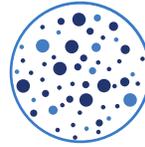


Minimizing Silica Exposure in the Countertop Industry and Other Trades



What it is

Crystalline silica commonly occurs in nature as the mineral quartz, and is found in granite, sandstone, quartzite, various other rocks, and sand. Workers in many industries are exposed to silica, including those in mining, manufacturing, construction and product installation.



When it's dangerous

Cutting, grinding, sanding, drilling, and polishing stone products can release hazardous levels of very small, crystalline silica dust particles into the air that workers breathe. Workers can also encounter silica at other times like when they're opening bags of ground quartz or emptying equipment dust bags.



Why it's risky

Workers who inhale silica particles are at risk for an incurable lung disease known as silicosis. They may also have increased risk of developing lung cancer, COPD and kidney disease.



How to protect workers*



Identify exposures by monitoring air quality.



Educate workers about the risk and train them to comply with safe work practices.



Isolate dust-producing activities in a contained area to limit the spread of silica.



Use water to minimize dust.

- Pre-wash stone before cutting it.
- Use water spraying systems, remote-controlled tools and wet-edged milling machines where possible.



Use equipment to contain dust.

- Use tools equipped with a vacuum system and HEPA air filter when wet methods cannot be used.
- Install local exhaust ventilation systems where possible.



Provide workers respiratory protection standards.



Control the environment.

- Complete work at your shop rather than onsite at a customer location when possible.
- Establish housekeeping procedures and use a HEPA-filtered vacuum to immediately contain dust.

Additional resources

- OSHA: Visit [osha.gov](https://www.osha.gov) or call 1-800-321-6742 (request free consultation service)
- NIOSH: Visit [cdc.gov/niosh](https://www.cdc.gov/niosh) or call 1-800-232-4636
- Marble Institute: Visit [marble-institute.com/silica](https://www.marble-institute.com/silica)

*Sources:

- https://www.osha.gov/dsg/topics/silicacrystalline/construction_info_silica.html
- <https://www.osha.gov/Publications/OSHA3768.pdf>

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