

# Equipment not protecting hydraulic fracturing workers from toxins

Many industrial workers are exposed to dangerous toxins in the workplace but hydraulic fracturing workers may face some of the most dangerous health hazards on the job. A new study found that workers in the hydraulic fracturing industry may be exposed to dangerous levels of silica despite wearing protective equipment.

Workers have been exposed to dangerous levels of crystalline silica while working on hydraulic fracturing operations across the country, according to the study, "Occupational Exposures to Respirable Crystalline Silica During Hydraulic Fracturing." The study found that some workers have been exposed to much higher levels than the recommended exposure limit and could be at risk for developing serious health conditions.

Workers at hydraulic fracturing operations are required to wear protective equipment to reduce the risks of occupational hazards and exposure to toxins like crystalline silica. Despite the safety precautions taken at these operations, the study reported that the most common type of respirator workers wear may not keep them protected from dangerous levels of silica.

Most workers in these operations use half-mask, air-purifying respirators. Unfortunately, the study found that these respirators do not provide sufficient protection against silica exposure. They reported that the silica concentrations most of these workers are exposed to exceed the maximum concentration level that the respirator can protect against.

Silica exposure can be very dangerous and is a significant

hazard for hydraulic fracturing workers. Crystalline silica contains a portion of respirable silica that can cause serious health issues if they are inhaled by workers. Exposure to respirable crystalline silica can cause silicosis, pulmonary tuberculosis, lung cancer and other respiratory diseases. Exposure to silica has also been known to cause chronic renal disease, autoimmune disorders and other adverse health effects.

With several hydraulic fracturing operations in Pennsylvania, many workers in the state may have been exposed to dangerous levels of silica. Workers who have suffered a workplace illness may be eligible for workers' compensation benefits and should consult a workers' compensation attorney to discuss what benefits and compensation may be available.

**Source:** EHS Today, "[Respirators Are Not Enough: New Study Examines Worker Exposure to Silica in Hydraulic Fracturing Operations](#)," Sandy Smith, August 1, 2013