

SILICA CONSTRUCTION & GENERAL INDUSTRY

Crystalline silica is a common mineral found in the earth's crust. Materials like sand, stone, concrete, and mortar contain crystalline silica. It is also used to make products such as glass, pottery, ceramics, bricks, and artificial stone. We should be concerned with respirable crystalline silica which are very small particles at least 100 times smaller than the ordinary sand you might find on beaches and playgrounds. Respirable crystalline silica is created when cutting, sawing, grinding, drilling, and crushing stone, rock, concrete, brick, block, and mortar. Activities such as abrasive blasting with sand; sawing brick or concrete; sanding or drilling into concrete walls; grinding mortar; manufacturing brick, concrete blocks, stone countertops, or ceramic products; and cutting or crushing stone result in worker exposures to respirable crystalline silica dust. Industrial sand used in certain operations, such as foundry work and hydraulic fracturing (fracking), is also a source of respirable crystalline silica exposure. About 2.3 million people in the U.S. are exposed to silica at work.

Workers who inhale these very small crystalline silica particles are at increased risk of developing serious silica-related diseases such as silicosis, lung cancer, chronic obstructive pulmonary disease (COPD), and kidney disease.

To protect workers exposed to respirable crystalline silica, OSHA has issued two respirable crystalline silica standards: one for construction, and the other for general industry and maritime. This presentation is designed to assist in compliance with these standards with an emphasis on the requirements of the recent (2017) silica in construction standard and to address the hazards and regulations for silica in both General industry and Construction.

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Richard has been an Industrial Hygienist with the Virginia Department of Labor and industry's enforcement division for 31 years. He works in the southwestern most corner of the State in Abingdon Virginia. Richard has conducted many VOSH silica emphasis inspections since the newer silica in construction standard came into effect.