

Silica Exposure Prevention

<https://api.succeedms.com/v1/training/7bdcf8a9-2385-4773-a702-4f80a07de408/1>

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.

Hazards of silica:

- Silica is hazardous when inhaled and can cause an incurable and potentially fatal lung disease known as silicosis.
- It can also cause lung 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.

Job duties with potential for silica exposure:

- The cutting, drilling, or crushing of concrete, brick, or stone
- The use of sand products, such as the following:
 - Mining and quarrying
 - Glass-making
 - Foundry work
 - Sandblasting

Recognizing the hazard:

In addition, silica may also be found in chemical mixtures. To identify silica, use the methods discussed below.

- Labeling:
 - All products that contain silica must be labeled.
 - Any product that contains more than 0.1% silica must be labeled by the manufacturer as hazardous when in use.
 - All machines where silica is in use must be labeled with warning signs.
 - 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.
 - Manufacturers must obtain or develop a SDS for each hazardous chemical they produce or import.
 - Employers must assure that employees have access to SDSs for all hazardous workplace materials.