8 Hygiene & Housekeeping Practices to Protect Workers from Respirable Silica



Respirable crystalline silica (RCS) is a hazardous substance widely encountered in workplaces across a number of industry sectors and is known to have serious health risks, mostly developing over many years. (See, worker exposure to silica during fracking operations and how to protect them.)

For example, together with asbestos, RCS is one of the substances with the highest respiratory health risk to construction workers. The cutting, breaking, crushing, drilling, grinding or abrasive blasting of silica-containing materials produces airborne dust, which can be inhaled. And inhaling RCS can lead to serious health effects such as silicosis, Chronic Obstructive Pulmonary Disease and lung cancer.

To address the risks workers face when they're exposed to RCS on construction sites, the European Commission's Senior Labour Inspectors' Committee recently released its Guidance for National Labour Inspectors.

The guide explains why RCS is a health risk and includes the hierarchy of appropriate controls plus important examples of relevant control measures for protecting construction workers from this substance. Although this document is intended for inspectors from the 28 member states of the European Union,

its contents provide useful advice for employers as well, including those located outside of the EU.

For example, the guidance explains that good personal hygiene and housekeeping practices support engineering and other safety measures by preventing re-suspension of dust containing RCS and the spread of such dust from surfaces or contaminated clothing. Key requirements include:

1. Suitable changing facilities should be provided when PPE is used or where outdoor clothing could become contaminated by RCS. Suitable storage for any PPE is also required.
2. Workers shouldn't eat, drink or smoke in areas contaminated by hazardous substances, such as RCS.
3. Provide washbasins that are large enough for workers to wash their face, hands and forearms.
4. Workers should use warm water, mild skin cleansers and soft paper towels for drying, and avoid abrasive cleaners.
5. The use of pre-work creams can aid in the washing of dirt from skin, while after-work creams can replace skin oils lost from washing.
6. Provide showers where removal of heavy dust contamination is needed, such as due to demolition activities.
7. Vacuum equipment should have at least dust class M if used for dry dust or use wet cleaning methods.
8. Workers shouldn't clean up with a dry brush or broom, or using compressed air.

And here's a model crystalline silica exposure plan that you can adapt and use to protect your workers if they're at risk of exposure to this hazardous substance.