AUTHENTICATED
U.S. GOVERNMENT
INFORMATION
GPO

HHS ACTIONS TO IDENTIFY AND ADDRESS HEALTH EFFECTS OF THE BP OIL SPILL

HEARING

BEFORE THE

SUBCOMMITTEE ON HEALTH

OF THE

COMMITTEE ON ENERGY AND COMMERCE
HOUSE OF REPRESENTATIVES

ONE HUNDRED ELEVENTH CONGRESS

SECOND SESSION

JUNE 16, 2010

Serial No. 111–135

Printed for the use of the Committee on Energy and Commerce
energycommerce.house.gov

U.S. GOVERNMENT PRINTING OFFICE
77–912 WASHINGTON : 2013

For sale by the Superintendent of Documents, U.S. Government Printing Office
Internet: bookstore.gpo.gov Phone: toll free (866) 512–1800; DC area (202) 512–1800
Fax: (202) 512–2104 Mail: Stop IDCC, Washington, DC 20402–0001

COMMITTEE ON ENERGY AND COMMERCE

HENRY A. WAXMAN, California, *Chairman*

JOHN D. DINGELL, Michigan
Chairman Emeritus
EDWARD J. MARKEY, Massachusetts
RICK BOUCHER, Virginia
FRANK PALLONE, JR., New Jersey
BART GORDON, Tennessee
BOBBY L. RUSH, Illinois
ANNA G. ESHOO, California
BART STUPAK, Michigan
ELIOT L. ENGEL, New York
GENE GREEN, Texas
DIANA DEGETTE, Colorado
Vice Chairman
LOIS CAPPS, California
MICHAEL F. DOYLE, Pennsylvania
JANE HARMAN, California
TOM ALLEN, Maine
JANICE D. SCHAKOWSKY, Illinois
CHARLES A. GONZALEZ, Texas
JAY INSLEE, Washington
TAMMY BALDWIN, Wisconsin
MIKE ROSS, Arkansas
ANTHONY D. WEINER, New York
JIM MATHESON, Utah
G.K. BUTTERFIELD, North Carolina
CHARLIE MELANCON, Louisiana
JOHN BARROW, Georgia
BARON P. HILL, Indiana
DORIS O. MATSUI, California
DONNA M. CHRISTENSEN, Virgin Islands
KATHY CASTOR, Florida
JOHN P. SARBANES, Maryland
CHRISTOPHER S. MURPHY, Connecticut
ZACHARY T. SPACE, Ohio
JERRY MCNERNEY, California
BETTY SUTTON, Ohio
BRUCE L. BRALEY, Iowa
PETER WELCH, Vermont

JOE BARTON, Texas
Ranking Member
RALPH M. HALL, Texas
FRED UPTON, Michigan
CLIFF STEARNS, Florida
NATHAN DEAL, Georgia
ED WHITFIELD, Kentucky
JOHN SHIMKUS, Illinois
JOHN B. SHADEGG, Arizona
ROY BLUNT, Missouri
STEVE BUYER, Indiana
GEORGE RADANOVICH, California
JOSEPH R. PITTS, Pennsylvania
MARY BONO MACK, California
GREG WALDEN, Oregon
LEE TERRY, Nebraska
MIKE ROGERS, Michigan
SUE WILKINS MYRICK, North Carolina
JOHN SULLIVAN, Oklahoma
TIM MURPHY, Pennsylvania
MICHAEL C. BURGESS, Texas
MARSHA BLACKBURN, Tennessee
PHIL GINGREY, Georgia
STEVE SCALISE, Louisiana

SUBCOMMITTEE ON HEALTH

FRANK PALLONE, JR., New Jersey, *Chairman*

JOHN D. DINGELL, Michigan
BART GORDON, Tennessee
ANNA G. ESHOO, California
ELIOT L. ENGEL, New York
GENE GREEN, Texas
DIANA DEGETTE, Colorado
LOIS CAPPS, California
JANICE D. SCHAKOWSKY, Illinois
TAMMY BALDWIN, Wisconsin
MIKE ROSS, Arkansas
ANTHONY D. WEINER, New York
JIM MATHESON, Utah
JANE HARMAN, California
CHARLES A. GONZALEZ, Texas
JOHN BARROW, Georgia
DONNA M. CHRISTENSEN, Virgin Islands
KATHY CASTOR, Florida
JOHN P. SARBANES, Maryland
CHRISTOPHER S. MURPHY, Connecticut
ZACHARY T. SPACE, Ohio
BETTY SUTTON, Ohio
BRUCE L. BRALEY, Iowa

NATHAN DEAL, Georgia,
Ranking Member
RALPH M. HALL, Texas
BARBARA CUBIN, Wyoming
JOHN B. SHADEGG, Arizona
STEVE BUYER, Indiana
JOSEPH R. PITTS, Pennsylvania
MARY BONO MACK, California
MIKE FERGUSON, New Jersey
MIKE ROGERS, Michigan
SUE WILKINS MYRICK, North Carolina
JOHN SULLIVAN, Oklahoma
TIM MURPHY, Pennsylvania
MICHAEL C. BURGESS, Texas

CONTENTS

	Page
Hon. Frank Pallone, Jr., a Representative in Congress from the State of New Jersey, opening statement	1
Prepared statement	3
Hon. John Shimkus, a Representative in Congress from the State of Illinois, opening statement	4
Prepared statement	5
Hon. Anna G. Eshoo, a Representative in Congress from the State of California, prepared statement	10
Hon. Joseph R. Pitts, a Representative in Congress from the Commonwealth of Pennsylvania, opening statement	12
Hon. Diana DeGette, a Representative in Congress from the State of Colorado, opening statement	12
Hon. Tim Murphy, a Representative in Congress from the Commonwealth of Pennsylvania, opening statement	14
Hon. Henry A. Waxman, a Representative in Congress from the State of California, opening statement	15
Prepared statement	16
Hon. Marsha Blackburn, a Representative in Congress from the State of Tennessee, opening statement	20
Hon. Donna M. Christensen, a Representative in Congress from the Virgin Islands, opening statement	21
Hon. John P. Sarbanes, a Representative in Congress from the State of Maryland, opening statement	21
Hon. Janice D. Schakowsky, a Representative in Congress from the State of Illinois, opening statement	22
Hon. Lois Capps, a Representative in Congress from the State of California, opening statement	23
Hon. Kathy Castor, a Representative in Congress from the State of Florida, opening statement	24
Hon. Mike Ross, a Representative in Congress from the State of Arkansas, opening statement	25
Hon. Gene Green, a Representative in Congress from the State of Texas, opening statement	26
Hon. Betty Sutton, a Representative in Congress from the State of Ohio, opening statement	27
Hon. Bruce L. Braley, a Representative in Congress from the State of Iowa, opening statement	27
Hon. Phil Gingrey, a Representative in Congress from the State of Georgia, prepared statement	97
Hon. Joe Barton, a Representative in Congress from the State of Texas, prepared statement	99

WITNESSES

Lisa Kaplowitz, M.D., M.S.H.A., Deputy Assistant Secretary for Policy, Office of the Assistant Secretary for Preparedness and Response, U.S. Department of Health and Human Services	29
Prepared statement	32
Answers to submitted questions	103
John Howard, M.D., M.P.H., J.D., LL.M., Director, National Institute of Occupational Safety and Health, Centers for Disease Control and Prevention	44
Prepared statement	46
Answers to submitted questions	109

Page

Aubrey Miller, M.D., M.P.H., Senior Medical Advisor, National Institute of Environmental Health Sciences, National Institutes of Health 61
Prepared statement 63
Answers to submitted questions 118
Michael Taylor, J.D., Deputy Commissioner for Foods, U.S. Food and Drug Administration 68
Prepared statement 70
Answers to submitted questions 125

HHS ACTIONS TO IDENTIFY AND ADDRESS HEALTH EFFECTS OF THE BP OIL SPILL

WEDNESDAY, JUNE 16, 2010

HOUSE OF REPRESENTATIVES,
SUBCOMMITTEE ON HEALTH,
COMMITTEE ON ENERGY AND COMMERCE,
Washington, DC.

The subcommittee met, pursuant to call, at 2:05 p.m., in Room 2123 of the Rayburn House Office Building, Hon. Frank Pallone Jr. [chairman of the subcommittee] presiding.

Members present: Representatives Pallone, Dingell, Eshoo, Green, DeGette, Capps, Schakowsky, Ross, Barrow, Christensen, Castor, Sarbanes, Space, Sutton, Braley, Waxman (ex officio), Markey, Shimkus, Whitfield, Pitts, Murphy of Pennsylvania, Burgess, Blackburn, Gingrey, and Barton (ex officio).

Staff present: Ruth Katz, Chief Public Health Counsel; Naomi Seiler, Counsel; Katie Campbell, Professional Staff Member; Allison Corr, Special Assistant; Eric Flamm, FDA Detailee; Camille Sealy, Public Health Analyst; Andrew Bindman, Fellow; Tim Westmoreland, Consulting Counsel; Melissa Cheatham, Professional Staff Member; Karen Lightfoot, Communications Director, Senior Policy Advisor; Elizabeth Letter, Special Assistant; Jen Berenholz, Deputy Clerk; Mitchell Smiley, Special Assistant; Ronald Allen, Staff Assistant; Clay Alspach, Counsel, Health; and Ryan Long, Chief Counsel, Health.

OPENING STATEMENT OF HON. FRANK PALLONE, JR., A REPRESENTATIVE IN CONGRESS FROM THE STATE OF NEW JERSEY

Mr. PALLONE. Call the meeting of the House subcommittee to order, and today we are having a hearing on HHS's or the Department of Health and Human Services actions to identify and address the health effects of the BP oil spill, and I will recognize myself initially for an opening statement.

The purpose of the hearing is to hear basically from the Department about the critical actions it is taking to identify and address the health effects related to the Deepwater Horizon spill. As we all know, that tragedy occurred on April 20. It has been devastating for the people living in the Coastal States and has captured the concern and sympathy of everyone across the Nation.

There is no question that we have a human health problem. Concerns associated with both short-term and long-term exposure to oil. Health experts have warned of health complications such as severe skin irritation, nausea, fatigue, headaches, throat and eye irri-

tation, not to mention the significant depression and anxiety which often accompanies this type of crisis.

Studies of people exposed to the Prestige Oil Spill off the coast of Spain in 2002, show that they suffered from respiratory complications several years after the exposure, breathing in volatile organic compounds, including benzene, can cause acute toxicity and could potentially result in serious, long-term health effects like cancer, neurological, and reproductive harm.

And we also have to ensure rigorous monitoring of dispersants being used to be sure that they have no adverse effects on human health for those workers and volunteers on the front lines of the cleanup.

Under the direction of the National Incident Commander Admiral Thad Allen, and in coordination with the other key federal, state, and local agencies, HHS has worked swiftly to identify and disseminate resources on the ground level.

Today we will hear about the work they are doing on health surveillance, worker training, food safety, and epidemiological studies from the Assistant Secretary for Preparedness and Response, Centers for Disease Control and Prevention, Food and Drug Administration, and the National Institute of Environmental Health Sciences. This discussion should give us a stronger sense of the challenges these agencies are facing, the success they have had so far, and how we can expect HHS to further engage as new information becomes available.

I think the crisis requires, as they say, all decks or all hands on deck, and swift information sharing to protect the workers and the community members living near the coastal waters. And I should add that no member of our full Committee of Energy and Commerce has been more committed to this effort than the gentleman from Louisiana, Mr. Melancon, and we have appreciated him keeping us informed of the local perspective.

Finally, I want to note that I am pleased that Secretary Sebelius has contracted a public meeting with the Institute of Medicine in New Orleans next week to convene an independent panel of scientific experts on human health exposure. The information we will glean from that meeting will undoubtedly provide even more expertise to help better execute the recovery effort.

[The prepared statement of Mr. Pallone follows:]

Statement of Chairman Frank Pallone
Energy & Commerce Committee
Subcommittee on Health Hearing
"HHS Actions to Identify and Address Health Effects of the BP Oil Spill"
June 16, 2010

"Today, we will hear from the Department of Health Human Services about the critical actions it is taking to identify and address health effects related to the Deepwater Horizon oil spill.

"The tragedy that occurred on April 20 has been devastating for the people living in the coastal states, and has captured the concern and sympathy of everyone across the nation. Eleven people were killed and 15 more injured from the initial explosion. And this is just the beginning.

"There is no question that we have human health concerns associated with both short-term and long-term exposure to oil. Health experts have warned of health complications such as severe skin irritation, nausea, fatigue, headaches, throat and eye irritation, not to mention the significant depression and anxiety which often accompany these crises. Studies of people exposed to the Prestige oil spill off the coast of in Spain in 2002, showed that they suffered from respiratory complications several years after exposure. Breathing in volatile organic compounds, including benzene, can cause acute toxicity and could potentially result in serious long-term health effects like cancer, neurological and reproductive harm. We must also ensure rigorous monitoring of dispersants being used to be sure that they are having no adverse effects on human health for those workers and volunteers on the front lines of the clean up.

"Under the direction of the national incident commander, Admiral Thad Allen, and in coordination with the other key federal, state and local agencies, HHS has worked swiftly to identify and disseminate resources on the ground level. Today, we will hear about the work they are doing on health surveillance, worker trainer, food safety and epidemiological studies from the Assistance Secretary for Preparedness and Response, Centers for Disease Control and Prevention, Food and Drug Administration, and the National Institute of Environmental Health Sciences. This discussion should give us a stronger sense of the challenges these agencies are facing, the success they have had so far, and how we can expect HHS to further engage as new information becomes available.

"This crisis requires all hands on deck, and swift information sharing to protect the workers and the community members living near the coastal waters. I should add that no member of our full committee of Energy & Commerce has been more committed to this effort than the gentlemen from LA, Mr. Melancon, and we have appreciated him keeping us informed of the local perspective.

"Finally, I want to note that I am pleased that Secretary Sebelius has contracted a public meeting with the Institute of Medicine in New Orleans next week to convene an independent panel of scientific experts on human health exposure. The information we will glean from that meeting will undoubtedly provide even more expertise to help better execute the recovery effort."

Mr. PALLONE. And now I would recognize Mr. Shimkus, who just mentioned that we are here 2 days in a row. I don't know why that is true, but I am not objecting to it.

OPENING STATEMENT OF HON. JOHN SHIMKUS, A REPRESENTATIVE IN CONGRESS FROM THE STATE OF ILLINOIS

Mr. SHIMKUS. Thank you, Mr. Chairman. Well, that is good because I have in the audience my legislative assistant's family, Mr. Sarley there up front. They can't really figure out what he does for a job, so they decided to come to a hearing to figure that out, and I don't know once they are done whether they will walk away thinking he really has a job, but we appreciate you all being here.

I am not going to pick on the healthcare law today, Chairman. We are just going to move on this hearing and some of the important things that we need to address. I would also say that we are fortunate in this committee to have two Louisianans and our own Steve Scalise has also been very involved and engaged on this bill and its effect for jobs, the economy, health, and all the things that we have dealt with. So shout out to both those guys.

Thank you for this hearing. I would like to welcome our witnesses and look forward to your testimony. We all know about the event on April 20, the loss of lives. We had the hearing yesterday on the—with the executives of massive spill and now, you know, we are focused on capping, recovery, payment, and but you are to talk about long-term effects or what they would be and what we know and what we don't know and how do we get good information. So that is the importance of this hearing.

I also am very happy that we have the FDA here today because, of course, one of the things we have worked with is on food safety, and we are going to have to watch this closely. We know it is already affecting the livelihood of the folks who use that as their livelihood, and there will be concern, and so where concern is merited and we want to have a safe food supply, we need to protect the consumers. Where there may not be and we can let these people return in certain areas to their livelihood, we want to do that. So we always focus or I always focus on our using real science, you know, and trying to keep away from the emotionalism that occurs in an event so that we can do our due diligence and in that way protect public health but also allow people to do the job that they have done for generations in some areas.

So appreciate you being . Appreciate all the testimony. I look forward to it, and I yield back the balance of my time.

[The prepared statement of Mr. Shimkus follows:]

STATEMENT OF RANKING MEMBER JOHN SHIMKUS

JUNE 15, 2010 Hearing – "NIH in the 21st Century: The Director's Perspective"

Mr. Chairman, thank you for holding this hearing on the National Institutes of Health's research activities and priorities.

I'd like to welcome Dr. Collins, who is the Director of the National Institutes of Health. We look forward to hearing your testimony.

NIH is the Federal government's principal medical research agency.

NIH's mission is to advance research in pursuit of fundamental knowledge that will lead to better health outcomes.

In my years in Congress, I've been a strong supporter of the National Institutes of Health.

This week I co-wrote a letter with Senator Durbin to the National Cancer Institute of the National Institutes of Health, expressing our support for federal investment by the National Cancer Institute (NCI) to find a cure for gastric cancer.

As you know, gastric cancer is one of the deadliest cancers in the U.S.

In 2009, there were an estimated 10,620 deaths from gastric cancer.

The five year survival rate for metastatic gastric cancer is 3.4 percent, one of the five lowest cancer survival rates.

This lethal cancer is increasing exponentially in young people. Just last month, the National Cancer Institute released a study based on surveillance tracking of gastric cancer. The study demonstrated the dramatic increase in gastric cancer in young people. For Americans age 25-39, one's likelihood of being diagnosed with gastric cancer has increased dramatically by almost 70 percent since 1977.

In addition to allowing us to learn more about the research activities of NIH, this hearing provides an opportunity for the Subcommittee to provide oversight of the NIH's implementation of the NIH Reform Act of 2006 and the Obama-Pelosi $787 "Stimulus" bill.

Back in 2006, the members of this Committee led Congress in enacting the NIH Reform Act.

The goal of the NIH Reform Act was to improve NIH's overall performance and increase the opportunities for research activities for all health conditions.

I look forward to hearing how NIH has implemented the Reform Act.

There are currently 27 Institutes and Centers at the NIH that focus on certain areas of the bodies or specific conditions. Prior to the NIH Reform Act, the Institutes seemed to function in isolation even though diseases rarely do. The Reform Act created the Common Fund designed to fund cross-institute research which will facilitate multi- institute projects of great promise.

The law also created the "Scientific Management Review Board" charged with formally and publicly reviewing NIH's organizational structure at least once every seven years. I look forward to hearing from Dr. Collins on the creation and work of the Management Review Board.

Last year, Congress enacted the $787 "Stimulus Bill" chalk full of wasteful spending and unfulfilled promises.

The Stimulus Bill did not create jobs. Before the Stimulus passed, Obama Administration officials predicted that passing the Stimulus would keep the unemployment rate under 8 percent, while failing to pass the Stimulus could send unemployment over 9 percent. As we all know, the unemployment rate stands just below 10 percent, and the only jobs being created in this country are temporary Census worker jobs.

To make matters worse, the Stimulus added even more debt than Congress expected as recent cost estimates of the Stimulus have risen to $862 billion, adding billions more to our national debt.

The Stimulus Bill included $10 billion for NIH. However, there is substantial concern that the $10 billion for NIH is not being used effectively.

The NIH's function is to further scientific and medical understanding and research; its mission is not job creation.

Typically, an individual receiving an NIH grant will receive funds over a four to five year cycle. The type of research conducted by NIH grantees is time intensive. Clinical trials and other scientific endeavors take time to develop, conduct, and then analyze.

Unfortunately, the NIH Stimulus money is not being used to fund these time intensive grants. Instead, the money must be used on two year grants. This two year limitation on NIH Stimulus grants will lead to little in terms of advanced scientific or medical understanding.

I'm glad we are doing oversight of the NIH Reform Act and Stimulus bill today. Mr. Chairman, it is clear to everyone that we need to extend this oversight to the new health law.

The bad news just keeps pouring in, but this Congress wants to ignore the fact that we just passed trillion dollar legislation that will affect every person in America.

The missed deadlines are piling up yet the Administration is wasting its time sending out propaganda.

The proponents of the law promised Americans they could keep their current health insurance if they like it. Now, the Administration is preparing regulations that could force at least 51% of employers to have to change their health plans. In fact, that number could be as high as 69%.

Americans were told that their health care premiums would be reduced by an average of $2,500 a year. However, the Congressional Budget Office has reported that Americans' premiums will actually increase by over $2,000 a year.

Next week, the new, temporary high risk pool program should go online. However, many questions remain about its operation, and this Committee has done nothing to try to answer them.

1. Will people really have to be uninsured for six months before receiving coverage?
2. Will those states that currently have a high risk pool be required to create a whole new program in order to contract with HHS?
3. Finally, will the design of the program encourage irresponsible states to spend their allotments quickly while responsible states have their funds raided? These are questions for a program that starts NEXT WEEK.

When a 3,000 page bill refers to the Secretary of HHS over 2,000 times, Congress has the responsibility to monitor the unlimited discretion that we have provided those bureaucrats.

I yield back the balance of my time.

Mr. PALLONE. Thank you, Mr. Shimkus.

Next is the gentlewoman From California, Ms. Eshoo.

Ms. ESHOO. Mr. Chairman, thank you for holding this important hearing, and welcome to the witnesses. I am going to waive reading my spectacular opening statement and save my time for questions. Thank you.

[The prepared statement of Ms. Eshoo follows:]

Statement of the Honorable Anna G. Eshoo
House Committee on Energy and Commerce, Subcommittee on Health
Hearing, "HHS Actions to Identify and Address Health Effects of the BP Oil Spill"
June 16, 2010

Thank you, Chairman Pallone, for calling this hearing on the health impacts of the oil spill which continues to unfold in the Gulf of Mexico. As we all know, coverage of BP's efforts to stem the flow of oil gushing into the Gulf has dominated the news for over a month. While the media's focus has been on the battle to cap the leak, it is a distraction from the most important issues: what will the impacts be, and how will we handle it?

Experts across the board agree that the impact of the spill will be wide-ranging…what no one knows yet is how bad it will be. Thousands of clean-up workers have been working long hours under treacherous conditions. Beyond the normal hazards of heat and machinery, the workers face prolonged exposure to the spilled oil and the chemical dispersants used to combat it.

We've seen a raft of troubling news reports that BP has dispensed with certain safeguards, including respirators, as unnecessary for cleanup workers. This news comes even as many workers have had to buy their own

respirators and reports of people feeling sick in the presence of the chemical dispersants continue to mount. I want to learn whether the federal government has been clear enough about what safeguards are or are not required to protect the health of the people engaged in the cleanup.

I'm also concerned that residents of the Gulf Coast must be able to separate fact from fiction regarding the hazards this disaster presents. It's critical that the federal government, particularly our public health authorities, speak with a clear voice about water and food safety issues, and provide the residents of the affected areas with all the information they need. This is especially important since too many of these areas are already medically underserved.

I thank the witnesses for coming today, and I look forward to their testimony and to their perspectives.

Mr. PALLONE. Thank you, and all opening statements can be submitted for the record.

Next is the gentleman from Pennsylvania, Mr. Pitts.

OPENING STATEMENT OF HON. JOSEPH R. PITTS, A REPRESENTATIVE IN CONGRESS FROM THE COMMONWEALTH OF PENNSYLVANIA

Mr. PITTS. Thank you, Mr. Chairman. I would like to thank the Administration for making available to us witnesses from FDA, from NIOSH, CDC, from the National Institute of Environmental Health Services, NIH, and from ASPR.

What happened on April 20 at—on the Deepwater Horizon, the resulting oil spill is a tragedy, and our thoughts and prayers are with the families of loved ones, the 11 people who died on the rig that day. Lives and livelihoods were destroyed along with ecosystems, although the environment is not the focus of this particular subcommittee.

I am struck by just how little we know about the long-term and even short-term effects of the oil spill on human health. While there have been oil spills before, none of them match the size and scope of this spill, and—or the particular conditions in which it occurred. We have people coming into contact with the oil, with dispersants, with other chemicals directly such as the responders involved here as they are trying to stop the flow of oil and clean up the water and the shorelines.

Others are facing psychological trauma as their livelihoods, fishing and tourism and numerous others have been severely injured or destroyed, and it is possible that if we are not careful contaminated seafood could sicken or kill people who live hundreds or even thousands of miles away from that Gulf.

This is a massive disaster, and the agencies in front of us today are all part of a massive federal response. I look forward to hearing from our witnesses, and I thank you and yield back.

Mr. PALLONE. Thank you, Mr. Pitts.

The gentlewoman from Colorado, Ms. DeGette, and thank you for chairing the hearing yesterday.

OPENING STATEMENT OF HON. DIANA DEGETTE, A REPRESENTATIVE IN CONGRESS FROM THE STATE OF COLORADO

Ms. DEGETTE. Thank you, Mr. Chairman. It was an important hearing, as is this hearing.

As President Obama said in his address to the Nation last night, this marks the greatest environmental disaster America has ever known. I am afraid it also has the potential to become one of the worst public health disasters America has ever known if we are not careful.

It has been almost 9 years now since the September 11 attacks on the World Trade Center, and we are still seeing repercussions in the form of health effects on first responders and residents who were exposed in the aftermath. The only group for which we have baseline health measures is the firefighters, and we are still, 9 years later, working to cobble together data on impacted populations.

We need to learn from our mistakes. We need to establish a registry of workers, volunteers, and residents, capture their baseline health status, and follow that and their offspring over the long term. The gaps in the research in human health effects of oil spills and the use of dispersants are unconscionable.

I understand that such gaps exist because there has never been a need for such data, but that is not an excuse for not taking every step possible now to ensure that we collect and monitor relevant data. We also need to make sure of making assumptions, that we don't make assumptions without evidence to back them up.

For example, there is a big assumption that because oil on the surface is dangerous and likely to wash up on shore, it is better to use dispersants to push the oil below the water surface. But we do not know what the impact on marine life will be or whether the combination of oil and dispersants is more toxic than either one alone.

And in addition, we need to ensure that the National Institutes of Health has the resources necessary to quickly ramp us research into the health effects of these oil and dispersants.

Similarly, we need to ensure that the Food and Drug Administration and the Centers for Disease Control and Prevention have the resources they need to move forward with monitoring the contamination of seafood, as well as for implementing surveillance system and long-term monitoring of the health effects of both workers and residents.

I was aghast to learn that although there is a rostering system in place to capture information about workers who have, may have been exposed to oil and dispersants, we have nothing in place to monitor unofficial volunteers or local residents.

And, Mr. Chairman, when the Oversight Investigations Committee was in the Gulf last week, we were horrified to hear from residents that while there is protective equipment on these boats, many of them are being told by BP and its subcontractors not to use the protective equipment for other reasons.

If there is one thing we should have learned from September 11 is that we need to have worker protections and health protections for everybody involved in this cleanup, and we also need to figure out what is happening to the residents and everybody else down there. Otherwise, we are going—as you said, Mr. Chairman, we are going to be seeing health effects for generations to come.

Mr. PALLONE. Thank you. You know, if I could just—if you could just—well, I guess your time is out, but I just wanted to say I remember vividly after 9/11 how, you know, the BP Administration then, who is my former governor, you know, made all these statements about how everything was so great and, you know, there wasn't a problem for the air pollution, and then we got all the devastating impact later.

So you have to be very careful about, you know, what representations we make as agency or elected officials when it comes to health impacts.

Next I would recognize the gentleman from Pennsylvania, Mr. Murphy.

OPENING STATEMENT OF HON. TIM MURPHY, A REPRESENTATIVE IN CONGRESS FROM THE COMMONWEALTH OF PENNSYLVANIA

Mr. MURPHY OF PENNSYLVANIA. Thank you, Mr. Chairman.

Exhibit A. Picture of a BP gas station. Some of you may have seen this in the media. I love the sign that they posted next to the tank. It says, "Warning. Do not leave pumps unattended. You are responsible for spills."

And so we are here today dealing with the same thing today on health effects. We have seen a lot of pictures of animals tragically affected by this catastrophic, economic disaster, but let us not forget the human element.

This committee recently passed legislation to provide healthcare monitoring for first responders as the Chairman just mentioned from a national tragedy of a different kind, the 9/11 terrorist attack. Now we are dealing with a different sort and one that we have to make sure that we are going to track and monitor for a long time.

We have several things. One, the direct effects of the oil on residents, the indirect effects that also may come from food from the region, and other products that may have been in the region and contaminated by the oil.

Two, the effects of chemical dispersants, the 30,000 plus workers and volunteers, and now the President has ordered 17,000 soldiers into the area, who themselves may face increased risks because of their exposure to chemicals involved, including the oil.

It is essential that this committee take a number of actions such as calling upon the Department of Health and Human Services to immediately establish some studies and monitoring of those involved exposed to these chemicals.

Two, the Department of Defense also needs to take account of initial evaluations and monitoring of any soldier who is down there.

Three, I believe we should be pushing for NIH to immediately move forward on establishing some longitudinal studies and to monitor those really over the next couple of decades, and of course, the Department of Agriculture is going to need to also monitor this as well.

We do need baseline medical exams for anybody going to this region, and we need to establish those immediately. We need to get those on electronic medical records and track this. So much of what people are being exposed to we simply do not know the medical effects. We also do not know the psychological effects, and it is important we monitor those as well.

Although other hearings have received a lot of media attention because they have the CEOs of oil companies around, this hearing and this committee and this jurisdiction of health is critically important because this committee will be monitoring this issue for the next couple of decades. We will clean up the beaches, we will reestablish some of those areas, but we have to remember that the human toll of this is going to be longstanding, and it is important that the work we do today and the information received from this very astute panel is one that helps establish what we need to be doing in that direction.

With that I yield back, Mr. Chairman.

Mr. PALLONE. Thank you, Mr. Murphy.

Yield to our full committee chairman, Mr. Waxman.

