

Silica Exposure in General Industry

Employee Information and Training

5-Minute Talk

Overview of topic

Employers must train and inform employees covered by the silica standard about respirable crystalline silica hazards and the methods the employer uses to limit their exposures to those hazards. Employers must cover the cost of training and must pay employees for the time spent in training.

Signs at entrances to regulated areas

The employer must post a sign at each entrance to regulated areas. The sign must include the following wording:

DANGER

RESPIRABLE CRYSTALLINE SILICA

MAY CAUSE CANCER

CAUSES DAMAGE TO LUNGS

WEAR RESPIRATORY PROTECTION IN THIS AREA

AUTHORIZED PERSONNEL ONLY



Training topics

The employer must ensure that employees trained under the silica standard can demonstrate knowledge and understanding of at least:

- Health hazards associated with respirable crystalline silica exposure. For respirable crystalline silica, the health hazards include: cancer, lung effects, immune system effects, and kidney effects.
- Specific workplace tasks that could expose employees to respirable crystalline silica.
- Specific measures the employer is implementing to protect employees from respirable crystalline silica exposure, including engineering controls, work practices, and respirators to be used. This training must be specific for the workplace and task that each employee performs. In general industry and maritime, training subjects would commonly include:
 - Signs that the controls may not be working effectively (e.g., visible dust emission).
 - Work practices needed for the controls to function effectively (e.g., not opening windows near local exhaust sources, positioning the local exhaust hood directly over the exposure source).
- If employees operate equipment with built-in controls that are under their control, those employees are required to demonstrate knowledge and understanding of the full and proper implementation of those controls.
- The contents of the Respirable Crystalline Silica standard. This would involve a description of the standard's requirements.
- The purpose and a description of the medical surveillance program required under the standard. Topics that employers could communicate to their employees as part of this training include:
 - That employers must offer medical examinations to employees who meet the exposure trigger for 30 or more days a year.
 - That employers must offer medical examinations at no cost to the employee, including additional silica-related tests or specialist examinations recommended by the PLHCP.
 - The types of tests included in the medical examinations.
 - Symptoms associated with respirable crystalline silica-related diseases.
 - Information that must be included in the written medical report for the employee versus the written medical opinion for the employer.
 - Information that must not be included in written medical opinion to the employer without written authorization from the employee (recommendations for limitations on exposures to silica and for specialist referrals).
 - The importance of keeping a copy of the written medical opinion to the employer as proof of a current medical examination to avoid unnecessary testing.



- That employers cannot retaliate or discriminate against employees for participating in medical surveillance.

Site-specific training

The employer is not required to provide all required training if an employee is already able to demonstrate knowledge and understanding of training topics such as health hazards, the contents of the silica standard, or medical surveillance requirements.

However, some site-specific or employer-specific training is always necessary, such as training on specific tasks that could result in exposures in that workplace, and specific controls or work practices that the employer is using.

Employees must be trained at the time they are assigned to a position involving exposure to silica.

The employer must make a copy of 1910.1053 readily available without cost to each employee. This could simply involve allowing employees to view a printed or electronic copy in a reasonable location.

Additional training

Additional training must be provided as often as necessary to ensure that employees know and understand silica hazards and the protections available in their workplace. Examples of when additional training would be required include:

- When the employer asks an employee to perform a task that is new to that employee;
- When the employer introduces new protections (for example, an employer who was having employees use a handheld grinder with wet method controls decides to have employees use a handheld grinder with a dust collection system); or
- When an employee is working in a manner that suggests he or she has forgotten what was learned in training.

Training tips

Cover your hazard communication program as it relates to exposure to silica.

Where to go for more information

29 CFR 1910.1053(j)(2)—Employee information and training

