

# TOOL BOX TALKS

## Respirable Crystalline Silica

### WHAT IS IT?

You may not be able to see it, but crystalline silica is everywhere. It is present in about 95% of rocks, clay, sand and soil. In its natural form, it is not a problem. When silica dust is released into the air, however, it can become a health hazard. These common tasks can cause airborne silica:

- Demolition of concrete, brick or masonry
- Chipping, hammering, grinding, sawing and drilling of concrete
- Abrasive sand blasting
- Crushing, loading, hauling and dumping of concrete or rock
- Dry-sweeping concrete, sand or rock dust
- Trenching and excavating



### WHY IS IT HARMFUL?

Prolonged exposure to silica can build up in your lungs, increasing your risk for developing a serious lung disease called silicosis. Symptoms of silicosis include coughing, breathing difficulty, chest pain and bronchitis-like symptoms. The disease produces excessive scarring of the lungs and eventually leads to debilitating illness.

### WHAT IS MY RESPONSIBILITY?

- Learn about the hazards of silicosis and know where it can occur in the plant.
- Always follow all guidelines for wearing a respirator.
- Learn the environmental controls (such as wet-cutting) that you can use to limit dust.

### WHAT IS MY EMPLOYER'S RESPONSIBILITY?

- Measure the amount of silica in the workplace.
- Protect workers from silica exposures above the PEL.
- Limit workers' access to areas above the PEL.
- Use engineering controls to protect workers from silica exposures above the PEL.
- Train workers on the dangers and how to limit exposure.
- Provide respirators to workers where appropriate.
- Restrict housekeeping practices that overexpose.
- Establish a competent person and a written exposure control plan.
- Offer medical exams for workers exposed at or above PEL for 30 or more days/year.
- Keep records of workers exposure and medical exams.

