

# ▶ TOXIC DUSTS – SILICA

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## Things to Do Before Training

- Identify materials such as concrete, brick, mortar, drywall, or stone that contain mineral dust.
- Identify work that exposes workers to silica dust.
- Check labels and Material Safety Data Sheets (MSDSs) of any purchased mineral products for silica.
- Identify basic controls implemented to reduce the creation of airborne mineral dusts.
- Identify workers who have medical clearance and have been fit tested for respirators.
- Have respirators available for use.
- In the index of the *Cal/OSHA Pocket Guide for the Construction Industry*, look up **Airborne Contaminants, Silica, Blasting** and read the pages listed.

## Introduction

You breathe in mineral dusts when handling mineral products or when cutting, grinding, sanding, drilling, or blasting solid mineral materials.

Mineral dusts often contain crystalline silica, a toxic substance that can be inhaled and result in serious health damage. Silicosis is a debilitating lung disease that is preventable. When construction work creates mineral dust, basic precautions should be taken.

## QUESTIONS TO ASK

- What materials could contain silica on this site?
- What types of job activities could expose workers to silica dust on this job?
- What basic controls have been/could be used to reduce mineral dust levels on this site?

SAFETY  BREAK

## ACTION TO TAKE

- Discuss basic precautions to minimize the amount of mineral dust you breathe and take home on your clothes and shoes.

## Key Points to Keep in Mind

- For any purchased mineral product (packaged or solid), **check the label, MSDS, or other product information.**
- Existing materials onsite can be tested, but because silica is common in many of these materials, it is best to just assume they do contain silica and take precautions against inhaling mineral dusts in general.

### ***All workers on a site where construction dust is generated should take the following basic precautions:***

- Work in a way that minimizes airborne dust**, such as using water and power tools with vacuum attachments.
- Maintain good housekeeping** by removing settled dust before it becomes airborne.
- Wash up before eating, drinking, smoking, or chewing gum or tobacco to avoid swallowing dust.
- Change out of work clothes** at site to avoid bringing silica home.
- Wear a half-mask respirator** with P-100 filters (see **Safety Break card 15** on respirators).

### ***Good dust masks are much better than nothing:***

- They do not provide the same protection as half-mask respirators.
- They should have two straps.
- They should have "R95" or "N95" marked on the packaging.

### ***Greater precautions must be taken with abrasive blasting and other high-exposure jobs:***

- The work area must be contained.
- Workers should wear air-line respirators.