



SILICOSIS Prevention



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Commissioner of Labor

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

- Bronchitis/chronic obstructive pulmonary disorder.
- Possible renal disease.
- **Lung cancer**—silica has been classified as a human lung carcinogen.
- **Tuberculosis**—silicosis makes an individual more susceptible to TB.
- **Scleroderma**—a disease affecting skin, blood vessels, joints and skeletal muscles.

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 and local exhaust ventilation. Avoid using compressed air for cleaning surfaces.
- Use water sprays, wet methods for cutting, chipping, drilling, sawing, grinding, etc.
- Substitute noncrystalline 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.

Adapted from OSHA Quick Card 3266-09N-05, U.S. Department of Labor.

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