



## Silicosis

Silicosis is a disabling, irreversible and often fatal lung disease caused by inhaling dust that has silica in it. According to the Occupational Safety and Health Administration, each year, more than 250 American workers die from suffocation because their lungs are so scarred from silicosis that they can't take a good breath. Hundreds more are disabled by it. Although there is no cure for silicosis, the good news is that it is entirely preventable.

Silica is a real hazard. It damages your lungs in more or less the same way asbestos does. Whenever you inhale crystalline silica, your lung tissue reacts by forming nodules and scarring around the trapped silica particles. Silicosis is the disease that results when this scar tissue forms in the lungs and reduces the ability of your lungs to absorb the oxygen that's in the air. As the silicosis gets worse, and more scarring develops, breathing becomes difficult and the end result can be disability or death. Symptoms of silicosis can include shortness of breath while exercising, fever, bluish skin at ear lobes or lips, fatigue, loss of appetite, or any combination of these.

If you work with silica-containing products such as sand, quartz, and granite rock, or if you are involved in sandblasting, stonecutting, rock drilling, tunneling, or quarrying, you need to be aware of the hazards of crystalline silica. You are at risk of developing silicosis if:

- You work around airborne silica
- The particles are small enough
- And you breathe in the silica

There are actions you can take that will limit your exposure to silica and prevent silicosis.

The first thing you can do is, whenever possible, eliminate the silica hazard by using a different, safety material that doesn't contain silica. Of course, removing silica is not always possible. The next best thing is to control the dust with engineering controls. This means keeping the silica out of the air. Some controls include installing local exhaust ventilation, using water to wet down dust as it is being created (like wet cutting tile or brick), and using dust-collection systems on machines that generate dust. The last option is to wear personal protective equipment like a respirator when necessary. Do not alter the respirator. If you have a beard or a mustache, it may prevent you from getting a good seal on your respirator. If your work requires a respirator, consider shaving your facial hair.



You can also follow safe work practices to reduce your silica intake. Know which tasks can lead to silica exposure. Practice good personal hygiene. Wash your hands and face before eating or drinking outside of the exposure area. Whenever possible, change into washable or disposable work clothes at the beginning of your shift, or shower and change into clean clothes before leaving the jobsite. Never eat, drink, smoke, or apply cosmetics in areas where silica dust is present.

### **SAFETY REMINDER**

**If you are a smoker, the damage caused by silica can be increased.**