

Tracking Silicosis in California

Completed Occupational Health Branch Activity, 2001-2005

Background and Purpose

Silicosis is a disabling, irreversible lung disease caused by breathing crystalline silica particles, which can trigger scar tissue to develop in the lungs. Silica is the second most common mineral in the earth's crust, and can be found in sand, rocks, glass, and building materials like cement and stucco. More than a million workers are exposed to crystalline silica in the U.S., and hundreds die each year. Silicosis cannot be cured, but it can be prevented.

The purpose of this project was to learn more about the occupations, industries, and work activities where workers are exposed to silica. We use this information to increase awareness of occupational silica exposure, reduce silica exposure levels, and prevent future silicosis cases through education.

Activities

To accomplish this, we:

- Identified cases of work-related silicosis in California;
- Interviewed workers to find out the occupations and industries where the workers were exposed to silica;
- Evaluated silica exposure at worksites in selected industries; and
- Made recommendations for decreasing exposures and protecting workers.

Partners

- National Institute for Occupational Safety and Health (NIOSH)
- Public Health Institute

Frequently Asked Questions

1. How long does it take to develop silicosis?
2. Who is at risk for silicosis?

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1. How long does it take to develop silicosis?

Acute silicosis occurs after high exposures that can cause symptoms to develop within a few weeks to 5 years. Chronic silicosis usually occurs after 10 or more years of overexposure.

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2. Who is at risk for silicosis?

Anyone who works in a dusty environment where crystalline silica is present is at risk. Industries OHB has identified as hazardous are mining; construction; stone cutting; glass manufacturing; and ceramics, clay and pottery manufacturing. Some dangerous tasks include sandblasting, dry sawing on concrete or masonry, chiseling or tuck-pointing, highway repair, concrete finishing work, excavation work, demolition work, grinding work, and tool cleaning using abrasives.

Related Resources (current at the time project was completed)

- NIOSH silica website [www.cdc.gov/niosh/topics/silica/default.html]
- NIOSH state silicosis programs [www.cdc.gov/niosh/topics/surveillance/ORDS/StateBasedSurveillance/Silicosis.html]
- OSHA silica website [www.osha.gov/SLTC/silicacrystalline/]
- American Lung Association – information on silicosis and other occupational lung diseases

For more information about the work of Occupational Health Branch (OHB), visit the OHB website [www.cdph.ca.gov/ohb].