

Silica

Silica is found in many materials common on construction sites, including sand, concrete, rock, mortar, and brick. When workers cut, grind, abrasive blast, jackhammer or perform other tasks that disturb these materials, dust containing crystalline silica can be released into the air. Workers who inhale this dust are at risk. Silica can cause serious, sometimes fatal illnesses including a lung disease called silicosis, lung cancer, and chronic obstructive pulmonary disease (COPD). It has also been linked to other illnesses such as kidney disease.

Here is an Example

Frank has worked as a laborer for 22 years dry cutting, jackhammering and drilling concrete. Water or vacuums were not used to control the dust, and he rarely was provided with a respirator. He began to experience shortness of breath, wheezing, and tiredness after even short periods of work. After a coworker developed tuberculosis, the state health department required all the workers to obtain a chest x-ray. Frank told his doctor 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 his silicosis.

1. Have you ever been exposed to silica dust either because of the work you were performing or work going on nearby?

2. How frequently is equipment with water or vacuums attached used to control dust at your worksite?
3. Have you known anyone who has developed a silica-related health problem?

Preventing Health Problems from Silica

- Use vacuums or water to reduce or eliminate the dust at the source, before it becomes airborne. When these controls are not enough, use respiratory protection. Routinely maintain dust control systems to keep them in good working order.
- Do not use sand or other substances containing more than 1% crystalline silica as abrasive blasting materials. Substitute less hazardous materials.
- Wear disposable or washable work clothes and shower if facilities are available. Vacuum the dust from your clothes and change into clean clothing before leaving the work site. Do not brush or blow the dust off! Do not bring dust home!
- Avoid eating, drinking and smoking in areas where silica dust is present. Wash your hands and face outside of dusty areas before performing any of these activities.

What Are We Going to Do Today?

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

1. _____
2. _____

OSHA REGULATIONS: 1926 Subpart C 1926.20; .21; .25;.27;.28; Subpart D 1926.51; .55;.57; .59; 1926 Subpart E 1926.95; .103



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