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Health Advisory on Stone Fabrication Hazards *Severe lung disease from inhaling silica dust*

If your company is cutting, grinding, sanding, or installing stone products, you need to know about the dangers of silica dust and how to protect your employees.



Photo: National Institute for Occupational Safety and Health

Wet methods and ventilation can reduce dust exposures

Crystalline silica is in quartz, granite, artificial/engineered stone, and other stone products. When very small particles of silica dust get in the air, they can be breathed into the lungs and cause permanent scarring and trouble breathing. Silica dust can also cause lung cancer, kidney damage, and autoimmune disease.

Many cases of **incurable and fatal lung problems** from exposure to silica dust in stone fabrication workers have been reported around the world and in the United States, including at least one recent fatality in California. These workers breathed in

high amounts of silica dust when they cut, sanded, ground, or polished stone that contained silica. **Similar lung problems could happen to your company's workers if silica dust levels are too high.**

There are two new Cal/OSHA silica standards that apply to fabrication shops and construction job sites where stone products are installed. In **fabrication shops**, employers must assess exposures and use feasible engineering, administrative, and work practice controls to keep workers' exposures to silica dust below the permissible exposure limit of 50 micrograms per cubic meter ($\mu\text{g}/\text{m}^3$) of air. At **construction job sites**, employers have to make sure that workers follow specified exposure control methods, or otherwise assess and keep workers' exposures to silica dust below the permissible exposure limit.

Under both Cal/OSHA silica standards, employers must have a written exposure control plan, train exposed employees and share air testing results with them, provide fit testing and medical clearance for employees who wear respirators, and may need to arrange for periodic medical examinations.

There are ways to keep exposure to silica dust below the Cal/OSHA limit, including the use of computer numerical control (CNC) machines, wet methods, local exhaust ventilation, cleaning with high-efficiency particulate (HEPA) vacuums and/or water cleaning systems, and good work practices. Respirator use is also addressed in the new Cal/OSHA standards and may be required in addition to other controls.

You can find more information about the silica standards and how to reduce silica exposure on the California Department of Public Health website:

www.cdph.ca.gov/silica-stonefabricators

If your company needs help with complying with the Cal/OSHA silica standards, there are several options:

- Contact your workers' compensation insurance company.
- Call Cal/OSHA Consultation Service at (800) 963-9424 for a free, confidential visit.
- Find an industrial hygienist (see the above website for a link to the American Industrial Hygiene Association's searchable list of consultants).

If you have any questions, you can email occhealth@cdph.ca.gov or call **(800) 970-6680**.

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