

## Silicosis

Silicosis is caused by exposure to respirable crystalline silica dust. Crystalline silica is a basic component of soil, sand, granite, and most other types of rock, and it is used as an abrasive blasting agent. Silicosis is a progressive, disabling, and often fatal lung disease. Cigarette smoking adds to the lung damage caused by silica.

### Effects of Silicosis

- Lung cancer – Silica has been classified as a human lung carcinogen
- Bronchitis/Chronic Obstructive Pulmonary Disorder
- Tuberculosis – Silicosis makes an individual more susceptible to TB
- Scleroderma – a disease affecting skin, blood vessels, joints and skeletal muscles
- Possible renal disease

### Symptoms of Silicosis

- Shortness of breath; possible fever
- Fatigue; loss of appetite
- Chest pain; dry, nonproductive cough
- Respiratory failure, which may eventually lead to death

### Sources of Exposure

- Sandblasting for surface preparation
- Crushing and drilling rock and concrete
- Masonry and concrete work (e.g., building and road construction and repair)
- Mining/tunneling; demolition work
- Cement and asphalt pavement manufacturing

### Preventing Silicosis

- Use all available engineering controls such as blasting cabinets and local exhaust ventilation. Avoid using compressed air for cleaning surfaces.
- Use water sprays, wet methods for cutting, chipping, drilling, sawing, grinding, etc.
- Substitute non-crystalline silica blasting material.
- Use respirators approved for protection against silica; if sandblasting, use abrasive blasting respirators.
- Do not eat, drink or smoke near crystalline silica dust.
- Wash hands and face before eating, drinking or smoking away from exposure area.