-New Mexico.MMWR 34(30):461-2, 1985.

Sewell CM, Hull HF, Fenner J, Graff H, Pine J: Effects of a child restraint law on motor vehicle accident fatalities and injuries: the New Mexico experience. Pediatrics 78:1079-1084, 1986.

Sewell CM, Hull HF, Montes JA, Ortiz A: New Mexico's Premarital Rubella Test Program (letter). Am J Public Health 76 (10):1250-51, 1986.

Sewell CM, Castle SP, Wiggins, C, Samet J, Hull HF: Testicular cancer and employment in agriculture and oil and natural gas extraction (letter) Lancet 1:553, 1986.

CDC. Multistate salmonella outbreak -New Mexico, Texas, Oklahoma and Colorado. MMWR 35(6):91, 1986.

Sewell CM, Pine JS, Hull HF: Fatalities and injuries associated with three wheel all-terrain vehicles. West J Med 146:497-498, 1987.

Sewell CM, Koza M, Young EJ: Risk factors associated with an outbreak of multiply-resistant *Klebsiella pneumoniae* urinary tract infections on a hospital geriatrics ward. Am J Infection Control 16:66-71,1988.

Hull HF, **Sewell CM**, Wilson J, McFeeley P: The risk of suicide in persons with AIDS (letter). JAMA 260:29-30, 1988.

Sewell CM, Becker TM, Wiggins CL, Key CR, Hull HF, Samet JM: Injury mortality in New Mexico's American Indians, Hispanics, and non-Hispanic Whites, 1958-1982. West J. Med 150:708-713, 1989.

Gallaher MM, **Sewell CM**, Flint S, Herndon JL, Graff H, Fenner J, Hull HF: Effects of the 65-mph speed limit on interstate fatalities in New Mexico. JAMA 262:2243-2245, 1989.

CDC. Eosinophilia-Myalgia Syndrome -- New Mexico. MMWR 38:765-7, 1989.

CDC. Eosinophilia-Myalgia Syndrome and LTryptophan-containing products - New Mexico, Minnesota, Oregon, and New York, 1989. MMWR 38:785-8, 1989.

Gallaher M, **Sewell CM**, Flint S, Graff H, Fenner J, Hull H: Effects of the 65-mph speed limit (letter), JAMA 263:1915-16, 1990.

Eidson M, Philen RM, **Sewell CM**, Voorhees R, Kilbourne EM: L-tryptophan and eosinophilia myalgia syndrome in New Mexico, Lancet 335:645-8, 1990.

Philen RM, Eidson M, Kilbourne EM, **Sewell CM**, Voorhees R, the New Mexico EMS Study Group: Eosinophilia-myalgia syndrome: a clinical case series of twenty-one patients. Arch Intern Med 151:533-537, 1991.

Gallaher MM, Fleming DW, Berger LR, **Sewell CM**: Between bar and home: Pedestrian and hypothermia deaths among Native Americans in New Mexico. JAMA 267:1345-1348, 1992.

CDC. Patient Exposures to HIV During Nuclear Medicine Procedures. MMWR 41:575-578, 1992.

CDC. Outbreak of acute illness-southwestern United States, 1993. MMWR 42:421-4, 1993.

CDC. Update: outbreak of hantavirus infection-southwestern United States, 1993. MMWR 42:441-3, 1993

CDC. Update: outbreak of hantavirus infection-southwestern United States, 1993. MMWR 42:477-9, 1993.

CDC. Update: outbreak of hantavirus infection-southwestern United States, 1993. MMWR 42:495-6, 1993.

CDC. Update: outbreak of hantavirus infection-southwestern United States, 1993. MMWR 42:517-9, 1993.

Eidson M, Philen RM, **Sewell CM**, Voorhees RE, Kilbourne EM: L-tryptophan and eosinophilia-myalgia syndrome. Author's reply (letter). Lancet 343: 1036-7, 1994.

Kilbourne EM, Eidson M, Philen RM, Voorhees RE, **Sewell CM**: L-tryptophan and eosinophilia-myalgia syndrome. Author's reply (letter). Lancet 344:818-19, 1994.

Wiktor SZ, Gallaher MM, Baron RC, Watson ME, **Sewell CM**: Firearm Ownership and Storage Practices in New Mexico. West J Med 161:137-139, 1994.

Zeitz PS, Butler JC, Cheek JE, et al: A case-control study of hantavirus pulmonary syndrome during an outbreak in the southwestern United States. JID 171:864-70, 1995.

Duchin JS, Koster F, Peters CJ, et al: Hantavirus pulmonary syndrome: a clinical description of 17 patients with a newly recognized disease. N Engl J Med 330:949-55,1994.

CDC. Hemorrhage and shock associated with invasive pneumococcal infection in healthy infants and children-New Mexico, 1993-1994. MMWR 43:949-952, 1995.

