Dust and silica toolbox talk

Health · about 5 minutes · read it out, or say it in your own words

SITE OR JOB	DATE	PRESENTER

Concrete, bricks, blocks, tiles, mortar, sand and stone all contain silica. Cutting, chasing, drilling, grinding and dry sweeping them throws up fine dust that goes deep into the lungs and can cause silicosis, lung cancer and other lung disease that cannot be cured. The damage builds up quietly over years, so the habits we keep today decide how well we breathe in years to come.

SAY THIS

The dust you cannot see

The dust that settles on your boots is not the worst of it. The most dangerous dust is so fine you cannot see it in normal light. It floats in the air long after the cutting stops and gets right down into the deepest part of your lungs. There it causes scarring that does not heal. You will not feel it today. You feel it years later, when climbing stairs leaves you out of breath.

Which jobs make silica dust

Cutting blocks, pavers or kerbs with a disc cutter. Chasing walls for conduit. Grinding or scabbling concrete. Drilling into concrete. Cutting tiles dry. Breaking up concrete with a breaker. Sweeping up dry rubble and cement. If a job makes a cloud, it is making silica dust.

Stop the dust at the tool

The best way is to stop the dust being made or getting into the air. Use water on the blade: a cut-off saw with a water feed, or someone wetting the cut as you go. Use tools with dust extraction connected to a proper vacuum. Where you can, choose a method that makes less dust, like a block splitter instead of a disc. Keep the water supply full and the extraction hose connected, or stop the job.

Masks are the last line

On top of wet cutting or extraction, wear the respirator you are given. A thin nuisance-dust mask is not good enough for silica. A tight-fitting mask must seal on your face, so it does not work over a beard or stubble. Check the straps, and change disposable masks when they get dirty, damp or hard to breathe through.

Clean up without a cloud

Do not dry sweep and never blow dust off with compressed air, not off the floor and not off your clothes. Wet the area first and then sweep, or use a vacuum. Keep other people out of the area while you cut, because the dust drifts to them too, and they are not wearing masks.

Look after your lungs

Do not shake out dusty work clothes or blow them off. Vacuum them or wash them separately, and do not take dusty overalls home in the taxi. Wash your face and hands before eating. If you have a cough that will not go away or you get short of breath, tell the supervisor and see a clinic or doctor, and tell them you work with concrete and stone.

CHECK ON SITE TODAY

- ☐ Which jobs today will cut, chase, drill, grind or break concrete, brick, block, tile or stone?
- ☐ Do the cut-off saws have water feeds, is there water on site, and are the hoses working?
- ☐ Are the extraction vacuums and hoses connected to the grinders and chasers that need them?
- ☐ Are there enough respirators of the right type, and are the people using them clean-shaven where the mask seals?
- ☐ Can we keep others away from dusty work by moving it or barricading it?
- ☐ Is there a vacuum or water for clean-up so nobody dry sweeps or uses compressed air?

ASK THE CREW

- ? Which job on this site makes the most dust, and how could we make less of it?
- ? What stops us from using water when we cut? How can we fix that?
- ? How do you check that your mask actually seals on your face?
- ? Where does dust from our work end up: in the next room, the street, the neighbour's yard?

PROTECTIVE EQUIPMENT FOR THIS JOB

Respirator suitable for fine dust, fitted to the wearer (not a paper nuisance mask) · Safety glasses or goggles · Hearing protection when cutting or breaking · Overalls that are washed separately

THE LAW

Regulations for Hazardous Chemical Agents (Government Notice R. 280 of 29 March 2021), regulation 10: Control of exposure to hazardous chemical agents; Regulations for Hazardous Chemical Agents (Government Notice R. 280 of 29 March 2021), regulation 11: Personal protective equipment and facilities; Regulations for Hazardous Chemical Agents (Government Notice R. 280 of 29 March 2021), regulation 4: Duties of persons who may be exposed to hazardous chemical agents; Regulations for Hazardous Chemical Agents (Government Notice R. 280 of 29 March 2021), Annexure 3, paragraph 66: Dusts. What each one says, in plain words, with links: sitediary.co.za/toolbox-talks/dust-and-silica/

Toolbox talk attendance register

TOPIC

Dust and silica

DATE

SITE OR JOB

TIME

PRESENTER

COMPANY

PRESENTER SIGNATURE

By signing, I confirm that I attended this toolbox talk, that it was given in a language I understand, and that I could ask questions.

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Keep this register in the site health and safety file. Log the talk in today's site diary with a photo of this page.