

# Response of the Federal Government to Health Issues

Assessing the Human Health Effects of the Gulf of Mexico  
Oil Spill: An Institute of Medicine Workshop

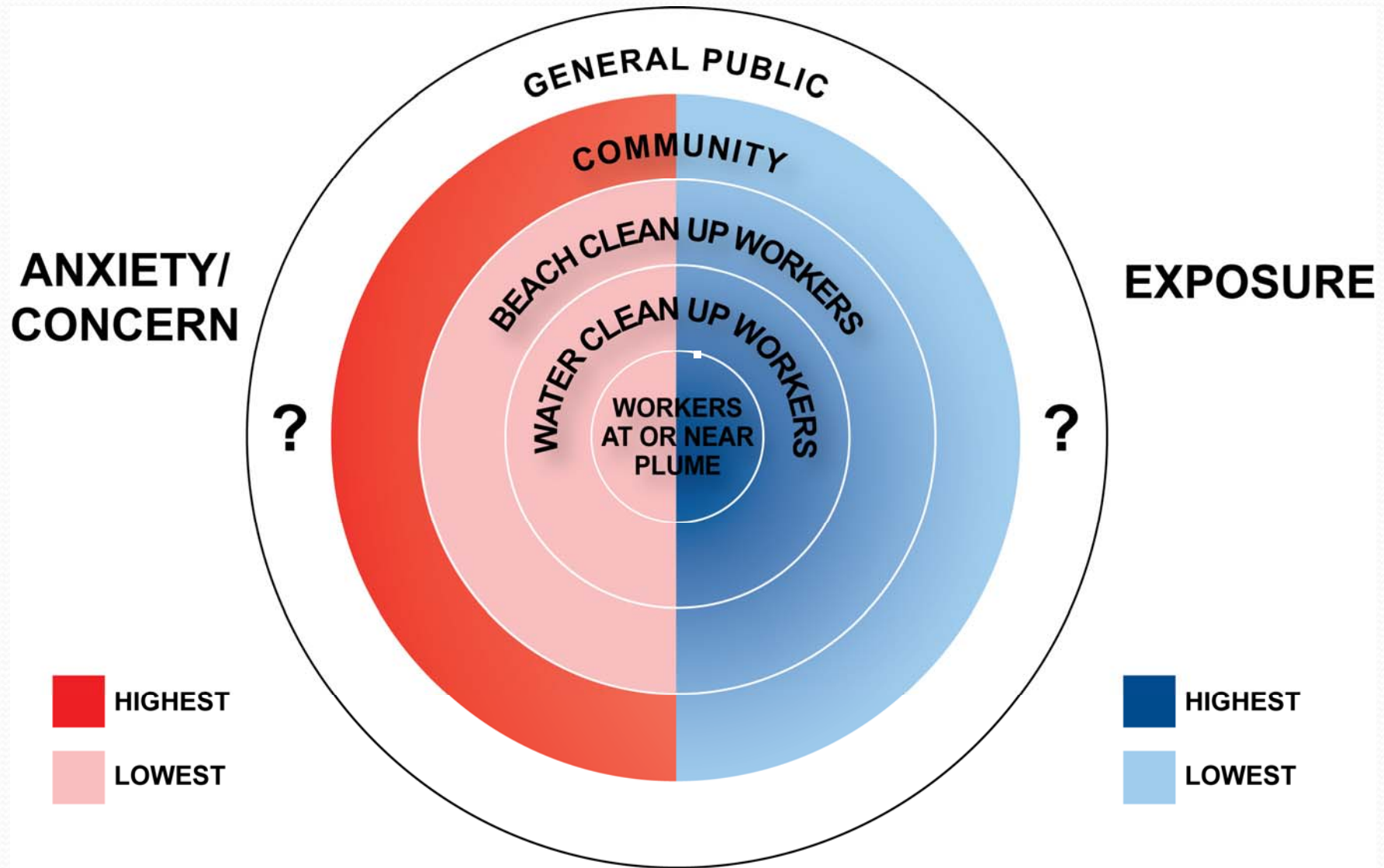
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## Federal Government Health Response: Overall Goals

- **Prevent** injury, illness and disability as a result of the spill and its consequences.
- **Monitor** short- and long-term health of affected populations.
- **Ensure care** for those who need it, including behavioral health care, for spill-related problems.
- **Anticipate and mitigate problems** that could arise.

