



# Silica

***Silica is in many materials common at construction sites, such as sand, concrete, rock, mortar, and brick. During tasks that disturb these materials (cutting, grinding, blasting, and jackhammering, for example), dust containing crystalline silica can be released into the air. Workers who inhale this dust are at risk of developing serious, sometimes fatal illnesses such as a lung disease called silicosis, lung cancer, and chronic obstructive pulmonary disease (COPD). It has also been linked to illnesses such as kidney disease.***

## **Frank's Story**

Frank has been a laborer for 22 years. His work frequently involved cutting, jackhammering, and drilling concrete. Water or vacuums were not used to control the dust, and he rarely was given a respirator. He began to have shortness of breath, wheezing, and tiredness after even short periods of work. Frank went to the doctor and told him about his work history. The doctor had Frank's x-ray read by a certified Class B reader because of the possible silica exposure. The results helped in diagnosing Frank's silicosis.

**✘ Have you ever been exposed to silica dust from the work you were doing or from work going on nearby?**

**✘ How could this illness have been prevented?**

## **Remember This**

- Use vacuums and/or water to reduce dust at the source, before it becomes airborne. When these controls are not enough, use respiratory protection.
- Keep dust control systems in good working order, and check vacuum filters and hoses regularly to make sure they are not clogged.
- Do not use sand (or other substances containing more than 1% crystalline silica) for abrasive blasting. Substitute less hazardous materials.
- If a less hazardous material is not available, use the appropriate respiratory protection.
- Avoid eating, drinking, and smoking in areas where there is silica dust. A good practice is to first leave the dusty area and wash your hands and face.
- Avoid bringing dust home. Vacuum the dust from your clothes or change into clean clothing before leaving the work site. Do not brush or blow dust off.
- To learn more, visit [www.silica-safe.org](http://www.silica-safe.org).

## **How can we stay safe today?**

What will we do at the worksite to control and prevent exposure to silica dust?

1. \_\_\_\_\_  
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2. \_\_\_\_\_  
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OSHA Regulations: 1926.1153 Respirable crystalline silica

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- ✘ Use vacuums and/or water to reduce the dust at the source, before it becomes airborne.
- ✘ Vacuum the dust from your clothes and change into clean clothing before leaving the work site.
- ✘ Do not brush or blow the dust off! Avoid bringing dust home!