OPENING STATEMENT OF HON. HENRY A. WAXMAN, A REPRESENTATIVE IN CONGRESS FROM THE STATE OF CALIFORNIA

Mr. WAXMAN. Thank you very much, Mr. Pallone. Thank you for holding today's hearing on the Department of Health and Human Services' critically important role in assessing the health effects of the Deepwater Horizon oil spill.

It has been nearly 2 months since this tragedy took place, killed 11 people, injured 15 others, it is doing an enormous amount of damage to the environment and to the economy of people in the Gulf. Our committee has been very involved in oversight on this issue. Tomorrow we are going to hear from—directly from the BP CEO Tony Hayward.

Today's hearing, although it is looking at a different aspect of the spill and underscores one reason why our focus is so comprehensive and so important, this oil spill has the potential to directly impact for years to come the health and wellbeing of millions of people who live and work in or near the Gulf area. I hope to get from our witnesses their examination of the potential health risks for clean-up workers, many of whom can no longer engage in their primary livelihoods, learn about how the spill may touch the broader population living near the Gulf, risks that may include respiratory complications, headaches, throat, eye irritation, rashes and skin problems, nausea, fatigue, and heat exhaustion. The possibility of more serious long-term illnesses has also been under study.

We need to hear from people in the Department of Health and Human Services to assess these potential risks and address whatever health problems do materialize, that working with each other, the different agencies, with other departments, with state and local governments on surveillance mechanisms, food safety controls, worker training programs, epidemiological studies. Unfortunately, I suspect their efforts will be needed for a long time to come.

Yesterday in testimony before this subcommittee Dr. Francis Collins, Director of the National Institute of Health, committed $10 million for research on the health effects of the oil spill. This is exactly the type of initiative that needs to be undertaken now, and I commend NIH for its efforts.

I know our own activities regarding this disaster will continue for as long as necessary and appropriate. Indeed, as the primary committee in the House for overseeing the Department of Health and Human Services we are committed to ensuring that HHS lives up to its responsibility and most especially to its mandate to protect the public health.

With that, Mr. Chairman, I thank you for the hearing. I thank our witnesses for testifying and being here today. I look forward to their testimony and working with them in the future.

Yield back.

[The prepared statement of Mr. Waxman follows:]

Statement of Chairman Henry A. Waxman
Energy and Commerce Committee
Subcommittee on Health Hearing
"HHS Actions to Identify and Address Health Effects of the BP Oil Spill"
June 16, 2010

Chairman Pallone, thank you for holding today's hearing on the Department of Health and Human Service's critically important role in addressing the health effects of the Deepwater Horizon oil spill.

It has been nearly two months since the devastating oil spill in the Gulf of Mexico killed 11 people and injured 15 others. The Energy and Commerce Committee has been examining various dimensions of this unprecedented catastrophe, including tomorrow's oversight hearing at which we will hear directly from BP CEO Tony Hayward.

Today's hearing takes on another aspect of the spill and underscores one reason why our focus is so comprehensive and so important: This oil spill has the potential to directly impact -- for years to come -- the health and well-being of millions of people who live and work in or near the Gulf area.

This afternoon we will examine potential health risks to cleanup workers, many of whom can no longer engage in their primary livelihoods because of this horrific spill. We will also learn about how the spill may touch the broader population living near the Gulf coast. As we know from previous spills, these risks may include respiratory complications, headaches, throat and eye irritation, rashes, skin problems, nausea, fatigue, and heat exhaustion. The possibility of more serious, long-term illness has been under study. And the psychological toll of a disaster like this can be very real as well.

Today's witnesses will describe actions taken by the Department of Health and Human Services to assess these potential risks and address whatever health problems do materialize. The HHS agencies represented are working with each other, with other Departments, and with state and local governments on surveillance mechanisms, food safety controls, worker trainer programs and epidemiological studies. Unfortunately, I suspect their efforts will be needed for a long time to come.

Yesterday, in testimony before this Subcommittee, Dr. Francis Collins, Director of the National Institutes of Health, committed $10 million for research on the health effects of the oil spill. This is exactly the type of initiative that needs to be taken now, and I commend NIH for its efforts.

I know our own activities regarding this disaster will continue for as long as necessary and appropriate. Indeed, as the primary committee in the House for overseeing the Department of Health and Human Services, we are committed to ensuring that HHS lives up to its responsibilities and most especially, to its mandate to protect the public health.

With that, Mr. Chairman, I want to thank today's witnesses for appearing before us today. I look forward to hearing their testimony.

Mr. PALLONE. Thank you, Chairman Waxman.

The gentlewoman from Tennessee, Mrs. Blackburn.

OPENING STATEMENT OF HON. MARSHA BLACKBURN, A REPRESENTATIVE IN CONGRESS FROM THE STATE OF TENNESSEE

Mrs. BLACKBURN. Welcome to all of you, and Mr. Chairman, thank you for the hearing, and I am pleased that we are going to take some time and look at the potential health effects of the ongoing oil spill in the Gulf.

It has—and having been down there to the Gulf, I know that it has greatly impacted the livelihoods and the health of workers, volunteers, and nearby communities that have not seen this type disaster before. We appreciate the significant effort by the agencies that are before us today to keep those involved safe through coordinated efforts focused on preventative measures such as worker training, seafood sampling, and closing hazardous waters.

Everybody knows that we are seeing the 63,000 barrels a day going into the ocean, and t seems to be no reprieve unfortunately, or resolution in sight. The fishing restrictions and the lack of tourism during the busiest time of year for this region is really devastating the economy, and it is changing the livelihoods forever. It truly is a sad situation.

Furthermore, the drilling moratorium in the region has only exacerbated the financial issues that families in this region are experiencing. For many families the moratorium has made it impossible to maintain the type lifestyle they had prior to the spill.

That said, we must stay vigilant on this issue and monitor it closely, focusing not just on the physical health but also the mental health. At this stage immediate care must be sought and documented for all workers who become ill during the cleanup efforts going forward. The Administration must work with all stakeholders to ensure that necessary safety measures are in place to protect the workers and the coastline communities. The spill isn't over, and we can't yet examine the lasting health effects, but the Administration can take proactive steps to protect communities, public health, and workers throughout the course of the spill.

Thank the Chairman, and I yield back.

Mr. PALLONE. Thank you, Ms. Blackburn.

Next I would yield to our Chairman Emeritus, Mr. Dingell.

Mr. DINGELL. Mr. Chairman, I thank you for your courtesy. I commend you for holding this hearing. I ask unanimous consent that my excellent opening statement be included in the record for the reading of all who will, I am sure, enjoy it much.

Thank you.

[The prepared statement of Mr. Dingell was unavailable at the time of printing.]

Mr. PALLONE. Without objection, so ordered, and all of the opening statements will be submitted for those who desire to enter them.

Next is—we will go to our—is she there? Lois is not there. Next is the gentlewoman from the Virgin Islands, Mrs. Christensen.

OPENING STATEMENT OF HON. DONNA M. CHRISTENSEN, A REPRESENTATIVE IN CONGRESS FROM THE VIRGIN ISLANDS

Mrs. CHRISTENSEN. Thank you, Mr. Chairman, and thank you, Chairman Pallone and Ranking Member Shimkus, for holding this hearing. There are some of us who have been asking over and over about the health effects of this disaster, and the answers have often been as unsatisfying as the prior promises of protection of the workers have been empty until recently.

So we welcome this opportunity to discuss one aspect of the BP oil spill that has not gotten much public attention, the health effects and the actions that the U.S. Department of Health and Human Services has and plans to take.

We have heard some of the health impacts that were the result of similar, but smaller it turns out, catastrophic accident in Alaska just over 2 decades ago as well as some others, but it still seems that the long-term effects are unclear.

So I want to thank today's witnesses for joining us to provide an update on the efforts that each of your respective agencies is undertaking to help tackle this horrific disaster and protect the health and wellbeing, not only of the workers but residents in the affected communities. I hope that we will hear what experience your agencies might have had in the past with oil spills and what institutional memory remains that is informing your responses today.

I also hope that we will hear more coordination from you with this—among yourselves and with state and local agencies that we have heard from other monitoring and responding agencies. We have already lost 11 lives that should not have been lost. We have to do everything we can to address the health needs of those they left behind, as well as the workers and the residents of the area.

As we know from Katrina and other natural assaults on the region, the Gulf Area is home to many vulnerable population groups, and so I am especially interested in hearing how the affected communities' most vulnerable residents who likely already had underaddressed health and healthcare needs before the spill, factor into your outreach of protection and response.

Again, I want to thank the witnesses for appearing and thank the Chair and Ranking Member for holding this hearing.

Mr. PALLONE. Thank you. Mr. Sarbanes.

OPENING STATEMENT OF HON. JOHN P. SARBANES, A REPRESENTATIVE IN CONGRESS FROM THE STATE OF MARYLAND

Mr. SARBANES. Thank you, Mr. Chairman, for convening this meeting. There are so many different narratives that are unfolding with respect to this catastrophe, and they are unfolding in stages. There was, obviously, the initial loss of life, of the spill itself, which continues every minute of every day, the assault on the coast in terms of the effects on wildlife and the marshlands and the other impact, the underwater plumes. That is another narrative that is underway. The loss of industries, fishing, shrimping, tourism, and then, of course, the health effects, which is what we are to speak of today.

In all of these narratives, most of them are potentially unending narratives. I mean, they are going to go on for decades and decades. It is really impossible to overstate the impact this catastrophe is going to have on our country, and we are really just at the very beginning of our understanding of all of the ramifications of this, but we do have to begin to build a record. We have to begin to try to understand what this is meaning, and that is part of what this hearing is designed to do.

So I thank you for convening it, and I yield back.

Mr. PALLONE. Thank you.

The gentleman from Georgia, Mr. Barrow.

The gentleman waives.

Next is the gentlewoman from Illinois, Ms. Schakowsky.

OPENING STATEMENT OF HON. JANICE D. SCHAKOWSKY, A REPRESENTATIVE IN CONGRESS FROM THE STATE OF ILLINOIS

Ms. SCHAKOWSKY. Thank you. The Oversight and Investigations Committee went down to Chalmette, Louisiana, for a hearing, and we heard testimony from Wilma Subra from the Louisiana Environmental Action Network, and I wanted to tell you a little bit about her testimony if you hadn't seen it about some of the problems with health.

First of all, they hired a lot of the fishermen who were—who are out of work, and initially they were required to sign an agreement that seriously compromised—I am reading now from—"that seriously compromised their existing and future rights and potential legal claims. A judge thought that was overbroad, and BP entered into a stipulated judgment that removed that."

But then this organization, a private organization, began distributing protective gear to the fishermen to utilize during cleanup activities, half-face respiratories with organic cartridges, goggles, gloves, and sleeve protectors. She later said that they were encouraged not to use those.

In fact, at one point as I recall, she said in the Q & A that heat stress was the reason and that some—I don't know if it was HHS or someone from the government of Louisiana agreed with that and so they were afraid to use those respirators, and she said the fishermen were reluctant to report their health systems for fear that they would lose their jobs and initially the women were, their wives were expressing concern, but then they stopped speaking out, "for fear their husbands would lose their jobs."

The Louisiana Department of Health and Hospital stated that oil cleanup workers, "should avoid skin contact in oral cavity or nasal passage, exposure to oil spill products using appropriate clothing, respiratory protection, gloves, and boots." But she continued throughout her testimony to say that there was not the proper training, that that equipment was, in fact, not provided. The shrimpers have not been provided with the appropriate protective gear. The oily skimmers and pads are being pulled into the shrimp boats by the boat crews with bare hands and no protective gear. On May 26 a number of workers became ill on the job, transported to the hospital.

So we have lots of testimony now that these things are going on. The President said in his speech yesterday that 30,000 personnel were there, that he has authorized the deployment of 17,000 National Guard, then there are volunteers who are working down there. I think we do have a tremendous responsibility to avoid the situation that followed 9/11, and there is every potential for that happening.

So I am very glad that you are today, looking forward to your testimony. Thank you.

Mr. PALLONE. Thank you.

I yield to our Vice-Chairman, Ms. Capps.

OPENING STATEMENT OF HON. LOIS CAPPS, A REPRESENTATIVE IN CONGRESS FROM THE STATE OF CALIFORNIA

Mrs. CAPPS. Thank you, Mr. Chairman, for holding this hearing.

While much focus has been on addressing BP's oil spill as an economic and environmental crisis, which it certainly is, I think it is incredibly important that you all and we all are today to discuss the public health crisis that is unfolding in front of us.

First off, I want to commend the Obama Administration for the important, life-saving public health response efforts that it has undertaken already. I think that your testimony today will show the many ways that your agencies are actively involved in the process.

But reports of workers becoming ill from their involvement in the oil spill cleanup still persist. It is not only the workers who are suffering, the health of residents and I fear even tourists, may be also affected long into the future due to contaminated beaches and shorelines.

Cleanup workers, often local fishermen and shrimpers, are not formally trained to work with toxic chemicals and currently rely on BP for training and provision of necessary protective equipment.

However, according to an internal Department of Labor memo, there has been a general systemic failure from BP to ensure the safety and health of the responders, and numerous media reports of minimal training from BP and photographs of workers without protective gear, this documents that these workers are not being protected.

BP has made clear that they are incapable of making the protection of the public health their priority. It lacks the expertise, the resources, or incentives to really address the public health and worker safety issues resulting from this spill.

That is why I have written to the Obama Administration, urging it to relieve BP of their role in the public health response and instead leverage the good work that you all are already doing to protect the public's health.

One area I do feel needs to be addressed is the coordination of these efforts. There is a unique tragedy that we are experiencing now, and as such requires a unique, multi-disciplinary response to health protections. While you all represent the numerous departments within HHS responding to BP's spill, other agencies like OSHA, NOAA, and the EPA also have a role to play in protecting the health and safety of Gulf workers and communities. What is done now to protect the health and safety of workers and communities will have impacts long into the future.

As a public health nurse who lived through the 1969 spill in Santa Barbara, I know that the damage brought by an oil spill can continue to haunt the public's health, and while I hope that we hear more today about the work being done by HHS to protect these groups in the short term from acute health problems associated with exposure to oil and the dispersants and detergents used to clean it up, I hope we can also discuss what research can be done to learn from this disaster so that future generations can be better protected.

I know you all would agree that nothing is more important than protecting the health of the oil spill workers and Gulf Coast communities. If BP will not take the necessary steps to protect the public's health, then the Federal Government must increase its coordinated efforts to protect the health and safety of oil spill workers and the Gulf communities. I know that you and your administrations share this concern.

I look forward to hearing your testimony and working with you to achieve this important goal.

I yield back, Mr. Chairman.

Mr. PALLONE. Thank you, Ms. Capps.

The gentlewoman from Florida, Ms. Castor.

OPENING STATEMENT OF HON. KATHY CASTOR, A REPRESENTATIVE IN CONGRESS FROM THE STATE OF FLORIDA

Ms. CASTOR. Mr. Chairman, thank you very much for calling this hearing, and I want to thank our agency experts. You all have been very proactive, and we need your continued help, but I have to say that I am very angry that we are at this point.

I am reflecting the frustration of my fellow Floridians and Gulf Coast residents who have been dealing with this BP disaster for weeks and weeks and the anxiety that there is no end in sight.

I have to say, Mr. Chairman, the BP disaster confirmed our worst fears about the risks associated with offshore oil drilling in the near places that rely upon tourism and fishing to drive our economies and our small businesses.

I am deeply concerned about the devastating impacts of the BP disaster, not just to Florida tourism and fishing but also the potential health effects on workers, volunteer responders, and people living in the Gulf communities.

I would like to thank President Obama and my colleagues who have all been pressing BP to set aside a significant amount to address the economic and environmental impacts because it was announced just a little while ago that BP will, indeed, put up $20 billion.

The question is will that fund include—give us the ability to address the physical harm to people and the public health. The taxpayers certainly should not be on the hook for this.

I do appreciate FDA and NOAA releasing a statement on Monday about the efforts underway to ensure that the seafood from the Gulf is safe to eat and notices that the public should not be concerned about seafood in the stores, and thank you also to CDC for announcing that tar balls washing up on Florida's panhandle beaches are not harmful, and by the way, you know, just a small part of the panhandle is suffering the effects of oil. The rest of Flor-

ida is pristine waters and is open for business, and we need you to continue with your vacations with summer.

But the reality is that many families remain frightened and uncertain about what to believe, and there are conflicting stories in the news about the health effects of the disaster. Most experts state that brief contact with crude oil is not harmful, however, some other scientists say that evidence exists that many of the compounds in crude oil are dangerous. Toxicologists explain that cleanup workers, many of whom are out-of-worker fishermen participating in the Vessels of Opportunity Program, could face problems with breathing and coordination and increased risks of cancer. So give us the best data you have and tell us how we protect our hardworking folks.

Furthermore, while EPA has directed BP to reduce dispersants application by 75 percent, we know that BP early on failed to use a less toxic dispersant and 1.1 million gallons of Corexit have already gone into the Gulf of Mexico and is a threat to public health. What is the real story here, and what do we have to do to monitor it in the near term and in the long term? Because we know that Corexit does pose a health, human health risk and is even tied to lingering health concerns from the Exxon Valdez.

So the people we represent deserve answers. We certainly can't rely on BP to put the public's health needs ahead of their business interests and corporate damage control. We need your help. We have got to make sure they have got the right protective gear, and they are getting the best expert advice available. We are relying on you, and we are your partners in making sure this information is disseminated.

So thank you very much.

Mr. PALLONE. Thank you.

The gentleman from Arkansas, Mr. Ross.

OPENING STATEMENT OF HON. MIKE ROSS, A REPRESENTATIVE IN CONGRESS FROM THE STATE OF ARKANSAS

Mr. ROSS. Thank you, Mr. Chairman, for holding today's hearing to examine how the Department of Health and Human Services, HHS, is responding to the public health risks associated with the Deepwater Horizon oil spill, now the worst environmental disaster in our Nation's history.

I first want to express my continued frustration and disappointment that we are on day 58 of this environmental disaster, and BP still does not have a concrete plan to stop the leak or clean up the oil that has been gushing into the Gulf of Mexico for almost 2 months now.

What we do know is that the nearly or up to 60,000 barrels of oil a day that is being released every day into the Gulf is hurting and killing hundreds of thousands of species of animals.

What we do know is that this disaster is destroying one of the most sensitive ecosystems in the world on which many people depend.

What we don't yet know is the total extent of this damage. What we don't yet know is how this spill will affect the health and safety of the people who live and work in the Gulf Coast region or those vigorously working to clean it up.

We cannot properly move forward until we know how bad of a situation we are facing, and that is the point of today's hearing.

Last night President Obama announced that he will be directing BP to establish an independently-administered account to help pay for the spill-related cleanup and economic damage claims. This is only one of many needed steps in moving forward towards addressing this terrible tragedy.

T are many lessons and hopefully forthcoming solutions to be learned from this preventable disaster that started back in April. Sadly, the impact of this catastrophe is one that will ultimately need to be measured not in weeks and months but in years. We must take this opportunity to not only examine our safety standards in deepwater drilling but to also examine how this spill is affecting both the short-term and long-term health of all those living and working in the affected region.

I look forward today to discussing ways we can mitigate these harmful effects. I want to thank the witnesses who have come before the subcommittee today to testify about the efforts being taken by our government to evaluate and help those who are and will be physically, emotionally, and economically impacted by this disaster.

Our government must do more to hold BP and other oil companies accountable for careless offshore drilling practices and the resulting harm they cause. We must ensure the most advanced technologies and safety procedures are in place so that we never face this situation again.

Mr. Chairman, I yield back.

Mr. PALLONE. Thank you, Mr. Ross.

Next is the gentleman from Texas, Mr. Green.

OPENING STATEMENT OF HON. GENE GREEN, A REPRESENTATIVE IN CONGRESS FROM THE STATE OF TEXAS

Mr. GREEN. Thank you, Mr. Chairman, for holding the hearing on HHS's efforts to address the known and potential health effects of the BP oil spill in the Gulf.

The Gulf of Mexico is in the midst of dealing with an incident that is tragedy like we have never seen, and my thoughts and prayers go out to the families and communities affected by this terrible accident. Energy and Commerce Committee has held several hearings in our Energy and Oversight Investigation Subcommittee on the topic, and I believe it is crucial we begin to examine and prepare for the potential health effects of the oil spill in the Gulf.

Today we are focused on how the spill might impact the local communities on the coast as well as the workers who are working diligently to clean up the spill day in and day out. Approximately 13,000 cleanup workers have been employed by BP or its contractors, and more than 1,800 federal employees have been directly involved in cleanup operations over four states. The health and welfare of these affected communities and workers are a priority for me, and I know my colleagues on this committee, and I appreciate our looking into the issue today.

I understand from the testimony we will hear today that knowledge of the potential risks from the BP oil spill comes from scientific studies following the Exxon Valdez disaster in Alaska and other major oil spills around the world. The potential health risks

are primarily due to inhaling toxic vapors, physical contact with the oil through skin or ingestion, and psychological stress in confronting the devastation.

I appreciate our committee looking into this and hopefully hearings will ensure that our government is doing everything in its power to protect the health of individuals who reside in the affected areas and especially those that are directly involved in the cleanup.

And, again, Mr. Chairman, thank you for holding the hearing, and I yield back my time.

Mr. PALLONE. Thank you, Mr. Green.

I yield now to the gentlewoman from Ohio, Ms. Sutton.

OPENING STATEMENT OF HON. BETTY SUTTON, A REPRESENTATIVE IN CONGRESS FROM THE STATE OF OHIO

Ms. SUTTON. Thank you, Mr. Chairman, and I appreciate your holding this hearing today.

Everyone on this committee is familiar with the health effects that continue to afflict the first responders and others who were present at the World Trade Center on 9/11 and during the recovery operations there. Not long ago this committee passed a 9/11 Health Bill to help those who were hurt, and we all remember it was a federal agency, the EPA, who said that the dust around the World Trade Center in the days after 9/11 was safe to breathe.

Volunteers and workers were told it was safe to be at ground zero and that it was safe to work there, but we sadly know now that that was not true. We now know 9 years later that people who worked and lived near ground zero suffer from a variety of health problems, ranging from respiratory illnesses to mental health disorders. And as we sit here today facing another tragedy, this one caused by BP, we must make sure that the mistakes that were made in the days and the weeks after September 11 are not made now.

Every worker, every volunteer, every resident, and every person who comes in contact with this spill needs to be protected. We must act to ensure that they are safe to the best of our ability.

BP's own documents which are posted on the Investigative Journalism website, Pro Publica, show that between April 22 and June 10 485 of their workers have been injured. Already the Louisiana Department of Health is reporting 109 illnesses in spill workers after exposure to oil or dispersants. And sadly there will be more to come.

This oil spill is a tragedy on so many levels, and we must do all that we can to prevent the spill from damaging the public's health for years and years to come.

I thank the witnesses for being today, and I look forward to hearing about what HHS is doing to prevent a damaging outcome in the days and the years ahead. Thank you, and I yield back.

Mr. PALLONE. Thank you, Ms. Sutton.

Next is the gentleman from Iowa, Mr. Braley.

OPENING STATEMENT OF HON. BRUCE L. BRALEY, A REPRESENTATIVE IN CONGRESS FROM THE STATE OF IOWA

Mr. BRALEY. Mr. Chairman, I am glad we are having this hearing, because it is a good opportunity to talk about the health im-

pacts of the BP oil disaster on the responders, those living and working in the affected communities, and in our food chain. It is hard to recognize the true impact of this devastating release of oil until you have seen it with your own eyes and smelled it with your own nose.

And back in Iowa when I was growing up and we didn't have a lot of entertainment, we would have people come over to our house, and we would show them slides of things we had been doing in our lives, so I am going to show you some slides of my trip last week to the Gulf Coast.

This is a shot from Venice, Louisiana, at the mouth of the Mississippi River, which is vital to my State because it is the scene of the southwest passage where a lot of the grain that is produced in the mid west enters the Gulf Stream of commerce. And those are ships that were leased by BP that used to be involved in the fishing industry. They are sitting there on a very rainy day.

We went out on a cargo plane after our field hearing and had the opportunity to sit there with the end gate open and fly over miles and miles of the delta and miles and miles of open water with plumes of oil, and this shot is taken out the back, and you can see one of the relief vessels right there in the lower right-hand corner, and then this is a shot that shows you those plumes of oil on the water. You can also see little ribbons that look like underway fire, which is where the dispersal chemicals were interacting with the oil below the surface. It literally looked like ribbons of fire.

And this is another shot of the same plume. This is, again, flying right over where the relief wells are being drilled. You can see the drilling ship and the plume ships that are around it, and that is a more close-up shot. You can actually see the burn off coming right off of the ship that is drilling the relief well.

One of the things that I can't show you is the immense stench coming off the water with that hatch open from the oil coming off the surface of the Gulf of Mexico. That is what these relief workers and the people living in these communities are dealing with on a daily basis.

This is a picture of the plane we flew in with the Admiral for the Coast Guard, who is leading the response effort on the ground. This is a picture from our field hearing where we heard from two of the widows who lost their husbands when that Deepwater Horizon rig exploded. Fittingly, you will see a picture of Andrew Jackson on a horse behind us because that is the same location where the Battle of New Orleans was fought.

But this picture to me captures the challenge we face, because no one appreciates the enormous mass of the Mississippi Delta when the Mississippi empties in the Gulf of Mexico. So you see some of the waterways that are part of the delta, you see the enormous land mass that is interfacing with the water that is all exposed to this oil release. And that is why until you have flown those massive miles that are affected by this disaster, it is impossible to really comprehend what we are going to do to solve this problem.

So I look forward to your testimony, and I look forward to working with you as we try to restore some sanity to what is going on in the Gulf of Mexico.

Mr. PALLONE. Thank you, Mr. Braley. I think that concludes our members' statements, and so I will now turn to our witnesses, and I want to welcome our panel. Let me introduce each of them.

On my left is Dr. Lisa Kaplowitz, who is Deputy Assistant Secretary for Policy of the Office of the Assistant Secretary for Preparedness and Response with HHS, and next to her is Dr. John Howard, Director of the National Institute of Occupational Safety and Health, the Centers for Disease Control and Prevention. And then we have Dr. Aubrey Miller, who is the Senior Medical Advisor for the National Institutes of Environmental Health Sciences with the National Institutes of Health, and finally is Mr. Michael Taylor, who is the Deputy Commissioner for Foods with the FDA.

And I want to welcome all of you. Thank you for being here. You know we have 5-minute opening statements become part of the record, and you may submit additional written comments afterwards if you would like.

We will begin with Dr. Kaplowitz. Thank you for being here.

STATEMENTS OF LISA KAPLOWITZ, M.D., M.S.H.A., DEPUTY ASSISTANT SECRETARY FOR POLICY, OFFICE OF THE ASSISTANT SECRETARY FOR PREPAREDNESS AND RESPONSE, U.S. DEPARTMENT OF HEALTH AND HUMAN SERVICES; JOHN HOWARD, M.D., M.P.H., J.D., LL.M., DIRECTOR, NATIONAL INSTITUTE OF OCCUPATIONAL SAFETY AND HEALTH, CENTERS FOR DISEASE CONTROL AND PREVENTION; AUBREY MILLER, M.D., M.P.H., SENIOR MEDICAL ADVISOR, NATIONAL INSTITUTE OF ENVIRONMENTAL HEALTH SCIENCES, NATIONAL INSTITUTES OF HEALTH; AND MICHAEL TAYLOR, J.D., DEPUTY COMMISSIONER FOR FOODS, U.S. FOOD AND DRUG ADMINISTRATION

STATEMENT OF LISA KAPLOWITZ

Dr. KAPLOWITZ. Thank you. Mr. Chairman——

Mr. PALLONE. I don't know if that is on. Is the green light on?

Dr. KAPLOWITZ. I have to move it closer.

Mr. PALLONE. Oh, yes. Move it closer. That works.

Dr. KAPLOWITZ. The green light is on.

Mr. PALLONE. Thanks.

Dr. KAPLOWITZ. Chairman Pallone, Ranking Member Shimkus, and distinguished members of the subcommittee, thank you for the opportunity to testify today about our public health and medical efforts in response to the Deepwater oil spill disaster. I commend this subcommittee for its leadership in holding today's hearing and share your sense of urgency on this important issue.

On behalf of the Department I would like to extend my sympathies to the families of those who lost their lives in this disaster, to those who were injured and to those whose way of life has been changed for years to come. The impacts of this disaster must be considered in the timeframe of not weeks and months but years. Oil can remain toxic in the environment for many years, and we do not know the impact it could have on human health over the long term.

As the agency responsible for coordinating HHS preparedness and response efforts, ASPR chairs a twice-weekly policy call with

other HHS agencies involved in the Gulf response, including the NIH, CDC, FDA, ACS, SAMSA, and other offices within HHS as well as the Secretary's Chief of Staff.These calls assure that HHS response efforts are coordinated among all agencies and office.

ASPR also provided direct support and is providing direct support to the oil spill through the National Disaster Medical System. From the time of the announcement of the explosion and fire, ASPR's regional emergency coordinators in the Gulf Coast areas were in close communication with each State's Emergency Coordinator, the State Departments of Health, and the Association of State and Territorial Health Officials, HHS liaison officers deployed to the unified area command team in Robert, Louisiana, to the incident command centers in Houma, Louisiana, and Mobile, Alabama, and to the National Incident Command Center at the U.S. Coast Guard Headquarters in Washington, DC.

On May 31, HHS, in coordination with the Louisiana Department of Health and Hospitals, set up a mobile medical unit in Venice, Louisiana, to provide triage and basic care for responders and residents concerned about health effects of the oil spill. The medical unit screens workers and citizens for exposure and refers those who require further care to local healthcare providers or hospitals.

