



5 Things you need to know about Respirable Crystalline Silica

Asbestos and dust are slow killers. The HSE estimates that annually there are around 8,000 work-related cancer deaths a year. The construction industry accounts for around 3,500 of these with asbestos and silica the major causes.

1. WHAT IS RESPIRABLE CRYSTALLINE SILICA?

Silica is a natural substance found in most rocks, sand and clay and in products such as bricks and concrete. When these materials are disturbed in the workplace i.e. cut into with power tools, they release fine dust particles.

Some of this dust, which can be hidden from the naked eye, may be fine enough to breathe deeply into your lungs and exposure to this dust can cause silicosis, leading to impaired lung function, breathing problems, lung cancer and is life threatening.



2. WHO IS AT RISK?



The construction industry is the most obvious workplace where workers are exposed to fine silica dust – where construction and demolition processes such as cutting concrete, stone, brick are common place.

Exposure can also occur in:

- quarrying
- slate mining and slate processing
- potteries, ceramics, ceramic glaze manufacture, brick and tile manufacture
- refractory production and cutting
- concrete product manufacture
- monumental and architectural masonry manufacture
- stone fireplace and kitchen worktop manufacture
- grit and abrasive blasting, particularly on sandstone

3. HSE INSPECTIONS - WHAT WILL THEY BE LOOKING FOR?

As the HSE continues to focus on the construction industry, in particular the measures in place to protect workers from occupational lung disease caused by asbestos, silica, welding, wood and other dusts, they will be looking at three main areas:

TRAINING - Do you provide training to all employees who work with hazardous substances such as silica, so they are fully aware of the health risks and understand how to protect themselves using the correct PPE/RPE?

PLANS OF WORK – In order to control health risks on site, you must have clear plans in place. Are you planning, identifying and assessing each risk before work begins? Are the risks communicated to workers?

CONTROL MEASURES – Once you have a plan of work in place, you must take action and control each identified risk to prevent exposure. Examples includes, using the right tools, providing the correct PPE/RPE, rotating workers tasks, provide training.

4. DON'T TAKE SHORTCUTS – YOU COULD BE FINED!

Over the past 6 years, the HSE has brought 16 prosecutions, issued 409 prohibition notices and 1,210 improvement notices for health and safety offences related to respirable crystalline silica.

More recently, a contractor and a stonemason were ordered to pay hefty fines for exposing employees to respirable silica dust.

Each fine highlighted the failures to provide protective equipment (RPE/PPE) when using power tools and the lack of control measures in place on site.



A HSE enforcement is every company's worst nightmare, not only do you put your employees long-term health at risk, but the media attention alone is not worth the reputational damage to your organisation alongside the increased insurance premium and legal costs. Don't become a PR headline and take action today.

5. EMPLOYERS – YOU HAVE A LEGAL DUTY

If you are an employer, who uses or generates any hazardous substances, such as respirable silica dust, in the workplace, you need to consider reviewing your existing risk assessment as well as controls and internal practices in order to continue to be compliant under the **COSHH Regulations 2002**, especially considering the HSE's proposed new classification of RCS as a carcinogen (CARC) when generated on site e.g. by cutting blocks, and the current union campaign to petition the HSE to reduce the WEL of respirable crystalline silica.

Does your current risk assessment meet the HSE's expectations, and are you taking the correct steps to protect your workers health?

Does previous exposure monitoring indicate control of exposures to below the new WEL?

1. **Review COSHH assessments** – is it still valid?
2. **Review control measures** - are your controls adequate and do you have written evidence?
3. **Carry out exposure monitoring** to prove that your controls are providing protection.
4. **Review your information and training**—alongside training courses, AEC can also offer toolbox talks and seminars at your health and safety staff briefings.

For further advice and support, contact our Occupational Hygiene team Manchester 0161 872 7111, London 0203 384 6175 customersupport@aec.uk.net

References

HSE

The full HSE WELs consultation document can be viewed

here <https://consultations.hse.gov.uk/hse/carcinogens-mutagens-revision-of-limit-values/>

Hazards magazine gets behind the silica campaign <http://www.hazards.org/dust/choked.htm>