

# Respirable crystalline silica examination

When you invest in workforce health, you get the peace of mind that comes from well-managed care – while also protecting the health of your business. And when you have employees that work around hazardous materials, such as crystalline silica, it's essential to ensure they're healthy. Silica medical examinations are an essential tool to help you safeguard your employees, and may mitigate workers' compensation costs.

## Ensure the health and safety of your workers

Around 2.3 million workers are exposed to crystalline silica on the job,\* which can be found in sand, concrete, stone, and mortar. Inhaling small crystalline silica particles can cause diseases including silicosis, an incurable lung disease, lung cancer, chronic obstructive pulmonary disease (COPD), and kidney disease.

The Occupational Safety and Health Administration (OSHA) has an established permissible exposure limit, or PEL, which is the maximum amount of crystalline silica to which workers may be exposed during an 8-hour work shift (29 CFR 1926.55, 1910.1000).

Employers are required to offer silica medical examinations to employees who have been exposed to respirable crystalline silica per OSHA requirements.

Be aware of the operations and job tasks creating crystalline silica exposures in your workplace environment and know how to protect yourself and your employees.

## Activities that create silica dust

- Abrasive blasting with sand
- Sawing brick or concrete
- Sanding or drilling into concrete walls
- Grinding mortar
- Manufacturing concrete blocks or ceramic products
- Cutting or crushing stone

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## What employers can expect

The employer will need to provide the health care provider with information relating to the employee, their work conditions relating to silica exposures, and description of personal protective equipment to be used, including when and how long it's used.

The physical exam includes review of adverse health effects associated with respirable crystalline silica exposure, and any related preexisting conditions. The examiner will determine if an employee qualifies for respirator use and advise the employee on opportunities to improve health.

Both the employee and the employer will receive a written medical clearance report. The employer's medical clearance report will include any recommended limitations on the employee's use of respirators.

### ► The exam will contain the following:

- Medical history and physical exam with special emphasis on the respiratory system
- Review of work history
- OSHA questionnaire evaluation
- Vital signs
- Spirometry
- Chest X-ray and B-reading
- TB skin test
- Physician interpretation and written clearance
- All appropriately required additional tests and specialty consultations are usually available with Kaiser Permanente subspecialists

For more information, visit [osha.gov/silica-crystalline](https://www.osha.gov/silica-crystalline).

For more information on Kaiser Permanente's Occupational Health and Safety Services, call:

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\*U.S. Department of Labor, Occupational Safety and Health Administration, accessed October 10, 2022.