

NIEHS Response to the Gulf Oil Spill

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Technical Conference

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Worker Education and Training Program (WETP) was created in 1986 by the Superfund Amendments and Reauthorization Act of 1986 (SARA), Section 126(g).

SARA authorizes a competitive grants program for training in hazardous waste removal, containment, and emergency response to events involving toxic substances.

WETP Emergency Support Activation Plan (ESAP) is built on the protocols of the Worker Safety and Health Annex of the National Response Framework (NRF).



NIEHS Disaster Response to the World Trade Center

Immediate and sustained supplemental funding to support World Trade Center training response efforts:

- On-site training for 7,000 response workers
- Provision and fit-testing of respirators
- Worker exposure monitoring
- Responder training course
- Consultation on the site safety plan





NIEHS training activation
through the Worker Safety & Health Annex
of the National Response Framework

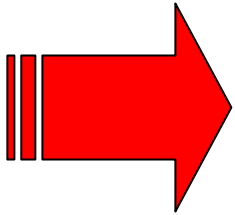
Keeping Workers Safe During Oil Spill Response
and Cleanup Operations



Admiral Mary Landry, USCG Incident Commander meets with OSHA Assistant Secretary David Michaels and the hazard assessment team at 6 AM on Monday, May 3, 2010 in Roberts, LA.

Keeping Workers Safe During Oil Spill Response and Cleanup Operations

Rescue



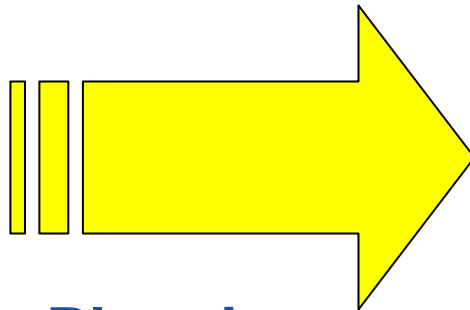
Chaotic

Risk-taking

Short

Frenetic

Recovery



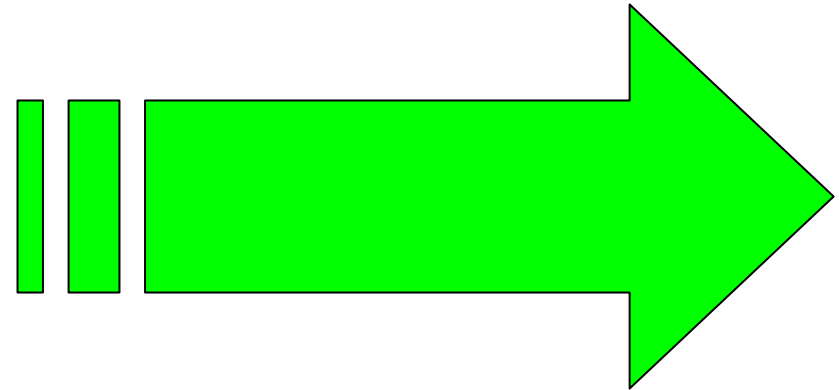
Planning

No risking lives

Longer than rescue

Paced

Clean-up



Normal cleanup

Risks assessed and understood

- **Used to manage emergency situations**

ICS uses:

- **Unity of command (one person in charge)**
- **Span of control to manage personnel (3 - 7 people under one supervisor)**
- **Life safety code**
- **A modular system to manage resources (a system that can expand and contract with the emergency event)**
- **Common terms to promote seamless communication**



NIEHS Response in partnership with OSHA and NIOSH

- **NIEHS developed oil spill response training tool on April 27, 2010 as the spill expands in the Gulf of Mexico.**
- **NIEHS begins work with OSHA and NIOSH as part of the Unified Command assessing worker safety issues on May 1st.**
- **NIEHS deployed staff, subject matter experts and awardees for instructor training and worker protection outreach.**



BP, USCG, OSHA, NIEHS, and NIOSH meet to assess worker protection issues in the BP Incident Command Center in Houma, LA on Tuesday, May 3, 2010.

- **NIEHS, together with OSHA, BP and the Coast Guard, developed short training courses.**
 - Training includes: safe work practices, personal protective equipment, decontamination, heat stress, and other common hazards for cleanup work.
 - As of August 29th, per BP, approximately 150,000 people had completed these courses.
- **Hazardous Waste Operations & Emergency Response (HAZWOPER) training:**
 - 40-hour training for those who will likely have direct contact with oil spill products.
 - More than 1,000 have completed the HAZWOPER training from NIEHS grantees.

Module 2



NIEHS Oil Spill Cleanup Training Tool OSHA

Module 2

Oil Spill Cleanup and Health Concerns



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WORKER EDUCATION & TRAINING PROGRAM

Gulf Oil Spill – vessel decontamination operations in Venice, LA



National Institute of Environmental Health Sciences
Oil Spill Cleanup Initiative

Safety and Health Awareness for Oil Spill Cleanup Workers



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National Institutes of Health



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NIEHS Oil Spill Responder Training Tool: Key Health and Safety Messages

- Proper training is a key component of a safe response and cleanup.
- The oil and hazardous materials associated with the cleanup can be hazardous to human health.
- The hazards and issues covered in this training tool are dynamic and require vigilance and flexibility.
- The key to a safe response is attention to the safety issues of your work environment.



How Can You Protect Yourself from Hazardous Chemicals?

When dealing with health and safety hazards try to control them by using the hierarchy of controls





How Do Chemicals Enter your Body?

