

ONE HUNDRED ELEVENTH CONGRESS
Congress of the United States
House of Representatives
COMMITTEE ON ENERGY AND COMMERCE
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WASHINGTON, DC 20515-6115

Majority (202) 225-2927
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MEMORANDUM

June 14, 2010

To: Members of the Subcommittee on Health

Fr: Health Subcommittee Staff

Re: Hearing on HHS Actions to Identify and Address Health Effects of the BP Oil Spill

On Wednesday, June 16, 2010, at 2:00 p.m. in room 2123 of the Rayburn House Office Building, the Subcommittee on Health will hold a hearing entitled “HHS Actions to Identify and Address Health Effects of the BP Oil Spill.” The hearing will examine how the Department of Health and Human Services (HHS) is responding to the public health risks associated with the Deepwater Horizon Oil Spill.

I. OIL SPILL TIMELINE

On April 20, 2010, at about 10 p.m., an explosion occurred on the Deepwater Horizon oil drilling rig in the Gulf of Mexico. There were 126 people on board at the time. Fifteen of those were injured and eleven died. The Coast Guard responded to the explosion and fire.¹

As of April 23, 2010, 1,900 gallons of dispersants have been used in the Gulf of Mexico.²

On May 10, 2010, the Environmental Protection Agency (EPA) issued a directive requiring BP to implement a monitoring and assessment plan for subsurface and surface applications of dispersants as part of the BP oil spill response.³

¹ Deepwater Horizon Unified Command. (online at www.deepwaterhorizonresponse.com/go/site/2931/) (accessed June 11, 2010).

² Deepwater Horizon Command, Operations and Ongoing Response – April 23, 2010. (online at www.deepwaterhorizonresponse.com/go/doc/2931/590571/) (accessed June 11, 2010).

³ Environmental Protection Agency, EPA *Response to BP Spill in Gulf*. (online at www.epa.gov/bpspill/dispersants.html#pr) (accessed June 11, 2010).

On May 20, 2010, EPA issued a directive requiring BP to identify and use a less toxic dispersant. On May 22, 2010, BP responded that it could not find an effective and available alternative on the EPA-approved dispersant list. On May 26, 2010, EPA issued a directive requiring BP to reduce dispersant application by 75% from the maximum daily amount used.⁴

As of June 7, 2010, the National Oceanic and Atmospheric Administration had closed 78,603 square miles of fishing area in the Gulf of Mexico, which represents roughly 33% of federal waters of the Gulf.⁵

As of June 11, 2010, over 13,000 cleanup workers have been employed by BP or its contractors; 1,700 boats have been supporting the response operations; and more than 1,800 Federal employees have been directly involved in cleanup operations over four states.⁶

II. HEALTH RISKS IDENTIFIED FROM PAST OIL SPILLS

Oil spills pose health risks for both responders involved in the cleanup activities and individuals living and working in the affected communities. Knowledge about these health risks comes from scientific studies undertaken following the Exxon Valdez disaster in Alaska in 1989, and other major oil spills around the world. These risks are primarily due to inhaling toxic vapors, physical contact with the oil through skin contact or ingestion, and psychological stress in confronting the devastation. The physical conditions associated with work in the area of an oil spill, such as extreme heat or cold, can also contribute to health risks.

In association with the Exxon Valdez disaster, the National Institute for Occupational Safety and Health (NIOSH) observed an increase in respiratory symptoms, headaches, throat and eye irritation, rashes and other skin problems among the cleanup workers. Similar health conditions were reported among cleanup workers involved in the Braer oil spill in Shetland, Scotland in 1993, and the Prestige oil spill in Spain in 2002. Negative health effects have been observed more frequently among cleanup workers with more prolonged exposure to polluted areas, who have skin contact with oil, and who eat while in contact with oil.⁷

In previous major oil spills, residents in the surrounding communities exposed to the oil suffered physical complaints similar to the cleanup workers, as well as significant incidence of

⁴ Deepwater Horizon Unified Command (online at www.deepwaterhorizonresponse.com/go/site/2931/) (accessed June 11, 2010).

⁵ National Oceanic and Atmospheric Administration, *NOAA Opens 339 Square-Mile Fishing Area in Gulf of Mexico*. (http://www.noaanews.noaa.gov/stories2010/20100607_closure.html) (accessed June 11, 2010).

