Silica

Cutting, drilling, grinding or polishing materials such as concrete, bricks, tiles and stone can release invisible silica dust. Breathing it can cause silicosis, lung cancer and other incurable lung disease.

Eliminate exposure where possible. Stop immediately if controls fail or unwanted exposure is suspected.

Primary Risks & Hazards to Spot







- **Cutting, drilling, grinding, sanding or breaking silica materials**
- **Airborne silica dust caused by abrasive work**
- **Missing or inadequate dust suppression or ventilation**
- **Silica content not checked before work**
- **Unauthorised access or missing controls**
- **Inadequate silica awareness or other training**

Where might this happen in our work environment?



Drilling into concrete: drilling holes in walls or slabs for fixings and services can release silica dust.



Cutting tiles or stone: cutting tiles, concrete pavers or stone during repairs can release silica dust.



Grinding / polishing concrete floors: floor preparation, grinding or polishing can release silica dust and expose workers or others nearby.

Where else?

What tasks or materials here could contain silica or generate silica dust?

What can we check to protect?

1. **Is the work planned?**
   Check SDS / silica content. Eliminate silica work or exposure where possible. Complete risk assessment / SWMS / JSA and required approvals / permits.

2. **Are people and controls ready?**
   Current silica awareness training is mandatory for work with or near silica. Use approved wet methods, ventilation / extraction, isolation and containment. Wear suitable, fit-tested RPE and PPE.

3. **Are controls still working?**
   Follow site air / health monitoring and control verification to keep risk as low as reasonably practicable. Stop immediately if controls fail or exposure is suspected.

How will we confirm that workers and contractors understand silica risks and use the right controls before starting?

Your safety comes first

The SI&CS Health, Safety and Wellbeing Team is here to help.

You don’t have to work through a safety concern alone.

Ask for support when:

You’re unsure

We can help you understand a hazard and discuss a safer way to work.

Something happens

We can help with hazard, incident and near-miss reporting and next steps.

You need support

We can work with you and your supervisor or manager to address health, safety and wellbeing concerns.

Do you know who is your HSW Business Partner?

Stop if the work is unsafe

Pause the task and move to a safe place. Speak up if something feels unsafe or you are unsure.

Notify your supervisor or manager

Report hazards, incidents and near misses promptly, even if no one is hurt. Explain what happened, where it is and who may be at risk.

Do not continue unsafe work

Keep the task stopped until the risk is addressed and your supervisor or manager confirms a safe way forward. Ask for help if you are unsure.