Simonsen L, Dalton MJ, Breiman RF, Hennessy T, Umland ET, **Sewell CM**, Rollin PE, Ksiazek TG, Peters CJ: Evaluation of the magnitude of the 1993 hantavirus outbreak in the southwestern United States. JID 172: 729-33, 1995.

Hjelle B, Torrez-Martinez N, Koster FT, Jay M, Ascher MS, Brown T, Reynolds P, Ettestad P, Voorhees V, Sarisky J, Enscore RE, Sands L, Mosley DG, Kioski C, Bryan R, **Sewell CM**: Epidemiologic linkage of rodent and human hantavirus genomic sequences in case investigations of hantavirus pulmonary syndrome. JID 173:781-6, 1996

Sewell CM: Overcoming barriers and reaping the benefits of surveillance for infectious diseases: the New Mexico experience. J Pub Health Mngmt Prac 2:(4) 31-36, 1996.

CDC. Mercury poisoning associated with beauty cream-Texas, New Mexico, and California, 1995-1996. MMWR: 45 (19) 400-403, 1996.

CDC. Update: Mercury poisoning associated with beauty cream--Arizona, California, New Mexico, and Texas, 1996. MMWR: 45(29) 633-635, 1996.

Balluz L, Philen RM, **Sewell CM**, Voorhees R, Falter K, Paschal D. Mercury toxicity associated with a beauty lotion. (Submitted for publication.)

Olson RK, Voorhees R, Eitzen H, **Sewell CM**: Cluster of gluteal abscesses associated with intramuscular corticosteroid injections from a single clinic in New Mexico, 1995. West J Med 1999; 170: 143-147.

Olson RK, Eidson M, **Sewell CM**: Staphylococcal food poisoning from a fundraiser. J Environmental Health 60 (3):7-11,1997.

CDC. Adverse events associated with ingestion of gamma-butyrolactone–Minnesota, New Mexico, and Texas, 1998-1999. MMWR 48:137-40, 1999.

Eidson M, **Sewell CM**, Graves G, Olson R: Beef Jerky Gastroenteritis Outbreaks–New Mexico. J Environmental Health 62 (No.6):9-13, 2000.

Gensheimer KF, Strikas RA, Fukuda K, Cox NJ, Sewell CM, Dembek ZF, Myers M: Influenza pandemic planning: review of a collaborative state and national process. Exerpta Medica International Congress Series 1219 (2001) 733-736. Options for control of influenza IV. Editors: Albert Osterhaus, Nancy Cox, and Alan Hampson.

Landen MG, Castle S, Nolte K, Gonzales M, Escobedo L, Chatterjee B, Johnson K, and Sewell CM: Methodological issues in the surveillance of poisoning, illicit drug overdose and heroin overdose deaths in New Mexico. (Submitted for publication).

Olson RK, Cheek JE, Voorhees RE, Luis S, Ettestad P, McLaughlin JC, Nims L, Sewell CM: Meningococal outbreakk amplified by a community gathering. (Accepted for publication).

The Prevention of Invasive Group A Streptococcal Infections Workshop Participants: Prevention of invasive group A streptococcal disease among household contacts of case patients and among postpartum and postsurgical patients, Recommendations from the Centers for Disease Control and Prevention (submitted for publication).

Book Chapters:

Sewell CM, Becker TM, Wiggins CL, Key CR, Samet JM: Injury mortality In Racial and Ethnic Patterns of Mortality in New Mexico.Edited by TM Becker, CLWiggins, RS Elliot, CR Key, JM Samet, 1993, University of New Mexico Press.

Theses and Abstracts:

M.S. Thesis. Bacterial removal in wastewater. Colorado State University, Fort Collins, CO 80521, 1975.

Koza, M, **Sewell CM**, Young EJ: Patient education: an extension of infection control. APIC, Atlanta, GA, May, 1981.

Sewell CM, Clarridge JE, Lacke C, Weinman EJ, Young EJ: The relation of nasal or skin colonization with bacteria to the development of infections in patients on chronic peritoneal dialysis. Clin Res 29:818A, 1981.

Dr.P.H. Dissertation. Biochemical characterization and clinical significance of coagulase-negative staphylococci. University of Texas School of Public Health, Houston, TX 77211, 1982.
Sewell CM, Young EJ, Guthrie RK, Clarridge JE: Biochemical characterization and clinical significance of coagulase-negative staphylococci. Am Soc Microbiol, Atlanta, GA 1982.

Sewell CM, Sheline JL, Hull HF, Lemen U, Nims L: Outbreak of *Shigella sonnei* at a prison in New Mexico. Sixth Annual Epidemiological Exchange, Denver, CO, October, 1986.

Sewell CM, Becker TM, Wiggins C, Key CR, Samet J: Injury mortality in New Mexico's American Indians, Hispanics, and Anglos, 1958-1982. Eight Annual Epidemiological Research Exchange, Denver, CO, October 1988.

