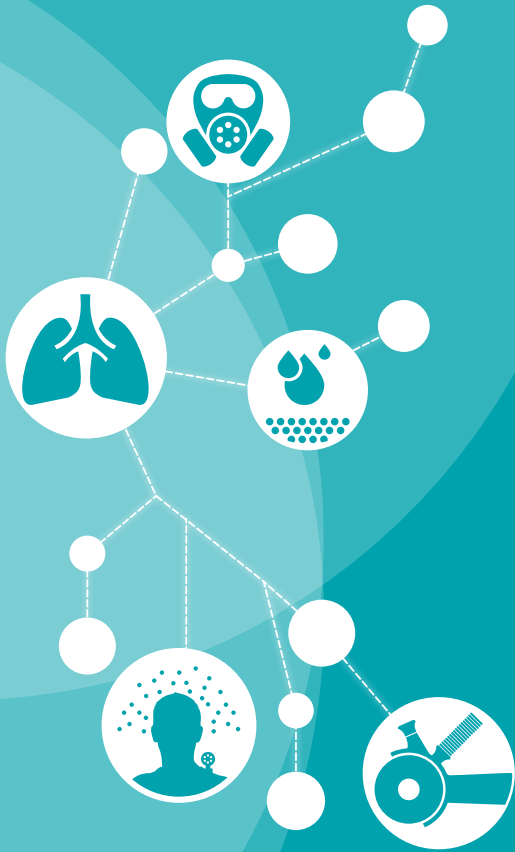


Information for workers

Managing respirable crystalline silica dust exposure in the construction industry



What is silica?

Crystalline silica is a common mineral found in:

- most rocks, sands, and clays
- products such as concrete, mortar, brick, blocks, pavers, tiles, natural and engineered stone benchtops
- cement-based materials such as fibre-cement sheeting and autoclaved-aerated concrete.

Do you work with products containing silica?

Dust containing respirable crystalline silica can be released when you cut, grind, sand, saw, drill, polish products that contain crystalline silica.

Certain work processes can also create silica exposure risks, including housekeeping activities involving dry sweeping, compressed air or blowers on silica containing dusts.

What are the health risks of respirable crystalline silica?

Silica dust particles are so small they cannot be seen and stay airborne long after larger particles have settled to the ground – the small particle size means it is easily inhaled deep into the lungs.

Silica dust can be harmful when it's inhaled into your lungs over a long period of time at low to moderate levels, or short periods at high levels.

Breathing in this dust can lead to serious diseases, including:

- silicosis - irreversible stiffening of the lungs
- lung cancer
- chronic obstructive pulmonary disease
- kidney disease.

There is no known cure for silicosis.

How your workplace must keep you safe

Depending on the materials you are working with your employer must eliminate or minimise your exposure to silica by controlling the dust. Dust controls can include:

On-tool dust extraction

This method removes dust as it is being produced and prevents it from being released into the atmosphere.

It is a type of local exhaust ventilation system that fits directly onto the tool. This system consists of several individual parts – the tool, capturing hood, an M or H class dust extraction unit or vacuum and tubing.

Water suppression

Water or fine mist suppression can also be used to control silica dust when local exhaust ventilation is not suitable. However, it needs to be used correctly. This means enough water supplied at the right levels for the whole time that the work is being done. Just wetting the material beforehand does not work. Examples for use include wet cutting methods for brick, tile, stone and concrete.

Isolation

Fully enclosed operator cabins, such as those found on earthmoving plant have been shown to effectively control exposure to silica when fitted with properly designed and maintained high efficiency air filtration.

Silica work processes should be done outdoors away from other workers where possible. Indoors, separate the silica work processes from other work activities where possible.

Respiratory protective equipment

Wearing a respirator does not stop silica from becoming airborne. Respirators should not be used as the primary means of control, but rather in combination with higher order controls like local exhaust ventilation or water suppression.

It is important to choose the right respirator for the job and you must wear it for the whole-time silica is in the air.

If you wear a tight-fitting respirator, you must pass a respirator fit-test to ensure it provides a good seal for your face size and shape. You must be completely clean-shaven or clean-shaven beneath the seal of the respirator for the respirator to seal properly.

Health monitoring

You must be provided with health monitoring when you:

- carry out ongoing work using, handling, generating or storing RCS
- are exposed to significant risk to your health from the work.

For more information on health monitoring and determining significant risk, visit [worksafe.qld.gov.au](https://www.worksafe.qld.gov.au) and search for health monitoring.

What you can do to protect your health

- Make sure the dust controls pull the dust away from you.
- Learn how to clean and maintain the dust controls in your workplace.
- To clean up dust, use wet sweeping and wiping or vacuums that have high efficiency filters. It is not safe to dry sweep or use compressed air to clean surfaces or clothes.
- Inspect, clean, store, and wear your respirator correctly.

What should I do if I think I have symptoms from breathing dust?

If you think something at work is causing your symptoms, let your employer or health and safety representative know.

If you are concerned about silicosis, are coughing or have trouble breathing, visit your doctor to discuss your concerns.

You should also talk to your employer about health monitoring at your workplace.

What are your workers' compensation rights?

If you have an illness caused by the work that you do, you have the right to workers' compensation. This applies if you are currently working or retired.

If your doctor issues a medical certificate that indicates you may have a work-related respiratory disease, you can make a workers' compensation claim.

For more information

To lodge a workers' compensation claim or for more information call **1300 362 128** or visit [worksafe.qld.gov.au](https://www.worksafe.qld.gov.au) and search for silica.