

Silica Dust

About 10 minutes to deliver

The dust you cannot see is the dust that hurts you — water, vacuums, and why a broom is the wrong answer.

Cutting, grinding, drilling or breaking concrete, brick, block, stone or mortar releases respirable crystalline silica. The particles that do the damage are far too small to see, which is why the air can look clear and still be dangerous.

What it causes is not reversible: silicosis, lung cancer, COPD, kidney disease. It builds over years of exposure that felt like nothing at the time.

CONTROL THE DUST AT THE TOOL

- Water. Wet cutting is the single most effective control on most tasks. A saw with the water feed running produces a fraction of the dust of the same saw dry. Keep the feed on and aimed at the blade.
- Vacuum. A shroud on the tool connected to a HEPA-filtered vacuum sized for that tool. A shop vac without a HEPA filter blows the fine fraction straight back out.
- Follow the setup on the sheet. OSHA's Table 1 lists a control method for each common task, and following it correctly means you do not have to do your own air monitoring.

NEVER DO THIS

- Dry sweeping. A broom takes settled dust that was harmless on the ground and puts it back in the air at head height. Wet sweeping or a HEPA vacuum, always.
- Compressed air to blow yourself or the work off. Same problem, worse.
- Dry cutting because the water was inconvenient. That is the shortcut that costs a lung, twenty years later.

RESPIRATORS

A respirator is the last line, not the first. Where the task needs one, it must be the right type, and the person wearing it must be fit-tested, medically cleared and clean-shaven where it seals. Stubble breaks the seal — that is not a preference, it is physics.

HOUSEKEEPING AND CLOTHING

Do not take it home. Dust on clothing goes into a truck cab and a family car. Change or brush down where the site allows, and never with compressed air.

ASK THE CREW

- Which tasks today make silica dust, and what control is set up for each?
- Is the water feed working on every saw we are using?
- Is anyone due a fit test or medical clearance for their respirator?

29 CFR 1926.1153

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ATTENDANCE RECORD

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Date

Job / site

Delivered by

Company

#	Print name	Signature	Date
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I delivered this talk and determined it was suitable for this crew and this work.

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