Our goal is to support the local community and fill in any gaps that may be there, not to displace local providers. As of today the NDMS Medical Unit has seen over 140 patients since opening. Thus far some patient conditions, such as heat stroke, have been consistent with any response effort in the area.

In total about 38 percent have been treated for acute respiratory conditions, another 27 plus patient encounters have been for dermatologic eye or gastrointestinal problems, as well as a number of individuals who have been treated for injuries.

The Department is also directing attention and resources to address the behavioral health issues arising from the oil spill. Our experience and research from previous disasters, including the Exxon Valdez spill, allow us to anticipate and prepare for potential behavioral health needs such as anxiety, depression, and other adverse emotional and psychological effects.

To date the Department's Substance Abuse and Mental Health Services Agency has engaged in supporting state and local efforts to assess and meet the behavioral health needs of residents of the Gulf States and workers responding to this environmental disaster.

In addition, since the information available to inform decision making related to the human health impacts is inconclusive, Secretary Sebelius has asked the Institute of Medicine to convene an independent panel of scientific experts at a public workshop, exploring a broad range of health issues related to the oil spill. From heat exhaustion and other occupational hazards to exposure to oil and dispersants. This workshop will be next week on June 22 and 23 in New Orleans.

In conclusion, I want to assure the subcommittee that our office, along with our sister agencies within the Department and the administration as a whole, are taking the public health and medical consequences of the oil spill disaster very seriously and are implementing a comprehensive strategy to monitor and address any public health and medical issues that may arise.

Thank you for the opportunity to testify today, and I am happy to answer any questions.

[The prepared statement of Dr. Kaplowitz follows:]

Testimony
Subcommittee on Health
Committee on Energy and Commerce
U.S. House of Representatives

Deepwater Horizon Oil Spill: ASPR's Public Health and Medical Response

Statement of
Lisa Kaplowitz, M.D., M.S.H.A.
Deputy Assistant Secretary for Policy
Office of the Assistant Secretary for Preparedness and Response
U.S. Department of Health and Human Services

For Release on Delivery
Expected at 2:00pm
Wednesday, June 16, 2010

Good afternoon Chairman Pallone, Ranking Member Shimkus, and distinguished Members of the Subcommittee. I am Dr. Lisa Kaplowitz, Deputy Assistant Secretary for Policy in the Office of the Assistant Secretary for Preparedness and Response (ASPR), U.S. Department of Health and Human Services (HHS). Thank you for the opportunity to speak with you about our public health and medical efforts in response to the Deepwater oil spill disaster. I commend this Subcommittee for its leadership in holding today's hearing and share your sense of urgency on this important issue.

Before I begin, on behalf of the Department I would like to extend my sympathies to the families of those who lost their lives in the explosion and sinking of the Deepwater Horizon, to those who were injured, and to those whose way of life has been changed for years to come. The impacts of a disaster such as this must be considered in the time frame of not weeks and months, but years. Oil can remain toxic in the environment for years and we do not know the impact it could have on human health over the long term.

Today, my colleagues and I will talk about actions the Federal Government is taking to (1) prevent injuries, illnesses and exposure to hazardous substances among response personnel and the general public, (2) ensure the safety of seafood from areas affected by the oil spill, (3) monitor the potential health impacts of the oil spill in the short and long terms, and (4) facilitate access to care to those impacted by the spill.

ASPR SUPPORT TO DEEPWATER HORIZON OIL SPILL RESPONSE

From the time of the announcement of the explosion and fire, ASPR's Regional Emergency Coordinators in Region VI (includes Louisiana and Texas) and Region IV (includes the rest of the Gulf States) were in close communication with the States' Emergency Coordinators, the State Departments of Health, and the Association of State and Territorial Health Officials. HHS Liaison Officers, who function as Medical Unit Leaders and provide coordination and oversight of Federal medical care, were deployed to the Unified Area Command team in Robert, Louisiana, to the Incident Command Centers in Houma, LA and Mobile, AL, and to the National Incident Command Center in Washington, DC.

On May 31 HHS, in coordination with the Louisiana Department of Health and Hospitals, set up a mobile medical unit in Venice, Louisiana to provide triage and basic care for responders and residents concerned about health effects of the oil spill. The goal of this medical unit is to screen workers and citizens for exposure and refer those who require further care to local health care providers or hospitals. Our goal is to support the local community and fill in any gaps that may be there, not to displace local providers. The Secretary activated the National Disaster Medical System (NDMS), and deployed a Medical Strike Team from Arkansas to staff the first rotation of the medical unit. Furthermore, we deployed an Incident Response Coordination Team to provide command and control and logistics support for the unit.

GULF REGION SURVEILLANCE

HHS is working closely with the Occupational Safety and Health Administration (OSHA) and the Environmental Protection Agency (EPA) to monitor for and prevent illness among both those working directly to clean up the oil as well as the general population living in the Gulf Region.

Because the oil spill in the Gulf region is unprecedented, we do not know the potential short- and long-term impacts of the spill on the health of workers or the region's general population. It is important, therefore, that surveillance and monitoring of the health status of the impacted population be initiated early, with continued surveillance activities for a number of years. To this end, HHS established a Health Surveillance Working Group, coordinated by the National Institutes of Health's National Institute of Environmental Health and Sciences (NIEHS), to coordinate the activities of various departmental agencies engaged in surveillance and monitoring related to potential health impacts in the Gulf region. The primary objectives of this Working Group are to:

1. identify all current health and medical surveillance activities, as well as points of contact for all agencies involved in these activities;
2. identify gaps in surveillance and develop relevant plans to address these gaps;
3. develop central coordination and fusion of health and medical surveillance activities; and

4. ensure that information is shared among all groups participating in health surveillance activities, as well as among workers directly involved in the oil clean-up and the general population.

HHS agencies directly involved in health monitoring and surveillance in the Gulf region include:

1. The Office of the Assistant Secretary for Preparedness and Response (ASPR), in the Office of the Secretary, responsible for coordination of surveillance efforts within HHS and for the National Disaster Medical System.
2. The National Institute for Environmental Health Sciences (NIEHS), a component of the National Institutes of Health, responsible for developing worker training programs for environmental hazards and conducting research.
3. The National Institute for Occupational Safety and Health (NIOSH), a component of the Centers for Disease Control and Prevention (CDC), responsible for providing information about protecting workers and volunteers from potential occupational safety and health hazards.
4. The National Center for Environmental Health, a CDC component that conducts public health surveillance and educates the public about possible health effects associated with exposure to oil and dispersants, and
5. The Agency for Toxic Substances and Disease Registry (ATSDR), a sister agency to CDC that studies and provides scientific health information to prevent harmful exposures and diseases related to toxic substances.

The Health Surveillance Working Group currently has six subgroups to address: 1) stakeholder issues; 2) health and toxicologic information; 3) survey/roster/questionnaire development; 4) human health surveillance activities; 5) human health biomedical monitoring; and 6) research.

HHS agencies are working closely with State health departments in the Gulf Region, as States are responsible for population health surveillance and have systems to monitor changes in population health status seen by hospitals and other health care providers. As you will hear from my colleague at the CDC, we are also using poison control centers and the BioSense system to monitor health. To date, none of these systems has documented any evidence of an increase in conditions that could be linked to oil or dispersant exposure.

INSTITUTE OF MEDICINE PUBLIC WORKSHOP

As I have previously mentioned, there is potential for the oil spill to impact not only the health of workers coming into direct contact with crude oil and dispersants, but also volunteers, residents, and visitors, who are likely to be subjected to less direct forms of exposure. Current scientific literature is inconclusive with regard to potential health hazards resulting from the spill. Some scientists predict little to no toxic threat to humans from exposure to oil or dispersants, while others express serious concern about the potential short- and long-term impacts exposure to oil and dispersants could have on the health of responders and affected communities. Since information available to inform decision-making related to the human health impacts is inconclusive, Secretary

Sebelius has contracted with the Institute of Medicine to convene an independent panel of scientific experts that will plan and commence a public workshop exploring a broad range of health issues related to the oil spill, ranging from heat exhaustion and other occupational hazards to exposure to oil and dispersants. The workshop will bring together the best scientific expertise available, drawing from both local and national subject matter expertise.

A review of current literature will be undertaken to facilitate the identification of gaps in knowledge concerning the human health effects of exposure to crude and weathered oil, exposure to dispersants, and an examination of the effects of environmental conditions, such as heat exposure, that have an impact on workers' health. A portion of the discussion will focus on delineating the populations most vulnerable to the adverse health effects of the oil spill and will include a division of worker populations into subgroups based on vulnerability.

Because much is unknown about the potential short- and long-term health effects of the oil spill, a major objective of the workshop is to review and assess a framework for monitoring and surveillance of the affected populations. In conjunction with a discussion of surveillance, research methodologies and appropriate data collection will be explored for the purpose of obtaining a better understanding of the human health risks associated with the spill.

Finally, because communities across the Gulf Coast have incredibly rich cultures and a dynamic history that contribute to the multitude of linguistic and cultural diversity found

in the region, the workshop will take a special look at effective communication strategies to convey information about health risks to at-risk populations, accounting for culture, health literacy, language, technology, and geographic barriers.

The IOM Workshop will take place on June 22 and 23, 2010 in New Orleans, Louisiana and will be open to the public. A webcast and associated web portal for public comment will be available for those unable to attend in person.

BEHAVIORAL HEALTH RESPONSE EFFORTS

The Department is also directing attention and resources to address the behavioral health issues arising from the oil spill. The Deepwater Horizon oil spill may be unprecedented in terms of scope and damage, but experience and research from previous disasters—including the Exxon Valdez oil spill—allow us to anticipate and prepare for potential behavioral health needs. Disasters, whether natural or man-made, can have adverse emotional and psychological effects on people. However, evidence also shows that individual resilience and support systems help prevent most people from developing serious behavioral health conditions[1].

The nature and location of the Deepwater Horizon oil spill raises specific behavioral health issues. Gulf Coast residents have survived numerous hurricanes, including the devastation of Katrina and Rita, and previous oil spills associated with hurricanes. Re-

[1] Bonanno, G.A. (2008). Loss, trauma, and human resilience: Have we underestimated the human capacity to thrive after extremely aversive events? *Psychological Trauma: Theory, Research, Practice, and Policy, 5(1)*, 101-113.

traumatization—experiencing the repetition of a traumatic event or exposure to multiple disasters— can heighten vulnerability to other traumatic events[2]. Following the Exxon Valdez oil spill, ecological damage was compounded by economic repercussions for the fishing and oil industries. Depression and anxiety levels increased for a period before dissipating. Among fishermen whose livelihood had been impacted, an increase in depression, anxiety, stress, substance abuse, and domestic violence was noted.[3]

The Department recognizes that in developing and implementing a behavioral health response to any disaster, Federal support must be carried out based on needs identified in close partnerships with the States. State partners know the needs of their communities and—particularly in the case of the Gulf Coast states—have extensive experience responding to the disaster behavioral health concerns of their citizens.

To date, the Department has been engaged primarily in supporting State and local efforts to assess and meet the behavioral health needs of residents of the Gulf Coast States and workers responding to this environmental disaster. CDC is conducting surveillance for behavioral risk factors. To aid their efforts, HHS has provided information and resources to State Disaster Mental Health Coordinators. Through its Substance Abuse and Mental Health Services Administration—or SAMHSA—the

[2] Brewin, C.R., Andrews, B., and Valentine, J.D. (2000). Meta-analysis of risk factors for posttraumatic stress disorder in trauma-exposed adults. *Journal for Consulting and Clinical Psychology, 68(5),* 748-766.

[3] Palinkas, L.A. (1993). Community patterns of psychiatric disorders after the Exxon Valdez oil spill. *American Journal of Psychiatry, 150,* 1517-1523. ...and...Picou, S.J., and Arata, C.M. (1999). Chronic psychological impacts of the Exxon Valdez oil spill: Resource loss and commercial fishers. *Sociological Spectrum, 23,* 12-19.

Department has also instituted regular calls for information sharing among the affected Gulf Coast States. These calls allow State Disaster Mental Health and Substance Abuse Coordinators to discuss what their local providers are reporting about the behavioral health needs of the affected communities and gaps where assistance is needed.

Overall, States are reporting spreading anxieties, frustrations about the ongoing nature of the spill and its economic impact, and fears that more severe psychological and social issues will emerge. The State behavioral health agencies have also reported to us that they are anticipating that the longer-term stressors and economic consequences of this disaster could lead to an increase in depression, substance use and abuse, family violence, high-risk behavior, suicide, and even a resurgence of trauma symptoms from previous events.

Currently, however, crisis hotlines are not showing significant increases in calls, and providers are not reporting marked increases in requests for assistance. States, at this point, are requesting guidance from the Department on substance use and prevention strategies. Efforts are underway at SAMHSA to bring substance abuse prevention and treatment expertise and resources to the group in the next call, which is scheduled for/was held on June 15. The Department will continue to maintain regular contact with the affected State Disaster Mental Health Coordinators and with behavioral health partners in the region and will provide assistance as gaps and needs are identified.

The Department has emphasized the need for stress management efforts to be included in worker health and safety precautions. Our colleagues at the National Institute for Occupational Safety and Health—NIOSH—have created a stress information pamphlet for distribution to responders that describes a range of potential stress reactions and recommendations for monitoring and addressing them. My colleague from CDC has described their efforts, and ASPR has been working with them to ensure coordination around behavioral health concerns.

The Department is focusing on long-term recovery issues as well. The Office of the Assistant Secretary for Health and the Regional Health Administrators' offices are actively communicating with Federal, State, and regional partners to plan for long-term recovery issues, including behavioral health. HHS is actively involved in coordination activities related to behavioral health and human services, such as the Deepwater Interagency Solutions Group led by the Department of Homeland Security.

Conclusion

I want to assure the Subcommittee that our office, along with our sister agencies within the Department, and the Administration as a whole, are taking the public health and medical consequences of the oil spill disaster very seriously and are implementing a comprehensive strategy to monitor and address any public health and medical issues that may arise. HHS continues to work in close partnership with virtually every part of

the Federal government under a national preparedness and response framework for action that builds on the efforts and lessons learned from prior response efforts.

Thank you for your time and interest. I am happy to answer any questions.

Mr. PALLONE. Thank you, Dr. Kaplowitz.
Dr. Howard.

STATEMENT OF JOHN HOWARD

Dr. HOWARD. Thank you, Mr. Chairman, and Ranking Member Shimkus and other members of the committee. I am here to provide you an update on CDC's activities in the Deepwater Horizon response.

Following the fire and explosion on April 20, CDC immediately activated its Emergency Response Center to coordinate response activities across the agency. CDC's National Center for Environmental Health leads the incident command and works closely with the National Institute for Occupational Safety and Health to respond to potential health threats to the public, workers, and volunteers from the disaster.

As of today CDC has 170 staff involved in the response including 17 staff deployed to the Gulf Coast States. Throughout this response CDC has been coordinating our efforts with other operating divisions of HHS and with the Coast Guard, OSHA, EPA, and most importantly with State Health Departments in the Gulf States.

The response hazards to the public primarily include skin and respiratory irritation to various chemicals contained in the crude oil and in the oil dispersants. Skin contact should be avoided, and any area that has come in contact with oil should be washed thoroughly. Eye, nose, and throat irritation can occur from closer contact with crude oil. Those with asthma or chronic lung disease may be more sensitive than others to very low levels of hydrocarbons and even they and others can be sensitive to levels of hydrocarbons that are far below measurable levels.

People who have questions about potential health effects related to the oil may visit our website for more information. We have information for residents, for professional healthcare professionals, for workers and volunteers.

CDC in partnership with state and local health departments is tracking symptoms and health complaints that could be associated with the oil spill. Health surveillance and populations near the Gulf is being done through three mechanisms.

First, we are collecting data from 60 poison control centers throughout the Gulf Region. Second, we are collecting data from the bio-sense surveillance system, which includes 86 healthcare facilities, clinical laboratories, hospital systems, ambulatory care centers throughout the area to detect any increase in illnesses or other health effects.

Third, we are analyzing surveillance data that is being collected by State Health Departments in the Gulf, which are monitoring potential health effects related to the oil spill. We posted initial results from these collaborative surveillance activities on our website, and we update those routinely.

CDC is also evaluating air, data from air, sediment, and water samples in the Gulf, looking for any indication of contaminants at levels that would pose a threat to public health. After EPA's public release of the chemical components of the dispersants being used in the response, CDC has completed a preliminary review of the toxicity of these dispersant components and has concluded that the

substances of greatest concern to human health are being monitored by EPA.

NIOSH is doing three major activities and is working together with the Occupational Safety and Health Administration. First, we are rostering all workers and volunteers included in the response by means of a voluntary questionnaire. To date we have rostered 13,000 workers, and we hope to continue that process to get all of the workers and volunteers.

Second, NIOSH is analyzing data from all sources for worker symptoms, health complaints, work-related injuries or incidents so that we can recommend interventions to prevent future injuries and illnesses. Third, NIOSH is conducting a Health Hazard Evaluation of reported illnesses among workers involved in offshore cleanup operations as requested by BP on May 28. Finally, as response activities proceed, CDC is working to protect the health and safety of workers, volunteers, and residents in the affected areas of the Gulf State, and as we learn more we will update our recommendations.

I thank you for your continued support, and I am pleased to answer any questions you may have.

[The prepared statement of Dr. Howard follows:]

Testimony before the
Subcommittee on Health
Committee on Energy and Commerce
U.S. House of Representatives

HHS Actions to Identify and Address Health Effects of the BP Oil Spill

John Howard, M.D.
Director, National Institute for Occupational Safety and Health
Centers for Disease Control and Prevention
U.S. Department of Health and Human Services

For Release upon Delivery
Expected at 2:00 p.m.
June 16, 2010

Good afternoon, Mr. Chairman, Ranking Member Shimkus, and distinguished members of the subcommittee. Thank you for inviting me to testify today. I am Dr. John Howard, Director of the National Institute for Occupational Safety and Health (NIOSH), which is part of the Centers for Disease Control and Prevention (CDC) within the U.S. Department of Health and Human Services (HHS). I am here today to provide an update on CDC's response to the recent Gulf of Mexico oil spill and our ongoing efforts to anticipate, monitor and respond to the potential health threats to workers and the public.

CDC's Environmental Health Response

On April 20, 2010, after the explosion on the Deepwater Horizon leading to the oil spill, CDC's National Center for Environmental Health (NCEH) immediately began monitoring the situation. On April 22, NCEH staff participated in the National Response Team's activation meeting and then formed an oil spill task force to monitor and respond to any potential public health hazards associated with the oil spill. NCEH quickly posted information for Gulf coast residents on the CDC Website describing the potential health risks associated with the oil spill and steps individuals can take to protect their health and safety. On May 10, CDC's Emergency Operations Center (EOC) officially activated, bringing in personnel from across CDC – including staff with expertise in environmental health, occupational safety and health, and emergency response – and coordinating CDC's efforts. NCEH is leading the EOC incident command and response activities and, together with NIOSH, is providing the vast majority of staff engaged in CDC's response effort. As of June 14, CDC had 170 staff responding to the oil spill.

Public Health Surveillance

Within the first few days of the response, CDC, in coordination with our federal, state, and local partners, stepped up our public health surveillance activities, looking for possible health effects that could be related to the oil spill – whether experienced by workers involved in the response and cleanup efforts or by Gulf coast residents. NCEH contacted the American Association of Poison Control Centers to request that local poison control centers code any calls related to the oil spill so that CDC is able to track the number of related calls. NCEH started using CDC's BioSense surveillance system – which analyzes diagnostic and pre-diagnostic health data from clinical laboratories, hospital systems, ambulatory care sites, health plans, U.S. Department of Defense and Veterans Administration medical treatment facilities, and pharmacy chains – to enhance surveillance for respiratory health effects in states along the Gulf of Mexico coast. NCEH also reached out to the state epidemiologists in Alabama, Florida, Louisiana, Mississippi and Texas to ensure open lines of communication, coordinate public health surveillance activities, provide weekly summaries of surveillance findings, and work together to monitor for potential health effects related to the oil spill. CDC posted results from these collaborative surveillance activities on the CDC Website on June 10.

Throughout the response to the oil spill, CDC has closely coordinated our efforts with other components of HHS – including the Assistant Secretary for Preparedness and Response, the Food and Drug Administration (FDA), the National Institutes of Health (NIH), and the Substance Abuse and Mental Health Services Administration; other federal partners like the U.S. Coast Guard (USCG), the Department of Labor's Occupational Safety and Health Administration (OSHA), and the Environmental Protection Agency (EPA); and the Gulf coast

states.

CDC, in partnership with state and local health departments, is closely tracking surveillance data across the Gulf coast states for health effects that may be related to the oil spill. These surveillance systems are being used to track symptoms related to the eyes, skin, and respiratory, cardiovascular, gastrointestinal, and neurological systems, including worsening of asthma, cough, chest pain, eye irritation, nausea, and headache. If the surveillance systems identify individuals with these symptoms, state and local public health officials will be able to follow up as needed to investigate whether there is an association between the symptoms and the oil spill. This follow-up is important because the same symptoms could be related to a different cause. The agency is also evaluating data from air, sediment, and water samples in the Gulf, looking for any indication of contaminants – such as volatile organic compounds, semi-volatile organic compounds, non-methane organic compounds, metals, particulate matter, carbon monoxide, and sulfides – at levels that would pose a threat to public health.

Potential Exposure Pathways

People can be exposed to hazardous substances related to the spill by breathing them (air), by swallowing them (food, water), or by touching them (skin). Individuals should avoid close contact with oil and fumes from any burning oil. Children tend to be more sensitive than adults to oil and other forms of pollution. What might be annoying to an adult could be a real problem for a child, particularly if the child is an infant or toddler, or has a pre-existing condition. If a person has concerns about a possible exposure, he or she should seek medical attention and phone the poison control center.

- Contact: While for most people, brief contact with a small amount of oil will do no harm, contact with the oil should be avoided. If skin comes in contact with oil, the area should be washed with soap and water, baby oil, petroleum jelly, or a cleaning paste for hands such as those sold at auto parts stores. Solvents, gasoline, kerosene, diesel fuel, or similar products to clean oil off skin should not be used. Rashes or dark, sticky spots on the skin that are hard to wash off are symptoms that indicate a person should see a doctor or other health care provider. If a person gets oil in the eyes, eyes should be flushed with water for 15 minutes. If a person swallows oil, he/she should not try to vomit it, as this may get oil into the lungs. Swallowing small amounts (less than a coffee cup) of oil will cause upset stomach, vomiting, and diarrhea, but is unlikely to have long-lasting health effects.
- Smell: People may be able to smell the oil spill from the shore. The odor comes from chemicals in the oil that people can smell at levels well below those that would make most people sick. However, exposure to low levels of these chemicals may cause irritation of the eyes, nose, throat, and skin. Those with asthma or other lung diseases may be more sensitive to these effects.
- Inhalation: If a person inhales oil vapors, or smoke from burning oil, he or she should move to an area where the air is clearer. If a person has inhaled a lot of vapor or smoke and feels short of breath, has chest pain or tightness, or dizziness, he or she should seek medical attention.
- Burning oil: When responders burn some of the oil, some particulate matter (PM) may reach the shore. PM is a mix of very small particles and liquid droplets found in the air. PM may pose a greater risk for people who have a chronic condition such as asthma or

heart disease. If a person can smell gas or see smoke or knows that fires are nearby, he/she should stay indoors, set the air conditioner to reuse indoor air, and avoid physical activities that put extra demands on the lungs and heart.

- Water: Drinking water and household water are not expected to be affected by the spill. However, water used for recreation may be affected. Swimming in water contaminated with chemicals from the oil spill could cause adverse health effects.
- Food: FDA and the Department of Commerce's National Oceanic and Atmospheric Administration are constantly monitoring the oil spill and its potential impact on the safety of seafood harvested from the area. The public should not be concerned about the safety of seafood in the stores at this time. Closure of the waters to fishing is the key step in preventing tainted fish from entering commerce. In addition, FDA is testing seafood at processing facilities in the Gulf region to further ensure that contaminated seafood does not reach consumers.

CDC's Occupational Safety and Health Response

As part of CDC's overall response, NIOSH involvement in the oil spill response began very early. NIOSH was with OSHA and NIH's National Institute of Environmental Health Sciences (NIEHS) in the initial HHS response visit to the Gulf during the week of May 3. Since then, NIOSH has been providing information to BP, OSHA, the Coast Guard, and other federal and state partners about protecting response workers and volunteers from potential occupational safety and health hazards.

Occupational Safety and Health Hazards

One key challenge in this public health response is that it appears that there are seven groups of workers potentially exposed to crude oil, weathered oil, chemical dispersants, combinations thereof, and other conditions that could pose hazards, and these groups are likely to have different exposure profiles. We are working to sort out these groups and their exposure differences and similarities. The groups include: (1) source control workers; (2) workers on vessels involved in burning; (3) workers on vessels not involved in burning; (4) equipment decontamination workers; (5) wildlife cleanup workers; (6) on-shore cleanup workers; and (7) waste stream workers.

To date, we believe the key exposures and hazards for these groups of workers include:

- Heat stress;
- Dermal exposure to oil, which is a skin irritant;
- Fatigue (we know that disaster response and recovery workers often work longer shifts and more consecutive shifts than the typical 40-hour work week, which may increase the risk of occupational injuries and accidents and can contribute to poor health);
- Potential exposure to chemicals, including benzene and other volatile organic compounds (VOCs), oil mist, polycyclic aromatic hydrocarbons (PAHs), and diesel fumes;
- Sprains, strains and lacerations; and
- Psychological stress.

To protect workers and volunteers against these occupational safety and health hazards and to better understand the threats posed by these hazards, NIOSH has undertaken a number of

activities, including: supporting safety and health training of response workers; developing recommendations for the use of Personal Protective Equipment (PPE); rostering and monitoring responders; collecting and evaluating occupational exposure data; conducting a Health Hazard Evaluation of workers; and researching the toxicity of potential exposures.

Supporting Safety and Health Training of Response Workers

To emphasize prevention through training, NIOSH has worked with OSHA and NIEHS to devise recommendations for worker training materials. Before being employed and before receiving an ID badge, all cleanup workers must complete between one to four training modules of classroom training, depending on their job assignment. These modules have been approved for use in this event by OSHA in compliance with the OSHA hazardous waste operations and emergency response standard (29 CFR 1910.120, and OSHA Compliance Directive CPL 2-2.51). NIOSH has been advising OSHA, BP, and other health and safety personnel about the capabilities of different types of Personal Protective Equipment (PPE), and has helped BP develop a matrix for selecting appropriate PPE. The type of protective equipment that is appropriate for each worker to use depends upon the circumstances of that worker's particular job and the mix of oil and dispersants to which that the worker may be exposed. NIOSH also has developed fact sheets targeted to oil spill responders to describe the health risks posed by the use of dispersants and the risk of stress associated with responding to a traumatic event like this. These fact sheets are available on the CDC Website at: http://www.cdc.gov/niosh/topics/oilspillresponse/.

Developing Recommendations for the Use of Personal Protective Equipment

To protect response workers from potential adverse health effects arising from their work, NIOSH recommends appropriate engineering controls (e.g., picking up tarballs with a scoop rather than by hand) and administrative controls (e.g., limiting the number of workers in areas with great exposure potential), as well as the use of task-specific PPE, including protective eyewear, clothing, gloves, and footwear. Selection of appropriate PPE requires: (1) identification of the hazards faced by workers (e.g., heat stress, fatigue, inhalational and skin exposure to crude oil and its constituents, chemical dispersants, and cleaning solvents, and musculoskeletal injuries); (2) analysis of the specific job tasks performed by workers (e.g., source control; surface control, such as laying boom, burning crude oil, and sheen busting; shoreline and marsh cleaning; and decontamination of personnel, equipment or wildlife); and (3) assessment of the risks that specific tasks present for workers.

VOCs, which may be more likely to be present at or near the oil leak source, pose a greater risk of inhalational exposure than the risk encountered in "aged" or "weathered" crude oil that may be encountered on or near the shoreline. Weathered crude contains mostly higher molecular weight, very low volatility hydrocarbon constituents of crude oil. When oil is deposited on shore, use of gloves and protective clothing to prevent dermal contact is recommended, but such deposits (referred to as "tarballs" or "tarpatties") are unlikely to pose inhalation risks. So, recommendations for respiratory protection and other PPE are not clear-cut and will vary depending on the characteristics of the oil, the type of work being done, and the magnitude of exposure. NIOSH and OSHA are currently working together on a respiratory protection policy.

It is important to note that in recent years several studies of previous oil spill response efforts have reported acute and chronic health effects in response workers. These studies may underestimate the health effects associated with oil response work since the magnitude and duration of the Deepwater Horizon response is unprecedented. At this time, there has been no comprehensive assessment of all response worksites in the Gulf, and as a result, we have an incomplete understanding of the human health toxicity associated with exposure to large amounts of dispersants and the toxicity associated with mixed exposure to large amounts of crude oil and dispersants together. This means that knowledge about potential exposures to the mixed exposure of crude oil and dispersant associated with the Deepwater Horizon response work is still evolving. Therefore, NIOSH believes it is prudent to reduce the potential for such adverse health effects by the responsible use of administrative controls and PPE.

Rostering and Monitoring Responders

NIOSH is administering surveys to thousands of response workers who are participating in the recovery efforts in an effort to compile a roster of individuals involved in the response. The purpose of this roster is to obtain an accurate record of who is participating in the cleanup. The information collected in this roster would be vital for possible future studies to determine whether health conditions that may develop in the future are associated with occupational exposures during the cleanup. A roster is an important tool to capture site-specific information, such as a worker's job task, time on task, available exposure information, use of PPE, and other related factors. Participation in the survey is voluntary, and once the information is collected, NIOSH will protect individuals' personally identifiable information as confidential to the extent allowed by the law.

