



In Gulf cleanup, toxic risks are uncertain

By Elizabeth Weise, USA TODAY

June 23, 2010

There are multiple possible human health effects of the [Gulf of Mexico](#) oil spill, experts told an [Institute of Medicine](#) workshop in New Orleans on Tuesday. The problem for now is that true danger levels aren't known.

"There is a threshold for these effects" based on the amount of toxins people are exposed to and for how long, says Peter Spencer, a neurology professor at the Oregon Health & Science University in Portland. "And we don't know if these thresholds will be reached in this spill."

One problem for workers helping to clean up is that occupational diseases are usually indistinguishable from diseases not related to work, says Scott Barnhart, a professor of occupational health at the University of Washington in Seattle.

In general, previous oil spills have shown short-term effects — including cough and irritation of the mucous membranes — that clear up over time. Though in at least one spill in Spain, respiratory tract irritation was persistent.

There can be immediate, short-term effects from exposure to toxins, but possible long-term effects, including neurological ailments and cancers, can take weeks to years to appear. Although the effects are strongly related to a person's level of exposure, genetics means some workers will be more susceptible than others and there's no way to know in advance which ones, he says.

In terms of chemical exposures, proper protective gear can keep exposures at safe levels. The problem comes when heat and humidity cause workers to remove the gear, Barnhart says.

The panel was also clear that psychological problems are very serious concerns.

"Living on the Gulf Coast has become a trial that many of us could not have imagined several years ago," said Irwin Redlener, with the National Center for Disaster Preparedness. For many in the area, that has been counteracted by strong identification with their community. But the destruction of habitats that supported fishing, oystering and other ways of life can affect some of that resilience.

"I'd be concerned with the loss of community ... and purpose in life," says Sheldon Cohen, who studies social factors in health at [Carnegie Mellon University](#) in Pittsburgh. "There are a lot of cultural and community issues that have major implications for psychological distress and being able to cope."