

Fact Sheet: Respirable Crystalline Silica Dust

What is Silica?

Respirable Crystalline Silica (also known as RCS) is a naturally occurring substance which can be found in materials such as stone, granite, rock, concrete, slate, brick, tile, mortar and plaster. It is also found in engineered stone (commonly used for kitchen work tops). When these materials are cut, drilled, sanded, grinded or polished it creates an abundance of respirable crystalline silica dust particles.



600,000+ Australian workers are exposed to silica dust every year.



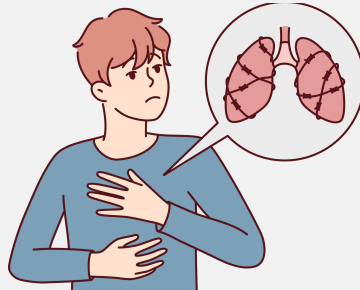
To reduce exposure to Silica Dust, WHS ministers introduced a ban on engineered stone in 2024.

Know Your Limit! *(Note: The limit is currently under review)*

Due to how dangerous silica dust is, the current work exposure limit is 0.05mg/m³ over an 8 hour TWA. To put this into perspective, this is a tiny quantity and it is invisible to the naked eye... any more than this amount, could be fatal.

Silica Dust Can Cause:

- Silicosis
- COPD
- Lung Cancer
- Tuberculosis
- Kidney Disease
- Rheumatoid Arthritis



Silicosis is Killing Our Workforce

When we breathe in RCS particles, they get lodged deep in our lungs, which over time, causes inflammation and scarring. These tiny jagged particles reduce the lungs' ability to take in oxygen making it difficult to breathe.

Silicosis is irreversible and fatal, meaning that eventually your lungs will stop functioning entirely.



How to Control Silica Dust:

As per the hierarchy of control, if you can't eliminate or substitute the hazard, you need to implement effective engineering controls.

For example, you should be using an extraction and filtration unit (LEV) that has a suitable capture hood, sufficient airflow, and a HEPA filter. A specialist hazard control company, such as RVT Group, will be able to specify the right solution for your application.

In addition to the tools, workers need to wear RPE compliant with AS/NZS 1716. When wearing RPE, you must ensure you are clean shaven, that your mask fits snugly around your nose and chin and the straps are not twisted.



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Employer Responsibilities:

- Conduct a suitable risk assessment & implement effective control measures (Eg. LEV & RPE).
- Ensure your workforce understand the dangers of Silica dust and are trained on how to protect themselves.
- Regularly review control measures & implement Occupational Health assessments.

Employee Responsibilities:

- Before starting work, familiarise yourself with the risk assessment and check that you have access to suitable engineering controls and RPE.
- If a process or control measure isn't working, tell management so they can find a better solution.
- Always attend training, always follow best practice guidance, call out bad practice on site, and always attend your health assessments.