It has been challenging to enroll workers due to the different locations of the training sites. To date we have visited all the staging areas in Louisiana to roster workers, and we are currently enrolling workers in Mississippi, Alabama, and Florida. Through our rostering efforts, we have already captured information from more than 11,000 workers responding to this event. In an attempt to reach all cleanup workers, the survey is being administered in English, Spanish, and Vietnamese. A copy of the survey is included as Exhibit 1.

Collecting and Evaluating Occupational Exposure Data

NIOSH is also gathering and evaluating occupational safety and health data for Gulf response workers, including:

- Demographic and role specific survey data collected from the rostering of workers involved in the response, as discussed earlier;
- Epidemiologic survey data collected from rostered workers who may have health symptoms resulting from their response participation (signs and symptoms of injury, illness or job stress); and
- Scientific/epidemiologic industrial hygiene data collected from workers in the workplace (i.e., measures of physical, biological or medical conditions in the workplace which may possibly be harmful) through a Health Hazard Evaluation that NIOSH is conducting.

NIOSH is also evaluating data collected by the EPA, OSHA, other federal agencies, state agencies, and BP, including:

- Personal monitoring data from work environments on-shore, aboard vessels, and upon off-shore work platforms;
- Response worker injury and illness incidence reports: NIOSH is currently collecting and characterizing all of the acute injury and illness incidents recorded by BP to identify trends and recommend interventions to prevent additional injuries and illness; and
- Injury and illness data on BP's employees, contract employees, federal, state, and local responders, and volunteers who seek care at a BP medical facility. NIOSH is recoding BP's data into a standardized reporting format.

Conducting a Health Hazard Evaluation of Workers

NIOSH has a unique opportunity to assess these occupational safety and health hazards and others that may arise as we conduct a Health Hazard Evaluation (HHE) of reported illnesses among workers involved in offshore cleanup operations, as requested by BP on May 28. Several NIOSH staff members have been deployed to the Gulf coast to work on this HHE, including industrial hygienists, who are assessing exposures through observation, industrial hygiene assessments, and evaluation of work practices and use of PPE, and medical officers, who are evaluating illnesses and injuries among groups of offshore workers. The Louisiana Department of Health and Hospitals has agreed to provide medical reports of seven previously hospitalized fishermen for NIOSH physicians to review. Once the HHE is completed, NIOSH will compile the findings and recommendations in a report that will be provided to employer and employee representatives, and it will be publicly available on the NIOSH Website.

Researching the Toxicity of Potential Exposures

NIOSH is also conducting laboratory research to address reports of workers with respiratory symptoms and headaches by initiating toxicity studies of both crude oil and chemical dispersants. This research will seek to determine the acute pulmonary, central nervous system, and cardiovascular responses to inhalation of dispersants, oil constituents, and the combination of the two, and the results will help inform the development of prevention strategies. We anticipate that preliminary data may be available by the end of the summer. NIOSH also has proposed a study to address concerns regarding skin exposure and the handling of oil during beach cleanup.

Conclusion

Regardless of the final size and extent of the spill, it is already evident that response and cleanup activities will be underway in the Gulf for an extended period of time, and thus we must remain vigilant to protect response and recovery workers, volunteers and the public from potential exposures to oil, its constituents, and dispersants. CDC continues to work diligently to protect the health and safety of workers and residents along the Gulf coast. This oil spill underscores the importance of CDC's work and the continued need for further health and safety research. It is important to protect against potential health hazards now so that we do not have to study chronic health effects associated with this spill in the future. Therefore, the occupational and environmental hazards associated with the oil spill must be identified, monitored, evaluated and addressed. As this situation evolves and we learn more about the potential health hazards, CDC will update our recommendations for how to protect the health of those living and working along the Gulf coast. I appreciate the opportunity to describe CDC's response activities in the Gulf of

Mexico. Thank you for your continued support. I am pleased to answer any questions you may have.

Exhibit 1 – Gulf Coast Oil Spill Survey

Form Approved
OMB No. 0920-0851
Exp. Date XX/XX/XXXX

Date _____

Gulf Coast Oil Spill Initial Survey

Name (Last, First, MI)

Date of birth / /

Last four digits of social sec.

Gender
☐ Male
☐ Female

Race/Ethnicity
☐ White ☐ Black
☐ Hispanic
☐ Asian ☐ Other

Cell phone (with area code)

Street address

City

State

ZIP

Email address

Name and number of contact who will know where you are in 6 months

Employer or volunteer organization on site

What has been your USUAL Job prior to the Spill?

How many years have you been working at your USUAL job?

On the Oil Spill, are you a: ☐ BP employee ☐ Contractor ☐ Government worker ☐ Volunteer ☐ Don't Know

Would you be willing to be contacted about participating in a possible post-event survey? ☐ Yes ☐ No

Response Work (please be as specific as possible)

What will be your job or responsibilities?

Will your job tasks involve the potential of exposure to oil or oily substances?
☐ Yes
☐ No
☐ Don't Know

If yes, please describe the tasks:

What are your expected deployment location(s)?

How long are you planning on working on the oil spill?
☐ less than 1 week to one week
☐ 1 week to 2 weeks
☐ more than 2 weeks to one month
☐ More than one month
☐ As long as the work is available
☐ I don't know

What training have you received? (Check all that apply)
☐ Module 1: BP HSE Basic Orientation
☐ Module 2: Contractor Expectations
☐ Module 3: Post-Emergency Spilled Oil Cleanup
☐ First Responder Awareness
  ☐ Annual refresher
☐ First Responder Operations (8 hr)
  ☐ Annual refresher
☐ Hazardous Materials Technician (24 hr)
  ☐ Annual refresher
☐ HAZWOPER (24 hr)
  ☐ Annual refresher
☐ HAZWOPER (40 hr+)
  ☐ Annual refresher
☐ Other training, describe:

Are you expecting to use personal protective equipment to protect your skin?
☐ Yes
☐ No
☐ Don't Know

Are you expecting to use personal protective equipment to protect your eyes (goggles or eyewear)?
☐ Yes
☐ No
☐ Don't Know

Are you expecting to use respiratory protection?
☐ Yes
☐ No
☐ Don't Know

Have you been fit-tested for a respirator in the last year?
☐ Yes
☐ No
☐ Don't Know

Do you smoke?
☐ Yes, number of cigarettes per day: ____
☐ No
☐ Prefer not to answer

CDC recommends that adults be vaccinated for tetanus every 10 years. Have you had a tetanus vaccine within the past 10 years?
☐ Yes
☐ No
☐ Don't Know

Do you have other issues or concerns?

I have read and understand the Data Use and Disclosure sheet about who is collecting this information and how it will be used and that my participation is voluntary.

Signature _____

Public reporting burden of this collection of information is estimated to average 5 minutes per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. An agency may not conduct or sponsor, and a person is not required to respond to a collection of information unless it displays a currently valid OMB control number. Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden to CDC/ATSDR Information Collection Review Office, 1600 Clifton Road NE, MS D-74, Atlanta, Georgia 30333; ATTN: PRA (0920-0851).

Mr. PALLONE. Thank you, Dr. Howard.

Dr. Miller, you are next.

STATEMENT OF AUBREY MILLER

Dr. MILLER. Thank you, Mr. Chairman, Ranking Member Shimkus, and the rest of the committee. Thank you for this opportunity to provide information about the activities undertaken by the National Institute of Environmental Health Sciences, NIEHS, in response to the oil spill disaster in the Gulf of Mexico. My name is Aubrey Miller. I am Senior Medical Advisor to the Director of NIEHS and the National Toxicology Program.

While extensive data exists on the effects of oil spills in wildlife and ecosystems, the effects on human health from these exposures have not been well studied. Experts agree that the potential for human health hazards exist since both crude oil and chemicals being used to fight the spill contain harmful substances.

Yet understanding and quantifying these effects requires further study. A recent review article which looked at 34 publications concerning the health effects related to past oil spill, past tanker oil spills made clear that there is very little data concerning exposed individuals and only for a handful of these incidents.

Historically, the workers involved in such cleanups have reported the highest levels of exposure and most acute symptoms. The reporting of higher levels of lower respiratory track symptoms was observed in fishermen who have participated in the cleanup following the Prestige tanker accident off the coast of Spain.

A few studies have looked at psychological effects of spills both among workers and in affected communities. Follow-up studies of affected populations from the Exxon Valdez spill, for example, reported higher levels of anxiety disorder, post-traumatic stress disorder, and depression. Such research findings remind us of the importance of keeping longer-term, less-obvious sequel in mind, not just the immediate toxicity affects when considering the overall health impact of this type of disaster.

Now, turning our attention to the Gulf oil spill response, our program director was on site within days of the platform explosion. NIH—an NIEHS team have been a continuous presence in Louisiana and have been working with the National Incident Command officials, as well as local and state officials, academic institutions, and other federal agencies to provide technical assistance for worker safety training related to the oil spill through NIEHS's Worker Training Education Program.

The NIEHS Superfund Worker Training Program has provided safety training to emergency responders and hazardous materials workforce for the last 23 years. For other emergency responses such as the World Trade Center attack and now the oil spill, NIEHS was able to provide nearly immediate assistance to help protect workers.

Three different levels of training for oil spill workers have been developed and supported by NIEHS; 40-hour training course on hazardous waste operations and emergency response, a short 2- and 4-hour training courses on safety and health awareness, developed together with OSHA, and as of June 10, BP reports that it

has trained approximately 30,500 people using NIEHS worker safety training materials.

Additionally, more than 5,000 pocket-sized booklets titled, "Safety and Health Awareness for Oil Spill Cleanup Workers," have been distributed to instructors, safety officials, frontline responders, participants in the BP Vessels of Opportunity Program, and beach workers in the Shoreline Cleanup Assessment Team. These booklets have been printed in English, Spanish, and Vietnamese. Here is an example of one. NIEHS has helped support and facilitate interagency coordination to protect the workers and the public affected by this disaster.

To help assess the response to this oil spill crisis on June 1, NIEHS in cooperation with the Coast Guard and BP, facilitated a multi-agency public health assessment of the oil spill responders in the Louisiana area to determine the need for any additional medical support and additional mobile medical units.

In addition, NIEHS has helped formed and is collating the interagency work crew, the Interagency Oil Spill Health Monitoring Researchers' Work Group. Within this work group NIEHS is focused directly on identifying all the relevant human health and toxicologic information to help inform our current actions and drive research efforts.

Two, to develop new tools to gather information about the adverse health effects stemming from the oil spill, both in the short term and long term, and three, engaging additional stakeholders to work with us in these efforts that produce the best processes, products, and outcomes.

Lastly, NIH is exploring a variety of different funding mechanisms and programs to carry out important research related to this particular disaster and the people whose health may be affected. We expect a number of researchers to apply immediately for our time-sensitive awards. Proposals are accepted each month, reviewed, and funded within 3 months, and as you noted, Mr. Chairman, that—NIH Director, Mr. Collins, has recently appropriated $10 million for additional research along these lines. These studies should prove useful information for some of our unanswered questions.

One of the most important takeaway messages from our current and ongoing review of the science regarding human health effects of oil spill disasters is that there is a clear need for additional health monitoring and research to underpin our public health decisions. As the situation in the Gulf of Mexico continues to unfold, NIEHS will stay engaged, both as a committed partner in research, on the health effects of these exposures on workers and the affected communities, and our efforts to keep cleanup workers safe.

Thank you, and I am happy to answer your questions.

[The prepared statement of Dr. Miller follows:]

Statement for the Energy and Commerce Committee Subcommittee on Health
United States House of Representatives
June 16, 2010
NIEHS Activities Related to the Gulf Oil Spill

Statement of
Aubrey Keith Miller, M.D., MPH
Senior Medical Advisor
National Institute of Environmental Health Sciences
National Institutes of Health
U.S. Department of Health and Human Services

Chairman Pallone, Ranking Member Shimkus, and members of the Subcommittee, thank you for the opportunity to provide information about the activities undertaken by the National Institute of Environmental Health Sciences (NIEHS), part of the National Institutes of Health (NIH), an agency of the Department of Health and Human Service (HHS), in response to the oil spill disaster in the Gulf of Mexico. My name is Aubrey Miller, and I am Senior Medical Advisor to the Director of the NIEHS. I will give you a brief overview of our understanding of possible human health effects of exposures related to the Gulf oil spill, a preview of some of our planned research, a description of how NIEHS is working with our agency partners to facilitate and support needed health monitoring and research activities to further our understanding and hopefully prevent adverse health effects among workers and exposed communities, and a report on NIEHS's early and ongoing role in helping to protect oil spill workers.

Effects on human health from oil spills

I would like to first provide a brief overview of our understanding of the human health effects associated with oil spills. While experts agree that potential for human health hazard exists, since both crude oil and the chemicals being used to fight the spill contain harmful substances, understanding and quantifying these effects requires further study.

Determination of actual exposure and risk is not a trivial task. To begin with, the composition of the spilled oil changes over time. The oil nearest the source of a spill contains higher levels of some of the more volatile and more toxic components, such as benzene, toluene, and xylene. These and other volatile organic compounds (VOCs) are well-known chemical hazards that can cause acute toxicity as well as longer-term health effects such as cancer, birth defects, and neurological effects. Oil that has been exposed to air and water for a period of time, so-called "weathered oil," has lost most of these VOCs. Nonetheless, weathered oil still contains other hazardous chemicals such as polycyclic aromatic hydrocarbons and heavy metals, such as nickel and lead, and therefore should be handled with skin protection. If aerosolized by wind and weather, it also could be taken into the body through respiration.

Other potential sources of toxicity exist due to the use of dispersants, but there is little information on the precise level of risk to public health that dispersants present when utilized on such a large scale. Different routes of exposure must also be considered, such as respiratory exposure, skin exposure, and ingestion. Different levels of exposure and risk are associated with different exposure routes for individuals who may come in contact with the oil in a variety of

ways, such as working on a boat, or doing cleanup on a beach, or through living in a nearby community.

In a recent article in the *Journal of Applied Toxicology*, the authors reviewed the results of studies of human health effects related to oil tanker spills as reported in 34 publications.[1] The clearest conclusion from the examination of these studies is that we have very little data; followup of exposed people has occurred only for a handful of the tanker spill incidents from the past several decades. Historically, the workers involved in cleanup have reported the highest levels of exposure and the most acute symptoms, when compared to subjects exposed in different ways, as seen in the reporting of higher levels of lower respiratory tract symptoms in fishermen who participated in cleanup following the *Prestige* tanker accident off the coast of Spain.[2] Other studies have looked at psychological effects of spills, both among workers and in affected communities; follow-up studies of affected populations from the *Exxon Valdez* spill, for example, reported higher levels of generalized anxiety disorder, post-traumatic stress disorder, and depressive symptoms.[3] Such research findings remind us of the importance of keeping longer-term, less obvious sequelae in mind, not just the immediate toxicity effects, when considering the overall human health impact of this type of disaster.

NIH-Funded Research

NIH is exploring a variety of different funding mechanisms and programs to carry out what will be important research related to this particular disaster and the people whose health may be affected by it. We hope that such research findings provide useful information for some of the unanswered questions discussed above.

NIEHS has a grant program for time-sensitive research and community education. We shall use this program to quickly fund research on the public health impact of the oil spill on affected populations in the region. Topics to be considered for funding are environmental monitoring and characterization related to the Gulf oil spill; toxicity testing of complex mixtures using high-throughput techniques and innovative statistical approaches; exposure assessment for individuals and populations; research on short-term health effects, including respiratory effects, irritants, and changes in immune function; long-term health effects, such as risk of cancer, adverse pregnancy outcomes, and neurodevelopmental effects in children; and risk assessment research, including understanding the unique risks of vulnerable populations, such as children, pregnant women, the elderly, and people with chronic health problems. NIEHS is coordinating with other Federal agencies, including the Environmental Protection Agency (EPA), to appropriately disseminate the results of this research and to avoid duplication of effort.

NIEHS also co-funds Centers for Oceans and Human Health with the National Science Foundation (http://www.niehs.nih.gov/research/supported/centers/oceans/index.cfm). The

---

[1] Aguilera F, Mendez J, Pasaro E, Laffon B. (2010) Review on the effects of exposure to spilled oils on human health. J Appl Toxicol 30:291-301

[2] Zock JP, Rodriguez-Trigo G, pozo-Rodriguez F, Barbera JA, Bouso L, Torralba Y, Anto JM, Gomez FP, Fuster C, Verea HS, SEPAR-*Prestige* Study Group. (2007) Prolonged respiratory symptoms in clean-up workers of the Prestige oil spill. Am J Resp Crit Care 176:610-616.

[3] Palinkas LA, Petterson JS, Russell J, Downs MA. (1993) Community patterns of psychiatric-disorders after the *Exxon-Valdez* oil-spill. Am J Psychiat 150:1517-1523

Centers have responded to the oil spill in various ways, such as providing expertise to local and state health departments, monitoring beach conditions in real-time, and dispatching researchers to the coast for water and wildlife sampling and analyses. Additional "rapid response" funds have also been provided by NSF to help carry out these efforts.

Also, NIH's National Center on Minority Health and Health Disparities (NCMHD) is supporting a consortium of seven medical and public health institutions that will expand and connect research projects to help Gulf Coast communities prepare for and recover from weather-related disasters, epidemics and environmental health threats. Projects by members of the SECURE (Science, Education, Community United to Respond to Emergencies) consortium include development of technology to enhance surveillance systems for early health and environmental warnings and to guide the efforts of first-responders during and after a disaster, arrangement of post-disaster health care, training programs to improve preparedness through community groups and schools, and post-traumatic stress counseling.

NIEHS, along with other HHS agencies, will keep a close accounting of costs and will identify funds from existing resources for research.

NIEHS Leadership Activities on Interagency Oil Spill Health Monitoring Workgroups

NIEHS has leveraged our existing relationships, rapid worker training response, toxicology expertise, and research programs to help support and facilitate interagency coordination and the overarching mission to protect the workers and the public affected by this disaster.

To help assess the response to the oil spill crisis, on June 1, 2010, NIEHS, in cooperation with the U.S. Coast Guard (USCG) and BP, facilitated a federal multi-agency public health assessment of the oil spill responders in the Louisiana area to determine the need for any additional medical support or additional mobile medical units. The team, which included the Assistant Secretary for Preparedness and Response (ASPR) and the Director of the National Institute for Occupational Health (NIOSH) within HHS, as well as the Deputy Assistant Secretary for the Occupational Safety and Health Administration (OSHA), met with Unified Command leaders and toured beach cleanup operations in Port Fourchon, LA.

Furthermore, NIEHS helped form and is co-leading an interagency workgroup, the "Interagency Oil Spill Health Monitoring and Research Workgroup," which includes HHS representatives from: the Assistant Secretary for Preparedness and Response (ASPR); NIOSH, the National Center for Environmental Health, and the Agency for Toxic Substances and Disease Registry (all within the Centers for Disease Control and Prevention); and the Substance Abuse and Mental Health Services Administration. Within this workgroup NIEHS is directly focused on: 1) identifying all the relevant human health and toxicological information to help inform our current actions and drive needed intramural and extramural research efforts; 2) developing new tools, such as health surveys and medical tests, to gather essential information about adverse health effects stemming from the oil spill, both in the short term and long term; and 3) engaging additional stakeholders, through our network of existing governmental, academic, and non-governmental organizations to work with us in this effort to produce the best process, products, and outcomes.

Safety Training for Oil Spill Workers

For 24 years, NIEHS has administered a Worker Training Program under its Superfund authority. The Program has provided safety training to emergency responders and the hazardous materials workforce, and we were able to provide nearly immediate assistance in the oil spill response through this program.

Our program director, Chip Hughes, was on site within days of the platform explosion. Hughes and his team have had a continuous presence in Louisiana and have been working with USCG, OSHA, and BP officials, as well as local and state officials, academic institutions, and other federal agencies to provide worker safety training.

Three different levels of training for oil spill workers have been developed and supported by NIEHS. As of June 10, 2010, BP reports that it has trained approximately 30,500 workers using the NIEHS worker safety training materials:

- **A 40-hour Training Course on Hazardous Waste Operations and Emergency Response. This is commonly known as HAZWOPER training.**

  This is part of our regular, ongoing worker training offered through NIEHS and OSHA. This extensive training is now being delivered to supervisors and individuals who will likely have direct contact with oil spill products. More than 1,040 people in the Gulf Coast region have completed the HAZWOPER training.

- **Short 2 and 4-hour training courses on Safety and Health Awareness.**

  NIEHS, together with OSHA, helped develop several short educational courses, including some online training, which focus on the necessary hazard awareness and safety training for all oil spill workers hired by BP. This training is provided to individuals who will have minimal contact with oil spill products. These courses provide training on safe work practices, personal protective equipment, decontamination, heat stress and other common hazards for cleanup work. As of June 10, approximately 29,500 workers throughout the Gulf Coast have completed these training courses, according to BP reports. The training is being paid for and administered by BP. The courses are being provided in English, Spanish and Vietnamese. OSHA is also working with BP to develop a new eight-hour curriculum for worker safety and health training.

Additionally, more than 5,000 pocket-sized booklets titled "Safety and Health Awareness for Oil Spill Cleanup Workers" have been distributed to instructors, safety officials, front-line responders participating in the BP Vessels of Opportunity Program, and beach workers in the Shoreline Cleanup assessment Team. The booklets also have been printed in English, Spanish and Vietnamese.

All of the NIEHS worker training resources and materials are available on our website at www.niehs.nih.gov/oilspill. In addition to our worker education and safety efforts, NIEHS has proactively pursued several avenues including rapid promotion of individual NIH-funded

research programs and collaborative interagency engagement to help close our knowledge gaps and foster the research needed to support science-based public health decisions and actions.

Conclusion

One of the most important take-away messages from our current and ongoing review of the science regarding human health effects of oil spill disasters is that there is a clear need for additional health monitoring and research to underpin our collective understanding and public health decisions. As the situation in the Gulf of Mexico continues to unfold, NIEHS will stay engaged, both as a committed partner in research on the health effects of these exposures on workers and affected communities and in its efforts to help keep our cleanup workers safe.

Thank you, and I am happy to answer your questions.

Mr. PALLONE. Thank you, Dr. Miller.
Mr. Taylor.

STATEMENT OF MICHAEL TAYLOR

Mr. TAYLOR. Good afternoon, Mr. Chairman, Ranking Member Shimkus, and other members of the committee. I appreciate the chance to talk today about FDA's activities with respect to the food safety aspects of the Gulf oil spill.

FDA is an integral part of the Federal Government's comprehensive, multi-agency program to protect the safety of seafood from the Gulf of Mexico. This program is important for consumers who need to know their food is untainted and for the seafood industry, which needs to be able to sell its products with confidence.

FDA is working closely with NOAA, the Environmental Protection Agency, our HHS colleagues here, and state authorities on a multi-pronged approach to ensure the safety of seafood from the Gulf of Mexico. The measures we are taking begin with the precautionary closure of fisheries and are backed up by surveillance and testing of seafood products and continued enforcement of FDA's Hazard Analysis and Critical Control Points or HACCP regulations.

The FDA and NOAA are also working together to develop protocols for reopening closed fisheries in the Gulf in a manner that ensures the safety of product from those areas.

Based on these protective measures and the best available science, we are confident that Gulf of Mexico seafood in the market today is safe to eat.

The primary preventative measure for protecting the public from potentially contaminated seafood is, of course, the closure by NOAA of fishing areas in the Gulf that had been or are likely to be affected by the oil spill. NOAA acted swiftly after the spill to close affected waters, and NOAA has been able to stay ahead of the spill with its closures by anticipating the movement of the oil spill and by including 5-mile buffer zones around the affected areas. FDA is working closely with both NOAA and the states to ensure that appropriate closures are in place.

To verify the effectiveness of the closures in protecting the safety of seafood, NOAA and FDA are collecting and testing a variety of types of seafood samples, including fin fish, shrimp, crabs, and shellfish. FDA's sampling is taking place at Gulf Coast Seafood Processors and is targeting oysters, crabs, and shrimp which could retain contaminants longer than fin fish. This sampling will provide verification that the closures are working and that seafood on the market is safe to eat.

As an extra measure of protection to compliment the closures and testing, FDA is stepping up inspections of seafood processors under our seafood HACCP regulation. HACCP is a system of preventative controls under which seafood processors are required to identify and control potential food safety hazards in their operations. We have just reissued existing guidance to Gulf Coast seafood processors explaining how they can meet their obligation under the HACCP regulation to ensure they are not receiving fish from waters that are closed by federal or state authorities. The agency will be inspecting these facilities to verify compliance.

Finally, FDA and NOAA are working closely with states on a protocol for determining when closed waters can be reopened. Under the protocol waters impacted by oil will not reopen until oil from the spill is no longer observable and seafood samples from the area successfully pass both century analysis by trained screeners and chemical analysis to verify the oil products are not present at harmful levels.

NOAA and FDA will work to reopen previously-closed areas as quickly as possible in order to minimize the impact of closures on fishermen and coastal communities, while protecting public health.

Mr. Chairman, we are all indebted to the scientists and frontline food safety specialists in our agencies and in state governments along the Gulf for their diligent and ongoing responses to this catastrophic oil spill. On their behalf I appreciate the opportunity to discuss their activities with you, and I look forward to questions that you and the committee may have. Thank you.

[The prepared statement of Mr. Taylor follows:]

DEPARTMENT OF HEALTH AND HUMAN SERVICES

Public Health Service

Food and Drug Administration
Silver Spring, MD 20993

STATEMENT OF

MICHAEL R. TAYLOR, J.D.

DEPUTY COMMISSIONER FOR FOODS

U.S. FOOD AND DRUG ADMINISTRATION

DEPARTMENT OF HEALTH AND HUMAN SERVICES

BEFORE THE

COMMITTEE ON ENERGY AND COMMERCE
SUBCOMMITTEE ON HEALTH

UNITED STATES HOUSE OF REPRESENTATIVES

HEARING ON

HEALTH IMPACTS OF THE DEEPWATER HORIZON OIL SPILL

JUNE 16, 2010

RELEASE ONLY UPON DELIVERY

INTRODUCTION

Mr. Chairman and Members of the Subcommittee, I am Michael Taylor, Deputy Commissioner for Foods at the Food and Drug Administration (FDA or the Agency), an agency of the Department of Health and Human Services. Thank you for the opportunity to discuss FDA's role in helping to protect the American public from negative health impacts of the Deepwater Horizon oil spill.

FDA is an active and integral part of the federal government's comprehensive, coordinated, multiagency program to ensure that seafood from the Gulf of Mexico is free from contamination as a result of the spill. This program is important not only for consumers who need to know their food is untainted, but also for the fisheries industry, which needs to be able to sell its products with confidence.

On May 17, FDA established an Incident Management Group (IMG) to oversee and effectively coordinate issues related to the oil spill. The IMG is coordinating activities and monitoring issues that include fish and shellfish safety, protocols for the testing of seafood samples, and requests from federal and state agencies for FDA assistance.

FDA is working closely with the National Oceanic and Atmospheric Administration (NOAA), the Environmental Protection Agency (EPA), other Federal agencies, and state authorities in the regions affected by the oil spill. We are taking a multi-pronged approach to ensure that marketed seafood from the Gulf of Mexico is not contaminated. These measures include the precautionary closure of fisheries, surveillance and testing of seafood products, and FDA's Hazard Analysis and Critical Control Point (HACCP) regulations. Beyond our immediate concern with ensuring that currently-marketed seafood is free of contamination, FDA and NOAA are developing strict protocols for reopening closed Gulf fisheries, in a manner that ensures the safety of product from those areas.

CLOSURES

The primary preventative control for protecting the public from potentially contaminated seafood is the closure of fishing areas in the Gulf that have been or are likely to be affected by the oil spill. NOAA has the authority to close federal waters to commercial and recreational fishing, and states have the authority to close waters within their state jurisdictional limits. FDA is working with both NOAA and the states to ensure that appropriate closures are in place.

On May 2, 2010, NOAA closed to fishing a portion of Gulf waters (3% of the Gulf of Mexico Exclusive Economic Zone (EEZ)) that were known to be affected by oil, either on the surface or below the surface, as well as areas projected to be affected by oil within 72 hours and a five nautical mile safety zone around those areas. Due to the evolving nature of the spill, NOAA has continued to revise the closed area, which, as of June 14th, encompasses 32.3% of the Gulf EEZ. The states of Alabama, Louisiana and Mississippi have closed portions of their coastal waters to recreational and commercial fishing and the states of Florida and Texas are closely monitoring their waters in conjunction with FDA and other agencies.

SURVEILLANCE

NOAA is collecting a variety of types of seafood samples including finfish, shrimp, crabs, and shellfish from the Gulf for analysis. NOAA is actively monitoring seafood caught just outside of closed federal areas, and testing it for both petroleum compounds and dispersants, to help ensure that NOAA's closed areas are sufficiently protective to prevent the harvest of tainted fish. FDA will be testing seafood collected from state waters by the respective state agencies.

Samples are compared to the baseline samples from unaffected areas, as well as samples taken after Hurricanes Katrina and Rita. These baseline and post hurricane samples demonstrate that Gulf seafood had low levels of polycyclic aromatic hydrocarbons (PAH), a primary contaminant of concern in oil, prior to the spill. They provide a comparative standard for safety in the region following the spill.

FDA is implementing a surveillance sampling program targeting seafood products at Gulf Coast seafood processors. The Agency will be targeting oysters, crabs and shrimp, which could retain contaminants longer than finfish. This sampling will provide verification that seafood on the market is not contaminated from the spill.

