What is carbon monoxide (CO)?

Carbon monoxide is a poisonous gas that can kill you when breathed. You can't see it, smell it or taste it. It is sometimes called the "silent killer" because it sneaks up on you and takes your life without warning.

Why is it deadly?

When we breathe air containing carbon monoxide, it is absorbed through the bloodstream; it displaces oxygen; and it inhibits the blood's ability to carry oxygen to vital organs such as the heart and brain.

Where does CO come from?

CO is a by-product of incomplete combustion. Any fuel-burning device has the potential to produce dangerous levels of CO gas. Examples of devices commonly used around the house include:

- Fuel fired furnaces (non-electric)
- Gas water heaters
- Fireplaces and wood stoves
- Gas stoves
- Non-electric space heaters
- Gas dryers
- Charcoal grills
- Lawnmowers, snowblowers, etc.
- Automobiles

What are the symptoms of CO poisoning?

The symptoms of CO poisoning are flu-like and include headache, fatigue, nausea, dizzy spells, and confusion. Prolonged exposure can result in vomiting, blackouts and eventually brain damage or death. The amount of CO inhaled and how long you are exposed to it affects you.

What can be done to prevent carbon monoxide poisoning?

- Make sure appliances are installed according to the manufacturer's instructions and by professionals.
- Have the heating system inspected and serviced at least once a year.
- Make sure chimneys and vents are checked for blockages, corrosion, and loose connections.
- Open flues completely when fireplaces are in use.
- Use proper fuel in kerosene space heaters.
- Never burn charcoal or a barbecue grill inside a home or enclosed area.
- Never use portable fuel-burning camping equipment inside a home, garage, vehicle or tent.
- Never leave a car or mower running in an attached garage, even with the garage door open.
- Never operate unvented fuel-burning appliances in any room where people are sleeping.
- Never use the kitchen range for heating the house.

How can I tell if CO is present in my home?

Since carbon monoxide is colorless, odorless and tasteless, the best way to alert your family is to install a carbon monoxide detector/alarm to warn of gas build-up.

What kind of detector should I get?

There are a variety of CO detectors available. When choosing a detector, you should consider the location, the ease of installation, and the power source of the alarm. CO detectors, like smoke detectors, are available in plug-in, battery-operated or hardwire models. Select one that has been listed by Underwriters Laboratory (UL).

Where should CO detectors be installed?

Carbon monoxide is almost identical in weight to normal air and thus will mix freely with air. For this reason alarms may be installed at any level in a room.

If the CO alarm is to be ceiling mounted, it should be installed away from any existing smoke alarms in order to be able to distinguish between a CO alarm and a smoke alarm in an emergency situation.

Every home should be equipped with at least one CO alarm near the sleeping area of the home. For maximum protection, additional alarms should be located on each level of your home.

What should I do if the CO alarm sounds?

Stay calm! Most situations resulting in activation of a CO detector are **not** life threatening and do not require calling the fire department. To determine the need to call the fire department, ask the following question of **everyone** in the house.

> Does anyone feel ill? Is anyone experiencing the "flu-like" symptoms of headache, nausea or dizziness?

If the answer to the above by anyone in the house is "YES", evacuate the house to a safe meeting place outside and have someone call the fire department. Failure to evacuate immediately may result in prolonged exposure and worsening effects from possible CO gas. The best initial treatment for carbon monoxide gas exposure is fresh air.

What should I do if the CO alarm sounds? (continued)

If the answer to the question by everyone in the house is "NO", the likelihood of a serious exposure is greatly diminished and you probably do not need to call the fire department. Instead, turn off any gas burning appliances or equipment, ventilate the area and attempt to reset the alarm. If the alarm will not reset or resounds, call a qualified technician to inspect your system for possible problems. If at any time during this process someone begins to feel ill with the symptoms described above, evacuate the household to a safe location and have someone call the fire department.

Safety Tips

Test and replace your CO detector per the manufacturer's instructions.

Check your batteries to your CO detector, following instructions from the manufacturer.

A CO detector does not replace a smoke detector. Smoke detectors sound before a CO detector can react, allowing for more time to escape.

Working smoke detectors save lives. Install smoke alarms on each level of your home and inside of all sleeping areas. Test your detectors monthly and change the batteries in them twice a year. **Change Your Clock - Change Your Batteries.**

Have a plan for escaping a fire and practice it by holding fire drills at least twice a year. Make sure there are two clear ways out of each room. Have everyone meet at a location outside of the home. Never go back into a burning house. **Get Out and Stay Out!**

For additional information, contact your local fire department or write to:

DIVISION OF STATE FIRE MARSHAL
8895 EAST MAIN STREET
REYNOLDSBURG, OH 43068
1-888-243-0305
TTY/TDD: 1-800-750-0750
www.com.state.oh.us

The Ohio Department of Commerce

Ted Strickland
Governor

Kimberly A. Zurz
Director of Commerce

Michael P. Bell
State Fire Marshal

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Carbon Monoxide

The Silent Killer in Your Home

Q & A About CO Detectors