⁶ Occupational Safety and Health Administration, *Keeping Workers Safe During Oil Spill Response and Cleanup: Update on OSHA Activities*, (online at osha.gov/oilspills/oilspill-activity-update.html) (accessed June 11, 2011).

⁷ Grist, *Oil Spills and Human Health: Lessons from History*, May 10, 2010 (online at www.grist.org/article/oil-spills-and-human-health-lessons-from-history/) (accessed June 11, 2011).

mental health disorders. Following the Exxon Valdez disaster, community residents suffered high rates of anxiety disorder, post-traumatic stress disorder, and depression.⁸

Not as much is known about the long-term effects of oil spill exposures. Follow-up studies of cleanup workers involved with the Prestige oil spill in Spain indicate persistent respiratory symptoms one to two years following exposure. Several chemicals in the vapors related to crude oil have known carcinogenic potential, but it is not yet clear whether these exposures do, in fact, increase the rate of cancer.

The use of dispersants as part of the Deepwater Horizon cleanup could potentially contribute to additional health risks. As a result, the federal government will “require regular analysis of [dispersant] effectiveness and impact on the environment, water and air quality, and human health through a rigorous monitoring program.”⁹

III. GOVERNMENT AGENCIES

The Department of Health and Human Services (HHS) is participating in the U.S. National Response Team for the BP oil spill by supporting public health surveillance strategies to federal and state partners and developing informational resources. The following HHS entities are directly involved with these efforts:

- Office of the Assistant Secretary for Preparedness and Response (ASPR)
- Centers for Disease Control and Prevention (CDC)
- Food and Drug Administration (FDA)
- National Institute of Environmental Health Sciences (NIEHS)
- Office of the Assistant Secretary for Health
- Office of Public Health and Science

The Department of Homeland Security, the Department of Labor, and EPA have also joined in this initiative.

A. Office of the Assistant Secretary for Preparedness and Response

The ASPR serves as the Secretary's principal advisory staff on matters related to bioterrorism and other public health emergencies. The ASPR coordinates interagency activities among HHS, other federal departments, and state and local officials related to public health emergencies. The Office of the Assistant Secretary is comprised of five offices, including the Office of Preparedness and Emergency Operations.¹⁰ The ASPR is working closely with the Occupational Safety and Health Administration (OSHA) and the National Institute of

⁸ *Id.*

⁹ Environmental Protection Agency, *EPA Response to BP Spill in the Gulf of Mexico* (online at www.epa.gov/bpspill/dispersants.html) (accessed June 11, 2010).

¹⁰ Department of Health and Human Services, *Office of Preparedness and Emergency Response* (online at [www.hhs.gov/as\(pr/opeo/index.html](http://www.hhs.gov/as(pr/opeo/index.html)) (accessed June 10, 2010).

Occupational Health and Safety (NIOSH), to investigate the causes of health effects suffered by workers and intends to establish a “long-term health program to monitor the health of workers involved with the oil spill.”¹¹

B. Centers for Disease Control and Prevention

CDC, working with state and local health departments, is monitoring and conducting surveillance across the Gulf States for emerging health effects related to the oil spill.¹²

There are a number of different chemical, physical, biological, and psychological hazards to which response workers may be exposed, depending on the nature of the spill, the type and phase of the response, and the specific tasks undertaken.¹³ According to CDC, risks to workers on ships or on shore may include:

- Chemical exposures, including volatile organic compounds, oil mist, polycyclic aromatic hydrocarbons, and diesel fumes;
- Physical risks, including those related to sun, noise, heat, and ergonomic challenges;
- Injuries related to equipment and vehicles;
- Biological hazards, including harm from dangerous animals or insects;
- Psychological hazards, including witnessing injuries or death of people or wildlife, as well as fatigue.¹⁴

NIOSH is leading CDC’s efforts in protecting workers and volunteers involved with the BP oil spill. Specifically, NIOSH is providing information to BP, OSHA, the Coast Guard, and other federal and state partners about protecting workers and volunteers from potential safety and health hazards.¹⁵ NIOSH is also administering a voluntary survey of workers to assess potential spill-related symptoms of illness or injury.¹⁶

In addition to monitoring health threats posed to response workers, CDC is studying public health risks to the broader population. For example, CDC is working with EPA to determine whether the chemicals detected in EPA samples (including air, water, sediment and oil samples) may cause health problems. As of June 9, 2010, the levels of pollutants being reported

¹¹ Occupational Safety and Health Administration, *Update on Safety of Oil Spill Response Workers*. (online at hr.blr.com/newsAlternate.aspx?category=4&topic=120&id=82461) (accessed June 11, 2010).

