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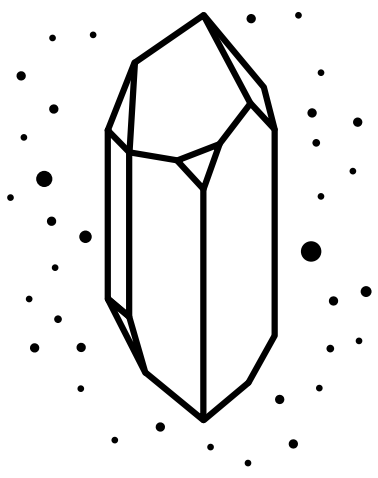
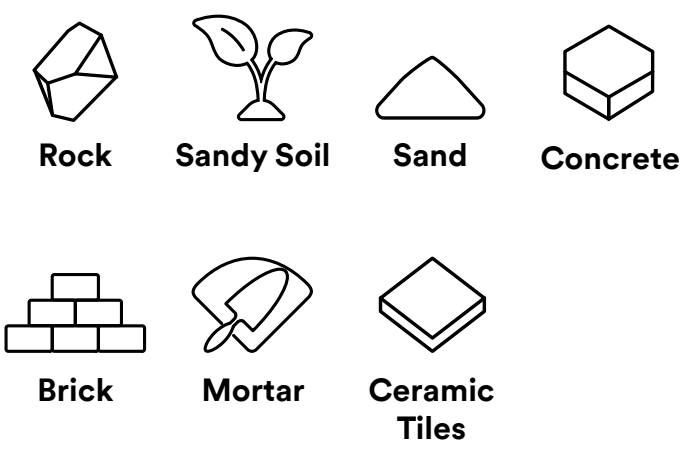
OSHA Construction Crystaline Silica Regulation Overview

What is Crystalline Silica?

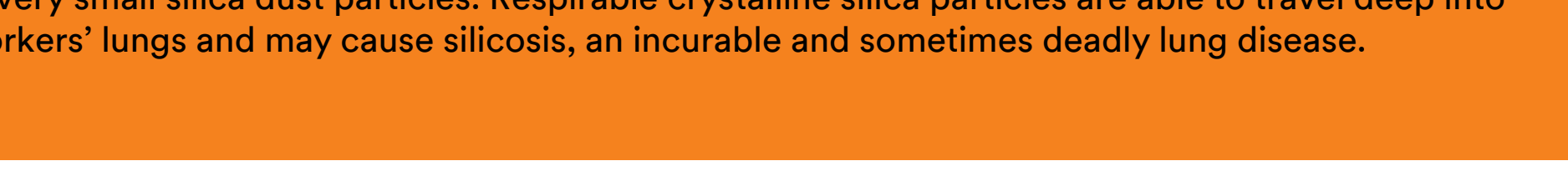
Crystalline silica is a common mineral that is found in materials such as stone, artificial stone, and sand. When workers cut, grind, or drill materials that contain crystalline silica, they can be exposed to very small silica dust particles. Respirable crystalline silica particles are able to travel deep into workers' lungs and may cause silicosis, an incurable and sometimes deadly lung disease.

Where can Silica be Found?





Typical Industries



Regulation Overview

1. Assess if employee exposures to respirable crystalline silica is at or above the action level of 25 µg/m^3 (micrograms of silica per cubic meter of air), averaged over an 8-hour day; *or for tasks on Table 1, properly implement required controls, work practices or respiratory protection;*
2. Establish and implement a written exposure control plan that identifies tasks that involve exposure and methods used to protect workers; *and designate a Silica Competent Person to implement.*
3. Train workers on work operations that result in silica exposure, ways to limit exposure, and the health effects of silica exposure; ensure workers can demonstrate their knowledge
4. Protect workers from respirable crystalline silica exposures above the permissible exposure limit (PEL) of 50 µg/m^3, averaged over an 8-hour day;
5. Ensure dust controls used to help protect workers from silica exposures have been fully and properly implemented according to the manufacturer's instructions;
6. Limit workers' access to areas where they could be exposed above the PEL;
7. Provide respirators to workers when dust controls cannot limit exposures to the PEL *or Table 1 requires use,* and ensure your respiratory protection program is implemented;
8. Use housekeeping methods that do not create airborne dust, if feasible;
9. Offer medical exams - including chest X-rays and lung function tests - every three years for workers exposed at or above the action level for 30 or more days per year; and
10. Keep records of exposure measurements, objective data, and medical exams.

Sources:
1. "Interim Enforcement Guidance for the Respirable Crystalline Silica in Construction Standard, 29 CFR 1926.1153" https://www.osha.gov/laws-regs/standardinterpretations/2017-10-19
2. "OSHA Safety and Health Topics, Silica, Crystalline " https://www.osha.gov/dsg/topics/silicacrystalline/construction.html
3. 29 CFR 1926.1153(c)(1-3) Specified exposure control methods.

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