Strauss WL, Gallaher MM, Breiman Rf, Schwartz B, and **Sewell CM**: Epidemiology of invasive group A streptococal infections among Native and non-Native Americans in New Mexico, 1991 ICAAC conference.

Sewell CM, Castle S, Flint S, Byers T, Hull H: Evaluation of sobriety checkpoints in reducing motor vehicle injuries in New Mexico. The Second World Conference on Injury Control. May 20-23, 1993, Atlanta, GA.

Olson RK, Voorhees R, **Sewell CM**, Eitzen H: A cluster of gluteal abscesses associated with corticosteroid injections at a single clinic in New Mexico. Society for Epidemiologic Research, 1996.

Wolfe MI, Mott J, Voorhees RE, Sewell CM, Redd S: Assessment of urinary metals resulting from exosure to a large vegetative fire, Los Alamos, New Mexico, 2000. Am J Respir Cri Care Med 163 (suppl): A176, 2001.

Certifications:

Board Certified, American College of Epidemiology, 1983-present.

Specialist Microbiologist in Public Health and Medical Microbiology, American Academy of Microbiology, 1982.

National Committees:

Executive Committee, Council of State and Territoreal Epidemiologists, 1996-1999, and 2001-2003

Honors:

Beta Beta Beta Biological Society
Sigma Xi
Traffic Safety Bureau-New Mexico Coalition Against Driving While Intoxicated and Alcohol Abuse
Governors Certificate of Appreciation, December, 1994
Council of State and Territorial Epidemiologists-Service Award, 1999
1998 (Co-Editor) State of Health Report:National Public Health Information Coalition-Best Health Department Annual Report in the Country
1999 (Co-Editor) State of Health Report-New Mexico: Health Information Resource Center-National Health Information Award
Who's Who in Executives and Businesses, 2002 Edition

Mr. HORN. Thank you very much. You have a lot of information that we need to know and that we need to help you. And that is why, to all of you, if you could, take a look at our State laws here in New Mexico, or the region, the southwest, that would inhibit the sharing of information between Federal, State and local officials. We have that problem at the Federal level, but it also sometimes occurs at the State level, and so if you have something you can put into the record in the next few weeks, we'd appreciate it.

So we can—we'll also have the American Law Division of the Library of Congress, and we'll see if we can't find these laws, then. We need to do it in advance, and we need to relate to it. And we have legislation in, that both Judiciary and Government Reform will work with it when we get back there. So that would be very helpful, if you would.

I'm going to ask Mr. Yim, of GAO, to join us, and we'll do him after we've had all of the panel. We always ask the representative the General Accounting Office to say, have we missed something. That's why we have him here.

Let me ask a few things, and then I'll yield it over to Representative Wilson on most of the things. But I have been very interested in the laboratory situation in any State, and you obviously have a very good and what would be the major laboratory here. But if we had a germ warfare thing, or anything else, do we have, besides your laboratory, nonprofit laboratories that could be able to look at and see what it is that's going on? And you don't know, often, for weeks, when you have a germ warfare type of thing, and I'm just curious, where are the other things besides your laboratory?

Dr. SEWELL. Mr. Chairman, members of the committee, I think, obviously, any laboratory and epidemiologic response is very much going to depend on the agent and how it were dispersed. Of the potential agents, the ones that are on most people's lists of possible agents, things like anthrax, smallpox, they all have very specific ways they would be dealt with.

One of the interesting things is that our State laboratory, some months ago, before the September 11th episode, and then subsequent anthrax attacks, sent out some nonpathogenic strains of anthrax to clinical laboratories, and they found that not a single one of them were able to identify anthrax. Now, since then, that has since changed. And there have been additional efforts to get better training in clinical laboratories thought the State.

In most States—New Mexico is no exception—specimens are frequently referred to the State laboratory, because they function as a reference laboratory. Specimens are also sent, depending on the situation, to the CDC. Certainly, any suspect smallpox cases, specimens, would be sent, automatically, to the CDC in Atlanta for analysis, because they have the reagents and capability to do so.

I think that our local hospital labs, and certainly, the medical staff, play a key role in recognizing any potential event. They're the frontline, and perhaps Dr. Roth may wish to followup on that, because that's the real key to recognizing an event, is that the right questions are asked, the right expertise is brought in early on.

Mr. HORN. What about the universities and colleges and even high school laboratories? If we're trying to find out what this—

whatever it is, and we don't really know what it will be, can they be of help?

Dr. SEWELL. It depends, again, on the situation. I think they may be of help. I think that for medical-type testing, the greatest level of expertise tends to be in the bigger commercial clinical laboratories, the State lab, and certainly the university arena. Many of the universities have a lot of laboratory testing, but in many other areas.