¹² *Id.*

¹³ Centers For Disease Control and Prevention, *Oil Spill Response Resources* (online at www.cdc.gov/niosh/topics/oilspillresponse/) (accessed June 11, 2010).

¹⁴ *Id.*

¹⁵ *Id.*

¹⁶ *Id.*

are “consistent with levels [the CDC] would expect to see this time of year”.¹⁷ Furthermore, “there is no indication of changes in levels, except for the samples of the oil residue on the beaches.”¹⁸ The data collected on beaches “indicate [the oil residue] consists of substances which are not well absorbed by humans”; therefore, CDC is advising people to avoid contact with this residue if possible, and practice good hygiene if contact occurs.¹⁹

C. Food and Drug Administration

Under the Federal Food, Drug and Cosmetic Act, FDA is responsible for the management and operation of a mandatory safety program for all fish and fishery products.²⁰ In collaboration with experts at the National Oceanic and Atmospheric Administration, other federal agencies and state authorities, FDA is monitoring the spill to prevent any impacted seafood from entering the market.^{21 22}

D. National Institute of Environmental Health Sciences

NIH’s National Institute of Environmental Health Sciences (NIEHS) is providing training and safety information to protect the health of responders.²³ Immediately after the oil spill, NIEHS’ Worker Education and Training Program instituted a four-hour education course on hazard awareness and safety for all oil spill workers hired by BP.^{24 25} In addition, NIEHS created a pocket handbook, “Safety and Health Awareness for Oil Spill Cleanup Workers,” which is available in English, Spanish and Vietnamese. It has been distributed throughout five

¹⁷ Centers For Disease Control and Prevention, *Environmental Surveillance*, (online at emergency.cdc.gov/gulfoilspill2010/2010gulfoilspill/environmental_surveillance.asp) (accessed June 11, 2010).

¹⁸ *Id.*

¹⁹ *Id.*

²⁰ Food and Drug Administration, *Gulf of Mexico Oil Spill Update- May 5, 2010* (online at www.fda.gov/Food/ucm210970.htm) (accessed June 11, 2010).

²¹ Department of Health and Human Services, *Background Factsheet on HHS Response to Deepwater Oil Spill* (online at www.hhs.gov/news/press/2010pres/05/deepwater_factsheet.html) (accessed June 10, 2010).

²² *Id.*

²³ Department of Health and Human Services, *Background Factsheet on HHS Response to Deepwater Oil Spill* (online at www.hhs.gov/news/press/2010pres/05/deepwater_factsheet.html) (accessed June 10, 2010).

²⁴ *Id.*

²⁵ National Institutes of Health, *NIEHS and OSHA Lead Oil Spill Worker Safety Efforts* (online at www.niehs.nih.gov/news/newsletter/2010/june/spotlight-spill.cfm) (accessed June 10, 2010).

Gulf Coast states to emergency responders within the BP Vessels of Opportunity Program and beach workers in the Shoreline Cleanup Assessment Team.²⁶

IV. WITNESSES

The following witnesses have been invited to testify:

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

Mike Taylor, J.D.

Deputy Commissioner for Foods

U.S. Food and Drug Administration

Lisa Kaplowitz, M.D., M.S.H.A.

Deputy Assistant Secretary for Policy

Office of the Assistant Secretary for Preparedness and Response

Aubrey Miller, M.D., M.P.H.

Senior Medical Advisor,

National Institute of Environmental Health Sciences
National Institutes of Health

²⁶ Department of Health and Human Services, *Background Factsheet on HHS Response to Deepwater Oil Spill* ([online at www.hhs.gov/news/press/2010pres/05/deepwater_factsheet.html](http://www.hhs.gov/news/press/2010pres/05/deepwater_factsheet.html)) (accessed June 10, 2010).