

## NIOSH to assess workplace hazards associated with hydraulic fracturing

The National Institute for Occupational Safety and Health (NIOSH) has called on the oil and gas industry to help assess the workplace hazards associated with hydraulic fracturing in response to four worker deaths since 2010.

The deaths occurred in the Williston Basin in North Dakota and Montana; NIOSH says the fatalities may have been due to “acute chemical exposures during flowback operations.” Flowback refers to drilling fluids that return to the surface after the hydraulic fracturing process is complete. The workers gauging, collecting, and transferring these fluids may be exposed to volatile hydrocarbons they contain. NIOSH states that high concentrations of the chemicals found in volatile hydrocarbons are extremely toxic and can damage the eyes, respiratory and nervous system, and lead to abnormal heart rhythms.

NIOSH researchers have developed several recommendations to reduce workplace exposures. These include developing alternative tank-gauging procedures, providing hazard awareness training, monitoring workers, ensuring that workers do not work alone, using appropriate respiratory protection, and establishing better emergency procedures.

These recommendations mark NIOSH’s ongoing effort to assess and mitigate health risks associated with hydraulic fracturing.

Sources: Centers for Disease Control and Prevention, NIOSH Science Blog, E&E News

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