



# Oil Spill Response and Research

## The 2010 Deepwater Horizon rig explosion and your health

The National Institute of Environmental Health Sciences (NIEHS) is part of the National Institutes of Health. From its home in North Carolina, NIEHS responded immediately to the 2010 Deepwater Horizon oil rig explosion, by providing safety training for cleanup workers, and initiating the largest research enterprise ever conducted on human health and oil spills.



Credit: Anthony Velasco/U.S. Fish and Wildlife Service.

### Safety Training

Within days of the explosion, staff from the NIEHS Worker Education and Training Program were on-site to ensure cleanup workers were trained to protect their own health and safety while responding to the disaster. NIEHS supported the training of approximately 150,000 cleanup workers.

Many of the trained workers are now participating in the NIEHS-led GuLF STUDY. NIEHS has also conducted evaluations of the training provided, and continues to work with Gulf communities and clinicians to develop and provide resiliency training in collaboration with the Substance Abuse and Mental Health Services Administration. The training teaches participants how to recognize signs and symptoms of disaster work-related stress; obtain support through employers or community resources; and recover from the emotional impact of a disaster through stress reduction and coping strategies. For more on this training, visit <http://go.usa.gov/e8nG>.



### University-Community Partnerships

NIEHS awarded \$25.2 million in research grants to Gulf area universities that partner with communities affected by the oil spill. This research network is addressing health questions specifically identified by the communities in need. Louisiana

State University Health Sciences Center, New Orleans; Tulane University, New Orleans; University of Florida, Gainesville; and The University of Texas Medical Branch at Galveston are the five-year grant recipients. These research teams are evaluating reproduction and birth outcomes, general health and well-being among coastal residents, and seafood safety. Researchers are also analyzing individual and community resilience post-disaster, and determining the impact resilience may have on behavior and mental health of children and adults living in the Gulf region. For more information on these partnerships, visit <http://go.usa.gov/z73m>.



### GuLF STUDY

In June 2010, NIEHS initiated the GuLF STUDY, and began research on the health of the workers and volunteers most directly involved in responding to the oil spill crisis. The GuLF STUDY will help determine if oil spills, and exposure to crude oil

and dispersants, affect physical and mental health. Researchers are studying a range of problems, including breathing and blood pressure issues, skin conditions, self-reported symptoms, and cancer, as well as depression, stress, and anxiety. Almost 33,000 cleanup workers are enrolled in the 10-year health study, making a significant contribution to their communities and answering important public health questions. For more information on this study, visit <https://gulfstudy.nih.gov>.



### Toxicology Research

The National Toxicology Program (NTP), headquartered at NIEHS, has established a research program to increase understanding of polycyclic aromatic compounds (PACs), widespread environmental contaminants that are naturally present in crude oil and also formed during the incomplete burning

of gas, coal, and other organic matter. The oil spill brought to light knowledge gaps on the ecological and human health hazards of these compounds. NTP is studying both individual PACs and PAC mixtures, to gain a better understanding of how exposures to these compounds may affect human health. For more information on this research, visit <http://ntp.niehs.nih.gov/go/PACs>.