Again, there's—I think one of the difficulties with terrorism is that one is only limited by one's imagination, whether there could be some novel agents or novel chemicals, biological agents, but certainly, they tend to fall into groups. And the conventional wisdom is that many of the agents that would be likely to be used are fairly predictable. And they fall into things like anthrax, plague, tularemia, smallpox, for the biological agents; there are a whole host of chemical agents that potentially could be used. Again, we do have good expertise, both at the State lab and at the university, in diagnostic capabilities.

Mr. HORN. Now, if we had such a situation, what's the capacity of the State of New Mexico, in terms of beds in hospitals and how that would be dealt with? And would the National Guard have, perhaps, mobile canvas-type situations that you'd have in a wartime; MASH, in essence. And I'd be interested to know if we're prepared there.

Dr. SEWELL. I'll take a first pass. I think that New Mexico—one of the things we did, several months ago, was a survey sponsored by the Department of Justice on capacity. And the results of that survey are available. I don't happen to recall, off the top of my head, issues like bed capacity and county emergency management personnel. But that was assessed during that Department of Justice survey. Perhaps Dr. Roth could comment, better than I, in terms of the issues of bed capacity. And again, what I heard him say, in our discussions we had before, is the system is already experiencing issues even without a bioterrorist attack.

Dr. ROTH. Mr. Chairman, in response to the earlier question, with regard to medical staffs' capabilities, and laboratory capabilities, the training that's been already implemented in New Mexico for hospital staff and in emergency departments around—really, nationally, including New Mexico, all would allow us to better recognize, in a fairly early way, syndromes that would present in the context of a bioterrorist attack. So I think we would be able to be alerted. I think the area of greatest need, at this point, is to try to consolidate this data through technology and have an opportunity to recognize this phenomena much earlier than we might at this point.

With regard to additional laboratory capabilities, the medical school currently has four—what are called BSL3 laboratories, which is the second-highest safety level laboratory there is. There are currently discussions underway to provide backup to the scientific laboratory, the Department of Health's laboratory in the event of the need for that level of diagnostics.

Part of what Dr. Sewell mentioned earlier, with regard to the quad services building, is inclusive of a BSL4, at least in the very early stages of development, which would permit us to go the next

step in not only research for vaccines and drug development, but again, to help back up the scientific laboratories.

With regard to bed capacity, I guess that's where I tend to be the most concerned. It's my belief that we have very limited surge capacity for hospitals, as I mentioned in my testimony. If we were to deal with—if one were to consider the worst-case scenario of smallpox, and even if we had, initially, only 50 patients that presented to various institutions around the State, the nature of that particular disease is such that you would anticipate a tenfold next wave of those who have already been exposed and contaminated.

Whether the system could handle 500 or 5,000, I believe, we do not have the capability of dealing with that volume, considering that about a third of those patients will go on to die, even under the best of the circumstances. The necessary critical care beds for, hopefully, preventing some of those deaths, are clearly not present in the State of New Mexico. I don't believe that they are present in any State in the United States.

And that concludes my response to that question, sir.

Mr. HORN. Well, we'll get back to a few others, then. I want my colleagues to ask a number of questions, and then we'll get back to, maybe, what the National Guard is planning to do.

But I do want to throw this in, because we started these hearings in Nashville. A very fine university there, just as a very fine university here. And one of the things we found out was that the communication situation of the military helicopters, if you're bringing people to the hospital and so forth, and the civilian ones, they can't talk to each other; they have a different frequency. So one of the things we've got to deal with is how do we connect the civilians and the military, in this kind of a situation, so they know what's going on.

Representative Wilson.

Mrs. WILSON. Thank you, Mr. Chairman. And just to follow on to that, it's not only the National Guard, but the active duty military, here in New Mexico, I would think that if we had a national disaster, we would be searching for all kinds of capability. In fact, down in Alamogordo, they have a lot of the surge sets for overseas deployment, which, if we were to try to pull in the event of a national disaster, would be accessible, but it's the planning and communication in advance and it's the knowledge of what might be available that's often part of the challenge.

General, what I wanted to ask, you mentioned in your testimony about the Civil Support Teams, 22-member team, and the difficulty of not having the backfill capacity. What needs to change, or what authority do you need to have, in order to make sure that if you have a radiological doctor that's out of service, that you've still got the capacity you need to do your job?

General RANDALL HORN. Mr. Chairman, Representative Wilson, the issue basically becomes that we have no bench, if I can use a sports field type of example. We have no bench. If we lose a player, for whatever reason, a personal reason or one being engaged in the action that they're trained to be involved with, is we have no one trained to fill in behind them. Each one of these 22 people are specifically trained to do a specific thing; there's not a whole lot of overlap between them. For instance, the radiological doctor, they're

not easy to come by. And we have no capability to train someone, even partially, who could fill in behind that person should something happen. So that's the issue.

