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OSHA's Rule on Respirable Crystalline Silica

On March 25, 2016, the Occupational Safety and Health Administration of the U.S. Department of Labor published a [final rule](#) which requires construction employers to limit worker exposure to silica and to take other steps to protect workers.

Crystalline silica is a common mineral found in many naturally occurring materials and used at construction sites. Respirable silica is generated by high-energy operations like 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; and cutting or crushing stone generate respirable dust. OSHA estimates that about two million construction workers are exposed to respirable silica in over 600,000 workplaces.

Under the new silica standard, construction employers are required to limit worker exposures to respirable crystalline silica and to take other steps to protect workers. The construction standard provides alternatives for compliance, which small employers may find useful. Employers can either use a control method laid out in Table 1 of the construction standard, or they can measure workers' exposure to silica and independently decide which dust controls work best to limit exposures to the PEL in their workplaces.

Regardless of which exposure control method is used, all construction employers covered by the standard are required to:

- Establish and implement a **written exposure control plan** that identifies tasks that involve exposure and methods used to protect workers, including procedures to restrict access to work areas where high exposures may occur.
- Designate a **competent** person to implement the written exposure control plan.
- Restrict **housekeeping** practices that expose workers to silica where feasible alternatives are available.
- Offer **medical exams**, including chest X-rays and lung function tests, every three years for workers who are required by the standard to wear a respirator for 30 or more days per year.
- **Train workers** on work operations that result in silica exposure and ways to limit exposure.
- **Keep records** of workers' silica exposure and medical exams.

Table 1 in the new OSHA standard matches common construction tasks with dust control methods, so employers know exactly what they need to do to limit worker exposures to silica. The dust control measures listed in the table include methods known to be effective, like using water to keep dust from getting into the air or using ventilation to capture dust. In some operations, respirators also may be needed. Employers that follow Table 1 are not required to measure workers' exposure to silica and are not subject to the PEL.

Construction employers that choose to not use the control methods in Table 1 must:

- Measure the amount of silica that workers are exposed to if it may be at or above an **action level of 25 µg/m³** (micrograms of silica per cubic meter of air), averaged over an eight-hour day.
- Protect workers from respirable crystalline silica exposures above the **permissible exposure limit of 50 µg/m³**, averaged over an eight-hour day.
- Use **dust controls** to protect workers from silica exposures above the PEL.
- Provide **respirators** to workers when dust controls cannot limit exposures to the PEL.

Construction employers must comply with all requirements of the standard by June 23, 2017, except requirements for laboratory evaluation of exposure samples, which begin on June 23, 2018.

For more information, see the ASA [Frequently Asked Questions on the OSHA Rule on Respirable Crystalline Silica](#) and the OSHA [final rule](#).