



# SAFETY TALK

## Silica dust exposure

Some work tasks in the heavy construction industry generate harmful levels of crystalline silica dust if proper controls are not followed.

Silica is the basic component of sand and rock. Some common silica-containing materials include:

- Concrete, concrete block, cement and mortar
- Masonry and brick
- Granite, sand, fill dirt, top soil
- Asphalt containing rock or stone
- Abrasive used for blasting

When materials containing crystalline silica are cut, ground or drilled, fine dust particles (known as respirable crystalline silica or RCS) are produced which may present a risk to workers.

If you do any of the following activities, you may at risk:

- Chipping, sawing, grinding, hammering and drilling of rock, concrete or masonry
- Crushing, loading, hauling and dumping of rock
- Demolition of concrete or masonry structures
- Abrasive blasting and hydro blasting of concrete
- Tunneling, excavation and moving of soils with high silica content

### What's the danger?

A worker's chance of becoming ill from exposure to silica dust depends on the tasks performed, the amount of dust they are exposed to and the frequency of exposures. Each exposure to silica adds to the total load of silica in the lungs – each exposure adds to lung damage.

As the total dose increases, so does the risk for developing:

- Silicosis
- Lung cancer
- Chronic obstructive pulmonary disease

### How to protect yourself

- Know the dangers of breathing in silica dust
- Use water spray systems and proper ventilation in confined spaces
- If water systems and proper ventilation are not enough, you must wear respirators specifically designed to protect against silica
- Thoroughly wash your hands before eating or drinking in dusty areas
- Shower and change into clean clothes before leaving work

Print and review this talk with your staff, sign off and file for COR™ / SECOR audit purposes.

Date: \_\_\_\_\_

Performed by: \_\_\_\_\_

Supervisor: \_\_\_\_\_

Location: \_\_\_\_\_

**Concerns:**

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

**Corrective Actions:**

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\_\_\_\_\_  
\_\_\_\_\_

**Employee Name:**

\_\_\_\_\_  
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\_\_\_\_\_  
\_\_\_\_\_

**Employee Signature:**

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