I think the thing that needs to be done is to expand the positions on those teams such that we could try and look ahead and say, "Well, is this position"—"is this person looking at leaving in the near-term future," and if so, it would allow us to put somebody into a backfill position, to have them trained and ready to move in, if——

Mrs. WILSON. Is that a question of the authorization of those slots that you have available in the Guard, or what prevents you from doing that now?

General RANDALL HORN. Well, we are specifically restrained from hiring more than the 22 people that are in those slots. So it's an issue of a manning document, if you will; it's what we call a "manning document." We're specifically told how many positions we can use to fill against that mission.

Mrs. WILSON. Thank you.

Dr. Sewell, what is the difference; how would you expect a manmade epidemic, an attack, to be different from a natural disease outbreak, and what—as an epidemiologist, you look at the progression of disease and how a disease spreads. How should we be thinking differently if that's an intentional use of disease as a weapon, if you will. How do we need to change our thinking for manmade epidemics?

Dr. SEWELL. Congresswoman Wilson, I think that's an excellent question. Of course, we've had experience with all of these agents that have been discussed, throughout history. I'm old enough to have been vaccinated against smallpox, but from a professional standpoint, I've never had to deal with it, because the disease was eradicated from the globe. I think that the issue is that a sinister mind could conceive of a situation that could be very disruptive and deadly, depending on how that scenario were played out.

I think a good example would be anthrax. We've dealt with anthrax, here in the State of New Mexico, since it's a soil bacteria; it's a disease found in cattle. Some of the old cattle trails that came up through Texas, on up into Wyoming and Montana, the soil is still contaminated. We have periodically dealt with cattle, here in New Mexico, that have died from anthrax, and the testing at the Veterinary Diagnostic Laboratory, here in Albuquerque, part of the quad—or the existing laboratory facility, made the diagnosis.

I think the difference is that a terrorist could—and one of the things that came out in the recent anthrax episodes on the East Coast, was that, apparently, it didn't take very much anthrax, dried spore material, to be widely dispersed and make several persons ill and kill several people. And this was a learning curve, I think, for the CDC and for others. Who would have predicted that sealed envelopes going through mail-sorting machines could have made postal workers ill? There just has not been a huge amount of experience with this disease.

There was an episode in the former Soviet Union where there was an accidental release that killed, I think, around 65 or so cases, something like that. And there have been other, so to say, accidents. But I think the difference is that an evil-intentioned per-

son could release what could literally be a small amount of material, if they had appropriate technology to release it, could wreak havoc on a large population and kill or injure tens of thousands of people.

Mr. HORN. Let me just ask about this vaccine. I have it. You had it. And if you had a rogue government of some sort try to get smallpox throughout America, or even in just one city, just to make a terror, which is what they're trying to do, that vaccine you and I had as little kids, and we didn't have smallpox, but would that do us any good at this point, and if not, what do we do about it, in terms of vaccine?

Dr. SEWELL. I think that there's still some debate out there. Clearly, those of us that were vaccinated as children may have some protection, but it's probably greatly reduced from the protection we might have had decades ago. I think perhaps a bigger issue would be all of our children, who have never been vaccinated, who are completely and totally susceptible to smallpox. I think the Federal Government, in my personal view, has taken the appropriate steps in terms of developing stockpile smallpox vaccine, to make it available should we need it.

There are still some issues, I think, that need to be worked out between Federal and State and local government. State health departments, for instance, cannot access the vaccine today. It's under the control of the CDC and released only by approval of the CDC director. I think we need to reexamine this policy as more vaccine is produced. The current vaccine, of course, is one that you just don't want to give to everybody, because there are significant side effects of the current vaccine. So I think that we need a balanced approach here.

But as more vaccine is produced, I think we should examine whether we should, on a State-by-State, hospital-by-hospital basis, have a few persons pre-immunized. We need to have a very balanced and cautious approach, I would advise.

Mr. HORN. Thank you.

Go ahead.

Mrs. WILSON. Nick, I've wanted to ask you, you mentioned the training for first-responders. From your perspective, being responsible for all of the first-responders in city of Albuquerque, what is the greatest need that is currently unmet? What do your people need that they don't now have?

Mr. BAKAS. Mr. Chairman, Representative Wilson, just last week, we were at our emergency command center here in Albuquerque, on the west side, specifically going through a scenario of—I think it was a sarin gas scenario. The training that we need and we're trying to develop is how does the first-responder recognize what they're coming upon. After 30 years in law enforcement, I don't have a clue, with respect to an anthrax incident, a sarin incident, those types of things. Basically, our people would be going in blind. Not only that, we have no protective equipment, going into that type of situation.

Our policies and procedures with respect to the command center need to be looked at and analyzed for the best effective response. This is a totally new area for us, in how to respond. This is an issue that we've never had to encounter. And as we mentioned,

planning is key. We're going to do exercises continuously. We're working, as we mentioned, with Dean Roth's folks at the hospital to recognize some of these issues, to make our officers aware of these issues.

