

Hazard Alert: Worker Exposure to Silica During Fracking



Hydraulic fracturing or “fracking” is a process used to “stimulate” well production in the oil and gas industry. It is not a new process, but its use has increased significantly in the last 10 years because of new horizontal drilling and multi-stage fracking (or “completions”) technologies that improve access to natural gas and oil deposits. It involves pumping large volumes of water and sand into a well at high pressure to fracture shale and other tight formations, allowing oil and gas to flow into the well.

NIOSH’s recent field studies show that workers may be exposed to dust with high levels of respirable crystalline silica (called “silica” in this Hazard Alert) during hydraulic fracturing.

The Hazard Alert attached below discusses the health hazards associated with hydraulic fracturing and focuses on worker exposures to silica in the air. It covers the health effects of breathing silica, recommends ways to protect workers, and describes how OSHA and NIOSH can help. Workers and employers need to be aware of the hazard that silica dust poses. Employers must ensure that workers are properly protected from exposure to silica. The Hazard Alert also provides a brief summary of other health and safety hazards to workers conducting hydraulic fracturing activities.