- Skin contact/absorption
- Inhalation
- Ingestion
- Injection



Over 25,000 guides distributed

Front-line responders,
instructors, and safety officials

English, Spanish, & Vietnamese

National Institute of Environmental Health Sciences
Oil Spill Cleanup Initiative

Safety and Health Awareness for Oil Spill Cleanup Workers



National Institute of Environmental Health Sciences
Iniciativa de Limpieza del Derrame de Petróleo

Seguridad y Concienciación de Salud para Trabajadores de Limpieza de Derrames de Petróleo



Mayo 2010, v5

1-800-321-OSHA (6742)

OSHA 3391-052010

PROGRAMA DE EDUCACIÓN Y DE CAPACITACIÓN DE LOS TRABAJADORES



NIEHS Oil Spill Cleanup Training Tool



HOẠT ĐỘNG TÍCH CỰC ĐỂ DỌN SẠCH THẢM HỌA TRÀN DẦU

Kiến Thức Về Sự An Toàn và Sức Khỏe cho
Nhân Viên Dọn Sạch Hiện Trường Tràn Dầu



Tháng Năm 2010, v4.1

WORKER EDUCATION & TRAINING PROGRAM

OSHA 3388-052010

- **NIEHS mission will include:**
 - **Conducting a training quality assessment process to assure that cleanup workers receive proper training to prepare them for oil spill response;**
 - **Create additional curricula and modules and provide Hazmat trainers to cover essential health and safety hazards for oil spill cleanup workers;**
 - **Develop training to support personal protection equipment for oil spill responders;**
 - **Provide advanced Hazwoper training to subcontractor employees for specialized response activities**
 - **Integrate safety and health training into an overall responder protection program in conjunction with BP, USCG, OSHA, NIOSH and others.**

NIEHS/BP Field Training for Vessels of Opportunity (VOO) workers in Venice, LA



NIEHS will provide support to BP and the Unified Command to support the training program for response workers participating in Gulf spill response clean-up efforts (MC252).

The primary objectives are to:

- **Assist with the development of health and safety related course materials, training matrix, and task level training requirements and PPE Assessment.**
- **Provide quality assurance of course material and delivery of training in collaboration with BP's prime contractors, Petroleum Education Council (PEC) Premier and Texas Engineering and Extension Service (TEEX);**
- **Provide qualified, local trainers to the training program, managed by PEC Premier to expand and augment training resources in the impacted areas to ensure the efficient and timely promulgation of health and safety training;**
- **Assist with the distribution of relevant safety training materials through its web site and training distribution network within the impacted area.**

DELIVERABLES:

- **1. Written evaluations of training delivery and content**
- **2. Trainers who meet qualifications defined by TEEX and live in the affected Gulf States (LS, MS, AL and FL)**
- **2. Delivered Training as scheduled through PEC/Premier**

Dirty boom cleaning off the coast of Louisiana







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Assessing the Human Health Effects of the Gulf of Mexico Oil Spill

6/17/2010

Decades later, we still can feel the consequences of the Exxon Valdez oil spill. How will the even larger crisis in the Gulf impact our health? The IOM will hold a meeting June 22-23 to discuss the health issues for those living and working near the Gulf.

[Read More »](#)



Key Points

1. Longitudinal human health research is clearly indicated
2. Health studies should begin as soon as possible
2. Mental health & psychosocial impacts must not be overlooked
3. Sensitive populations need to be monitored
4. External stakeholders must be part of the process
5. Data and data systems should be developed to support wider research efforts



Medical surveillance studies and human health exposure assessments related to the spill will be difficult due to the size of the spill area, potentially impacted shoreline area, and number of those responding or exposed.

- **Health Concerns**

- **Acute**

- Dermal, Eye, Respiratory
 - Heat-related issues & Injuries
 - Mental Health / Psychosocial Issues

- **Long-term health effects**

- respiratory, neurological, carcinogenic, etc.

- **Target Groups**

- Workers
 - Volunteers
 - Exposed Community

- **Exposure Complexity**

- Chemical mixtures including raw and weathered crude oil, dispersants, and combustion by-products.
 - Exposure measurements from various sources and methods






GuLF Worker Study

A health study for oil spill clean-up workers and volunteers

To study potential short-and long-term health consequences of exposure to oil and oil byproducts

- 21,000 paid community clean-up workers & volunteers exposed to burning oil, weathered oil, dispersants, and crude oil
 - Currently employed and newly hired over time
 - Vessels of opportunity, shoreline clean-up, decontamination, and disposal
 - BP oil rig workers and contractors

Primary objectives

- Assess potential short-and long-term health effects associated with oil spill clean-up
- Create a resource for future collaborative research
- Specific subgroups

*Working title: **Gulf Long-term Follow-up Study**

- **National Contingency Plan (NCP) vs. National Response Framework (NRF) – Clarifying worker safety and health protection procedures and protocols in conjunction with ICS safety officer.**
- **All oil spill response training should grow out of the 1910.120 HAZWOPER framework.**
- **Assembly of appropriate subject matter experts for creating training materials based on best professional judgments and expertise.**
- **Job hazard analyses (JHA's) and exposure assessments for creation for assuring adequacy of training components and curricula modules.**
- **Training assessment process for characterizing target populations in terms of prior knowledge, literacy levels and expected job tasks.**
- **Quality assurance process must be built-in to assure the “right to understand” and assure training responds as conditions change.**

OSHA Deputy Assistant Secretary Jordan Barab in Venice, LA with his raincoat maker and HHS partners



In remembrance of the eleven Deepwater Horizon drilling rig workers who died at MC252. May they not be forgotten.

