

OSHA Silica Rule

To improve worker protection, the Occupational Safety and Health Administration released its long-awaited silica rule on March 25, 2016. The rule, which took effect on June 23, 2016, reduces permissible exposure limits (PEL) for respirable crystalline silica to 50 micrograms per cubic meter of air – averaged over an 8-hour shift – and requires employers to use engineering controls to limit worker exposure.

WHAT TO KNOW ABOUT THE RULE CHANGE

Crystalline silica is a common mineral found in many naturally occurring materials that is used in many industrial products and at construction sites. Materials such as sand, concrete, stone and mortar contain crystalline silica. Crystalline silica is also used to make products such as glass, pottery, ceramics, bricks, concrete and artificial stone. Exposure to crystalline silica dust occurs in common workplace operations involving cutting, sawing, drilling and crushing of concrete, brick, block, rock and stone products (such as construction tasks), as well as operations using sand products (such as in glass manufacturing, foundries, sand blasting and hydraulic fracturing).

Inhaling very small (“respirable”) crystalline silica particles causes multiple diseases. This includes silicosis, an incurable lung disease that can lead to disability and death. Respirable crystalline silica also causes lung cancer, chronic obstructive pulmonary disease and kidney disease.

WHAT TO KNOW ABOUT THE RULE CHANGE

The rule is comprised of two standards, one for construction and one for general industry and maritime. Precast concrete manufacturing in a plant-controlled environment falls under the general industry standard 29 CFR 1910.1000. Any modifications to precast products in the field involving coring, chipping, cutting, drilling or grinding that create respirable crystalline silica particles falls under 29 CFR 1926.55(a).

KEY PROVISIONS OF THE UPDATED REGULATION

- Reduces the PEL for respirable crystalline silica to 50 micrograms per cubic meter of air averaged over an 8-hour shift (cutting worker exposure in half in general industry and by five times in construction)
- Requires employers to use engineering controls (such as water or ventilation) to limit worker exposure or provide respirators when engineering controls cannot limit exposure
- Limits worker access to high-exposure areas
- Development of a written exposure plan
- Worker training on silica risks and how to limit exposure
- Medical exams to monitor highly exposed workers and access to information about their lung health
- Flexibility to help employers protect workers from silica exposure

COMPLIANCE DATES

Industry	Responsibility	Compliance Date
Construction	Comply with all obligations of the standard, except methods of sample analysis	June 23, 2017
Construction	Comply with methods of sample analysis	June 23, 2018
General Industry	Comply with all obligations of the standard, with the exception of the action level trigger for medical surveillance	June 23, 2018
General Industry	Offer medical exams to employees exposed above the PEL for 30 days or more	June 23, 2018
General Industry	Offer medical exams to employees exposed at or above the action level for 30 days or more per year	June 23, 2020

OSHA-approved state plans have six months from March 24, 2016, to implement standards that are at least as stringent as the new federal requirements.

RESOURCES

osha.gov/silica

