

BREATHE EASY

Protect yourself from deadly silica dust at work. Depending on what you're doing, your employer will tell you which steps to take – and when. You may need to wear a special mask too.



1 USE LOCAL EXHAUST VENTILATION

Use a ventilation system to suck the dust away before you can breathe it in. Some workstations have hoods or enclosures



2 OPERATE ON-TOOL EXTRACTION

Make sure you use the controls integrated or mounted onto a hand-held tool to capture the dust while you're using it



3 DAMP DOWN DUST

Use water to keep dust levels down. You need to use enough water for the whole time that the work is being done. Just wetting the material before you start doesn't work



4 WEAR A MASK

Put on a respirator that suits the job – for many tasks, you'll need an FFP3-standard mask or a powered mask or hood if the work lasts longer. Never use a 'nuisance' dust mask – it won't protect you



5 GET TRAINED

Understand the dangers of silica exposure, and when and how to use dust controls and protective equipment

Your employer should also think about changing the product or process, for example:

- using a safer material than silica sand in abrasive blasting, like olivine
- getting materials cut to size off-site in a facility where dust exposure can be controlled more easily

Local exhaust ventilation image courtesy of Pat Sharkey Engineering Ltd
On-tool extraction image courtesy of Core Cut Ltd

KEEP DUST DOWN

After you've used the right gear and protective equipment, the tiny amount of silica dust next to the coin is the most you should be breathing in a day*



Silica dust

EVEN A QUICK TASK CAN CREATE DANGEROUS LEVELS OF SILICA DUST – CONTROL EVERY EXPOSURE

SILICA DUST PARTICLES ARE SO SMALL THAT THEY FLOAT IN THE AIR FOR LONGER – AND CAN BE BREATHED DEEP INTO YOUR LUNGS

CONTROLLING SILICA DUST CUTS THE RISK OF LUNG CANCER, SILICOSIS AND EMPHYSEMA



Control dust when you're clearing up after a job – damp down or use an industrial vacuum, and wear your respirator.

*According to British law – limits vary from country to country

DANGEROUS DUST

WHAT IS SILICA?

Silica is everywhere. It's part of bricks, concrete and mortar. It's in tiles and the slates on our roofs. It's found naturally in stone and rocks. Even some fillers and plastic composite products use silica. Left alone, silica is safe. But if you work on materials that are made up of silica, you'll be releasing dangerous silica dust.

WHAT IS SILICA DUST?

Silica dust is the very fine dust that's created when you cut, drill, grind, chip or sand materials and products like stone, bricks, concrete, tiles or mortar.

WHY IS SILICA DUST DANGEROUS?

Silica dust can be harmful if you breathe it in. Silica dust particles are much smaller than normal dust – and they can get deep into your lungs and stay there, permanently damaging the lung tissue and eventually leading to serious lung diseases in some people. Silica dust can cause cancer, silicosis and diseases like emphysema and bronchitis.



IOSH working in association with Network Rail

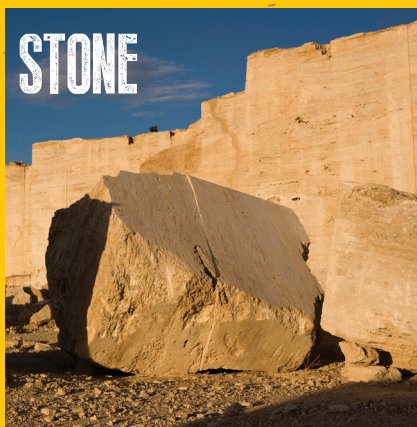


Working together to beat occupational cancer
Find out about the campaign at www.notimetolose.org.uk/networkrail

SILICA DUST AT WORK



WHERE DOES SILICA DUST COME FROM?



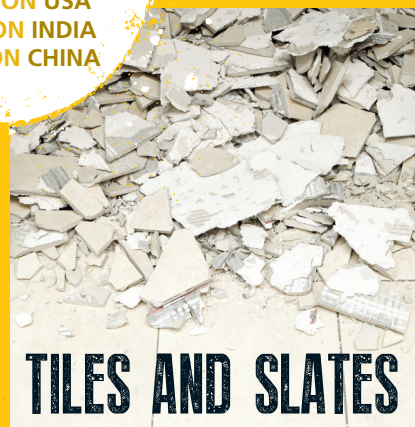
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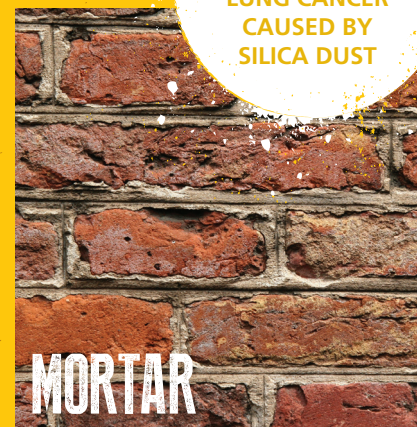
CONCRETE



BRICK



TILES AND SLATES



MORTAR

EXPOSED TO SILICA DUST AT WORK...
500,000 UK
5 MILLION EU
2.2 MILLION USA
10 MILLION INDIA
23 MILLION CHINA

15 PEOPLE A WEEK DIE IN BRITAIN FROM LUNG CANCER CAUSED BY SILICA DUST