

Silica

It's not just dust!

What is silicosis?

- Silicosis is a lung disease caused by workers' breathing dust containing silica particles.
- Scar tissue forms in the lungs, reducing the body's ability to get oxygen.
- Acute silicosis develops after short periods of high exposure.
- Chronic silicosis occurs after 10 or more years' exposure at lower levels.
- Nearly 2 million workers are exposed to silica every year.
- 100,000 workers are at high risk.
- 250 workers die per year from silicosis.
- There is no cure.
- Prevention is the only answer.



What are the symptoms of silicosis?

Early stages

- Without medical exam may go unnoticed

Continued exposure

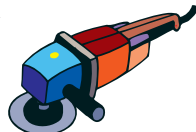
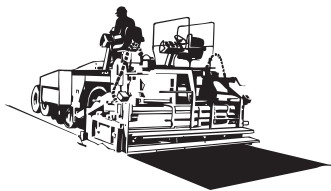
- Shortness of breath upon exercising
- Possible fever
- Bluish skin at ear lobes or lips
- Susceptibility to infectious lung diseases, such as tuberculosis

Progression of the disease

- Fatigue
- Extreme shortness of breath
- Loss of appetite
- Pain in the chest
- Respiratory failure

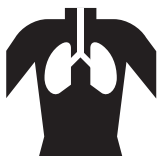
How are workers exposed?

- Sandblasting
- Jackhammering
- Rock or concrete drilling
- Concrete manufacturing and mixing
- Brick and concrete cutting and sawing
- Asphalt pavement manufacturing
- Foundry work
- Demolition



What should be provided for workers exposed to silica?

- Annual chest x-rays and medical monitoring
- Respirators
- Periodic measurement of air quality
- Training programs



How can exposure to silica be limited?

- Control work processes by
- Using water when cutting concrete, brick, or rock
 - Substituting other abrasives (such as aluminum oxide or steel grit) for silica sand
 - Using type CE positive-pressure abrasive blasting respirators for sandblasting
 - Wearing a HEPA or dust-mist respirator when silica dust is present.

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