

How to identify the hazards that can cause occupational lung diseases in

ENGINEERED STONE WORKERS

PHASE 1

Identify hazards & assess risks



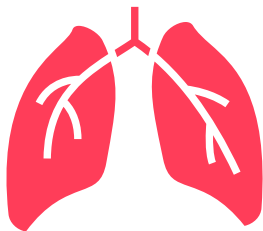
PHASE 2

Manage risks



PHASE 3

Monitor & review



Breathing in respirable crystalline silica (silica dust) can damage the lungs.

Engineered stone products like kitchen benchtops can contain over 90% silica.

Silica dust particles are small enough to lodge deep in the lungs. If your workers breathe in dusts from engineered stone, over a long period of time, they have a very high risk of developing serious and potentially fatal lung diseases like silicosis, emphysema, and lung cancer. As a person conducting a business or undertaking (PCBU), you must protect your workers from breathing in silica dust.

Silica dust is generated when engineered stone is cut, drilled, ground, trimmed, sanded or polished. This can happen through:

- fabrication of engineered stone
- installation, maintenance and removal of engineered stone
- construction and demolition
- clean-up activities on construction sites and in fabrication workshops.

You might not see silica dust in the air. Even when you can't see dusts, your workers may be at risk of breathing in microscopic dust particles that can lodge deep in their lungs.

The first step to protect workers is to identify where these hazards are in your workplace. This is part of your duty of care to minimise health and safety risks at your workplace as much as you reasonably can.

If a hazard is identified, you should conduct a **workplace risk assessment.**

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How to identify hazards:



Look at your workplace

Observe your workplace and how your workers conduct their work to help identify if they are breathing in silica dust. Look at how your workers use machinery and equipment and the general state of tidiness/maintenance for example, if:

- there is dust on machinery, work surfaces, walls, windows, and the ground
- any tools have activated warning lights that indicate the tool or filters are not working
- workers are using control measures appropriately, such as on-tool dust extraction, water suppression, and are wearing suitable respiratory equipment.

It is important to consider other people in your workplace who may be exposed to hazards. This could include contractors and sub-contractors from trades and suppliers and on-site office staff.

The workplace exposure standard (WES) for respirable crystalline silica (silica dust) in most jurisdictions is 0.05 mg/m³ (eight-hour time weighted average). The WES must not be exceeded. Even if exposure to silica dust is below the WES, you must keep your workers' exposure to silica dust as low as you reasonably can.

Air monitoring can help you assess the risk of your workers being exposed to silica dust. It should be conducted by an independent, competent person like an occupational hygienist.

Talk and consult with your workers



Your workers and health and safety representatives may know what work processes create silica dust, and how often it happens. They may also be able to tell you how work processes could be changed to manage the risk of breathing in silica dust.



Read labels and safety data sheets

Some materials used in your workplace may contain or generate a hazardous chemical. Hazardous chemicals are required to have a safety data sheet (SDS) containing health and physical hazards information. Look for labels on other materials too, as these may also contain health information. A label or SDS may not always be available at a workplace or for a product that contains silica. If you do not have an information sheet or SDS for a product, you might need to talk to your supplier or manufacturer to find out if the products contain silica. You should assume that engineered stone products contain very high amounts of silica.

For more information, read our [Using safety data sheets: identifying hazards that can cause occupational lung diseases](#) information sheet at swa.gov.au/clearlungs.



Talk with your work health and safety (WHS) regulator

Your **WHS regulator** is here to help. You can talk with them if you have questions or need guidance. They can provide you with information and advice to help you identify the hazards at your workplace – including hazards that can cause occupational lung diseases.



Engage a professional

A professional such as an occupational hygienist can help identify what hazards are present in your workplace. You can search for occupational hygienists near you on the [Australian Institute of Occupational Hygienists' website \(aioh.org.au\)](http://aioh.org.au).

Your industry association may be able to help you identify the hazards at your workplace or suggest who can assist you.

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How to identify hazards (continued):



Reassess

Managing WHS risks is an ongoing process. When you introduce new materials (e.g. a new engineered stone product) or a new cutting or cleaning process into the workplace, you must reassess for any new or changed risks. You should regularly inspect your workplace to identify if these changes present a new or changed hazard to the health and safety of your workers.

For more information, read our checklist 'How to identify the hazards that can cause occupational lung diseases in engineered stone workers' at swa.gov.au/clearlungs.