# Populations of Concern



# Overview of Federal Health Agency Activities

- **Disseminating Information on Health Risks** (All Federal Agencies, State and Local Health Departments)
- **Protecting Workers, Volunteers and Residents** (Coast Guard, OSHA, FDA, NOAA, CDC, SAMSHA, State and Local Health Departments)
- **Training Workers to maximize their safety during response** (NIH/NIEHS, OSHA)
- **Monitoring Exposures of Workers and the Public** (Coast Guard, EPA, OSHA, CDC/NCEH, CDC/NIOSH)
- **Monitoring Population Health** (CDC, State and Local Health Departments, FDA, SAMSHA)
- **Providing Medical Care** (ASPR/NDMS, State and Local Health Departments)
- **Preparing for Long Term Follow-up** (NIH, CDC, State and Local Health Departments)

# Potential Worker Exposures On Water

## Source Control Vessels

- Closest to the area where crude oil appears on the surface, e.g. drilling relief wells, applying underwater subsurface dispersants, providing support and supplies. These vessels have contact with fresh crude oil, VOCs, explosive vapors, and concentrated dispersant chemicals.

## Vessels Involved in Burning Crude Oil

- Exposed to crude oil/dispersant that is less aged and may emit more VOCs than crude/dispersant closer to shore. Other hazards include heat, exposure to combustion products and, rarely, flash fire.

## Vessels Involved in Removing Oil from the Water

- Involved in containment, booming and skimming, distant from source or burning. Generally, these vessels have contact with oil that has weathered, and, as such, does not emit significant amounts of VOCs.

# Potential Worker Exposures On Land

**Shoreline Cleanup Activities:** These workers engage in manual removal of oiled-contaminated sand, low pressure flushing, manual sorbent application, and manual cutting of vegetation. Heat stress is a significant hazard.

**Decontamination Activities:** Vessels, PPE and other equipment may become contaminated during cleanup activities with weathered oil. This must be removed before leaving the contaminated areas. Workers and volunteers may also be involved in cleaning and caring for oil-soiled birds, turtles and other wildlife prior to relocation to the wild.

**Waste Stream Management Activities:** Response and remediation workers are engaged in the *centralized* disposal and recycling of hazardous solid and liquid wastes during collection, storage, transport and final disposal.

# Potential Exposures of Community Residents

- ***Dermal*** exposure to weathered crude in the water (through swimming) or on the beaches (by walking or sunbathing or touching weathered crude)
- ***Inhalational*** exposure to hydrocarbons and their irritant odors from close proximity or from prevailing winds
- ***Ingestion*** by eating potentially contaminated seafood, especially from non-commercial sources
- ***Psychological*** stress from social and economic disruption, and uncertainty about the future

# Unified Command: Overall Incident Coordination

**Department of Homeland Security.** The Department of Homeland Security is the principal Federal agency for domestic incident management. The Unified Command for the Deepwater Horizon Response incorporates all federal components and operates under the direction of Coast Guard Admiral Thad Allen.

See <http://www.deepwaterhorizonresponse.com/go/site/2931/>.

**Coast Guard.** In addition to overall incident management, the Coast Guard is engaged in a activities to protect its workers. Through the Unified Command, it posts health and safety information, including worker/volunteer health and safety information, on its website.

See <http://www.deepwaterhorizonresponse.com/go/doc/2931/567723> and <http://www.deepwaterhorizonresponse.com/go/doc/2931/567787/>



# Federal Health Activity Coordination

In coordination with Unified Command:

- White House Domestic Policy Council
  - Health-related activities of all Cabinet-level departments and Federal health agencies
- HHS Assistant Secretary for Preparedness & Response
  - CDC/NIOSH, CDC/NCEH, NIH/NIEHS, FDA, HRSA, SAMHSA, ACF, CMS, ASPR/NDMS