And in passing, let me also say, I know that General Horn mentioned the backfill issue. But let us not forget in our conversations this morning, that when the National Guard is called up, the individuals you're calling up are police officers, firefighters, and corrections officers. So the challenge for us is, when they're doing their active duty, we still have a city to protect and calls to respond to. So the issue for us is a grave issue.

Additionally, what we must do within our various zones of public safety is cross-train. There is absolutely no reason why a firefighter cannot perform some law enforcement duties, or vice versa. Those types of issues, clearly, have to be addressed.

Mrs. WILSON. Thank you, Mr. Chairman.

Mr. HORN. Mr. Udall.

Mr. UDALL. Thank you, Mr. Chairman.

First of all, let me thank you all for coming and tell you I think you're all—your testimony has been very, very helpful. And I think you are pointing out some things where we could be a lot more effective. I think the comment by Dr. Sewell on the vaccine and the CDC; in addition, Dr. Roth's comment about public health and improving the public health system we've created, and I know, Dr. Sewell, that's an interest of yours; we've let that languish too long. And it's not only important for terrorism; it's important for public health, as we're interconnected and we see many of the diseases that are spreading, I think, around the world. And this issue that Nick just brought up, in terms of equipment and training.

So I think you're bringing some very important things to the table here today. Many of you probably listened to some of the earlier panel that were here, and you heard many of these Federal agencies that are supposed to be interacting with you, supposed to coordinate, cooperate, share information, understand and help you deal with these kinds of threats. And what I'm wondering is, what type of grade do you give them? I don't want this to degenerate into a piling onto the feds situation. But what are the areas that really can be improved? Where are the areas that we're having problems? And really, the thrust of this hearing is how that cooperative effort is going, and what thoughts do you have on that? And that's to any of the panelists here today.

Mr. BAKAS. In the absence of anybody else speaking, Mr. Chairman, Representative Udall, I would give the Federal Government, across the board, a C-minus or a D-plus in exchange of information. And I think Mr. Dean correctly set out that there are different statutory schemes, of which, Mr. Chairman, you've already spoken to, that can be undone, that prohibit the flow of information. Some information is coming, but it's usually very limited and very late.

Mr. HORN. Any other thoughts on that question? It's a very important question.

General RANDALL HORN. Mr. Chairman, Representative Udall, I think the Federal Government has been doing pretty well. I guess I would give them more of a grade along a B. The issues that we have in front of us, a year ago, were not even, really, contemplated.

The issues that we have in front of us today require that we quickly throwup some kind of a guard, if you will, a preventive measure. But what I think the Federal Government needs to start working on now is refining those responses to the areas that we think can give us the biggest bang for our buck.

There is no way that this government, whether it be State, local or Federal, is going to protect the citizens of the United States against a terrorist attack on all fronts. We don't have the money, and we don't have the people. So what we have to do is carefully decide, what are the areas that we think we're most exposed in, and to cover from there.

But I think what the Federal Government can mostly do is to work on the intelligence angle and be ready to respond to the perpetrators of the attack. That's where we can get the biggest bang for our buck, in terms of making sure that anybody who is thinking about doing something knows that it's going to get back to them. And if we can identify who that person or that group is, that's going to be the greatest thing we can do.

Mr. UDALL. Dr. Roth, you mentioned surge capacity. Is that something we only need in terms of a terrorism attack, or is it something we need, if you set aside terrorism and the threats weren't there and September 11th hadn't happened, is it something we need in terms of public health? And how do we upgrade that; how do we move in that direction? Do we need additional Federal resources devoted to this?

Dr. ROTH. Well, I can speak mostly to the specific area of hospital and medical surge capacity, to be distinguished from an overall public health surge capacity. I'll let Dr. Sewell speak, perhaps, to that question.

I think, from my personal observations, the ability of a hospital and its medical staff to respond to significant swings in volume has more or less disappeared. And that capability has probably taken, perhaps, 7 to 10 years to occur. And I think what significantly dealt a significant blow to hospital capacity was the Balanced Budget Act of 97. That had significantly reduced resources flowing to hospitals, and the basic infrastructure necessary to support the reserves and the ability of a hospital to contend with significant volumes more or less has disappeared.

We can deal with a narrow range today, but, certainly, if there was either a natural epidemic, a naturally occurring epidemic, such as an influenza—it wouldn't even have to be an epidemic; a small increase or moderate increase in the volume of individuals suffering from influenza, which is not an out-of-the-box notion, I don't believe the average hospital in New Mexico could deal with that.

