

HEALTH ALERT!

Preventing Carbon Monoxide Poisoning While Using Gas-Powered Tools Indoors

Many gas-powered tools are used in construction. Examples of these tools are concrete-cutting saws, generators and air compressors. These tools run on combustible fuels, and one by-product is carbon monoxide (CO). CO is colorless and odorless. Fatal CO poisoning can sometimes occur within minutes of exposure. By identifying the symptoms of CO poisoning and the ways you may become exposed, you can make using gas-powered equipment safer.



“A farm owner died of CO poisoning while using an 11 horsepower, gasoline-powered pressure washer to clean his barn. He had worked about 30 minutes before being overcome.” (NIOSH 1993)



The Bureau of Labor Statistics reported 700 work-related carbon monoxide poisonings and 39 deaths in the United States during 2005.

Recognize the signs and symptoms of carbon monoxide poisoning:

- Nausea and Vomiting
- Headache
- Dizziness
- Blurred Vision
- Personality Changes
- Confusion

Symptoms and signs can occur after just minutes of exposure to CO.

What to do if you are exposed to carbon monoxide at work:

- Immediately turn off the CO source (generator, power washer, saws, etc.).
- Evacuate yourself and co-workers from the work area quickly but safely to an area with fresh air.
- Call for emergency medical attention. If you delay you may lose consciousness.
- DO NOT DRIVE! CO poisoning may impair your judgment or you may lose consciousness.

Safety Tips to Avoid CO Exposure While Working Indoors with Gas-Powered Tools

- ✓ Always keep generators outside of enclosed work areas, and never locate them near building air intakes.
- ✓ If working in an enclosed area where elevated CO concentrations can occur, always wear a personal CO monitor with an audible alarm. This will allow you and your co-workers time to evacuate the area if elevated CO levels develop.
- ✓ Substitute gas-powered equipment for electric whenever possible while working indoors.
- ✓ Select equipment that allows you to place the gas-powered engine outside the work area. When using gas-powered power washers, allow only the water line to be in the work area and not the engine.
- ✓ Remember to educate your employees about the potentially fatal risks associated with CO poisoning, and how gas-powered tools can contribute to these risks.
- ✓ Never re-enter the contaminated area until you are sure the CO levels have been reduced. Trained personnel (such as the fire department) should be involved to confirm CO levels are low enough.

Remember:

Gas powered tools are not the only way CO poisoning can occur. CO poisoning can occur whenever there is incomplete combustion of fossil fuels (gasoline, propane, etc.). Workers using indoor kerosene heaters, welding equipment, or any other equipment where fuel is used may be at risk for CO poisoning as well.

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The following resources will provide you with information to help prevent an accidental carbon monoxide poisoning while working with gas-powered tools:

National Institute for Occupational Safety and Health. *Carbon Monoxide Hazards from Small Gasoline Powered Engines*. <http://www.cdc.gov/niosh/topics/co/>

United States Environmental Protection Agency. *Carbon Monoxide: An Introduction to Indoor Air Quality*. <http://www.epa.gov/iaq/co.html>

Consumer Product Safety Commission. *Carbon Monoxide Questions and Answers*. <http://www.cpsc.gov/cpsc/pub/pubs/466.html>

Texas Department of Insurance, Division of Workers' Compensation. *Carbon Monoxide Hazards from Small Gasoline Powered Engines: Fact Sheet*.

Centers for Disease Control and Prevention. Electronic Library of Construction Occupational Safety and Health. <http://www.cdc.gov/elcosh/>

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