

RCS – What You Need to Know

Silica is a natural substance found in varying quantities in most rocks, sand and clay, and in products such as bricks and concrete.

In the workplace these materials create dust when they are cut, sanded, carved, chiselled etc. Some of this dust may be fine enough to breathe deeply into your lungs and cause harm to your health. The fine dust is called respirable crystalline silica (RCS) and cannot be seen in normal lighting conditions.

Breathing in RCS can cause silicosis, chronic obstructive pulmonary disease (COPD), and lung cancer. Skin exposure to RCS dust can also cause dermatitis. All of the above are avoidable with effective control measures in place.

Workers in many industries may be exposed to RCS, this includes industries such as brick and tile manufacturing, ceramics, construction and demolition, foundries, manufacturing of silica, quarries, and stoneworkers etc.

RCS, where generated as a result of a work process, is classified as a carcinogen and must be controlled to as low as is reasonably practicable.

In addition, there must be compliance with the Principles of Good Practice for Control as set out in Schedule 2A of COSHH and the Workplace Exposure Limit (WEL) as detailed in the HSE's EH40/2020.

RCS – Controlling Exposure

Controlling exposure to RCS to an adequate level will involve a variety of approaches which may include;

- Consideration of elimination of the process
- Enclosing the process and handling systems further
- Using an alternative material with a lower silica content
- Using control measures to ensure you remove dust from the workplace before it can spread, e.g. with local exhaust ventilation (LEV), that is correctly designed, installed, used and maintained
- If RPE is necessary, in addition to other control measures, ensure that it is adequate and suitable for the task and worker, fit tested if required, and is correctly used, maintained and stored
- Providing adequate information, instruction and training for your staff on the hazards, control measures, cleaning and maintenance procedures, how to report faults, concerns or signs of ill-health
- Completing health surveillance for all workers who are regularly exposed to RCS and there is a reasonable likelihood of silicosis
- Regularly checking and reviewing all elements of your control measures to ensure they are still effective

An occupational hygienist can help to determine if you are compliant and protecting your staff adequately