## Environmental Monitoring: EPA and NOAA

- Monitoring exposures in air, water, sediment and waste stream.
- Collecting samples along the shoreline and beyond for chemicals related to oil and dispersants in the air, water and sediment
  - NOAA: Aerial monitoring by NOAA P-3 aircraft (60 meters above surface) for air toxics
- Supporting and advising Coast Guard efforts to clean the reclaimed oil and waste from the shoreline
- Closely monitoring the effects of dispersants in the subsurface environment.
- All data regularly posted and publicly available.
  - See <http://www.epa.gov/bpspill/>

# Worker Protection: U.S. Coast Guard

- Ensuring all aspects of marine safety and fire control
- Ensuring port and tanker safety
- Monitoring vessel decontamination procedures
- Monitoring the safe operation of all U.S. Flag vessels and offshore facilities
- Setting priorities for protecting human health, welfare and the environment through the Unified Command
- Protects all Coast Guard personnel by monitoring exposures and by means of established occupational safety and health programs
- Provides senior safety officials to work with BP Safety, OSHA, CDC/NIOSH and other Federal, State and local health departments

# Worker Protection: DOL/OSHA & NIH/NIEHS

## ***DOL/OSHA***

- Distributes worker safety educational materials in multiple languages and audits training sessions
- Works with safety officials to protect workers from hazards such as exposures, heat stress, injuries
- Monitors worker exposures
- OSHA posts its worker monitoring data on its website.

See [http://www.osha.gov/oilspills/oil\\_slc\\_bysite.html](http://www.osha.gov/oilspills/oil_slc_bysite.html)

## ***NIH/NIEHS***

- Provides recommendations on Worker Education and Training
- Develops training material and translates into relevant languages (e.g. Spanish, Vietnamese)

# Worker Protection: CDC/NIOSH

- *Rostering of Workers*
  - NIOSH administered surveys to 15,000 workers involved in the response
- Surveillance
  - Working to capture all health symptoms, injuries and illnesses that could be related to oil response work, to ensure that those reports are being evaluated by safety and health professionals.
  - Using data to monitor reports of worker illness and injury and to work with the States, OSHA, and BP to identify acute trends and potential chronic health effects.
- Health Hazard Evaluations (HHEs)
  - Worker health assessments and exposure characterizations on water and on land
- Interim Guidance for Protecting Workers and Volunteers (*in clearance*)

# Population Protection and Monitoring: CDC/NCEH

- Planning for periodic, systematic reviews and evaluation of health data to ensure preventive actions are taken to reduce the risk of harm.
- Working with EPA to review air monitoring data to identify potential health impacts on residents.
- Conducting health surveillance across the Gulf States by collecting and reporting information from 60 poison control centers, from 86 healthcare facilities—many of them funded by the Health Resources and Services Administration (HRSA) at HHS, and from the Alabama, Florida, Louisiana and Mississippi state health departments and local health departments in those states.
- Data is reported on the CDC website as well as on state health department websites. See <http://emergency.cdc.gov/gulfoilspill2010/>

# Population Protection and Monitoring

- **Monitoring Behavioral Health**

  - **SAMHSA (Substance Abuse and Mental Health Services Administration)**

  - Currently collecting baseline behavioral health data from impacted states.
  - Close consultation with NGO disaster mental health partners including around cultural issues
  - Collaboration to ensure behavioral health needs into all aspects of response planning
  - Works with states to facilitate access to needed behavioral health services

- **Monitoring Food Safety**

  - **FDA and NOAA**

  - FDA and NOAA monitor fish caught just outside closed fishing areas, testing them to ensure the closed areas are sufficiently protective. FDA continues to closely monitor potential impact on the safety of seafood harvested from the area. See <http://www.fda.gov/Food/ucm210970.htm>
  - FDA has deployed a laboratory for testing and has increased food safety inspections

# Medical Care and Research

- **National Disaster Medical System (NDMS)**

Provides care on request from states. Currently is providing sick-call/primary care support to responders and the local community in Venice, Louisiana

- **Research**

- NIH Director (June 15<sup>th</sup>): Planning for cohort study of exposed workers and residents





# Thank You!

- Thank you for your assistance in advising the Federal, state and local health agencies
  - How best to protect response workers, volunteers, and Gulf residents,
  - What long term effects can be expected from an oil spill of this magnitude and duration, and
  - How we should be responding now and in the future to the human health effects from Deepwater Horizon fire and explosion and its aftermath.