

An overview of Oregon OSHA's new silica rules

As many of you know, federal OSHA adopted its final rules for respirable crystalline silica last March. On Sept. 23, 2016, Oregon OSHA adopted its own set of silica rules – 437-002-1053 through 437-002-1065 – that apply to general industry and construction employers.

Oregon OSHA's silica rules become effective July 1, 2018. The medical surveillance requirements for general industry employers become effective July 1, 2020.

Here's an overview of what you need to know about the new silica rules.

What's the purpose of the rules?

Employees exposed to respirable crystalline silica dust are at increased risk of developing silicosis and other nonmalignant respiratory diseases, lung cancer, and kidney disease. The silica rules were written to protect them.

What industries are affected?

The rules apply to general industry and construction industry employers whose employees may be exposed to crystalline silica dust. The rules do not apply to agriculture and forest activities employers.

What activities put employees at risk?

Employees can be exposed to silica dust when they cut, saw, drill, and crush concrete, brick, ceramic tiles, rock, and stone products. Exposures are also possible in operations that process or use large quantities of sand – such as foundries and the glass, pottery, and concrete products industries.

Many construction tasks are also sources of exposure, including those that require masonry saws, grinders, drills, jackhammers, hand-held powered chipping tools, vehicle-mounted drilling rigs, milling machines, and demolition work.

What do the rules require me to do?

Key parts of the rules require employers to:

Prepare a written exposure control plan:

The plan must describe the tasks that expose employees to respirable crystalline silica, work practices necessary to control exposures, the respiratory protection used for each task, and the housekeeping measures used.

Do a workplace exposure assessment:

Assess the exposure of each employee who is exposed to respirable crystalline silica at or above the action level of 25 micrograms of silica per cubic meter of air (25ug/m³),

averaged over an eight-hour day. This does not apply to construction-industry employers if they follow the requirements in 437-002-1057, *Specified exposure control methods*.

Keep exposures below the permissible exposure limit:

Ensure that no employee is exposed to an airborne concentration of respirable crystalline silica that exceeds the permissible exposure limit of 50 µg/m³ (calculated as an eight-hour time-weighted average).

Establish restricted areas:

Restrict employees' access to areas where they could be exposed above the permissible exposure limit. Construction activities require written procedures that restrict access to these areas and a competent person must ensure the procedures are followed.

Use engineering and work practice controls:

Use engineering and work practice controls to keep employees' exposure to respirable crystalline silica at or below the permissible exposure limit.

Use "Table 1" for construction activities:

Table 1 – in rule 437-002-1057 – matches common construction activities with dust control methods to help employers know what they need to do to limit employees' exposures. Construction employers can use these exposure control methods instead of doing a workplace exposure assessment.

Provide respirators to employees when silica dust controls are inadequate.

Provide respirators to employees when silica dust controls cannot keep their exposures at or below the permissible exposure limit. Respirators must meet the requirements in 437-002-1060 and the requirements in 1910.134, *Respiratory protection*. Construction employers who follow Table 1 in rule 437-002-1057 may determine when respiratory protection is required according to the table.

Follow appropriate housekeeping practices:

Prohibit dry sweeping and brushing when wet sweeping or HEPA-filtered vacuuming is feasible. Prohibit the use of compressed air to clean clothing or surfaces unless the compressed air is used with a ventilation system that captures the dust.

Provide medical surveillance:

Offer medical exams, including chest X-rays and lung function tests. Make them available every three years for general industry employees exposed for 30 or more days per year at or above the action level, and every three years for construction employees who are required to wear a respirator for 30 or more days per year.

Make sure that employees are informed and trained:

Ensure that each employee has access to the labels on crystalline silica containers and safety data sheets. Employees must understand the requirements in 1910.1200, *Hazard Communication* and must know the activities and health hazards associated with respirable crystalline silica and how they can protect themselves.

Keep accurate records:

Keep records of all exposure measurements and objective data used to assess employees' exposures to respirable crystalline silica. Keep records of employees' medical exams if they are under medical surveillance.