TESTING

FDA and NOAA bring considerable technical expertise to this situation in terms of collecting and analyzing seafood. The testing already underway and being planned covers several areas. These include baseline testing of seafood in oil-free areas for future comparisons; surveillance testing to ensure that seafood from areas near to closed fisheries are not contaminated; testing as part of the reopening protocol to determine whether an area is producing seafood safe for consumption; and market testing to ensure that the closures are keeping contaminated food off the market. Results of the testing and sampling times and locations will be made available to the public.

Testing involves two steps – including both a sensory and a chemical analysis of fish and shellfish. The sensory standard for comparison is based on samples of surface water mixed with a combination of oil and dispersants. Sensory experts check the scent and look of raw seafood, and the taste and scent of cooked seafood. Chemical analysis of oil allows scientists to conclusively determine whether contaminants are present in fish or shellfish tissue that would be consumed, and if so at what level, and whether the contaminants are due to the spill or related clean-up activities. The current science does not suggest that dispersants bioaccumulate in seafood. NOAA, however, is conducting studies to look at that issue. FDA will be closely reviewing the results of those studies. If the studies provide new information, that will be taken into consideration in management of the effects of the spill with regard to seafood safety.

FDA has deployed its Mobile Chemistry Laboratory to the Florida Department of Agriculture in Tallahassee, which will be used to run chemical analyses of samples collected by States for select volatile organic compounds. The technique will screen seafood samples for volatile headspace chemical compounds that may be indicative of petroleum taint. Positive results from these tests will trigger further chemical analysis for PAH. FDA has seven employees currently deployed to the Mobile Lab.

FDA's Arkansas Regional Laboratory has begun to test Gulf seafood samples collected by States, while three additional FDA field laboratories and state labs in California, Florida, Arizona and Wisconsin that are members of FDA's Food Emergency Response Network (FERN) continue to work on the implementation of testing protocols and methodology for PAH. These laboratories are expected to be ready to begin running samples by the end of June, and additional state and federal labs are also preparing to assist in the sample analysis.

Samples collected by NOAA from Federal waters for surveillance or associated with re-opening Federal waters will be analyzed by NOAA laboratories or inspection personnel using the same methodology and protocols.

HACCP

The existing framework of FDA's Seafood HACCP program is proving its value in the context of this extraordinary public health effort. These science-based regulations, issued in 1997, initiated a landmark program to increase the margin of safety that U.S. consumers already enjoyed and to reduce seafood related illnesses to the lowest possible levels.

The FDA's seafood HACCP regulation requires processors to identify and control hazards which are reasonably likely to occur. FDA will reissue existing guidance to seafood processors that explains how they can meet their obligation under the regulation to ensure that they are not receiving fish from waters that are closed by federal or state authorities. The Agency is also increasing inspections of facilities that may be processing seafood from affected areas.

REOPENING

FDA and NOAA are working to refine a protocol that sets the health standard for what seafood in the Gulf is considered safe to consume, as well as a process for determining when closed federal waters can be re-opened. Under the protocol, waters impacted by oil will not re-open until oil from the spill is no longer observable and seafood samples from the area successfully pass both sensory analysis by trained screeners and chemical analysis to ensure there are no harmful oil products found in them. With respect to PAH and other possible chemical contaminants, the reopening criteria include quantitative limits that will help ensure that seafood harvested from reopened waters will be as safe as seafood taken prior to the oil spill.

FDA will work with NOAA to facilitate the re-opening of previously closed areas as quickly as possible in order to minimize the impact of closures on the fishing industry and coastal communities. The two agencies have held multiple discussions with state officials from Texas, Louisiana, Mississippi, Alabama, and Florida to discuss the protocol for reopening waters closed in response to the oil spill. We are confident that the protocol used to re-open federal waters can also be used to assess the safety of state harvest waters before they are re-opened by state agencies.

NOAA and FDA have provided a working draft of the re-opening protocol to the affected Gulf Coast states. Along with the protocol, federal agencies are working to provide the States with all

of the baseline data from areas where oil from the Deepwater Horizon spill had not yet reached. Each sample location was selected to represent the spectrum of seafood species and conditions in the Gulf of Mexico.

CONCLUSION

FDA, in close coordination with other federal and state agencies, has been proactive in monitoring this disaster, planning for its impacts, and preparing our personnel and facilities to continue to help ensure a safe food supply. The protocols and approaches we have developed will protect the American people while minimizing the negative impact on Gulf seafood producers and exporters.

Thank you for the opportunity to discuss FDA's activities with regard to seafood safety. I look forward to answering any questions you may have.

Mr. PALLONE. Thank you, Mr. Taylor, and now that you have finished your statements we will turn to questions from the members, and I will start with myself.

And I am going to start with Dr. Howard. Dr. Howard, we know that thousands of workers are participating in the recovery efforts to clean up the BP oil spill, and clearly your primary goal is to ensure worker safety and have an accurate record of where workers are stationed in the Gulf.

Can you explain NIOSH's role in monitoring these response workers who are participating in the recovery through rostering? And I know that there is a difference between ID'ing workers through a roster as opposed to a registry, so I guess my question is does this rostering contain enough information to follow up with people should a more-detailed health registry become necessary?

And just generally, what kind of outreach have you done to reach the largest number of workers, and how many have you been able to ID so far?

Dr. HOWARD. I think the simplest way to describe the difference between rostering and registering or between a roster and a registry is that a roster is a list. It is a list of workers. A registry is active management of those workers in terms of accessing their exposure profile, the health effects that they may be feeling, and following them through time.

So the first step in a registry may, indeed, be collecting the names and demographic information of workers that you would then put into a registry. So it is a foundational step. It is the first step that we are taking.

So it does not ever preclude a registry from actually happening.

Mr. PALLONE. And what kind of outreach have you done to reach the workers, and how many have you been able to ID so far?

Dr. HOWARD. We have been able to roster nearly 13,000, and we do it in three ways. The first way that we started out a few weeks ago was by going to the actual sites where the workers are working. We are still doing that because we are not capturing everyone in the second method, which is as they come into a training center, before they are assigned for any cleanup work, we roster them at that time. There we are capturing nearly all of the workers who are coming in for training.

Then the third method which we have been asked by both other government agencies like Coast Guard and EPA and BP workers themselves, is if we could do some web-based rostering. So we are developing a program that they can go onto the web. So those are the three methods; going out and finding them ourselves, two, rostering them in the training centers, and three, web-based rostering.

Mr. PALLONE. And what other plans are there in the future to document health problems, either by—either for workers or people in the community, too?

Dr. HOWARD. Well, there is a lot going on in this area in terms of surveillance, looking at all of these systems that are in place now. I mentioned three different ways.

One is through poison control centers. People call in, they complain or they ask information about a particular health issue. So we are looking at 60 poison control centers in the Gulf area, scan-

ning all of their calls to see whether there is any oil-related issues, people complaining about eye, throat irritation, I smell hydro-carbon odors, et cetera.

The bio-sense program, which surveys healthcare facilities, then looks at what is the reason that somebody came into a healthcare facility. Was it because I had eye and throat irritation because I went to an area in which I was involved in cleanup, could be a worker, or I was a resident. I went to a beach area, for instance.

In the third activity we are looking at State Health Departments both—Louisiana and Mississippi, Alabama, and Florida do an excellent job in their State Health Departments at collecting information about health complaints, people that are going to seek medical attention.

And what is interesting about that lately is that we have seen about four, 500 calls if you add up all of those calls, and they are all on our website, on the CDC website. If you look at that, about 75 percent of them are coming from workers. Only about 25 percent are coming from residents. So the proportion is obviously workers. There are, as you know, many millions of people who live in the Gulf area, so we are not seeing a large number of calls now, but we are monitoring, and what we are doing now is then looking at the types of information that we are getting, both from a call as well as an appearance in a healthcare facility. Then comparing that to the 3 years previously as a way of looking at a baseline. Are we seeing more throat and eye irritation, more cough comes in? We are trying to compare the last 3 years to what we are seeing now.

Mr. PALLONE. Okay. I was going to maybe just quickly, Mr. Taylor, this idea with the FDA assessing whether the oil or the dispersants bio-accumulate in seafood, would you explain that to me? I mean, do the components in crude oil bio-accumulate in fish and other seafood, and do we need to be concerned about that in this, you know, with this crisis?

Mr. TAYLOR. Well, if fish are exposed to oil, it will be present. It can be bio-concentrated, bio-accumulated in the fish, in the edible portion of the fish, and this is why, of course, the primary preventive measure is to close waters and not take fish from waters that are contaminated with oil so they won't be so exposed.

Dispersants, compounds of dispersants are different. They are water soluble. They don't have the same ability to bio-concentrate, which is another important part of the analysis there, but, again, the primary preventive is to keep fish that we are going to put in the marketplace away from—not take fish that are affected by the oil in the first place.

Mr. PALLONE. Okay. Thank you. Mr. Shimkus.

Mr. SHIMKUS. Thank you, Mr. Chairman. Dr. Howard and Mr. Taylor, is the fish on our store shelves safe? Or the seafood?

Dr. HOWARD. Well, I am going to defer to——

Mr. SHIMKUS. No. Don't defer because you have in your testimony, I think, a statement to that fact.

Dr. HOWARD. Yeah. I would say yes.

Mr. SHIMKUS. Thank you. Mr. Taylor.

Mr. TAYLOR. We are confident about the safety, as I have testified, of the seafood that is in the market, Mr. Shimkus.

Mr. SHIMKUS. Great. Thank you very much.

Back to Dr. Howard, I understand that you are conducting health hazard evaluation report illnesses, and you have been given medical reports for seven previous hospitalized fishermen to assist in their evaluation. When do you think this evaluation will be complete?

Dr. HOWARD. Well, we certainly hope it is going to be complete by the beginning of next week, because we want to talk about it at the Institute of Medicine meeting in New Orleans.

Mr. SHIMKUS. Great, and this was a great discussion between the Chairman and the difference between rostering and a registry, and I think that is an important line to continue to move down. How—first you have a roster and then maybe that moves to a registry. How do you ensure that if your—you mentioned in your opening statement about people who might have asthma or chronic pulmonary activity, they would be more susceptible.

So in this process how do you do things? How do you get an appropriate baseline of their health conditions prior to, and then how would you do an evaluation of—if there is degradation in years based upon normal health decline or an impact on something like this?

Dr. HOWARD. I think the easiest answer would be comparison between the baseline that you have collected and then the assessment that you are doing after the exposure.

Mr. SHIMKUS. But you are going to have to get health data from their healthcare professional previous to this event.

Dr. HOWARD. And as Dr. Miller referred to in these previous studies what has happened is questionnaires have been filled out by individuals who are workers or residents in these previous spills, and then you assess what their level of symptomatology was before and then you assess it after the exposure.

Mr. SHIMKUS. So you are getting it from the person who may be ill and may be more ill, not a healthcare professional that does an evaluation of their health status.

This is the same type of issue that we deal with in pre-existing conditions on VA issues, healthcare issues, how do you identify this issue was based upon service duty or service connected or not.

Dr. HOWARD. Certainly self-identified issues in a questionnaire have to be corroborated or should be corroborated in a better study with actual medical data, either a previous medical information that that individual's healthcare provider had in a previous record, so you want to look at that, and as it was referred to before in the 9/11 situation, we have previous annual physicals for firefighters, so we have a baseline for them and then we look at them post-exposure.

Mr. SHIMKUS. Great. Thank you, and because you went on that line, do you currently run a program that provides treatment and monitoring of health conditions for first responders to the World Trade Center attack?

Dr. HOWARD. Yes. Our Department——

Mr. SHIMKUS. Thank you, and my time is quick, so I want to continue to move.

Dr. Miller, based upon what I have read weatherized oil has lost most of its volatile organic compound. What is happening to these?

Dr. MILLER. The volatile organic compounds?

Mr. SHIMKUS. Right.

Dr. MILLER. They are evaporating off into the atmosphere.

Mr. SHIMKUS. So they are evaporating.

Dr. MILLER. That is correct.

Mr. SHIMKUS. A lot of the testimony or the experiences we are citing is based upon like the Exxon Valdez or the Spanish tanker that broke up on—this is different because it is a mile under the top of the ocean, there is a lot of pressure.

Does pressure have a different characteristic that is making this do something different than just the evaluation of crude oil itself washing on the shore?

Dr. MILLER. I don't have any specific information on how the pressure affects it per se, but we are doing measurements, and EPA is doing measurements to actually see what is in the actual atmosphere. So part of it is this weathering process of the crude and as it comes toward land or it moves around and is exposed to sunlight, et cetera, and gets to the atmosphere. Then these volatile organics do come off, as well as some other compounds tend to break down in the weathering process as well.

Mr. SHIMKUS. And my last question and my time is almost up. Could the oil and dispersant mix to form a compound that creates a unique human health risk that would not exist with just the oil or the dispersant alone?

Dr. MILLER. Now, that is an area of uncertainty, and it is a potential concern for us, what is the effect of the oil and dispersant together. Is it—it could work two ways. One, it could lessen the effect, or it could also increase the effect, and that is something we need to look at.

Mr. SHIMKUS. Thank you, Mr. Chairman.

Mr. PALLONE. Thank you.

The gentlewoman from California, Ms. Eshoo, has 8 minutes.

Ms. ESHOO. Thank you, Mr. Chairman. I want to thank our witnesses for your expertise, for your testimony, and for the work that you are doing.

Several news reports have stated that BP has told its workers that they don't need to use a respirator for the cleanup efforts, and the company is only releasing limited test results to tamper down public worries.

So I would like to start out by asking you if in your opinion do you believe that BP is doing everything it can to protect the health of the cleanup workers?

Now, in our staff background notes it is noted that there are over 13,000 cleanup workers that are employed by BP or its contractors. So this is a large group of people. So that is my first question.

And my second having to do with this is have you been given access to BP's test results, and if so, could additional information from BP help you make more informed decisions?

I don't know who wants to take this but——

Dr. HOWARD. I would be happy to.

Ms. ESHOO. Okay. Thank you.

Dr. HOWARD. Excellent questions. You know, I think that from the perspective of the data that we have, you know, oftentimes we don't know what we don't have.

Ms. ESHOO. That is why I am asking.

Dr. HOWARD. That is the most serious issue. What I know we don't have, and we have asked BP for is an actual list of the 13,000 workers.

Ms. ESHOO. And when was that request made?

Dr. HOWARD. We made that request several times in the last couple weeks.

Ms. ESHOO. And no response?

Dr. HOWARD. We have yet to receive it. So we are anxious to receive that, because we would like to correlate it with our roster to make sure that we are capturing everybody, and for those folks that we do not have, we would like to go out and find them so we can put them on the roster.

Ms. ESHOO. How many are rostered right now?

Dr. HOWARD. Right now there are 13,000 rostered. We believe that——

Ms. ESHOO. So you know——

Dr. HOWARD [continuing]. It may be 15 or 20,000.

Ms. ESHOO. Wow. Does anyone else want to comment on that?

On funding, we know that—well, the President announced today that there will be an escrow account that taxpayers will not pick up a dime of the cost of this catastrophe, have any of you been reimbursed for your work so far? Or is still——

Dr. HOWARD. Well, Secretary Sebelius wrote the BP Chairman saying that she expected all of our work in support of the response to be reimbursed.

Ms. ESHOO. Well, we all expect that. I just wondered if there is any attempt to——

Dr. HOWARD. We are keeping track of it.

Ms. ESHOO [continuing]. Reimburse. Okay.

Dr. HOWARD. We are keeping track.

Ms. ESHOO. Let us know when the check arrives.

On the dispersants, oil is not obviously the only health concern. The manufacturer of Corexit, the dispersant being used to clean up the oil, warns against contact with eyes, skin, obviously the lungs. This product is somewhat volatile, and it is critical for cleanup workers and volunteers to wear personal protection equipment when applying the dispersant or working near where it has been applied.

Can you tell us what steps you are taking to ensure that the dispersants will not pose a threat for the workers or the nearby communities?

Dr. HOWARD. From the health and safety perspective, we are not fans of dispersants. There was aerial spraying of dispersants up until about 2 to 3 weeks ago. That resulted or was correlated with the illness that the nine fishermen had that we are investigating.

Now, dispersant is only being applied I am to understand in a sub-surface manner. Okay? So aerial spraying really puts it in all sorts of exposure zones that we do not think is safe, so we are delighted that the application of dispersant is only sub-surface.

Ms. ESHOO. Uh-huh, and when it is sub-surface, there isn't anything that reaches the surface, so there isn't any concern there?

Dr. HOWARD. Well, that is unclear. We really don't know, and certainly those workers that are operating at the source where the

oil and water column are coming up mixed with dispersant, those workers may be at risk.

Ms. ESHOO. Are there any studies on human health effects of the dispersants that are being used now?

Dr. HOWARD. No. I think as Dr. Miller pointed out, we have very scant information in general about oil spills. It has come from a few studies of oil tankers that have run aground. We have some information about acute irritant effects.

Ms. ESHOO. Uh-huh.

Dr. HOWARD. We have some information about psychological stress in the communities. We have practically none about chronic effects.

Ms. ESHOO. Is there any such thing as a safe dispersant?

Dr. HOWARD. Well, you are talking to a Health and Safety Director, and I am not a fan of putting more hydrocarbons in an area that already it has a lot of volatiles in it. I understand the reasons why they are being used, but from a health and safety perspective, I am not——

Ms. ESHOO. Well, that is what we are for today, to examine the health impacts.

Does anyone else want to comment on that? Dr. Miller.

Dr. MILLER. Yeah. Just kind of reiterating a little bit because the effect of the dispersants and we understand that they are, you know, trying to break up the oil and do things with it, but in terms of adding additional complexity and uncertainty for human health exposures and the facts is more complicated, and certainly we need to be monitoring what these exposures may be both at the source and as it moves toward other human populations to understand exactly what we are dealing with.

Ms. ESHOO. Thank you. Mr. Taylor, in your testimony you stated that current science does not suggest that dispersants bio-accumulate in seafood. We had some discussion I think from previous questions about this, but NOAA is conducting studies to look at that issue.

Do you know when those studies will be completed?

Mr. TAYLOR. I don't have a precise timetable. I am told it will be a few months. They are doing a series of studies to really confirm what our hypothesis is and our understanding from the knowledge that we do have that these compounds do not bio-accumulate. We want to certainly confirm that, but—so but this will be a course of work over the next few months as I understand it. I would have to defer to them on the details.

Ms. ESHOO. Uh-huh. Thank you.

In terms of the chain of command, who covers for the President all of the various health aspects? Is it Secretary Sebelius that is part of the team, and you all feed into or contribute your daily doings and——

Dr. KAPLOWITZ. Well, we——

Ms. ESHOO. What is happening on the ground?

Dr. KAPLOWITZ [continuing]. Certainly all report to Secretary Sebelius. She has been very involved. As I said, her Chief of Staff has been at all our meetings. We actually——

Ms. ESHOO. Uh-huh.

Dr. KAPLOWITZ [continuing]. Were just meeting with her today. The President is in charge, and Admiral Allen is the incident commander. So we work through the Incident Commander. The Secretary is responsible for the health response.

Ms. ESHOO. It seems to me that there is—this is a very important aspect that is not being covered, and when I asked about the chain of command, I really don't hear—I don't think I have heard anything on TV that has either put out warnings or health reports, what people can access. I mean, maybe I am missing it, but I haven't been aware of it, and that is why I am, you know, I raised the question.

You know, this is—I think it was—one of the members said, you know, there are so many narratives to this. Without a question this is the largest environmental disaster in the history of our country, and it is sickening, and I think anyone that is saying that song, Drill, Baby, Drill, should have some second, third, and tenth thoughts about this.

So I want to thank you for what you are doing and what you will continue to do. I wish that this wasn't—I wish it were not the case that you are going to be busier and busier as a result of this catastrophe, but I think that the longest-lasting effects are the ones that you are—the ones that are going to be responsible to help take care of.

So, thank you, and thank you, Mr. Chairman.

Mr. PALLONE. Thank you.

Next is Mr. Whitfield.

Mr. WHITFIELD. Thank you, Mr. Chairman, and thank you all for your testimony.

To follow up a little bit on Ms. Eshoo's line of questioning, when we had the CEOs of the major oil companies in yesterday, I believe, they talked a lot about the Unified Command, and Dr. Kaplowitz, you were talking about Secretary Sebelius and Admiral so and so and so and so, but is—what is your relationship to the Unified Command and explain to us a little bit about the Unified Command.

Dr. KAPLOWITZ. Certainly. The Incident Commander is Admiral Allen. The two agencies that are jointly responsible for the response in my understanding are EPA and the Coast Guard, and certainly Secretary Napolitano is very involved since she—since the Coast Guard is part of the Department of Homeland Security.

We have representation in the National Incident Command Center, DHHS.

Mr. WHITFIELD. Okay. Can I interrupt you one minute?

When you say Incident Command, is that the same thing as——

Dr. KAPLOWITZ. Yes.

Mr. WHITFIELD [continuing]. Unified Command?

Dr. KAPLOWITZ. Unified Command implies there is more than one individual.

Mr. WHITFIELD. Yeah.

Dr. KAPLOWITZ. So I am——

Mr. WHITFIELD. You all refer to it as Incident Command. Yesterday they kept talking about Unified Command. It is the same thing.

Dr. KAPLOWITZ. It is the same structure. Yes.

Mr. WHITFIELD. Okay.

Dr. KAPLOWITZ. It is, and we have representation in the National Incident Command Center or the NICC, so that if any questions come up in terms of health issues, we are available. We are also available locally in the command sites within Louisiana and Alabama. There are State Health Officials that are involved in each of the states who also assist their governors, for example, in response, in terms of state responsibilities.

Part of the important aspect is ongoing good communication among all aspects, but it is Admiral Allen who is responsible for the response.

Mr. WHITFIELD. But all of you represent agencies that are involved with the Incident Command.

Dr. KAPLOWITZ. Yes, sir.

Mr. WHITFIELD. Okay. Now, as far as these dispersants, Dr. Howard, I think you made it rather clear that you think the negative impact of dispersants would exceed any benefit by using the dispersants. So I am assuming that if you had the authority, you would just say no dispersants at all?

Dr. HOWARD. No. I don't have that authority.

Mr. WHITFIELD. No, but if I you did have that authority.

Dr. HOWARD. If I had that authority, I would say we have enough hydrocarbons in the exposure——

Mr. WHITFIELD. Okay.

Dr. HOWARD [continuing]. Zone and——

Mr. WHITFIELD. But does EPA—is EPA the agency that makes that decision?

Dr. HOWARD. I believe so.

Mr. WHITFIELD. Okay, and it is my understanding that they are still using dispersants, but that EPA made them reduce by 25 percent what they started off using. Does that make sense?

Dr. HOWARD. My understanding is the aerial spray of dispersant has ceased about 2 or 3 weeks ago, and now dispersant is only being applied sub-surface as the crude oil column comes through the water column.

Mr. WHITFIELD. Okay. Now, you know, another—when you have an event like this, obviously with your responsibilities you try to anticipate what may be happening, and since we have very scant information from the impact of spills like this, I mean, you have indicated that we just have a few studies from tankers that have leaked, the Valdez tanker, others, so forth.

But do we have any information at all? I have been told that the biggest spill that ever occurred from an oil well was in 1978, in the Gulf, which referred to something like 1XCO2T1, and that there were 3.3 million barrels of oil that leaked out between June of '78, and March of '79. And I have been told that that was the biggest spill in the history of the country.

Do any of you have any information at all from that spill?

Dr. HOWARD. If it was the biggest spill, it wasn't studied from the health perspective. If it was studied from the health perspective, nobody wrote it up and put it in the scientific literature.

Mr. WHITFIELD. Okay. Thank you.

Mr. SHIMKUS. Would the gentleman yield for——

Mr. WHITFIELD. I yield.

Mr. SHIMKUS. I just want to follow up quickly on this dispersant issue.

The use of dispersants are designed to push the oil not below the surface but above the surface so it will evaporate. That is—and the dispersants is not something new that we—the issue is the amount and using under and the pressure. This is what we use in everyday detergent. That is the same chemicals that we are using in dishwashing soap and stuff. That is what this dispersant is, and I think the issue for us is the amount, is the amount. I think that is what we need to focus on.

Dr. HOWARD. There is one other attribute. The dispersant may contain a concentration of the surfactant that is found in dish—but at a much higher concentration.

Mr. PALLONE. Thank you. Ms. DeGette.

Ms. DEGETTE. Thank you. I want to follow up on Mr. Whitfield's questions because I—my staff prepared a whole bunch of questions for me, which I am going to submit almost all of those for you to answer in writing, but what really strikes me is how it seems to me we are trying to do public health on the fly because we don't have the data of how an oil spill like this, you know, we are resisting calling it a spill, it is such a catastrophe, will impact public health.

And what strikes me is in all of your written testimony and then your verbal testimony today you are talking about putting together the worker monitoring, you are putting together the different lists and so on.

But what I want to know is do we have enough data to tell people about the potential health risks and to warn them about what they should or shouldn't be doing. I am wondering is there anybody can answer that question.

Yes.

Dr. KAPLOWITZ. I will start. First of all, you are absolutely right. We don't have enough information. I wouldn't say we are doing public health on the fly. I have been in public health for many years. We know how to do monitoring, how to do surveillance, how to——

Ms. DEGETTE. Yeah. That is just great, and I am glad you are monitoring and you are surveying, but my question is—let me just—Dr.—and I am not meaning to be critical of you, but when we were down there last week, we were talking to folks who were concerned. They didn't know what to do. We were talking to workers who were saying we are being told by OSHA to wear breathing masks, and then we are being told by BP that the risk of heat exhaustion is such that we shouldn't wear the breathing masks, and they didn't know what to do.

But then we received an email, we received actually a bunch of emails from Dr. Gina Solomon's blog, which talked—she is of the National Resources Defense Council, and yeah, she testified, and about people who don't know what to do, not just the workers, although we are hearing concerns from the workers. This one gal said, "I am pregnant and concerned about the health of my unborn baby. We live about a half a mile from the Mississippi Gulf Coast. I am concerned about the fumes that my family is breathing. Do you have anymore info on this or other areas to find info on it?

You said miscarriage is possible for pregnant women. What stages would this be? All stages or up to a certain trimester? I also have two children under 5 that I am concerned about the impact on their development. I am seriously considering leaving the area."

Do we know what to tell people like this, and are we telling that to them?

Dr. KAPLOWITZ. First of all, I want to—there is a great deal we don't know, and that is exactly why we are having the Institute of Medicine do the workshop next week. We are very concerned about vulnerable populations, and we have asked experts—the Institute of Medicine has brought in experts addressing these issues with children, with pregnant women. We know they are vulnerable to many exposures.

Ms. DEGETTE. So, yeah.

Dr. KAPLOWITZ. We don't know in this case—and——

Ms. DEGETTE. So—but is the thing, and I think this is a great opportunity for us to get more data, but we are hoping on the other end that we will put regulations in place and supervisions so that we don't have oil spills like this. So we will get the data for the next one, but my question is so you are bring the Institute of Medicine, you are bringing everybody in, that is great, but what are we going to tell this gal? What are we going to tell everybody else to do?

Because it does no good to just collect the data if we don't have something to tell them. Like Mr. Taylor saying, you know, we know what we are going to do with the fish. We are going to tell people not to fish there and not put those fish on the market.

What are we going to tell these people who live along the Gulf Coast or the people who are the fishermen or the people who are helping remediate it? What are we going to tell them to do? And when?

Dr. HOWARD. At CDC we have a website that has information about food, about smell, about swimming, about water, about drinking——

Ms. DEGETTE. Okay. So if people smell the oil, what are we telling them to do from a public health perspective?

Dr. HOWARD. Well, odors—some people are very sensitive to odors, and obviously we would like people to, you know, avoid if they are in an area in which there are a lot of odors, and certainly in workers' populations they could be in those areas.

Ms. DEGETTE. Okay, but like if people are smelling bad odors, that is because there is some substance in the air, probably oil, that smells. Do we have some knowledge or sense that that might have some adverse affect and maybe tell them to stay indoors or I don't know.

Dr. HOWARD. Exactly. That is exactly what I just said.

Ms. DEGETTE. Okay.

Dr. HOWARD. I am not trying to avoid it. You know, I think we should point out that the human olfactory nerve at the top of our nose is probably the most sensitive measure of hydrocarbons that we could have. A lot of the instruments that we use that find undetectable levels that we measure often are not as sensitive as our nose.

So the nose is extremely important. If you smell hydrocarbon, try to get away from that area or go inside.

Ms. DEGETTE. Okay, and have we told that to people?

Mr. PALLONE. The gentlewoman's time has expired.

Ms. DEGETTE. I apologize. I am going to ask you all to supplement your answers because I think these are really important questions.

Mr. PALLONE. Any written questions you would like to submit. Sure.

All right. We will follow up. I should mention to you that, you know, you will obviously receive written questions. We try to get them to you within the next 10 days or so.

Next is the—is our Ranking Member, Mr. Barton.

Mr. BARTON. Thank you, Chairman Pallone, and I apologize if I ask a question that has already been asked since I have just now gotten here.

Yesterday when we had the CEOs of the major oil companies, I asked them a question, and they weren't very definitive, so I am going to ask you folks the same question.

Is there any capability now to put some of these organisms into the oil spill that convert it to non-toxic substances? Some of the people have talked about some sort of an organism from algae or some of these activities like that.

Is that advanced enough that we could use that to convert the oil into something that didn't have any kind of a long-term health liability?

Dr. HOWARD. I will just say that, you know, we represent the Department of Health and Human Services, so we are experts in human health, and so that may be something that may be more environmental or other issue.

