

Tools for Life – Weekly Health & Safety Meeting



Home Healthy - Home Safe

Date: July 2022

AISH 21 Silica Awareness

The purpose of this training is to help you identify silica hazards you may encounter during work activities and to know what to do about it. If you are working with silica mixtures such as grout or cement, or you are cutting drilling sanding, crushing concrete, brick or stone contact your safety professional to conduct a hazard assessment. Whether you work in an OSHA state or a state plan state, permissible exposure limits and action levels are very low for silica, so it is important that you work with your Safety Professional to identify and control the hazards.

Silica, or crystalline silica, is one of the most abundant minerals on the earth, primarily found in the form of quartz. Most commonly it is found on worksites in concrete, bricks, and materials made from quartz-based rocks or sand.

Why do we care? It is hard to believe that we could be very sick 10-15 years from now so we take risks that we may later regret.

- Silica is hazardous when inhaled and can cause an incurable and potentially fatal lung disease known as silicosis.
- It can also cause lung and kidney cancer.
- Although silica can cause immediate health effects, such as shortness of breath and coughing, most health effects are seen 10 – 15 years after the initial exposure.
- It is important to note that silica is not hazardous as a solid material; **it is most hazardous when it is being cut, sanded, or manipulated in a way that creates airborne dust.**

Places to look for silica:

- Check Labels and warning signs:
 - All products that contain silica must be labeled.
 - Label machines with a warning sign if silica is used in it.
 - Assure that labels are not removed or defaced.
- Safety data sheets (SDSs):
 - Any product that contains more than 0.1% silica requires a safety data sheet.
 - Employers must assure that employees have access to SDSs for all hazardous workplace materials.

A few other things to know and ask your Safety Professional about:

- Engineering controls primarily include wet methods, ventilation and dust reduction techniques.
- Practicing personal hygiene around silica can reduce your exposure and the potential for taking silica home to your family.
- Respirators may be needed if the silica dust cannot be reduced adequately. Remember respirators can be a hazard in and of themselves so be sure you collaborate with Safety.
- Protective clothing that prevents contamination of your regular clothing.
- Medical examinations for people who work with silica above the action limit for more than 30 days per year.

Discussion Points/Quiz Questions:

1. What can happen if you are exposed to high levels of silica over time?
2. What tasks might cause silica exposure?
3. Why should you protect yourself from silica exposure?