

Environmental and Occupational Health & Safety Unit

OHS ALERT

THE REAL DANGERS OF SILICA DUST

The International Agency for Research on Cancer (IARC) have now classified Crystalline Silica as a Group 1 Carcinogenic.

Epidemiologic studies from around the world have shown an increased risk of lung cancer among workers exposed to silica.

Emerging evidence also suggests that silica may also cause renal (kidney) disease.

Even at levels of exposure that appear not to “cause” overt silicosis, a condition that badly affects and restricts the normal operations and functions of the lungs, silica dust can still cause chronic bronchitis and chronic obstructive airways disease.

Unacceptable levels of Silica dust occurs far too often during construction and demolition work.

Some examples of jobs that can create dangerous levels of silica dust are:

- brick cutting and chasing
- angle griding on concrete or masonry
- concrete cutting
- jack hammering and chiselling of concrete, masonry, sandstone, etc.
- scabbling
- ceramic tile cutting
- drilling of concrete or brick structures
- hand stoning concrete surfaces
- excavation
- cleaning up of dust and debris created by the above activities



Safety is union business.

Stand Up. Speak Out. Come Home.

Environmental and Occupational Health & Safety Unit

OHS ALERT

Other building and excavation workers in close proximity to these processes for long periods of time are also at risk.

Equipment used for cutting, grinding, drilling, sweeping, etc. should be fitted with extraction devices to eliminate the dust. Where dust extraction is not possible, wet methods should be used. For many jobs, some form of respiratory protection will also be needed, especially chasing work.



SILICA UNDER THE MICROSCOPE

National OHS Regs [370]state that employers must ensure health surveillance is provided to workers who are exposed to crystalline silica. This health surveillance includes chest x-rays, standardised respiratory function tests and records of personal exposure.

The medical examination should be done at least every five years and if there are any abnormal findings they should be reported to the employer so that control measures can be checked. A final medical should be done on termination of employment and the reason for termination should be noted.

We often underestimate the dangers of exposure to silica dust because we are so used to it. But not anymore!

As recently as 2017, the U.S. have halved their exposure level, and the permissible level is now 50 mg/m³ (half Australia's) with action to be taken at levels of 25mg/m³.

In Australia the standard for exposure is too high at 100 micrograms of respirable crystalline silica per cubic metre of air [ie. = 100mg/m³].

So if the U.S. can improve their standards, why can't we!

IF IN ANY DOUBT – CALL YOUR UNION.

Safety is union business.

Stand Up. Speak Out. Come Home.