Dr. MILLER. I believe EPA was working on remediation efforts and using biologics to try to help with remediation, so probably——

Mr. BARTON. You all aren't aware of any of that activity yourself? And I am not saying you should be. This is a health hearing, so I am asking a health question.

Dr. HOWARD. I think we have read the same reports that you have read, but we are sure not experts in that area.

Mr. BARTON. All right. Really that is the only question I had, Mr. Chairman, so I am going to yield back. Thank you for the—I think this is a good hearing. I would ask the Chairman a question. Why do we not have the EPA here? Did they not come, or you didn't want them to come or——

Mr. PALLONE. The—you are asking a difficult question——

Mr. BARTON. I am not intending——

Mr. PALLONE [continuing]. Which delves into the realm of jurisdiction of the subcommittees.

Mr. BARTON. Okay. Well, that is a fair answer. Thank you.

Mr. PALLONE. Next is the gentlewoman from California, our Vice-Chair.

Mrs. CAPPS. Thank you, Mr. Chairman, and thank you all for your testimony. It is really helpful to hear the important steps that the Department is taking to protect the health and safety both now and in the future.

You have all described how your agency is working in cooperation with each other. If you sense a certain frustration with us, it is because of the sense that there might have been, and this is going to drive the series of questions that I hope to elicit some responses from you, before I do I just want to say at the outset you are doing incredibly and important work and necessary work. We need to learn lessons. If there isn't enough data, we need to start creating data now, and I understand that from Dr. Francis Collins, who spoke—who addressed another of our subcommittees or this subcommittee yesterday.

We need to develop a coordinated health system to respond to any disaster in the future, whether it is like this one, whether it is natural, whether it is manmade, so that we can ensure the health and safety of both responders and local communities and in any future tragedy. And I know this is not something that you haven't thought about as well.

So I am—I want to get some responses from you about how we can—well, let me just phrase it this way. Last week at a hearing environmental health experts agreed that enhanced federal coordination was needed to best respond to this disaster, and with that being said, you work in one of the—under one Cabinet Secretary. We know that a lot—some of this public health response is being done outside of HHS and OSHA and NOAA and there are—there is presence at the Gulf now by these other agencies as well.

So in the—I have written—I will just say as a disclaimer, written a letter to the President cognizant that BP is not capable of dealing with this. They have not demonstrated their ability to deal with the public health of their workforce and the others that they have employed to help clean up the disaster. So I said, take it out from their responsibility, I have suggested to the President and create kind of a head coordinator or czar if that is a word that you—appeals to you.

I want to know—that is behind some of the questions I am asking you. If you give me some specifics, each of you, briefly, of the ways that you and your Department have coordinated outside HHS with some other federal agencies and in a very short answer if you could.

Dr. KAPLOWITZ. I am actually glad to answer that——

Mrs. CAPPS. Great.

Dr. KAPLOWITZ [continuing]. Because I was on the phone today with the head of OSHA. OSHA actually has joined our call, even though HHS, they are very important, we have been in meetings with EPA. I know my colleagues have coordinated with NOAA because of the whole issue of fish. There has been a great deal of discussion across departments.

Mrs. CAPPS. Okay.

Dr. KAPLOWITZ. Another piece that I just want to say briefly is the role of the state and localities is——

Mrs. CAPPS. Yes.

Dr. KAPLOWITZ [continuing]. Very important.

Mrs. CAPPS. That was another concern is had. Are you able to work down that——

Dr. KAPLOWITZ. Absolutely. We have close coordination. I was also in communication with state health officials.

Mrs. CAPPS. Let me drive it one step further. What is your relationship with BP as you are—or your people on the ground as you are dealing with them?

Dr. KAPLOWITZ. The—I will do my best.

Mrs. CAPPS. I mean, yeah.

Dr. KAPLOWITZ. Our communication with BP has been through Incident Command. It is through the Coast Guard. We want to work through the appropriate channels.

Mrs. CAPPS. Okay.

Dr. KAPLOWITZ. There—I know that there are many discussions in terms of the payment issue, but we really try to coordinate, including our discussions with BP. So I don't know if any of my colleagues——

Mrs. CAPPS. Okay.

Dr. KAPLOWITZ [continuing]. Want to answer, but we work through Incident Command.

Mrs. CAPPS. That was a great response. I am going to ask one final question, but I would like to have anybody else pick up on this if this seems an appropriate topic for you to explore.

Mr. TAYLOR. Well, just on the food safety aspect of this, our collaboration with NOAA and the states has just been central. We are working towards really——

Mrs. CAPPS. So you already do that.

Mr. TAYLOR [continuing]. State and federal waters. It is a seamless, you know, coordinated effort on the seafood safety side.

Mrs. CAPPS. Okay.

Dr. MILLER. I have an additional comment, too. With regard to our Worker Education Training Program that we went down and try to help develop content——

Mrs. CAPPS. Is this with BP?

Dr. MILLER. This is—this was actually—BP is the one who implements it, but it was developed with OSHA using our Coast Guard and Incident Command in general as a throughput in developing this so EPA could start to develop this and use it for the workers.

Mrs. CAPPS. Can you guarantee that they are actually doing it? Do you have a way of doing that as well?

Dr. MILLER. We don't have that from our particular—but OSHA who we work with and NIOSH——

Mrs. CAPPS. They would.

Dr. MILLER [continuing]. Also, they would have additional oversight and opportunity to evaluate the actual implementation of that.

We also have an interagency work group now that is working on the surveillance issues and some of the health longitude and short-term health issues.

Mrs. CAPPS. Let me see if I can get an answer—I am being rude. I am sorry. We tend to sometimes do that, at least I get—I would like to—and then my time is out. I would love to have one other response if I could, and maybe you don't feel comfortable saying this.

Do you see a need for a little bit more coordination than you are able to get because of the urgency on the ground there? Would you like—would that be an idea that should be pursued, that I should

keep bugging people about, having a Chief Coordinator, if you will, or someone to organize?

I—we—I find it hard to know who to turn to.

Dr. KAPLOWITZ. Actually, I used my—I came from the state and the local perspective. I have only been in my position 3 months. I think that things are being very well coordinated at all levels up and down and across government and using Incident Command is really the best approach to take——

Mrs. CAPPS. Well, that—I suspected that——

Dr. KAPLOWITZ [continuing]. Gives us the—there has been an incredible amount of communication cross department.

Mrs. CAPPS. And so would that—so Admiral Allen is the Incident Commander. Right? And so you believe that is the—and you all feel—can I get a real quick assessment from each of you? Is that working? Do you feel like having that one point person should be the way it continues?

Just kind of answer real quick.

Mr. TAYLOR. When the system is working well in terms of——

Mrs. CAPPS. You think—you feel it is working well?

Mr. TAYLOR. From an FDA standpoint, food safety standpoint I think the system is working very well.

Dr. MILLER. From NIEHS we coordinate through the Department and back up. So we haven't seen a problem with respect to that.

Mrs. CAPPS. Okay.

Dr. HOWARD. I would say one of the issues that we would want our committee to look at next week is whether or not we have sufficient coordination.

Mrs. CAPPS. What committee is that?

Dr. HOWARD. Our Institute of Medicine Committee——

Mrs. CAPPS. Oh, yes.

Dr. HOWARD [continuing]. Meeting in New Orleans.

Mrs. CAPPS. So you are going to bring this——

Dr. HOWARD. One of the questions that we want them—are we being—are we coordinated enough.

Mrs. CAPPS. Well, I will be interested—will that be—okay. I will look for that answer then from then. Thank you very much.

Dr. MILLER. And our issues are still getting at data and things like that that help NIOSH and us, you know, perform the research that we need, so that needs to get translated back to BP.

Mrs. CAPPS. Thank you.

Dr. KAPLOWITZ. I can tell you one panel includes federal, state, local. It is going to be a whole discussion of that aspect of coordination.

Mrs. CAPPS. Great. Thank you very much.

Mr. PALLONE. Ms. Christensen.

Mrs. CHRISTENSEN. Thank you, Mr. Chairman, and thank—I would like to thank all of the witnesses for the work that you are doing. It is really appalling the lack of information on health impacts that we have not been able to accumulate over the years, but—and I hope we never have another spill like this, but I hope that the work that is being done now, should it happen, we would be better prepared.

A question following up on Ms. Capps' question. Within the Health Department who is in charge? Within the Department of Health and Human Services, who is the——

Dr. KAPLOWITZ. Within the Department of Health and Human Services Secretary Sebelius is——

Mrs. CHRISTENSEN. She is not——

Dr. KAPLOWITZ. I will say my boss is the Assistant Secretary for Preparedness and Response and is the Chief Advisor to the Secretary on emergency response issues and that is Dr.——

Mrs. CHRISTENSEN. And coordinates the rest of the team?

Dr. KAPLOWITZ. Exactly, and that is why I am here. We do take this very, very seriously. We are in constant communication with the Secretary's office, and you know, she is in charge.

Mrs. CHRISTENSEN. Okay, but even within the different agencies, with so many agencies operating, it is really—we still need——

Dr. KAPLOWITZ. We have twice-a-week calls.

Mrs. CHRISTENSEN. Okay.

Dr. KAPLOWITZ. They are chaired by Dr. Lorrey, Dr. Lorrey was on leave, I chaired them, we have pulled together all components of HHS, including CMS because of whole issues about healthcare payment issues, everything you can imagine. Agency for Children and Families. So everybody, every component of HHS has been either in the room or on that call, and it has worked very well in terms of coordinating our efforts.

Mrs. CHRISTENSEN. Another question I guess would go to—I am not sure who it would go to. It might go to Dr. Howard from Centers for Disease Control.

You—in response to another question about the information that is being shared with the population about what to look for and how to respond, you talked about it being on the website. The population, a large part of the population that we are dealing with in the Gulf Region don't have access to a website.

So what other avenues are you using to reach some of the harder-to-reach people?

Dr. HOWARD. We are using every avenue that we can get our hands on, including the local and the State Health Departments.

Mrs. CHRISTENSEN. What about radio?

Dr. HOWARD. Radio, TV, we are twittering, we are using all social media that we can get our hands on.

Mrs. CHRISTENSEN. And for the public meeting, the IOM meeting, again, are all media being used to reach out? If the public is invited, we want the public to know about it.

Dr. KAPLOWITZ. That is an excellent point. We are well aware this is a very diverse population, very culturally diverse, and that is one charge we, additional charge we have given to the IOM. We want to have addressed at this meeting the best way to reach out and to communicate with the range of populations, and we hope for some very good feedback from them.

Mrs. CHRISTENSEN. Okay. A recent study apparently of beach cleanup workers and volunteers after an oil spill in Spain reported increase in DNA damage, and I believe it has been reported in some of the other spill workers from some of the other cleanup of oil spills.

What—do we have any idea what the effects of those changes to DNA or to genetic make up might be, and are we planning to follow up on what we have seen with the workers and volunteers in this spill?

Dr. MILLER. We have actually as part of our interagency group as well have connected with the research group from Spain and are evaluating not only their materials but we will be working with them closely to look at some of their results as well that may help inform us.

And this will go also before the IOM and the direction in which we develop research. So how does this help us think this through, what tests do we need to do, and what are our concerns based on those findings?

Mrs. CHRISTENSEN. Was any—I don't remember that there was any finding from the Exxon Valdez workers and volunteers. Any thought about going back and checking them? Or is——

Dr. HOWARD. There has been some follow up of limited populations but not in the scope that there should be.

Mrs. CHRISTENSEN. Is this damage to DNA considered serious, or is it something that is felt can repair itself?

Dr. MILLER. I am not totally familiar with all the tests, but the tests certainly indicate that there may be a problem that is happening based on the exposure. So what they were looking at is the groups that had higher exposure and lower exposure and did these changes occur.

So the ultimate ramifications in terms of public health or disease is not known at this point but certainly it is a cause for concern, and we will look more closely at that particular issue.

Mr. PALLONE. The gentlewoman——

Mrs. CHRISTENSEN. Thank you.

Mr. PALLONE. Thank you. Just so you know, we are expecting to have votes, so I am trying to get everybody in before.

The next member is Ms. Castor.

Ms. CASTOR. Thank you, Mr. Chairman.

Mr. Taylor, the FDA's recent announcement said the public should not be concerned about the safety of seafood in stores at this time, but there are large areas of the Gulf of Mexico closed down. You know, here is the most recent map, and it is really having a terrible impact on our, all of our commercial fishermen and our charters. So many small businesses.

But I think it is important to also emphasize there are large areas still open for fishing, you know. You can come right off of Tampa Bay and get the reef fish, grouper and snapper, fabulous. So you all are monitoring. You are working with NOAA on these closures, and I wonder if you would go through your jurisdiction and then explain some of the sampling that is going on as well. I know that is primarily NOAA's jurisdiction, but if you would explain that, and then tell us what—how you are working with states to ensure that the areas are reopened on a timely——

Mr. TAYLOR. Sure.

Ms. CASTOR [continuing]. Basis.

Mr. TAYLOR. Sure. There is a shared jurisdiction over all of this between FDA, NOAA, and the states. With respect to closing waters, federal waters, that is from 3 miles offshore and out, that

is NOAA's jurisdiction or federal waters. The states have the authority to close the state waters, and of course, NOAA and the states——

Ms. CASTOR. Three miles?

Mr. TAYLOR. Three miles out to the—yes.

Ms. CASTOR. Uh-huh.

Mr. TAYLOR. NOAA and the states work very closely on that, and we are in consultation as well with NOAA and the states about the closure of water, so we are confident collectively that these are ahead of the spill, they are protective, and they are ensuring the seafood that is then harvested and brought to market, you know, has been taken outside of these closed areas, and we have got that fundamental preventive measure in place to give us confidence.

But, then, yes, we are doing surveillance sampling of fish that is coming to market. NOAA and FDA are doing that sampling, again, just to verify, you know, that that protective measure is working.

And so it is very much a shared enterprise.

Ms. CASTOR. How does that take place?

Mr. TAYLOR. Well, it is various ways in which the sampling is done. NOAA is collecting samples out, you know, in the water in the vicinity of the spill, and just, again, being sure that their understanding of the protectiveness of the closure is, you know, verified. We are collecting sample at retail—I am sorry, at processing establishments I should say, where the fish has been brought to be processed to go to retail, and, so, again, that is where we are looking at the crabs and shrimp and shellfish.

So, again, it is a collective, coordinated effort to provide a verification that the system is working.

Ms. CASTOR. And then on the reopening, I want to make sure I understand the criteria for reopening. You mentioned that you and other agencies have looked at baseline levels of oil contaminants in seafood from the Gulf. While this spill is obviously very severe, there has been a lot of drilling in the past and spills of petroleum product.

Are the baseline levels of petroleum-related contaminants in seafood in the Gulf of concern to the FDA?

Mr. TAYLOR. The baseline levels are not of concern, and, in fact, they are well below what would be our level of concern from a public health or safety standpoint. And so we are developing a protocol for reopening that would look at the levels that are of concern and be sure that any residues are below those levels of concern.

So, you know, we expect over time levels will go back to baseline, but baseline is way below——

Ms. CASTOR. And if it turns out that the baseline levels are well within the safe range, will you wait until the levels return to the baseline before NOAA reopens federal water?

Mr. TAYLOR. No. We don't think public health requires waiting until we go all the way back to baseline. Again, based on our safety evaluation and our risk assessment, we can set levels that, you know, where the level of concern actually is and then be sure that any levels are below that.

So we don't need to wait until we go all the way to baseline.

Ms. CASTOR. Okay. We had a researcher at the University of South Florida where they have a great consortium of all the public

and private universities in Florida, and they have just gotten some grant money from BP, thankfully, because they have been out on the water with their vessels, and the taxpayers, who really should not be paying for their research, and they are one of the partners for NOAA, and one of the researchers had difficulty getting a water sample, an oil sample from BP.

Have you all run into any of that, any resistance from BP getting oil samples, water samples, or air samples?

Mr. TAYLOR. I am not aware that from FDA's vantage point. I would check, though, and be sure, but I haven't heard those reports as far as FDA is concerned.

Ms. CASTOR. Okay.

Dr. HOWARD. We wanted to acquire some dispersant to study it. The manufacturer is under contract to BP to sell all of their product to BP. So we went to BP to see whether or not they would allow us to purchase some, and we received that assurance from BP through its manufacturer that we would be able to look at getting some so we could study.

Ms. CASTOR. What is their timeframe?

Dr. HOWARD. The timeframe for getting that permission?

Ms. CASTOR. Or getting the actual sample.

Dr. HOWARD. Well, we are still waiting for it, but we are hopeful.

Mr. PALLONE. The gentlewoman's time has expired. I am just trying to move along because I know we are going to have votes soon.

Gentleman from Iowa, Mr. Braley.

Mr. BRALEY. Thank you, Mr. Chairman. I would like to start with some brief comments about terminology. Some of you used the word, spill, in your presentations. This is a spill.

BP from the beginning has misled us about the volume of spill coming from the Gulf, and I want to talk about that because it relates to the whole problem of planning from a public health standpoint.

The day after this release occurred we were told that no more than 1,000 barrels per day were coming out of that well head. On April 27 an outside group looking at the video monitor upgraded that estimate to 5,000 barrels per day, which BP contested. Then last week or the end of May that estimate was raised upward from 12,000 to 19,000 barrels per day and then just this week we have been told that the release after the intervention occurred can be as great as 60,000 barrels per day.

That is 2.5 million gallons per day, 17.6 million gallons per week, 75 million gallons per month, and over the 57 days of this disaster, which is what it really is, it is 144 million gallons, and my friend, Mr. Whitfield, talked about this 1XCO2T1 release in Mexico, it wasn't in the United States or the Continental Shelf, which was termed the largest accidental disaster in history of 100 to 140 million gallons. We will exceed or have exceeded that flow rate.

So when we use the word, spill, talking about that massive amount of release, it does a great disservice to the people whose lives have been impacted by this disaster.

And Dr. Howard, you mentioned that you were not a big fan of dispersants, and having spoken to people on the ground who were involved in those decisions, I mean, one of the problems we have is we are talking about balancing environmental and public health

interests. People who made that decision did so reluctantly, talking to them, because managing this immense quantity of oil from an environmental and ecologic standpoint is a totally separate challenge than dealing with the public health implications.

Isn't that true?

Dr. HOWARD. Yes.

Mr. BRALEY. And, you know, so you talk to the people in the Gulf, and they talk about this enormous water column at the site of the release and the trillions of gallons of water that are being used where these chemical dispersants are dissipating in some way these large plumes and slicks of oil, but the reality is you are making tough decisions about tradeoffs between how you clean this mess up and how it impacts the long-term commercial fishing industry and vacation industry, and then the implications for public health from the workers who are exposed to it.

So I would like all of you, if you would, to comment about how you are struggling from a public health standpoint with dealing with decisions that have to be made, that could be not in the best interest of public health, but have very significant implications for environment and ecology.

So——

Dr. HOWARD. I would say that what I would like is for when those decisions are discussed and made that a consideration at that time be placed on that same table for public health, both from the residents' standpoint and from the workers' standpoint.

So all I would ask is as those very tough decisions are being made, talk about, factor in the public health issue. That is all I would ask.

Mr. BRALEY. Dr. Miller.

Dr. MILLER. And additionally, in terms of the toxicology that come with this, so if we don't know something that we put into place, structure to get the information we need so we can make better decisions, we can understand that effects of what our actions are.

Mr. BRALEY. Dr. Kaplowitz.

Dr. KAPLOWITZ. Just to add to that, public health is at a disadvantage precisely because we don't know. If we had the data, it would be easier to present the risks, and since we don't know what they are, it makes it very, very difficult to counter some of the decisions that are being made.

Mr. BRALEY. Mr. Taylor.

Mr. TAYLOR. I think our approach to food safety very much takes account of both sides of the coin. I think it is our being protective and preventive of seafood being taken from contaminated waters is what permits us to say that the product on the market is safe.

And so protecting the fisheries that are safe from the public confidence concern that would arise if we didn't have a good protective system in place where the seafood is potentially contaminated. So I think inherently our food safety approach is taking account of both sides of that coin.

Mr. BRALEY. Well, I think you have done a nice job of laying out the toxic components of sweet crude and some of the dispersants and how they interact, but when you don't know the total volume of this release and how that combined effect can contribute to these

public health considerations, I think we are all at a disadvantage, and I think we need to get to the bottom of that as well, and I yield back my time.

Mr. PALLONE. Thank you, Mr. Braley.

The Chairman of the Energy and Environment Subcommittee has joined us, and I would yield to him. Mr. Markey.

Mr. MARKEY. I thank the gentleman very much.

Dr. Howard, in your written testimony you state that there may not be health risk just because residents and workers smell toxic chemicals because these chemicals can be smelled at levels, "well below those that would make most people sick."

Last week in a hearing here to examine environmental fate and human exposure to oil and dispersants, at that hearing one of the witnesses said that she believed that it was inappropriate to not warn people that they could be made sick. This witness named several chemicals found in oil, including Benzene and Toluene, which are hazardous to human health at levels far below the odor threshold.

Dr. Howard, would you agree that some chemicals present in crude oil may be hazardous to health at levels below what—where they can be smelled and that assuring people that they are safe when they smell these chemicals may not be appropriate?

Dr. HOWARD. Yes. I would agree.

Mr. MARKEY. Is it possible that these fumes can cause long-term health impacts long beyond when the symptoms of eye, nose, throat, and skin irritation pass?

Dr. HOWARD. It certainly is possible. We don't have any data to refute that.

Mr. MARKEY. Do you think if people smell these fumes, should they go inside to reduce their exposure?

Dr. HOWARD. Yes.

Mr. MARKEY. If these fumes come into the home, should people close their windows to reduce their exposure?

Dr. HOWARD. Yes.

Mr. MARKEY. Dr. Miller, do you believe that there should be a centralized federal agency responsible for compiling all the health information and surveillance data related to the BP Gulf oil disaster?

Dr. MILLER. It needs to be done. I don't know what the best agency to do it is in terms of that, but it needs to be done in a reasonable component.

Mr. MARKEY. Which agency in your opinion should hold that responsibility?

Dr. MILLER. Well, through HHS probably a shared collective response with regard to that.

Mr. MARKEY. How would you then share that information with university and other independent, non-governmental scientists?

Dr. MILLER. If it is developed accordingly, they should be putting stakeholders in the actual development up front and participate in the way it is implemented.

Mr. MARKEY. Okay. The CDC website says that smelling chemicals isn't a risk. Should that be rephrased on the CDC website?

Dr. HOWARD. I think for most people, but there are people who are very sensitive to odors, and I think that would be something that we are looking at.

Mr. MARKEY. Is that phrase—is it phrased that way on——

Dr. HOWARD. No. That is an area that we received a number of surveillance reports, and we are looking at that phraseology right now.

Mr. MARKEY. Okay. So you believe that perhaps the warning should be more clear for those that might be vulnerable?

Dr. HOWARD. Exactly. There are people who are very sensitive to hydrocarbon odors.

Mr. MARKEY. And how long would it take in order to ensure that we have a warning that reflects the level of risk for people who could be vulnerable?

Dr. HOWARD. Well, soon, very soon.

Mr. MARKEY. Very soon.

Dr. HOWARD. We hope to be able to finish that this week and to have the language on the website.

Mr. MARKEY. So by Friday?

Dr. HOWARD. Hopefully.

Mr. MARKEY. We can—we would hope that you would be able to finish it by then.

And one final question. Is BP sharing all the information that you want with regard to the health effects?

Dr. HOWARD. You know, I had answered that question earlier. The answer for us in NIOSH is no. We have asked for a list of workers that they have hired specifically by name so we could correlate with our roster. We have yet to receive that list from them.

Mr. MARKEY. Dr. Miller.

Dr. MILLER. We have not specifically asked BP for anything at this point, but we will be looking more toward that as we develop the research.

Mr. MARKEY. Okay, but NIOSH, you have been asking, and they have not been fully cooperative?

Dr. HOWARD. Yes, sir.

Mr. MARKEY. Is there any reason why BP would withhold health-related information since it would make it possible to put together the best response to protect the health of people in the Gulf?

Dr. MILLER. I wouldn't speculate on that. I would add one thing just for our Worker Education Training Program. They have been very compliant in working with us with respect to trying to provide information to workers.

Mr. MARKEY. On that program. But I am more concerned about what I am hearing from Dr. Howard. I would say that BP continues to be more interested in its own liability than it is in the livability for the people in the Gulf. They should make the health of these residents paramount. They are responsible for the harm that is going to be done. They should ensure that the information is in the hands of public health officials so that they can do their job and protect them, and they should do it immediately.

Thank you all for your testimony. Thank you, Mr. Chairman.

Mr. PALLONE. Thank you, and that concludes all questioning just in time for votes. So I just want to remind members that they can submit additional questions for the record, some have already sug-

gested that they would, and would like to get those to the clerk within the next 10 days. And then we will send them to your various offices for the panel.

And, again, I want to thank you for being here today. Obviously this was very important, very informative. I—we may have to do additional, you know, hearings like this. We will see as we progress, but I thought this was very enlightening. Thank you.

And without objection, this meeting of the subcommittee is adjourned.

[Whereupon, at 4:15 p.m., the Subcommittee was adjourned.]

[Material submitted for inclusion in the record follows:]

U.S. Congressman Phil Gingrey
Subcommittee on Energy and Commerce
Hearing: "*HHS Actions to Identify and Address Health Effects of the BP Oil Spill*"
June 16, 2010

Mr. Chairman,

The Deepwater Horizon Oil Spill in the Gulf of Mexico has dominated the headlines since April 20th – both for the size of the disaster and the staggering lack of coordination between BP and our Federal government on how to solve the problem.

Therefore, I want to thank Chairman Pallone for holding this hearing today. Going forward, it is important that all parties – communities, state and Federal governments, and BP – closely monitor this situation to ensure that we fully appreciate all of the health issues that may arise from this disaster.

BP is responsible to the citizens of the gulf and our country for the spill, their mistakes that led to this disaster and loss of life, and the damages that are changing the lives of residents living in the Gulf – both economically and ecologically. BP should make right what it has done wrong and answer for any fraud that they have perpetrated – both before and after the explosion on April 20. That is the commitment to the citizens of this country that I expect from BP.

However, I have been outraged by our administration's response to the oil spill as well. In my opinion, President Obama and his team have failed to take responsibility or show any leadership in crafting our Nation's response to the worst ecological disaster in modern history. Effective leadership is not a televised trip to the gulf or tough talk during an interview – leadership is taking responsibility for fixing a problem regardless of its cause and working with any and all interested parties to do so expeditiously.

Yet, this administration has punted on its leadership duties and instead left responsibility for managing the cleanup to BP – which may explain why we are still struggling to stop this leak after almost two months. This lack of leadership can be summed up by the words of David Axelrod, President Obama's top political advisor, when he publicly stated that "**BP** has the principal responsibility for dealing with this spill…and we have ultimately the responsibility of holding them accountable for any damage that is done."

I cannot disagree with that assertion more. It **IS** the responsibility of this administration to work with BP to stop this spill and help minimize the damages to our Gulf Coast that are occurring under President Obama's watch.

Last night – 57 days into an oil spill – President Obama addressed the Nation on the oil spill. But the headline of today's Congressional Quarterly reads "Obama Makes His Case for Energy Bill." Instead of providing any direction or leadership of any kind on efforts to stop this leak, we were treated to a political speech on the merits of the President's energy bill. **True leadership is not using a crisis to advance a political agenda** –our number one priority today should be

working together to stop this leak. Anything less is simply unacceptable. Mr. Chairman, our constituents deserve more than this – much more. I yield back.

The Honorable Joe Barton
Committee on Energy and Commerce
Subcommittee on Health
HHS Actions to Identify and Address Health Effects of the BP Oil Spill
June 16, 2010

Thank you, Mr. Chairman for holding this hearing today.

This is the second of three hearings at the Committee this week on the BP Oil Spill. Yesterday, we had the leadership of ExxonMobil, Chevron, CononoPhillips, BP America and Shell Oil testify before our Energy and Environment Subcommittee on the safety of offshore drilling operations. Tomorrow, the CEO of BP will testify before our Oversight and Investigations Subcommittee about the oil spill and BP's response.

Today, we have four witnesses from the Department of Health and Human Services, and the hearing will focus on public health and the federal government's response. My hope is that members will refrain

from hyperbole so we can hear from the witnesses on the facts on the ground regarding the public health effects of the spill.

Our four HHS witnesses all have roles in responding to the potential health effects of the spill. The Food and Drug Administration (FDA) has the primary responsibility for ensuring the safety of most domestic and imported food, including seafood. For years, the FDA has imposed an even higher level of regulation on seafood through its imposition of Hazard Analysis and Critical Control Points (HACCP) on seafood processors. FDA's HACCP regulation requires seafood processors to identify potential safety hazards and prepare a plan to address those hazards. Included in the HACCP regulation is the requirement that the processors know the source of their seafood.

The FDA's response is critical in ensuring that consumers are confident in the safety of Gulf seafood. The ill-conceived drilling moratorium has exacerbated the economic effects of the oil spill on the Gulf communities. It is imperative that the vibrant seafood industry of

the Gulf rebound from this tragedy, and FDA will play a critical role in shoring up consumer confidence that the seafood from the Gulf is safe.

The National Institute of Occupational Safety and Health (NIOSH) has undertaken important activities, like the rostering of all cleanup workers. These rosters will help us track both the short and long-term health effects that could arise. NIOSH also will be conducting surveillance and toxicology testing that will provide the government and Gulf communities necessary health information

I would also like to welcome the representatives from the Office of the Assistant Secretary for Preparedness and Response (ASPR) and the National Institute for Environmental Health Sciences. ASPR is the HHS Secretary's principal advisory staff on issues pertaining to public health emergencies, and it coordinates activities between federal agencies, state officials, and local officials related to emergency preparedness.