The workforce issues for hospitals has continued to deteriorate; the ability for hospitals to hire nurses, to hire technicians. There's currently enough—or at least early data that would suggest that this country will be suffering from a physician shortage, and this is in great counterdistinction to studies done in the early 90's, that would have suggested that there would be a surplus of physicians by this point. And I think, as a result of those studies, training programs around the country substantially cut back positions and even modified the ratio of primary care to specialty programs.

And all of these factors taken into consideration, along with managed care, I think, has not just disrupted, but I think significantly rendered the modern healthcare system in the United States into a very compromised position, as we currently speak. And I do not hold out that much hope that even within the next few years, even if there were significant changes, that we would see much of a change.

As to what the Federal Government can do, I think issues around reimbursement are obvious, to whatever extent some of the impact of the Balanced Budget Act of 97 can be reexamined. Other types of regulation that would significantly increase the costs of hospitals are the HIPAA regulations, which is projected to cost hospitals $7 million in infrastructure costs, which could have done as programming. I am encouraged by recent statements from the administration in regard to perhaps backing off slightly on those issues, while trying to strike a reasonable balance to patient safety and patient confidentiality.

But I think, with regard to infrastructure support, other grants, personal moneys that are flowing to States for hospital capacity are a very nice beginning. I know, in New Mexico, we've received under $1 million for all of our hospitals; that can go to some extent to support planning and maybe some education, but clearly not address capital improvement or workforce issues.

An example would be the reference I made earlier to the Health Sciences Center, in rewriting our disaster plan to accommodate a potential biological terrorist attack in New Mexico. In order to effectively handle patients infected by organisms that we are worried about, it would require a substantial change in everything from our ventilation system to the types of supplies and the training and the preparation for our staff. We estimate that would cost nearly $3 million. That is only one facility in the State. There would be similar, proportionate increases for any hospital in New Mexico.

Mr. HORN. Any other questions?

Mr. UDALL. Just let me—Dr. Sewell, were you going to say——

Dr. SEWELL. I was just going to make a quick followup to your question, if I may.

Mr. UDALL. Sure.

Dr. SEWELL. I'm not sure that I could come up with a letter grade. I do think that, speaking for the New Mexico Department of Health, we've been working with Federal agencies for a long time, particularly the CDC, and we have been working with Federal and other local agencies, before September 11th. I would state, though, that the increased funding that has come down in the last couple of years has certainly improved that communication, because we now have some resources to do some things. We're partnering both with Sandia National Labs and Los Alamos National Labs. We're working closely with the university; we have been for many years. And we are getting to know the FBI.

I think the concern, though, that I wanted to express was in my testimony, and the concern I've heard Secretary Valdez express, is concern about whether we have the staying power here in this country. There is a lot of concern and interest now around bioterrorism and bioterrorism preparedness. Clearly, the recent funding that's come down for State health departments, in my view, is

greatly needed, and we're going to do our best to try to put it to good use. The issue, though, that keeps coming up is "Well, will this money be here next year and the year after, and so on?".

And I realize it's hard for Congress to make a commitment way out, on some of these things, but we do clearly need that support to continue to allow us to do the things we need to do. The concern might be that if no event occurs in the next year, will there be pressure then to be reduce some of the funding that's coming down. And again, a request that we all stick in there for the long haul.

Mr. UDALL. Let me just thank the panel again, and tell you that I hope this is an opening dialog with you, about how all of us can do our jobs better, and I hope that you will not hesitate to let us know how we can work more effectively and cooperatively together on terrorism, or any other issues.

And I'm going to have to excuse myself, Mr. Chairman. I've got some other commitments.

But once again, thank you very much for coming, and thank you for your very good testimony.

Mr. HORN. Thank you very much. We appreciate your coming. I know you've got a lot of constituency things to do.

I want Mr. Yim, on behalf of the General Accounting Office, to tell us what we are missing.

Mr. YIM. Thank you, Mr. Chairman.

It's very hard to add to the comments of this distinguished panel. But as an attorney, let me attempt a few comments, if I could.

First of all, I think that Mr. English points out that what we need to do, if we're going to have an affordable and sustainable strategy, is to augment existing mechanisms; not necessarily build a new bureaucracy. And I think that's exactly on point. We need to look at ways that we can adapt existing mechanisms, like the wonderful FEMA response that he's talking about, to handle the unique situations of terrorism.

Mr. Bakas points out the need to plan now. I think that's exactly right. But one of the things we need to plan, also, is to look at regional aid, regional compacts, mutual aid agreements, so it's not just a local jurisdiction having to plan for every contingency, but to what extent can we bring larger regions together to augment our response.

General Horn talks about the many missions of the Guard and the problem of backfill. I think we need to be sensitive to the plight of the employers and the individuals, and the sacrifices when they perform both their Guard and Reserve duties, and how can we make it easier upon them to contribute their skills to this national fabric.

