

SAFETY ALERT

340 - Silica Dust Exposure

Background

A contracted worker suffered an eye injury after concrete dust entered their eye while clearing drilled holes using compressed air. The investigation found that the worker was wearing standard safety glasses that did not provide protection from dust entering the eye.

The investigation also found that adequate controls were not in place to manage exposure to silica dust.

The company had a Silica SOP in place, that required at least a P2/P3 respirator—however makes no mention of sealed (gasketed) eyewear.



Key Findings

- Compressed air generated high volumes of airborne silica dust
- Worker wore inadequate eye protection
- No respirator was used
- Workers had not completed silica training
- SOP did not specify sealed eyewear as a control

Safety Issues

Silica dust (from concrete, bricks, stone) contains respirable crystalline silica - a Group 1 carcinogen. Contact with the eyes can lead to irritation and inhalation can lead to:

- Silicosis – irreversible scarring of the lungs
- Lung cancer
- Chronic obstructive pulmonary disease (COPD)
- Kidney damage

Even small exposures can build up over time, and dust can enter the eyes, nose, mouth, and lungs during cutting, drilling, grinding, or blowing with compressed air.

RECOMMENDED WAYS TO CONTROL RISK

Understand Programmed’s Safe Work Essentials for working around silica.

Consider the presence of Silica in pre-task risk assessments and implement controls in accordance with the Hierarchy of Controls. A combination may be required.

Controls for silica tasks - Drilling / Cutting / Blowing:

- Use **wet cutting methods** or **on-tool dust extraction** with H-class HEPA filter to suppress dust at the source.
- No dry sweeping or uncontrolled air blowing.
- Restrict access to the work area to **essential personnel only**.
- Mandatory SOP training before work begins
- P2 or P3 Respirator (fit-tested).
- Sealed (gasketed) safety goggles
- Disposable overalls if dry cutting

For more information contact: safety@programmed.com.au

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Report all incidents and near misses

Please display on Safety Noticeboards and raise this matter at the next Toolbox Talk or Safety Meeting.