The coordination function of ASPR office is critical. There are a lot of cooks in the kitchen. There are multiple agencies within multiple departments of the federal government involved in responding to the crisis, and additionally there are state and local governments expending resources to respond to their constituents' needs. I look forward to hearing from ASPR on how it is coordinating activities to ensure that resources are spent effectively.

Given the importance of this hearing, I will keep my statement brief so we can listen and ask questions of our witnesses. I yield back the balance of my time.

HENRY A. WAXMAN, CALIFORNIA
CHAIRMAN

JOE BARTON, TEXAS
RANKING MEMBER

ONE HUNDRED ELEVENTH CONGRESS

Congress of the United States
House of Representatives

COMMITTEE ON ENERGY AND COMMERCE
2125 RAYBURN HOUSE OFFICE BUILDING
WASHINGTON, DC 20515–6115

Majority (202) 225-2927
Minority (202) 225-3641

July 8, 2010

Lisa Kaplowitz, MD, MSHA
Deputy Assistant Secretary and Director
Office of Policy and Planning
Office of the Assistant Secretary for Preparedness and Response (ASPR)
200 Independence Avenue, S.W.
Washington, D.C. 20201

Dear Dr. Kaplowitz:

Thank you for appearing before the Subcommittee on Health on June 16, 2010, at the hearing entitled "HHS Actions to Identify and Address Health Effects of the BP Oil Spill."

Pursuant to the Committee's Rules, attached are written questions for the record directed to you from certain Members of the Committee. In preparing your answers, please address your response to the Member who submitted the questions.

Please provide your responses by July 22, 2010, to Earley Green, Chief Clerk, via e-mail to Earley.Green@mail.house.gov. Please contact Earley Green or Jennifer Berenholz at (202) 225-2927 if you have any questions.

Sincerely,

Henry A. Waxman
Chairman

Attachment

The Honorable Diana DeGette

1. Does the NIH have the resources it needs to be able to very quickly ramp-up research into the health impacts of oil and dispersants? What about for the CDC and the FDA?

2. To elaborate on my oral question from the hearing, please comment on what your agency is doing to notify the public about relevant health concerns and any actions they should or should not take?

3. Vulnerable Populations: As you know certain groups, such as pregnant women and children are often more susceptible to toxins. I am particularly concerned about volatile organic compounds present in oil, including benzene and naphthalene, which are known carcinogens, and hydrogen sulfide, known to cause upper respiratory complications. Many residents have already noted disconcerting symptoms.

   I would like to draw your attention to a recent comment posted on the blog of Dr. Gina Solomon, a Senior Scientist at the National Resources Defense Council (NRDC), the Director of the UCSF Occupational & Environmental Residency Program and Associate Director of the UCSF Pediatric Environmental Health Specialty Unit:

   > "I am pregnant and concerned about the health of my unborn baby. We live about half a mile from the Mississippi gulf coast. I am concerned about the fumes that my family is breathing. Do you have any more info on this or any other areas to find info on it? You said miscarriage is possible for pregnant women, what stages would this be? All stages? Or up to a certain trimester? I also have 2 children under 5 that I am concerned about the impact on their development. I am seriously considering leaving the area. Any info or advice you have would be appreciated."

   Although I don't expect you to be able to answer her questions necessarily, it begs the question of what steps are being taken to monitor the health of community members, especially vulnerable populations.

4. I understand that ASPR plans to establish a "long-term health program to monitor the health of workers involved with the oil spill." Can you please expand on what this would include? And can you attest as to whether a parallel program for local residents is (or should be) in the works?

ASPR responses

The Honorable Diana DeGette

1. Does the ASPR have the resources it needs to be able to very quickly ramp-up research into the health impacts of oil and dispersants?

Response: ASPR is not conducting research on the health impacts of oil and dispersants. Our HHS colleagues at the Food and Drug Administration (FDA) and the National Institutes of Health (NIH) are involved in such research. In fact, NIH/National Institute of Environmental Health Sciences (NIEHS), in coordination with the Centers for Disease Control and Prevention's (CDC) National Institute of Occupational Safety and Health (NIOSH) announced it will launch the GuLF Study (Gulf Longitudinal Follow-up Study) this fall. It will be a multi-year study to look at the potential health effects from the oil spill in the Gulf region. NIH Director Francis S. Collins, M.D., Ph.D. pledged $10 million in NIH funding for the study's initial phases (http://www.niehs.nih.gov/news/releases/2010/gulf-study.cfm).

GuLF will be a prospective health study that will investigate the potential short- and long-term health effects among people engaged in clean-up activities linked to the Gulf of Mexico oil spill, such as respiratory, neurobehavioral, immune disorders, and cancer. The study will also evaluate mental health concerns and other oil spill-related stressors such as job loss, family disruption, and financial uncertainties. Workers and volunteers with varying levels of exposure to oil and dispersants who were involved in oil burning, skimming and booming, equipment decontamination, wildlife clean-up, and shoreline clean-up will be enrolled to evaluate whether exposure levels and certain types of clean-up activities correlate with adverse health effects. The study is being planned and implemented in coordination with other HHS and federal agencies and local Gulf Coast communities. The Institute of Medicine, at the request of the HHS Secretary, will plan and convene periodic meetings to provide scientific and community input on the design, implementation, and progress of the cohort study.

HHS requested and received $10 million from BP for this and other important health research. The NIH will have full autonomy regarding the distribution of the $10 million, with input from CDC/NIOSH, the Institute of Medicine, and external scientific experts in environmental health and who are familiar with the Gulf region.

2. To elaborate on my oral question from the hearing, please comment on what your agency is doing to notify the public about relevant health concerns and any actions they should or should not take?

Response: Throughout the course of the BP Deepwater Horizon Oil blowout, HHS has been in direct, ongoing contact with Gulf Coast state and local health departments to assess how HHS can support the overall health response to the Gulf States.

HHS has developed materials to address concerns about mental health; general food safety; seafood safety, monitoring and surveillance; water and air quality; worker safety; crude oil, and dispersants, as well as concerns from pregnant women, frequently asked questions, and health

surveillance data, with links to state and other federal resources. All of the materials above and more can be found at http://www.hhs.gov/gulfoilspill/index.html. These materials have been translated to appropriate languages such as Spanish and Vietnamese. These materials have been shared with the UAC JIC for inclusion with other BP Deepwater Horizon information and distributed through a variety of sources, including through FEMA's Community Outreach Teams and http://www.restorethegulf.gov/.

HHS Secretary Kathleen Sebelius announced the availability of a toll-free helpline to provide information, support and counseling for families and children affected by the BP Deepwater Horizon oil spill (http://www.hhs.gov/news/press/2010pres/10/20101001f.html). The Oil Spill Distress Helpline (1-800-985-5990) links callers to behavioral healthcare services and serves as an important resource for the localized oil spill outreach efforts in the Gulf Coast states. Administered by the Substance Abuse and Mental Health Services Administration (SAMHSA), the Helpline routes callers to the nearest Gulf Coast area crisis center, where trained staff from the region will answer calls and provide assistance. In addition, these crisis centers are working to provide support via text messages, a capability that will launch later this fall.

The Surgeon General has also recorded public service announcements (PSAs) about the importance of awareness of mental health issues and where people can seek help if it is needed. These PSAs have been distributed to all five Gulf States.

HHS staff continue to ensure that health information is easily accessible on the redesigned Unified Area Command Website, http://www.restorethegulf.gov. All of these materials have been shared with Gulf Coast state and local health departments for their use and distribution as well.

The FDA has widely publicized their hotline 1-888-INFO-FDA. The public can dial this hotline with any questions or concerns about seafood or to report any seafood they have purchased that they suspect of being contaminated with oil. It is also available for anonymous reports of oily waters in the Gulf.

CDC's National Institute for Occupational Safety and Health (NIOSH) and the U.S. Department of Labor's Occupational Safety and Health Administration (OSHA) issued interim guidance for protecting the health and safety of the responders in the Gulf, including recommendations on preventing heat stress, preventing traumatic stress, preventing fatigue, and selection/use of personal protective equipment where needed (http://www.cdc.gov/niosh/topics/oilspillresponse/protecting/default.html).

In partnership with OSHA and the Unified Command, more than 8,000 of the NIH's National Institute of Environmental Health Sciences' (NIEHS) pocket-sized booklets titled "Safety and Health Awareness for Oil Spill Cleanup Workers" have been distributed to instructors, safety officials, front-line responders participating in the Vessels of Opportunity program, and beach workers in the Shoreline Cleanup Assessment Teams. The booklets also have been printed in English, Spanish and Vietnamese. In addition, NIEHS Superfund Worker Training staff have had a continuous presence in the Gulf area and have developed a 40-hour training program for supervisors and workers who will likely have direct contact with oil or dispersants and 2-and 4-hour training programs for workers whose contact is minimal. The training is being paid for and

administered by BP, and is being provided in English, Spanish and Vietnamese. All of the NIEHS worker training resources and materials, including the NIEHS/OSHA booklet, are available online, www.niehs.nih.gov/oilspill.

3. Vulnerable Populations: As you know certain groups, such as pregnant women and children are often more susceptible to toxins. I am particularly concerned about volatile organic compounds present in oil, including benzene and naphthalene, which are known carcinogens, and hydrogen sulfide, known to cause upper respiratory complications. Many residents have already noted disconcerting symptoms.

I would like to draw your attention to a recent comment posted on the blog of Dr. Gina Solomon, a Senior Scientist at the National Resources Defense Council (NRDC), the Director of the UCSF Occupational & Environmental Residency Program and Associate Director of the UCSF Pediatric Environmental Health Specialty Unit:

> **"I am pregnant and concerned about the health of my unborn baby. We live about half a mile from the Mississippi gulf coast. I am concerned about the fumes that my family is breathing. Do you have any more info on this or any other areas to find info on it? You said miscarriage is possible for pregnant women, what stages would this be? All stages? Or up to a certain trimester? I also have 2 children under 5 that I am concerned about the impact on their development. I am seriously considering leaving the area. Any info or advice you have would be appreciated."**

Although I don't expect you to be able to answer her questions necessarily, it begs the question of what steps are being taken to monitor the health of community members, especially vulnerable populations.

Response: Using established surveillance systems, including the National Poison Data System (NPDS), BioSense, and several state-based surveillance systems, the HHS Centers for Disease Control and Prevention (CDC) is conducting surveillance across the Gulf States for health effects related to the oil spill. CDC is also collaborating with the FDA and NOAA in their efforts to monitor the safety of the seafood supply harvested from the Gulf area.

CDC worked with individual state and local health departments to help refine and enhance their vigilance for health effects related to the oil spill. State and local surveillance systems are monitoring for new-onset respiratory, cardiovascular, ocular, dermal, gastrointestinal, and neurological symptoms, including asthma exacerbation, cough, chest pain, eye irritation, nausea, and headache. This health surveillance will capture public health issues that surface in the general public, including vulnerable populations.

The CDC recommendation for everyone—including coastal residents, tourists, pregnant women, and other vulnerable populations—is to avoid the oil and spill-affected areas, stay away from cleanup activities and to carefully follow health and safety advice or warnings provided by state or local government officials. For more Gulf Spill Information for Pregnant women, see http://www.bt.cdc.gov/gulfoilspill2010/2010gulfoilspill/pregnancy_oilspill.asp

The EPA also conducted comprehensive air monitoring of the components of crude oil and dispersants along the Gulf shores. Air monitoring data showed levels well below levels of concerns for long-term health effects related to the spill. See http://www.epa.gov/bpspill/air-mon.html .

4. I understand that ASPR plans to establish a "long-term health program to monitor the health of workers involved with the oil spill." Can you please expand on what this would include? And can you attest as to whether a parallel program for local residents is (or should be) in the works?

Response: ASPR does not have plans to establish a "long-term health program to monitor the health of workers involved in the oil spill." As mentioned earlier, NIH/NIEHS, in coordination with NIOSH, is in the early stages of implementing the GuLF Study (Gulf Longitudinal Follow-up Study), a large population (cohort) follow-up study of the physical and psychological effects on clean-up workers and volunteers. As part of Secretary Mabus' recent report to the President (http://www.restorethegulf.gov/release/2010/09/28/america%E2%80%99s-gulf-coast-long-term-recovery-plan-after-deepwater-horizon-oil-spill), HHS describes a number of other significant research efforts that can be undertaken to address community health concerns and fill gaps in knowledge about the health consequences of clean-up activities. The recommended research efforts span study of response workers and volunteer populations as well as study of the general population and at-risk groups including children and pregnant women.

In order to fully assess the long-term implications, HHS has asked that a committee of experts be convened to provide periodic independent review of the federal response to the oil spill as it relates to the surveillance and monitoring of acute and long-term physical and behavioral health effects of workers and affected communities. The Institute of Medicine (IOM) will provide information and advice to HHS on issues such as feedback on the design and progress of the NIH GuLF Study, research priorities such as investigator-initiated research beyond the GuLF Study, including the assessment of children and pregnant women, and on emerging concerns identified by HHS. IOM conclusions and recommendations on research priorities to studies on the health effects of the oil spill on both workers and the public will inform funding decisions by the Gulf Coast Recovery Council.

HENRY A. WAXMAN, CALIFORNIA
CHAIRMAN

JOE BARTON, TEXAS
RANKING MEMBER

ONE HUNDRED ELEVENTH CONGRESS

Congress of the United States

House of Representatives

COMMITTEE ON ENERGY AND COMMERCE

2125 RAYBURN HOUSE OFFICE BUILDING
WASHINGTON, DC 20515–6115

Majority (202) 225-2927
Minority (202) 225-3641

July 8, 2010

John Howard, M.D., M.P.H., J.D., L.L.M.
Director
National Institute of Occupational Safety and Health (NIOSH)
Centers for Disease Control and Prevention (CDC)
1600 Clifton Rd. Atlanta, GA 30333, USA

Dear Dr. Howard:

Thank you for appearing before the Subcommittee on Health on June 16, 2010, at the hearing entitled "HHS Actions to Identify and Address Health Effects of the BP Oil Spill."

Pursuant to the Committee's Rules, attached are written questions for the record directed to you from certain Members of the Committee. In preparing your answers, please address your response to the Member who submitted the questions.

Please provide your responses by July 22, 2010, to Earley Green, Chief Clerk, via e-mail to Earley.Green@mail.house.gov. Please contact Earley Green or Jennifer Berenholz at (202) 225-2927 if you have any questions.

Sincerely,

Henry A. Waxman
Chairman

Attachment

The Honorable Diana DeGette

1. Does the CDC have the resources it needs to be able to very quickly ramp-up research into the health impacts of oil and dispersants?

2. To elaborate on my oral question from the hearing, please comment on what your agency is doing to notify the public about relevant health concerns and any actions they should or should not take?

3. Response Time: You mention that CDC's Emergency Operations Center officially activated on May 10th. The Deepwater Horizon explosion was on April 20th. Why did it take over 20 days for the CDC to respond?

4. Worker Monitoring: What efforts have been made to assess the health of oil-spill personnel before, during, and after their clean-up efforts? Who is collecting this information and where is being stored? What about volunteers and people who are just pitching-in and helping out on their own—has there been an effort to identify and track these individuals?

5. Monitoring Long-Term Health Effects: Has there been any sort of effort to identify and monitor residents in the affected areas? Do we have any baseline health information for such residents? I know that post-9/11 many New York and New Jersey residents have reported health effects from the world trade center dust. Don't you think it would be worthwhile to follow the long-term health effects of residents, watching for cancer-clusters, asthma, reproductive effects, and more?

6. Long-term monitoring: In your testimony you mention that surveillance data is being used to monitor a plethora of symptoms. Can you please tell me how people are identified? For example, are they self-reported? Reported by doctors? Do we need to worry about any sort of reporting bias in considering whether everyone who should be monitored actually is?

7. Long-term effects of ingesting oil: Could you please provide this Committee with citations for the portion of your testimony where you mention that "swallowing small amounts (less than a coffee cup) of oil will cause upset stomach, vomiting, and diarrhea, but is unlikely to have long-lasting health effects."

The Honorable Diana DeGette

1. **Does the CDC have the resources it needs to be able to very quickly ramp-up research into the health impacts of oil and dispersants?**

Response: The Centers for Disease Control and Prevention's (CDC) funds cover current activities. Examples of current activities include:

- The Health and Human Services (HHS) Secretary asked the Institute of Medicine (IOM) to plan and host a public workshop to provide a defensible scientific basis for future research and surveillance efforts (See: http://www.iom.edu/Activities/PublicHealth/OilSpillHealth/2010-JUN-22.aspx). The workshop, held 22-23 June, explored a broad range of health issues related to the oil spill, ranging from heat exhaustion and other occupational hazards to chemical exposures. The IOM brought together the best available local and national scientific expertise. The formal conclusions and research recommendations of the workshop were released on 10 August 2010.

- CDC is assisting the National Institutes of Health's (NIH) National Institute of Environment Health Sciences (NIEHS) as they move forward with their cohort study for oil spill clean-up workers and volunteers titled *GuLF Study: Gulf Longitudinal Follow-Up Study.*

2. **To elaborate on my oral question from the hearing, please comment on what your agency is doing to notify the public about relevant health concerns and any actions they should or should not take?**

Response:

- CDC provides timely, accurate and actionable information to the public, Gulf Coast residents, and clean-up workers/volunteers to help them better understand and protect themselves from potential and evolving health risks associated with the oil spill. All information for the public is available on the CDC website at: http://www.bt.cdc.gov/gulfoilspill2010/. CDC continues to produce materials that specifically target the information needs of workers and volunteers and many of these materials are written to be easy to understand and are available in English, Spanish, and Vietnamese. Information for workers and volunteers can be found online at: http://www.cdc.gov/niosh/topics/oilspillresponse/dwhworkertips.html

- CDC is providing clinicians with information on the oil spill contaminants and guidance on taking patient exposure histories, available online at: http://emergency.cdc.gov/gulfoilspill2010/health_professionals.asp.

- CDC regularly sends health-related messages to more than 1.3 million Twitter followers.

- CDC participated in public meetings and press conferences for residents of the Gulf Coast.

- CDC hosted a call with clinicians to provide information about potential health effects.

- CDC maintains ongoing communication with the public through liaison officers stationed in Florida, Louisiana and Texas. CDC also maintained a liaison at the Public Health Unit in the Unified Command Post in Mobile, AL; with the HHS Assistant Secretary for Preparedness and Response and staff; and with the Senior Health Official in the Deepwater Horizon National Incident Command. CDC continues to maintain regular contact with the Environmental Protection Agency (EPA), Food and Drug Administration (FDA), Department of Defense (DOD) and Substance Abuse and Mental Health Services Administration (SAMHSA).

- CDC's National Institute for Occupational Safety and Health (NIOSH) and the Occupational Safety and Health Administration (OSHA) have jointly issued *Interim Guidance for Protecting Deepwater Horizon Response Workers and Volunteers* (See http://www.cdc.gov/niosh/topics/oilspillresponse/protecting/.) This Interim Guidance contains specific recommendations for all workers and volunteers participating in the Deepwater Horizon Response; it includes guidance on the selection of protective clothing and the use of respiratory protection. Recommendations contained in the Interim Guidance will be updated as more information about exposures is collected and assessed in relationship to the incidence and prevalence of symptoms, illnesses and injuries. In addition to this guidance, NIOSH has published eight Health Hazard Evaluations that address specific work activities and identify critical precautions for workers. OSHA has also published worker information on health hazards, training requirements, and job-specific safety and heath hazards on its website. This information was distributed during training sessions and at staging areas and work sites.

3. **Response Time: You mention that CDC's Emergency Operations Center officially activated on May 10th. The Deepwater Horizon explosion was on April 20th. Why did it take over 20 days for the CDC to respond?**

Response: Activation of CDC's Emergency Operations Center (EOC) does not mark the beginning of CDC's response. CDC's response began immediately after the 20 April 2010 Deepwater Horizon event, first by monitoring the event and then, on 22 April 2010, by participating in the National Response Team's (NRT) activation meeting. After the NRT activation call, CDC assigned an oil spill task force to monitor and respond to any potential public health hazards associated with the oil spill. CDC's early response included developing informational and education materials used to inform the public and public health colleagues along the Gulf Coast, and providing technical assistance via the federal, state, and local command structure established in the Gulf region.

Within ten days of the event CDC/ATSDR had:

- Responded to a request from the EPA to assist that agency in generating answers to questions regarding potential impacts on human health that might emerge related to this event;

- Posted new materials on the CDC Website to add information about the oil spill, update fact sheets and created a feature tab;

- Submitted to the EOC the National Center for Environmental Health (NCEH) / Agency for Toxic Substances and Disease Registry (ATSDR) Draft Director's Critical Information Requirements (DCIRs) for Oil Spills and Chemical events;

- Reviewed the US EPA Region IV & VI "Quality Assurance Sampling Plan for Mississippi Canyon Oil Spill;"

- Participated in coordination calls with the Health and Human Services Communication Point of Contact, Assistant Secretary for Health and Senior Management, Emergency Support Function 8 (ESF8), and National Incident Communication Coordination Line Calls led by the Coast Guard at the National JIC;

- Contacted State Epidemiologists in Louisiana, Mississippi, Texas, Alabama and Florida to establish points of contact, discuss current or planned activities, and determine what data collection instruments and systems already existed in each respective state to monitor for potential health events related to the spill;

- Contacted the American Association of Poison Control Centers (AAPCC) to request local Poison Centers to code any call related to the oil spill; and

- Contacted BioSense to ascertain their coverage in the Gulf Coast states (number of and location hospitals, VA/DoD clinics) and to let them know of the need for enhanced surveillance for respiratory health effects in the coastal regions of these states.

On 10 May 2010, the EOC was officially activated. The decision to activate the EOC was based on the need to utilize (and not duplicate) EOC support staff systems, task tracking systems, and enhanced agency and department coordination. CDC remains confident that the agency is ready to address any public health needs that may arise.

4. **Worker Monitoring: What efforts have been made to assess the health of oil-spill personnel before, during, and after their clean-up efforts? Who is collecting this information and where is being stored? What about volunteers and people who are just pitching-in and helping out on their own—has there been an effort to identify and track these individuals?**

Response: CDC's NIOSH has created a roster of the workers participating in the oil spill response. Information collected will enable the agency to contact workers about spill-related illness or injury, as deemed necessary. The roster is designed to capture site-specific

information, such as a worker's job task, time on task, available exposure information, use of personal protective equipment, and other related factors. Participation is completely voluntary, and once the information is collected, an individual's personally identifiable information is confidential to the extent allowed by the law. CDC/NIOSH developed a worker health survey that received OMB clearance under the Paperwork Reduction Act (OMB #0920-0857). CDC/NIOSH did not administer this survey to workers but it was provided to NIH along with the roster to be used in their GuLF study.

Workers have several opportunities to be included on the CDC/NIOSH roster. Workers may provide their contact information to CDC/NIOSH during required clean-up worker training or they may provide it subsequently, at established staging areas (locations to which trained workers report for duty each day) in Louisiana, Mississippi, Alabama, and Florida. Response workers may also roster electronically, online, through a secure website. CDC/NIOSH has asked multiple federal agencies, state health departments, and BP to refer workers to the rostering website. For those workers and volunteers who are not required to complete BP training, CDC/NIOSH also asked state health departments to help identify those workers or volunteers so that they too can be included on the roster. As of 10/14/10, more than 55,500 workers have been included in the roster. This information is being stored in a database maintained by CDC/NIOSH.

Every known federal/state/local responder, contract worker, BP employee, and volunteer who seeks care at a BP field medical facility is included in the BP/UAC Reported Illness and Injury database. CDC/NIOSH staff are analyzing and using injury and illness data provided by BP to increase awareness of risks associated with Gulf oil response work and to identify opportunities for interventions. The data are being used to support public health response efforts such as improved training or work modifications. (See http://www.cdc.gov/niosh/topics/oilspillresponse/pdfs/NIOSHRept-BPInjuryandIllnessDataApril23-June6.pdf.)

To better characterize potential hazards faced by workers, CDC/NIOSH is conducting a series of health hazard evaluations (HHEs) of workers engaged in onshore and offshore cleanup operations. These evaluations include air monitoring and health symptom surveys. The goal of these evaluations is to provide CDC/NIOSH with better data about potential exposures and worker exposure categories. (See http://www.cdc.gov/niosh/topics/oilspillresponse/gulfspillhhe.html.)

As part of the HHE activity, CDC/NIOSH field teams also administered health surveys to a representative sampling of response workers working in both off-shore and on-shore work sites. CDC/NIOSH staff are currently analyzing survey data. The surveys were designed to reveal deficiencies in education and training, work practices or other controls, or unmet needs for personal protective equipment, or medical monitoring and care. Health survey data may also be useful in planning or modifying exposure assessment activities. In the future, these health survey data will be used to design health screening tools and can serve as a reference baseline for longer term health studies.

5. **<u>Monitoring Long-Term Health Effects</u>: Has there been any sort of effort to identify and monitor residents in the affected areas? Do we have any baseline health information for such residents? I know that post-9/11 many New York and New Jersey residents have reported health effects from the world trade center dust. Don't you think it would be worthwhile to follow the long-term health effects of residents, watching for cancer-clusters, asthma, reproductive effects, and more?**

   Response: In order to learn about potential health hazards related to the Deepwater Horizon oil spill, CDC has been working with partners to identify data gaps to address and evaluate potential long-term and short-term health. CDC is working with NIEHS as they design and implement research projects examining the health effects of Gulf Oil Spill workers and volunteers.

   In addition, working with the Poison Control Centers, CDC began collecting information on baseline levels of inquiries from the Gulf Coast in the first week after the explosion and fire. This data, collected long before the landfall of any oil, is being used as a community-specific baseline and basis for comparison for post-exposure symptoms.

   CDC, in coordination with state and local health departments, conducted surveillance across the Gulf States for health effects related to the oil spill. Early on, CDC worked with states to help define what to watch for in their own surveillance systems and what enhancements to make to their surveillance systems to have more effective surveillance of health effects related to the oil spill. States shared the results with us (and with each other). This state-based surveillance concluded on 6 October due to the absence of reports of new cases of self-reported exposures. CDC also used established national surveillance systems: The National Poison Data System (NPDS—mentioned above) and BioSense. This health surveillance captured public health issues that surface in the general public and concluded 1 October. A summary of state findings are posted on the CDC website. See http://emergency.cdc.gov/gulfoilspill2010/2010gulfoilspill/health_surveillance.asp

   Furthermore, as part of the HHE activities CDC/NIOSH field teams administered health surveys to a representative sampling of response workers working in both off-shore and on-shore work sites. These surveys were designed to reveal deficiencies in education and training, work practices or other controls, as well as unmet needs for personal protective equipment, or medical monitoring and care. Health survey data may also be useful in planning or modifying exposure assessment activities. In the future, these health survey data will be used to design health screening tools and can serve as a reference baseline for longer term health studies.

6. **<u>Long-term monitoring</u>: In your testimony you mention that surveillance data is being used to monitor a plethora of symptoms. Can you please tell me how people are identified? For example, are they self-reported? Reported by doctors? Do we need to worry about any sort of reporting bias in considering whether everyone who should be monitored actually is?**

Response: CDC surveillance work monitored calls to poison centers, emergency department records (redacted to prevent disclosure of patient identity), and similar types of data that states have access to.

- CDC, in coordination with state and local health departments, conducted surveillance across the Gulf States for health effects related to the oil spill in order to provide early indications of possible health impacts on the populations most likely to be exposed. This surveillance concluded on 6 October due to the absence of reports of new cases of self-reported exposure.

- In addition, CDC used two established national surveillance systems, the National Poison Data System (NPDS) and BioSense. The NPDS provides self-reported call data about exposure. The data reported by poison control centers may be from clinicians or maybe self-reported by members of the public, since poison control centers can receive calls from either. BioSense collects data about specific groupings of signs and symptoms at 86 coastal healthcare facilities. BioSense and NPDS surveillance concluded on 1 October.

- The surveillance systems were being used to track symptoms related to the eyes, skin, respiratory, cardiovascular, gastrointestinal and neurological systems, including worsening of asthma, cough, chest pain, eye irritation, nausea, and headache. Although state-based surveillance systems varied from state to state, in general they collected data from healthcare providers in designated hospitals and other facilities. If the surveillance systems identified groups of individuals with these systems, the state and local public health officials followed up as needed to investigate whether there was an association between the symptoms and the oil spill.

- States and CDC regularly shared data and summaries with each other. This health surveillance was designed to capture public health issues that surfaced in the general public. A summary of state findings are posted on the CDC website. See http://emergency.cdc.gov/gulfoilspill2010/2010gulfoilspill/health_surveillance.asp

- Surveillance work for acute health effects concluded on 6 October. Community members were captured in the surveillance system if they sought medical care at the participating coastal hospitals and presented symptoms associated with potential oil spill exposure. CDC provided clinicians with information about the oil spill contaminants and guidance on taking patient exposure histories. Hospitals shared aggregate surveillance data with state health departments, who then shared that data with the CDC. Individual community members were not actively monitored.

- Additionally, EPA, State environmental agencies, and other agencies continually monitored the air in the coastal areas of the Gulf states for hazardous compounds associated with the spill. CDC/ATSDR received these data, then analyzed and interpreted them to determine if any of the levels represented human health risks. CDC/ATSDR reviewed data packages as they were received; however, the agency has not received any sampling data packages from EPA since the week of 4 October 2010, as response operations were curtailed following capping of the well.

