SafetyWorks! Tip

(SWT0402)



Protect Workers from Silica Dust during Road Sweeping

I. What is Silica?

Crystalline silica is a mineral found in most materials mined from the earth --- rock, sand and clay. It is added to masonry, concrete, joint compound and some paints. Silica is one of the most dangerous dusts you can breathe.

Because road dirt contains silica, workers who sweep the roads inhale silica dust. Workers can also breathe in silica dust doing sandblasting, rock cutting/sawing/drilling, jack hammering, road repairs, and demolition of masonry structures.

Each year about 2 million U.S. workers breathe in silica dust on their jobs. 300 workers die from silicosis. More workers die from other diseases related to breathing silica. These deaths are preventable.

II. Why is silica dangerous?

Breathing silica has serious health effects, including silicosis ---an often-fatal disease that scars lung tissue and makes it hard to breathe. Silica may increase your risk of getting lung cancer and tuberculosis (TB). It may contribute to bronchitis, emphysema, stomach cancer, heart, kidney and liver disease, and rheumatoid arthritis.

You can inhale silica even if you don't see dust. Silicosis usually takes many years to develop. And it may get worse even years after you work with silica.

III. How can you protect yourself?

- **Don't smoke.** Smoking combined with exposure to silica makes you much more likely to get lung disease.
- **Do not dry sweep.** Wet down the area before sweeping, or sweep after a rain. If you must dry sweep, stand up-wind of the dust and use the right kind of dust mask or respirator.
- Do not eat, drink, use tobacco, or apply cosmetics in dusty places. Wash your hands and face before you eat, drink, use tobacco, or apply cosmetics if you've been working around silica.
- Change out of your work clothes before you go home. If possible use disposable coveralls and shower before you leave work so you don't bring silica dust home with you.
- Use newer street sweeping vehicles if you can. They filter the air operators breathe and keep outside dust levels low for area residents.
- If you use a respirator, make sure it's the right kind and you know how to use it and take care of it. If you need a respirator, your employer must have a written respiratory protection program. Your respirator must be selected and fitted to you. And you need medical clearance before you use a respirator. A tight-fitting respirator won't work if you have a beard or big mustache.
- **OSHA sets limits on how much silica** workers can be exposed to. **SafetyWorks!** can monitor the amount of silica in the air where people are working - it's a free service.

For more information about this or other workplace safety and health topics, contact SafetyWorks! Toll-free: 1-877-SAFE-345 (1-877-723-3345) TTY: 1-800-794-1110 Website: www.safetyworksmaine.org