

## **Carbon Monoxide - The #1 Poison Killer**

Carbon monoxide (CO) is an odorless, tasteless, invisible, poison gas. It is produced when carbon containing materials, like wood, coal, oil, and natural gas, burn incompletely. This occurs when a fire has a low oxygen supply. Each burning carbon atom joins with only one oxygen atom instead of the usual two, and that makes carbon monoxide.

When CO enters the lungs, it quickly latches onto red blood cells. When this happens, CO keeps red blood cells from delivering the oxygen they carry to the other cells of the body. Without oxygen, cells and organs die.

Every year, 1,500 people die of CO poisoning and 10,000 others need medical attention because of it. CO poisoning is a real threat, one that you cannot see, smell, or taste, but that you can prevent.

## **Carbon Monoxide Kills**

Carbon monoxide (CO) can kill or cause long-lasting health problems. It is especially dangerous for children, pregnant women, people with heart disease, and the elderly.

Early signs of CO exposure are headache, sleepiness, nausea, and dizziness. If you suddenly feel these symptoms, open windows or go outside. If fresh air brings relief, have your home's heating system inspected.

## **Clear the Air**

Carbon monoxide can be a sneaky enemy. Because it is invisible, odorless, and tasteless, it can hurt you before you even know it's there. Avoiding dangerous activities and checking for good ventilation can prevent most CO buildup. CO alarms can warn you if a problem occurs. Read on to learn more.

## **Sources of Carbon Monoxide**

Any machine that burns fuel can produce carbon monoxide. Many ordinary household appliances and machines may produce CO, including:

- Non-electric, fuel-fired furnaces.
- Gas water heaters, stoves, and dryers.
- Gas-powered generators.
- Fireplaces, woodstoves, and charcoal grills.
- Lawnmowers, snow blowers, leaf blowers, etc.
- Cars, trucks, and motorcycles.

These machines can produce CO if they do not have enough fresh air flowing around them. If CO builds up near you and your family, you can be poisoned, injured, even killed.

## **Don't Let It Get to You**

Carbon monoxide, which is odorless, tasteless, and invisible, can be found in many places. How can you keep from being affected by it? A little bit of prevention goes a long way.

Prevent CO emergencies by avoiding dangerous activities. Never run your car or other gas-powered vehicles in the house or garage, even if the garage door is open. Do not use a charcoal grill or a gas-powered generator inside a house, tent, or other enclosed space.

## **Call in the Professionals**

Prevent CO buildup by maintaining your equipment. A blocked or leaking chimney, or an undersized vent on a furnace or water heater can lead to CO buildup in your home. If you have a new appliance installed, make sure that the venting system' is adequate.

Have your heating system professionally inspected every year. Only a trained expert can make sure that there are no leaks in the heating equipment vents. Have other fuel-burning appliances, like your stove and dryer, inspected from time to time to be sure that they are receiving enough fresh air.

## **A Bit of Backup**

Prevent a carbon monoxide tragedy by installing CO alarms. CO alarms look like smoke alarms. In fact, you can purchase a single alarm unit that detects both smoke and carbon monoxide.

Carbon monoxide alarms may be battery-powered or current-powered (plug-in models). Plug-in models can be used in any outlet. Battery-operated models are useful where outlets are not available. These models can also be installed on or near the ceiling to detect any CO that rises with warm air. It is smart to have some plug-ins and some battery-operated CO alarms in your home.

## **Installation**

At a minimum, place one carbon monoxide alarm near all sleeping areas. For the next level of protection, install one additional alarm on each level of the home. Put some alarms on or near the ceiling. Others can be plugged into electrical outlets. Do not install CO alarms within 15 feet of heating or cooking appliances, or in very damp areas such as bathrooms.

## **Respond Correctly**

If your carbon monoxide alarm sounds, do not panic.

First, find out if anyone is feeling sick. Early symptoms of CO exposure are headache, sleepiness, nausea, and dizziness. If anyone has symptoms, leave the house immediately. Use a neighbor's phone to call the fire department.

If no one feels ill, you probably do not need to call the fire department. Turn off any fuel-burning appliances. Open windows for ventilation, and reset the alarm. If the alarm sounds again or cannot be reset, have a heating and ventilation professional inspect your home as soon as possible. If anyone begins to show signs of CO poisoning, evacuate and call the fire department.