



Silicosis

THERE IS NO CURE, BUT IT CAN BE PREVENTED!

What is silica?

Silica is the common name for silicon dioxide, a white or colorless crystalline compound found naturally in sand, granite and many other types of rocks. Concrete and masonry products, the primary materials used in road construction, contain both silica sand and rock containing silica.

Why is silica exposure a health concern?

The key health concern to breathing silica is an incurable lung disease called silicosis. Lung damage from silicosis is permanent, making prevention extremely important. Silicosis usually develops after ten or more years of exposure to silica at low levels. However, it can develop a lot sooner (even within a few weeks) if you breathe in high levels of silica. Breathing in silica dust is also associated with lung cancer, pulmonary tuberculosis, and airway diseases.

What are the symptoms of silicosis?

Symptoms may not appear in the early stages of silicosis but develop over time as the lung becomes damaged. Symptoms may include:

- Shortness of breath/difficulty in breathing
- Severe cough and chest pain
- Weakness/fatigue

If you experience any of these symptoms, be sure to tell your doctor about your job and any silica exposures, so he or she can consider silicosis as a possible cause of your symptoms.

How can I be exposed to silica at road construction sites?

Workers may be easily exposed to silica dust during:

- Abrasive blasting (e.g., sandblasting) using silica sand or abrasive blasting of concrete (regardless of the abrasive)
- Chipping, hammering and drilling of rock/concrete
- Crushing, loading, hauling or dumping of rock/concrete
- Cutting, sawing or grinding of concrete, concrete block or brick
- Dry sweeping or using compressed air to blow off concrete, rock or sand dust

- Concrete mixing or tunneling operations

I know I work around silica, but I don't see any dust clouds. Should I still be concerned?

Yes! You can still be exposed when the dust is not visible. While working around dust clouds can be a clear indication that you are being exposed to silica, the very small pieces of silica that you cannot see can also be harmful to you. That is why it's important to always protect yourself when you work around silica.

What can I do to protect myself and my family from being exposed to silica from my worksite?

If your work causes you to be exposed to silica dust, there are things you can do to protect yourself and your family including:

- Learn the sources of silica dust and exposure at your job.
- Wear proper respiratory protection as per OSHA regulations.
- Use wet cutting, wet drilling or water sprays to help keep dust levels low.
- Use wet methods to clean-up silica dust, do not dry sweep or use compressed air.
- Practice good personal hygiene: clean your hands before handling food and do not eat, drink, or smoke in dusty areas.
- While at work, park cars away from dusty areas and keep car windows closed.
- Change into clean clothes before leaving the work-site; carry dirty work clothes home in a sealed plastic bag and wash separately from all other clothes.

More Information

New York State Department of Health
Bureau of Occupational Health and Injury Prevention
(518) 402-7900
www.health.ny.gov/silicosis
www.cdc.gov/niosh/topics/silica



Department
of Health