

# Silica Awareness

Silicosis is an occupational lung disease that occurs after inhaling crystalline silica particles. Silicosis symptoms include coughing, inflammation and fibrosis. The disease is incurable and debilitating and often leads to death.

## Silicosis: Occupational lung disease

Silicosis is an often fatal lung disease caused by breathing dust containing crystalline silica particles, a basic component of sand and granite. There is no cure for silicosis, and treatment options are limited. However, the condition can be prevented if measures are taken to reduce exposure.

#### Symptoms

### **At-risk occupations**

#### **Continued exposure:**

- Shortness of breath
- > Fever
- Bluish skin at the ear lobes or lips

#### As the disease progresses:

- > Fatigue
- Extreme shortness of breath
- Loss of appetite
- Chest pain
- Respiratory failure

Construction

- > Mining
- Sandblasting
- Masonry
  Demolition
- Manufacturing of glass and metal products
- Plumbing
  Painting

Alveolar

Inhaling the dust can cause scar tissue to form in the lungs that reduces the lungs' ability to extract oxygen from the air.

#### Silica dust particles can embed themselves in the alveolar sacs deep in the lungs where they cannot be cleared by mucous or coughing.

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#### Occupations that have the highest risk of exposure to unsafe respirable crystalline silica:

- Building maintenance workers
- Civil engineers
- Farmers
- Foundry workers
- Hydraulic fracturing workers
- Oil and gas workers
- Street sweepers
- Road construction workers
- Rock drillers



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