- Bias is always a question in developing surveillance system. To address this, current surveillance activities relied on a variety of data sources.

- Both the environmental monitoring and the health surveillance were structured to alert agencies to health risks posed by the oil spill so that the government could respond in a timely and appropriate manner to protect public health.

7. **Long-term effects of ingesting oil: Could you please provide this Committee with citations for the portion of your testimony where you mention that "swallowing small amounts (less than a coffee cup) of oil will cause upset stomach, vomiting, and diarrhea, but is unlikely to have long-lasting health effects."**

Response: See citation below and attached document.
Title : Results of a Workshop on Health Effects of Crude Oil Exposures Related to Operation Desert Storm.
Descriptive Note : Final rept. 14-15 Feb 91,
Personal Author(s) : Macys, D. A. ; Carpenter, R. L. ; Risher, J. F. ; Vinegar, A. ; Dodd, D. E.
Corporate Author : MANTECH ENVIRONMENTAL TECHNOLOGY INC DAYTON OH
Report Date : FEB 1992

HENRY A. WAXMAN, CALIFORNIA
CHAIRMAN

JOE BARTON, TEXAS
RANKING MEMBER

ONE HUNDRED ELEVENTH CONGRESS

Congress of the United States
House of Representatives

COMMITTEE ON ENERGY AND COMMERCE
2125 RAYBURN HOUSE OFFICE BUILDING
WASHINGTON, DC 20515–6115

Majority (202) 225-2927
Minority (202) 225-3641

July 8, 2010

Aubrey Miller, MD, MPH
Supervisor for Public Health Science
National Institute of Environmental Health Sciences (NIEHS)
National Institutes of Health (NIH)
111 T.W. Alexander Drive
Research Triangle Park, NC 27709

Dear Dr. Miller:

Thank you for appearing before the Subcommittee on Health on June 16, 2010, at the hearing entitled "HHS Actions to Identify and Address Health Effects of the BP Oil Spill."

Pursuant to the Committee's Rules, attached are written questions for the record directed to you from certain Members of the Committee. In preparing your answers, please address your response to the Member who submitted the questions.

Please provide your responses by July 22, 2010, to Earley Green, Chief Clerk, via e-mail to Earley.Green@mail.house.gov. Please contact Earley Green or Jennifer Berenholz at (202) 225-2927 if you have any questions.

Sincerely,

Henry A. Waxman
Chairman

Attachment

The Honorable Diana DeGette

1. Does the NIH have the resources it needs to be able to very quickly ramp-up research into the health impacts of oil and dispersants?

2. To elaborate on my oral question from the hearing, please comment on what your agency is doing to notify the public about relevant health concerns and any actions they should or should not take?

3. Health data: The environmental health expertise at NIEHS is imminently needed in devising appropriate and sufficient toxicology assessments for oil spill workers and residents living in the area. What specific health data from both workers and affected community members is needed in order to adequately assess short and long term health effects of the oil and dispersants? And for how long and with what frequency should health data be captured?

4. Lessons Learned from Earlier Spills: In your testimony you reference a recent publication from the Journal of Applied Toxicology that provides an overview of health impacts from earlier oil spills. What can we draw from previous oil spills to help us understand and properly respond to potentially negative health consequences of the current spill?

5. Impact of Dispersants: The use of dispersants in this spill has been unprecedented, with over one million gallons used to date. Dispersants are designed to prevent oil from collecting on the surface, which instead has resulted in plumes of oil spreading into the Gulf. This may have serious impacts on the ocean ecosystem that we have yet to fully understand. In fact, according to toxicity data posted on the EPA website, both the major Corexit dispersants appear to be more toxic when mixed with oil that either the dispersant or oil alone. Could you please comment on this and how it may impact research into or surveillance of health effects?

NIH/NIEHS responses – OS reviewed

Diana DeGette Questions

1. Does the NIH have the resources it needs to be able to very quickly ramp-up research into the health impacts of oil and dispersants? What about for the CDC and the FDA?

Response:
NIH has quickly ramped up research on the health effects of the oil and dispersants. NIH is devoting $10 million to initiate research through the National Institute of Environmental Health Sciences (NIEHS) on the potential human health effects of the oil spill. With this funding, NIEHS will recruit clean-up workers, including community volunteers, and will collect biological samples, health histories, information about clean-up work they performed, and the nature of their potential exposures. NIEHS is leading the design and implementation of the study in collaboration with the National Institute of Occupational Safety and Health (NIOSH), building on NIOSH's efforts to identify and roster all the clean-up workers in the Gulf. In the near term, NIH will establish a baseline of such information and then monitor the oil spill workers for respiratory, immunological and neurobehavioral effects. NIEHS is working with other HHS agencies, federal partners, as well as local communities and universities to both assess and implement its research plan. The Institute of Medicine has already reviewed the study protocol and will continue to monitor the federal response. For more information, please see http://www.iom.edu/Activities/PublicHealth/FedResponseOilSpill.aspx.

Additionally, the National Toxicology Program (located administratively within NIEHS and headed by the NIEHS Director) is planning studies to identify important biological activities and tissue targets for crude oil, weathered oil, dispersants, and mixtures of dispersants and oil that have appeared in the Gulf. The proposed studies include a mixture of literature evaluations, analytical chemistry activities, and toxicity pathway screens to confirm and extend our understanding of the hazards presented by these complex materials. Through a variety of interagency working groups involving health monitoring, exposure data, toxicology, and related issues, NIEHS has been collaborating with CDC and others to identify critical environmental health issues stemming from the spill, its cleanup, and aftermath and to identify resources to address these issues.

2. To elaborate on my oral question from the hearing, please comment on what your agency is doing to notify the public about relevant health concerns and any actions they should or should not take?

Response:
NIEHS administers the Worker Education and Training Program (WETP), which for 24 years has provided safety training to emergency responders and the hazardous materials workforce. Through this program, NIEHS provided nearly immediate assistance to the oil spill response to protect the health of oil spill workers and continues to work with the Coast Guard and BP officials, as well as local and state officials, academic institutions, and other federal agencies to provide worker safety training. In partnership with OSHA and the Unified Command, more than 8,000 pocket-sized booklets from NIEHS entitled "Safety and Health Awareness for Oil Spill Cleanup Workers" have been distributed to instructors, safety officials, front-line responders participating in the Vessels of Opportunity Program, and beach workers in the Shoreline Cleanup

Assessment Team. The booklets also have been printed in English, Spanish and Vietnamese. The training is being paid for and administered by BP with oversight and input, including on curricula, from OSHA, NIEHS, and other federal agencies, and is being provided in English, Spanish and Vietnamese. All of the NIEHS worker training resources and materials are available online, www.niehs.nih.gov/oilspill.

3. Health data: The environmental health expertise at NIEHS is imminently needed in devising appropriate and sufficient toxicology assessments for oil spill workers and residents living in the area. What specific health data from both workers and affected community members is needed in order to adequately assess short and long term health effects of the oil and dispersants? And for how long and with what frequency should health data be captured?

Response:
Several agencies are working together in collaboration to formulate study designs to help address the potential exposures and health concerns of clean-up workers, many of whom were drawn directly from members of the affected communities. As part of this effort, NIEHS has begun planning research studies on the potential long-term health consequences of the oil spill. This work will include a prospective study of persons involved in clean-up activities, building on current efforts of CDC/NIOSH to collect data on clean-up workers and assess hazards. NIEHS is planning to follow for up to 20 years a diverse population of response workers including volunteers and paid community members involved in a wide range of clean-up activities involving potential exposure to oil and chemical mixtures and to stressful conditions that may be associated with future adverse health consequences. Partnership between NIEHS and CDC/NIOSH has been established to facilitate this work, which will also involve collaborations with other Federal, state and local health and environmental agencies and groups.

As currently planned, the NIEHS-led study will include in-depth study of roughly 20,000 response workers, and brief contact and follow-up of 25,000 more, including a range of professional and non-professional workers and community-based volunteers involved in clean-up activities. An appropriate non-exposed comparison group will be included, and emphasis will be on including a majority of workers from Gulf States to facilitate follow-up. The cohort will include workers involved in source control and oil containment activities, those on vessels involved in burning oil, those on vessels not involved in source control or burning, those involved in shoreline activities, and those involved in decontamination activities, as well as a comparison group of out-of-work fishermen and related workers who are not likely to have been exposed to oil and oil mixtures but may have been affected by the spill. The cohort will also include federal workers such as members of the Coast Guard and National Guard who may have been called in and/or been involved in clean-up activities. Extensive health and exposure information will be collected at baseline and periodically over time. NIEHS anticipates following this cohort for up to 20 years, although the exact duration of the study will depend on the nature and intensity of follow-up efforts needed to address the levels of exposure and potential health risks.

NIEHS plans to:

- collect baseline health, lifestyle, work, and residential history data, and biological samples from currently deployed workers who will be followed both actively and passively over time for changes in health status;
- add any newly deployed workers for similar follow-up with additional collection of biological samples and data prior to first deployment, if feasible;
- collect periodic follow-up health and exposure survey data to identify changes in health status and complete oil-spill exposure histories, including contact with and consumption of potentially contaminated seafood;
- follow the cohort passively via linkage to state cancer registries and vital records, and if feasible any electronic medical records; and
- create a biorepository of collected blood, urine and other samples to support future research.

In addition, smaller subsets of workers will be studied more intensively over time, including repeat collection of biosamples and periodic health assessment, including pulmonary function and neurobehavioral testing to more comprehensively study short and long-term changes in health and biological response.

As part of this study, NIEHS will work with CDC/NIOSH and other partners to facilitate the compilation of environmental and personal monitoring data, information from ongoing hazard evaluations, systematically collected surveillance data on acute symptoms related to clean-up activities, information on daily weather conditions, and other relevant data collected by Federal, state, local, and corporate groups to support creation of a job exposure matrix and geographically based data (e.g. by compiling geocoded residence and work location information) to characterize the exposures of workers in the cohort. This data repository may also support research on other potentially affected communities. As the understanding of community exposures and potentials risks is clarified, NIEHS intends for the research on the potential health consequences to community members not actively engaged in clean-up activities to be supported through extramural and other mechanisms.

4. Lessons Learned from Earlier Spills: In your testimony you reference a recent publication from the Journal of Applied Toxicology that provides an overview of health impacts from earlier oil spills. What can we draw from previous oil spills to help us understand and properly respond to potentially negative health consequences of the current spill?

Response:
In the recent article in the *Journal of Applied Toxicology*, the authors reviewed the results of studies of human health effects related to oil tanker spills as reported in 34 publications. The clearest conclusion from the examination of these studies is that we have very little data; follow-up of exposed people has occurred for only a handful of the tanker spill incidents from the past several decades. Historically, the workers involved in cleanup have reported the highest levels of exposure and the most acute symptoms, when compared to subjects exposed in different ways; for example, higher levels of lower respiratory tract symptoms were reported in fishermen who participated in cleanup following the 2002 *Prestige* tanker accident off the coast of Spain. Other studies have looked at psychological effects of spills, both among workers and in affected communities; follow-up studies of affected populations from the 1989 *Exxon Valdez* spill, for

example, reported higher levels of generalized anxiety disorder, post-traumatic stress disorder, and depressive symptoms. A few studies have also indicated the possibility for adverse respiratory effects and genotoxicity among oil spill workers. Additionally, based upon the potential toxicity of various components of the crude oil and the applied dispersants, other health effects, such as risk of cancer, adverse pregnancy outcomes, and neurodevelopmental effects in children should be considered and evaluated as appropriate.

5. Impact of Dispersants: The use of dispersants in this spill has been unprecedented, with over one million gallons used to date. Dispersants are designed to prevent oil from collecting on the surface, which instead has resulted in plumes of oil spreading into the Gulf. This may have serious impacts on the ocean ecosystem that we have yet to fully understand. In fact, according to toxicity data posted on the EPA website, both the major Corexit dispersants appear to be more toxic when mixed with oil that either the dispersant or oil alone. Could you please comment on this and how it may impact research into or surveillance of health effects?

Response:

The use of dispersants to remove or control oil discharges is authorized under Subpart J of the National Oil and Hazardous Substances Pollution Contingency Plan (NCP) (40CFR300.900 *et seq.*). The NCP also specifies procedures and approvals regarding about when and how to use dispersants. The EPA maintains the NCP Product Schedule <http://www.epa.gov/emergencies/content/ncp/product_schedule.htm>, which lists the dispersants that are authorized for use. There are specific data requirements for a dispersant to be listed on the Schedule and one of these is determining toxicity (measured as lethality at 48 or 96 hrs) to two model marine organisms, a small fish and a small crustacean. The toxicity data cited in the Technical Product Bulletin for COREXIT EC9500A, the predominant dispersant used in the Gulf Oil Spill response, indicates that dispersant mixed with a fuel oil in a 1:10 ratio is more toxic than the fuel oil alone, which is in turn more toxic than the dispersant alone (http://www.epa.gov/emergencies/content/ncp/products/corex950.htm).

EPA also conducted independent toxicity tests of eight dispersants on the Product Schedule including the predominant one used in the Gulf (COREXIT EC9500A). The results indicate that for all eight dispersants for both test species noted above, the dispersants alone were less toxic than the dispersant-oil mixture. Oil alone was found to be more toxic to mysid shrimp than the eight dispersants when tested alone. Oil alone had similar toxicity to mysid shrimp as the dispersant-oil mixtures, with exception of the mixture of another dispersant not used in the Gulf and oil, which was found to be more toxic. See http://www.epa.gov/bpspill/dispersants-testing.html#phase2.

With respect to the interactions of the dispersants and oil with the ocean ecosystem, we are not aware of any systematic research performed to date to allow predictions of the overall effects of the use of dispersants. Studies of the effects of dispersants in combination with oil on marine species, primarily fish and shellfish, but also other marine invertebrates and waterfowl, published

in the scientific literature have yielded inconsistent findings. What we can readily glean from this body of literature is that dispersed oil can have different toxicological activity than the oil itself, with the nature of the effects observed dependent on many factors such as species, life stage, experimental conditions, and the specific crude oils and dispersants evaluated.

Toxicity studies of dispersants, or oil mixed with dispersants, in animal models typically used for evaluating human health hazards have not been conducted. The ingredients of COREXIT EC9500 are safely used in a variety of household products and in small amounts are not thought to represent a significant human health hazard. Yet because the detergent and solvent ingredients that make up the dispersant formulation act to solubilize the oil, it is possible this will cause altered absorption of the chemical components of oil. Whether this would reduce or enhance the toxicity of oil is unknown. To help answer these questions, research is being planned by NTP. Also, the EPA recently announced the results of high throughput *in vitro* toxicity studies of oil and dispersant combinations (http://yosemite.epa.gov/opa/admpress.nsf/d0cf6618525a9efb85257359003fb69d/2b73ee902b54e4f585257752006591fd!OpenDocument). EPA's results indicated that none of the eight dispersants tested, including the product in use in the gulf, displayed biologically significant endocrine disrupting activity.

As to the effects on the health surveillance activities outlined in response to prior questions, the use of dispersants is being taken into consideration in the overall study designs and will be a factor considered in assessments of adverse health outcomes.

HENRY A. WAXMAN, CALIFORNIA
CHAIRMAN

JOE BARTON, TEXAS
RANKING MEMBER

ONE HUNDRED ELEVENTH CONGRESS

Congress of the United States
House of Representatives

COMMITTEE ON ENERGY AND COMMERCE
2125 RAYBURN HOUSE OFFICE BUILDING
WASHINGTON, DC 20515–6115

Majority (202) 225-2927
Minority (202) 225-3641

July 8, 2010

Michael R. Taylor, J.D.
Deputy Commissioner for Foods
U.S. Food and Drug Administration
10903 New Hampshire Ave
Silver Spring, MD 20993-0002

Dear Mr. Taylor:

Thank you for appearing before the Subcommittee on Health on June 16, 2010, at the hearing entitled "HHS Actions to Identify and Address Health Effects of the BP Oil Spill."

Pursuant to the Committee's Rules, attached are written questions for the record directed to you from certain Members of the Committee. In preparing your answers, please address your response to the Member who submitted the questions.

Please provide your responses by July 22, 2010, to Earley Green, Chief Clerk, via e-mail to Earley.Green@mail.house.gov. Please contact Earley Green or Jennifer Berenholz at (202) 225-2927 if you have any questions.

Sincerely,

Henry A. Waxman
Chairman

Attachment

The Honorable Diana DeGette

1. Does the FDA have the resources it needs to be able to very quickly ramp-up research into the health impacts of oil and dispersants?

2. To elaborate on my oral question from the hearing, please comment on what your agency is doing to notify the public about relevant health concerns and any actions they should or should not take?

3. Bioaccumulative Effects: The use of dispersants reduces the oil exposure to organisms at the surface, but increases exposure of oil and dispersants to organisms living deeper in the ocean. What concerns does the FDA have regarding the potential bioaccumulative consequences of dispersant application for the food chain? Can you comment not just on the impact of bioaccumulation of dispersants, but of oil given that the oil will remain present below the surface?

4. Reopening Closed Waters: I am extremely encouraged that FDA has set out such strong testing and analysis procedures to determine at what point it is safe to reopen closed waters. What data does FDA use to determine that contaminated fish are not swimming elsewhere and being caught in an area that is assumed to be fine?

5. Seafood contamination: As Dr. Howard mentions in his testimony, the closure of the waters to fishing is the key step in preventing tainted fish from entering commerce. Do you have any insight as to how long closure of such waters will be necessary? Couldn't it take a very long time for all contaminants to dissipate and that they could remain in the food chain for a very long time?

The Honorable Diana DeGette

1. **Does the FDA have the resources it needs to be able to very quickly ramp-up research into the health impacts of oil and dispersants?**

Response: Based on the composition and known toxicological profiles of the components of the dispersants used in response to the oil spill, FDA has judged the likelihood of significant human health impacts of exposure to dispersants from the ingestion of seafood to be minimal.

Little is known about the potential short- and long-term health effects of crude oil in combination with chemical dispersants. The National Oceanic and Atmospheric Administration (NOAA) and the Environmental Protection Agency (EPA) are performing additional research into dispersants. FDA works closely with NOAA, and we would defer to the National Institutes of Health / National Institute of Environmental Health Sciences (NIH/NIEHS) as well as the Centers for Disease Control and Prevention (CDC) for some aspects of the human health issues.

FDA, in cooperation with NOAA, is conducting extensive monitoring of seafood taken from the Gulf. This surveillance will help identify the potential long-term impact of the release of oil and dispersants into the food chain. To account for unexpected needs, FDA received $2 million in supplemental funding – as requested by the Administration – to monitor and respond to the environmental impact of the oil on seafood fished from the Gulf and surrounding areas.

In the months since the hearing, out of an abundance of caution and in order to gather additional information, FDA and NOAA have developed an analytical method to test for the potential presence of dispersants in seafood. The method tests for the presence of dioctyl sulfosuccinate sodium salt (DOSS), which is a significant component of the dispersants applied in the Gulf, and therefore, an effective marker for the presence of these compounds. Samples of finfish and shellfish were collected from June to October covering a wide area of the Gulf. As of October 15, scientists have chemically tested 1,735 seafood samples for the presence of dispersant, using the DOSS detection method. The results confirm that none of the samples pose a threat to human health. FDA and NOAA will now use this second test for dispersants, in addition to the sensory and chemical analysis of polycyclic aromatic hydrocarbons (PAHs), before reopening additional federal waters. FDA also intends to use this testing methodology in our post-reopening surveillance, consistent with additional funding that may be made available.

2. **To elaborate on my oral question from the hearing, please comment on what your agency is doing to notify the public about relevant health concerns and any actions they should or should not take?**

Response: FDA is confident that the actions taken by FDA, NOAA and the state agencies are sufficient to ensure that commercial seafood available to U.S. consumers poses no risk from contamination as a result of the Deepwater Horizon oil spill. Consequently, the Agency is not advising consumers that they need to take any additional precautions regarding consumption of commercial seafood.

FDA has established a page on its website for Gulf of Mexico Oil Spill Updates. The site contains updates on various aspects of the Agency's response to the oil spill as well as questions and answers on topics related to the safety of seafood from the area and links to non-FDA information on the spill and response. To contact FDA on questions regarding contaminated seafood or other issues related to Agency actions in response to the Deepwater Horizon Oil Spill, consumers can call 1-888-INFO-FDA.

3. **Bioaccumulative Effects: The use of dispersants reduces the oil exposure to organisms at the surface, but increases exposure of oil and dispersants to organisms living deeper in the ocean. What concerns does the FDA have regarding the potential bioaccumulative consequences of dispersant application for the food chain? Can you comment not just on the impact of bioaccumulation of dispersants, but of oil given that the oil will remain present below the surface?**

Response: The Federal government is taking a four-pronged approach to ensure that seafood from Gulf waters is not contaminated by oil. This approach consists of 1) precautionary closures and surveillance; 2) testing of seafood at primary processing plants; 3) stepped-up emphasis on FDA's Hazard Analysis and Critical Control Points (HACCP) regulations; and 4) using a strict protocol for re-opening closed waters when appropriate. NOAA has the authority to close federal waters to commercial fishing, and states have the authority to close waters within state jurisdiction. FDA works closely with NOAA and the states whenever commercial fishing waters are closed for public health reasons and again when they are re-opened to harvest. NOAA is monitoring fish caught just outside of closed Federal areas and testing them for both petroleum compounds and dispersants. The results of the sampling will help ensure that NOAA's closed areas are sufficiently protective to prevent the harvest of tainted fish. State fisheries enforcement agencies are performing similar enforcement activities in their jurisdictional waters.

Crude oil is a mixture of many different chemicals, a number of which are well established as being harmful to people if inhaled, absorbed through the skin, or ingested in contaminated food or water. Chemicals such as polycyclic aromatic hydrocarbons (PAHs) are toxic components of crude oil that are of high concern if ingested. For public health and regulatory purposes, PAHs are unintended environmental contaminants, for which FDA customarily sets limits at a level that is protective of public health. FDA has set limits on this basis for such chemical contaminants as PCBs and mercury in fish and dioxins in a range of foods, as well as for PAHs in previous oil spill situations.

Finfish have the ability to absorb PAHs if exposed to oil; however, they tend to metabolize (breakdown and eliminate) the petroleum compounds quickly after exposure. Oysters will likely remain tainted for an extended period of time after exposure to oil because they are stationary filter feeders. Shrimp and crab metabolize oil at a faster rate than oysters, but slower than finfish. Seafood species that are not sedentary, such as finfish, will deliberately move away from sources of oil contamination based on their sensitivity to concentrated levels of the chemicals present. This will make testing oysters in particular a very sensitive way to determine if an area is safe to harvest.

NOAA is collecting a variety of types of seafood, including finfish, shrimp, crabs, and oysters from the Gulf for analysis. Sensory experts check the scent and look of raw seafood, and the taste and scent of cooked seafood. NOAA has a voluntary seafood inspection program where seafood distributors and processors are inspected dockside. NOAA will be primarily focusing on offshore species, while FDA will be concentrating, with the states, on assessing the safety of near shore seafood species (oysters, crabs and shrimp).

To ensure seafood does not contain unsafe levels of chemicals, FDA is implementing a risk-based surveillance and sampling program targeting seafood products at Gulf Coast seafood processors. The Agency is targeting oysters, crabs, and shrimp, which, as stated above, can retain contaminants longer than finfish. This sampling will provide verification that seafood on the market is safe to eat with respect to potential contamination associated with the oil spill. FDA's sampling activities are designed to complement the dockside monitoring of finfish already planned by NOAA. If adulterated seafood is found on the market, both FDA and the states have the authority to seize the product and remove it from the food supply.

FDA operates a mandatory safety program for all fish and fishery products under the Federal Food, Drug, and Cosmetic Act, the Public Health Service Act, and related regulations. FDA's seafood HACCP regulation requires processors to identify and control hazards that are reasonably likely to occur. FDA has issued a letter reminding fish and fishery product processors of the Agency's regulations and policy concerning the food safety hazard of chemical contaminants in the environment, including the importance of verifying that fish they are processing have not come from closed waters. In addition, FDA is increasing inspections of Gulf Coast seafood processors to ensure compliance with HACCP regulations.

NOAA, FDA, and the Gulf Coast states have agreed on a protocol to determine when closed harvest waters can be safely re-opened. Under the protocol, harvest waters may not re-open until it is determined that there is no active oil contamination in the area, it is not likely to become oiled in the near future, and the seafood samples from the area successfully pass both sensory evaluation and chemical analysis to ensure there are no harmful oil residues. NOAA, FDA, and the states feel confident that when this protocol is followed, the seafood harvested from the re-opened areas will be fit for consumption.

With regard to your question on chemical dispersants, FDA has conducted an assessment of the chemicals in the dispersants being used in the Gulf and their potential to bioconcentrate in fish. The assessment included a review of current scientific literature, Material Safety Data Sheets (MSDS) and a detailed ingredient list provided by the dispersant manufacturer that identifies and describes the physical properties and biological effects of the dispersant chemicals. The dispersants used in the Gulf are made up of detergents and solvents commonly found in consumer products such as household detergents, medicines, cosmetics and toothpaste.

The potential for a chemical to become concentrated in aquatic organisms is described by the bioconcentration factor (BCF). The scientific community generally accepts the following scale for measuring BCF: high potential = BCF>1000, moderate potential = 1000 >BCF> 250, low potential = BCF<250. For food safety purposes, it is generally accepted that any chemical with a

BCF of less than 100 does not pose a public health concern. The constituents and characteristics of COREXIT® EC9527A and COREXIT® 9500 dispersants are as follows:

- Propylene glycol, a constituent of both COREXIT® EC9527A and COREXIT® 9500, is generally recognized as safe (GRAS) by the FDA in 21 CFR 184.1666, for use as a direct food additive under the conditions prescribed. Among other uses, it is a moisturizer in medicines, cosmetics and toothpaste. Propylene glycol has a BCF of 3, which is a low order of bioconcentration.

- 2-butoxyethanol, a constituent of COREXIT® EC9527A, is also a primary ingredient of various cleaners, liquid soaps and cosmetics. 2-butoxyethanol has a BCF of 3, again a low order of bioconcentration. The half-life for 2-butoxyethanol in water is approximately 1-4 weeks, indicating that it is readily biodegradable.

- Proprietary organic sulfonic acid salt, a constituent of both COREXIT® EC9527A and COREXIT® 9500, is reported by the manufacturer to be readily biodegradable, non-bioaccumulative, and moderately toxic to fresh water fish and invertebrates. It has a BCF of 10, also a low order of bioconcentration.

- Petroleum distillates, constituents of COREXIT® 9500, are volatile organic solvents produced from crude oil (e.g. mineral spirits, kerosene, white spirits and naphtha). They are common in hundreds of consumer products, including lip-gloss, deodorants, and furniture polish. Petroleum distillates have BCFs ranging from 60 to 80, indicative of a low potential for bioconcentration.

Available information, including current scientific literature, Material Safety Data Sheets and ingredient lists, indicates that the dispersants being used to combat the oil spill do not accumulate in seafood, and therefore, FDA has concluded there is no current public health concern from these products due to seafood consumption. However, as noted in the response to an earlier question, out of an abundance of caution and in order to gather additional information, FDA and NOAA have developed an analytical method to test for the potential presence of dispersants in seafood, using DOSS as a marker. The results of this test on 1,735 seafood samples confirm what FDA had previously found through our sensory testing -- that none of the samples pose a threat to human health. Almost all of the samples (over 99 percent) showed no detectable dispersant residue. The trace amounts of DOSS found in 13 of the 1,735 samples were below one part per million, well below the level of concern of 100 parts per million for finfish and 500 parts per million for shrimp, crabs and oysters.

4. **<u>Reopening Closed Waters</u>: I am extremely encouraged that FDA has set out such strong testing and analysis procedures to determine at what point it is safe to reopen closed waters. What data does FDA use to determine that contaminated fish are not swimming elsewhere and being caught in an area that is assumed to be fine?**

Response: NOAA and FDA are monitoring seafood caught in a five-mile wide buffer zone outside of closed areas, and testing them for petroleum compounds, to ensure that the closed areas are sufficiently large so as to prevent the harvest of contaminated seafood. So far, fish flesh

tested from outside the closure areas have tested well below any level of concern for oil-based contamination.

FDA is also implementing a risk-based surveillance sampling program targeting seafood products at Gulf Coast seafood processors. The Agency will be targeting oysters, crabs, and shrimp, which could retain contaminants longer than finfish. This sampling will provide verification that seafood on the market is safe to eat with respect to potential contamination associated with the oil spill. FDA's sampling activities are designed to complement the dockside monitoring of finfish already planned by NOAA. If adulterated seafood is found on the market, both FDA and the states have the authority to seize product and remove it from the food supply.

5. **Seafood contamination: As Dr. Howard mentions in his testimony, the closure of the waters to fishing is the key step in preventing tainted fish from entering commerce. Do you have any insight as to how long closure of such waters will be necessary? Couldn't it take a very long time for all contaminants to dissipate and that they could remain in the food chain for a very long time?**

Response: State and federal authorities reached a critical step toward reopening with their agreement on a shared protocol that will be applied as oil contamination abates in federal and state waters. Between July 22, 2010, and October 15, 2010, NOAA has announced nine re-openings of areas of Federal waters in the Gulf of Mexico that had formerly been closed to fishing. As of October 15, 2010, approximately seven percent of the Gulf remained closed to fishing.

We are committed to ensuring the safety of seafood coming out of the Gulf of Mexico, through closures of affected waters, surveillance, and with an eye toward reopening closed waters as soon as possible, consistent with protecting public health. This is important not only for consumers who need to know their food is safe to eat, but also for fishermen who need to be able to sell their products with confidence.