

TOOLBOX TALK

DISCUSS WITH CREWS

mm/dd/yyyy

SILICA EXPOSURE

Topic Overview

Silica is the second-most common mineral on earth and makes up nearly all sand and rock. Silica exists in many forms. One of these, crystalline silica (including quartz), is the most abundant and poses the greatest concern for human health. Crystalline silica dust can cause a disabling, sometimes fatal disease called silicosis – a thickening and scarring of the lung tissue.

Hazards to be aware of

- Chipping, sawing, grinding, hammering, and drilling of rock, concrete, asphalt, or masonry.
- Crushing, loading, hauling, and dumping rock.
- Sawing, hammering, drilling, grinding, or chipping concrete or masonry structures.
- Demolition of concrete or masonry structures.
- Power-cutting or dressing stone.
- Façade renovation, including tuck-point work.
- Abrasive blasting and hydro blasting of concrete.
- Clean-up activities, such as dry sweeping or pressurized air blowing of concrete or sand dust.
- Tunneling, excavation, and earth-moving of soils with high silica content.

Safety Tips

Prevent dust from getting into the workplace air. As silica is only dangerous in dry form if breathed into the lungs, wet cutting, grinding, and drilling are the preferred methods of preventing exposure.

If wet cutting, grinding, and drilling are not possible, the use of local exhaust ventilation is required. Air discharge from the ventilation system must not be recirculated into the work area.

The use of respirators to prevent exposure is not acceptable as a primary control when other control measures are available.

*** An exposure control plan (ECP) may be required**



Worker grinding concrete using local exhaust ventilation



Worker cutting concrete using water for dust control



Worker drilling concrete inside an enclosure equipped with a "negative air" unit

TOOLBOX TALK

LOCATION		DATE	
PRESENTED BY		TIME	

Review previous Workplace Inspections

Review previous Accident/Incident/Near Misses

Other Safety Issues or Suggestions made by Staff

Attendance Record

NAME	SIGNATURE	NAME	SIGNATURE

TOOLBOX MEETING REVIEWED	NAME (PRINT)	SIGNATURE	DATE
MANAGEMENT REP			
WORKER REP			