

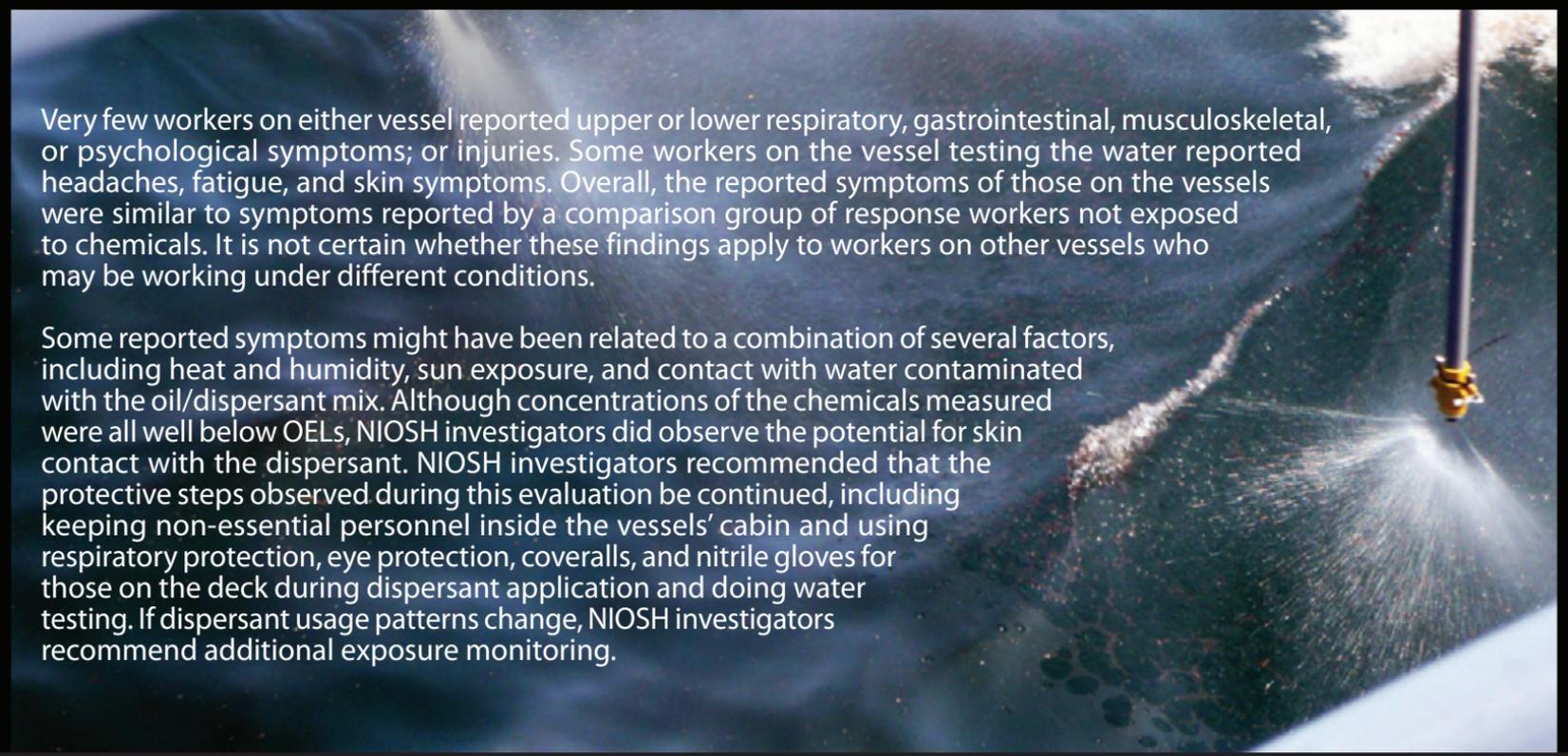
Health Hazard Evaluation of Deepwater Horizon Response Workers

On May 28, 2010, BP requested a health hazard evaluation of Deepwater Horizon Response workers. The first interim report from this health hazard evaluation was released on June 23, 2010. This card summarizes what NIOSH found.

Seven fishermen were hospitalized on May 26, 2010, having headache, upper respiratory irritation or congestion, nausea, elevated self-monitored blood pressure, fatigue, and chest pain or pressure. Two had other serious but common medical problems; five were observed because of reported chemical exposure.

Although early investigations focused on dispersants as the cause of the symptoms, NIOSH investigators conclude that dispersant use was unlikely to be the cause; rather, unpleasant odors, heat, and fatigue, among other factors, played a role. NIOSH investigators recommended improving worker training, coordination of illness/injury investigation and follow-up, and occupational health resources in the local community.

NIOSH investigators completed industrial hygiene surveys, health symptom surveys, and medical interviews during a small area dispersant mission on two motor vessels, the M/V International Peace and the M/V Warrior, on June 4-5, 2010. On this mission, personnel applied dispersant to the water surface from the deck of one vessel and personnel on the other monitored the dispersed oil under the surface and collected water samples. On all air samples, concentrations of volatile organic chemicals were well below occupational exposure limits (OELs) or were not detected. Even on an additive basis, the mixtures of chemicals measured in the air were a fraction (<10%) of acceptable levels.



Very few workers on either vessel reported upper or lower respiratory, gastrointestinal, musculoskeletal, or psychological symptoms; or injuries. Some workers on the vessel testing the water reported headaches, fatigue, and skin symptoms. Overall, the reported symptoms of those on the vessels were similar to symptoms reported by a comparison group of response workers not exposed to chemicals. It is not certain whether these findings apply to workers on other vessels who may be working under different conditions.

Some reported symptoms might have been related to a combination of several factors, including heat and humidity, sun exposure, and contact with water contaminated with the oil/dispersant mix. Although concentrations of the chemicals measured were all well below OELs, NIOSH investigators did observe the potential for skin contact with the dispersant. NIOSH investigators recommended that the protective steps observed during this evaluation be continued, including keeping non-essential personnel inside the vessels' cabin and using respiratory protection, eye protection, coveralls, and nitrile gloves for those on the deck during dispersant application and doing water testing. If dispersant usage patterns change, NIOSH investigators recommend additional exposure monitoring.

To read Interim Report #1 and view updates on this health hazard evaluation visit
<http://www.cdc.gov/niosh/topics/oilspillresponse/gulfspillhhe.html>.