Mr. Busboom talks about the close coordination between the private and public sector; absolutely critical. I think it's very instrumental for us in looking at what type of Federal programs we should design. If we're designing programs that are very applicable to State and local governments, they could have no applicability to augmenting private sector resources. So are we looking at, for example, tax credits issues, or making available to the private sector insurance, terrorism insurance; it may be harder and harder to get. But that needs to be a fundamental examination; when we're aug-

menting capabilities, there's differences between public and private sector.

Dr. Roth talks about the role of transferring expertise and surge capacity. I think that really points out that what we need to do is focus on recapitalizing some of our infrastructure, as a way not only to augment that capacity, but to lessen the likelihood that would be a terrorist attack. It could be not only hospital capacity; it could be highway system capacities; it could be energy, power distribution line capacities. We need to really look carefully at that. And also the role of our hospital systems and medical providers in early detection and surveillance; not merely response, but giving us that extra 24 or 48 hours to respond to a bioterrorist activity.

And finally, from Dr. Sewell, the education role that he points out, I think, is absolutely critical. One of the problems was just the insufficiency in the activities being taken as a result of the anthrax scares, and can we disseminate good, good scientific information, so that our policymakers can make reasoned choices.

I think this was a very excellent panel. It's hard to add, Mr. Chairman, to their comments.

Mr. HORN. Let me ask you a question that a lot of citizens have told me, and that is, with the various current reactors that we have for getting the electricity—Illinois is a good example; much of their electricity is generated by nuclear forms, and I don't know the degree to which New Mexico has any of their energy coming from a reactor. There is certainly one in Arizona, I believe. So, if you had some nut that drove a plane into the reactor, what would that mean to the people of New Mexico? Do we know that?

Mrs. WILSON. Mr. Chairman, New Mexico does not have any nuclear reactors producing power here. We do have research reactors at both of our national laboratories, and we've had some discussions, at the classified level, with respect to protecting their security. And I believe maybe Mr. Busboom may be able to discuss that a little bit, although possibly not in this forum.

Mr. BUSBOOM. Mr. Chairman, I'd be glad to followup with you this afternoon on that very question, while you're at Los Alamos.

Mr. HORN. That would be fine.

Now, I mentioned that helicopter example in Nashville, and we've had a lot of input from the law enforcement part on the frequencies and the broadband, and all that we've got to do to get interoperability between these. What are we seeing here and to what degree are you able to deal with it, or are you simply doing it by region or nationally? And the frequency problem, in particular.

Mr. ENGLISH. Mr. Chairman, I think we have a number of problems across the frequencies. The city of Albuquerque and Bernalillo County, where we're at now, utilize an 800 megahertz system. The rest of the cities in New Mexico utilize a much lower megahertz system. In addition to what General Horn alluded to, the fact is that the military units are all on separate frequencies. And in fact, current regulations require the Guard to have accountability for the property within their stores; therefore, it's not even within our ability to provide them with radios to reach us on the proper frequencies. So a complete relook at this is absolutely essential to our ability to have a unified response.

Mr. HORN. Any other thoughts on that?

Well, if not, I want to first thank the following people, and then I have a closing, that takes about a minute. To my left is J. Russell George, the staff director and chief counsel for the subcommittee. And our hardworking clerk, Justin Paulhamus, is here, and he's setting-up these hearings, so we can get things done.

And we also want to thank the field representative to Representative Wilson, and that's Jane Altwies and then Raul Alvillar, who is the Field Representative to Representative Udall.

And then Beth Horna, with an "A," Facility Coordinator, University of New Mexico Continuing Education, which is this beautiful, wonderful place, to have people from throughout New Mexico and America, to be in this setting, where you can relate to each other and get some ideas. We are really thankful to the New Mexico University, and a lot of Beth Horna's team are in this building, and if they're around, thanks.

And the court reporter, of course, is always overworked, and that's Lynne Page Rasmussen. There she is. So thank you very much.

I want to thank all of the witnesses. This was the third of a series of field hearings that this subcommittee has held around the Nation. The goal of these hearings is to learn what our government can do to ensure that our Nation is prepared to respond to any threat posed to it. The testimony received today will help reach that goal. And post September 11th, we truly live in a new world. But you're helping us solve some of these problems, and I think this is a really excellent panel. So thank you.

And I'll yield to my colleague.

Mrs. WILSON. Mr. Chairman, I want to thank you again for coming to New Mexico and allowing New Mexicans to tell their story of the things that New Mexico is doing that then can be modeled in the Nation, and things that we need to do in Washington to make it easier to get things done here.

I do want to say that, following this, General Horn will be taking us out to the parking lot, where there's a demonstration set up by the National Guardsmen and their chem/bio response gear. Everyone is welcome to come on out to see what the National Guard can do.

Mr. Chairman, again, thank you for coming to New Mexico.

Mr. HORN. It's a pleasure.

OK, we'll follow the general. With that, we're adjourned.

[Whereupon, at 11:30 a.m., the subcommittee was adjourned.]

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