

WHAT IS CARBON MONOXIDE?

Carbon Monoxide is the leading cause of accidental poisoning deaths in America, according to the Journal of the American Medical Association (JAMA). 1,500 people die annually due to accidental carbon monoxide exposure, and additional 10,000 seek medical attention. (Medical experts agree that it's difficult to estimate the total number of carbon monoxide incidents because the symptoms of carbon monoxide poisoning resemble so many other common ailments.)

Carbon monoxide is a flammable, colorless, odorless, tasteless toxic gas produced during incomplete combustion of fuel - Natural Gas, Oil, Coal, Wood, Kerosene, etc.

During normal combustion, each atom of carbon in the burning fuel joins with two atoms of oxygen - forming a harmless gas called carbon dioxide. When there is a lack of oxygen to ensure complete combustion of the fuel, each atom of carbon links up with only one atom of oxygen - forming carbon monoxide gas.

What is the danger to me?

Carbon monoxide inhibits the blood's capacity to carry oxygen. In our lungs, CO quickly passes into our bloodstream and attaches itself to hemoglobin (oxygen carrying pigment in red blood cells). Hemoglobin readily accepts carbon monoxide - even over the life giving oxygen atoms (as much as 200 times as readily as oxygen) forming a toxic compound known as carboxyhemoglobin (COHb).

By replacing oxygen with carbon monoxide in our blood, our bodies poison themselves by cutting off the needed oxygen to our organs and cells, causing various amounts of damage - depending on exposure.

Low levels of carbon monoxide poisoning (with COHb levels of 10%) result in symptoms commonly mistaken for common flu and cold symptoms - shortness of breath on mild exertion, mild headaches, nausea.

With higher levels of poisoning (COHb levels of 30%) the symptoms become more severe - dizziness, mental confusion, severe headaches, nausea, fainting on mild exertion.

At high levels (COHb of 50% or more) there may be unconsciousness and death.

How does CO enter the home?

Carbon monoxide can escape from any fuel-burning appliance, furnace, water heater, fireplace, woodstove, or space heater.

Most newer homes are built very air-tight, thus cutting down on the supply of fresh air to your furnace - and creating an oxygen starved flame. Tight closing replacement windows and doors, as well as additional insulation can cause similar problems in older homes.

Carbon monoxide can spill from vent connections in poorly maintained or blocked chimneys. If the flue liner is cracked or deteriorated, CO can seep through the liner and into the house - slowly creeping up to dangerous levels. If a nest or other materials restrict or block the flue, CO will mostly spill back into the house.

Improperly sized flues connected to new high-efficiency furnaces and water heaters can also contribute to CO spillage. (Many new furnaces and water heaters are installed using the existing chimneys which may be the wrong size to allow the furnace to vent properly.)

Warming up vehicles in an attached garage, even with the garage door opened, can allow concentrated amounts of CO to enter your home through the car port door or near-by windows.

What to do in a CO emergency.

If you are suffering from chronic flu-like symptoms, see your doctor and ask him if it could be a low-level CO poisoning.

If you have a CO detector, and it alarms, open windows and ventilate your home w/ fresh air, have your heating system checked by a professional.

If your alarm sounds and you are feeling drowsy or dizzy, leave the house and call 911 from your neighbors home. You may need medical attention for CO poisoning.

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FOR IMMEDIATE RELEASE

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CPSC WARNS THAT THE DEADLY THREAT OF CARBON MONOXIDE CAN BE STOPPED BY A YEARLY PROFESSIONAL INSPECTION

Washington, D.C. -- Having your home inspected each year at the beginning of the heating season can help avoid deadly carbon monoxide gas from leaking into

your home, according to Chairman Ann Brown of the Consumer Product Safety Commission.

"CO poisoning from the use of fuel burning appliances kills at least 200 people each year and sends more than 5,000 to hospital emergency rooms for treatment," Brown said. "Consumers can avoid this tragedy by having their fuel-burning appliances inspected by a qualified technician each year, and by purchasing and installing CO detectors that meet the requirements of the Oct. 1, 1995 Underwriters Laboratories standards."

CO is a colorless, odorless gas produced by burning any fuel. The initial symptoms of CO poisoning are similar to the flu, and include dizziness, fatigue, headache, nausea and irregular breathing. High level exposure to CO can cause death.

"Modern heating equipment is sophisticated and requires special training and tools for proper maintenance," Brown said. "CPSC recommends that consumers should not service their own appliances, but instead have a qualified professional perform an inspection."

A yearly inspection of your home by a professional should include a careful look at the following sources of carbon monoxide:

- o Furnaces, hot water heaters and stoves. If they burn natural gas, heating oil, wood or other kinds of fuel, these appliances are potential sources of CO.
- o Chimneys, flues and vents. Have flues and chimneys inspected before each heating season for leakage and for blockage by creosote or debris. Creosote buildup or leakage could cause black stains on the outside of the chimney or flue. These stains can mean that pollutants are leaking into the house. Have all vents to furnaces, water heaters or boilers checked to make sure they are not loose or disconnected.
- o High Temperature Plastic Venting (HTPV) pipes. CPSC has received reports that high temperature plastic venting (HTPV) pipes -- which are used in mid-efficiency appliances -- may separate or crack. This could allow CO from the furnace to enter a home. The CPSC is currently investigating this problem. Homeowners with a gas-fired mid-efficiency furnace or boiler installed between 1987 and 1993 should have them inspected for cracking or separating.
- o Improper ventilation. Make sure that your appliances have adequate ventilation. A supply of fresh air is important to help carry pollutants up the chimney, stovepipe or flue, and is necessary for the complete combustion of any fuel.

Finally, consumers should be aware that charcoal grills can also be a potential source of CO. Never use charcoal grills in enclosed spaces such as a home, garage,

vehicle or tent, and never bring grills with live coals indoors after use. Never use charcoal grills as an indoor heat source.

"Carbon monoxide is a deadly threat, but it can be avoided by having a yearly professional inspection of your home fuel burning appliances and by installing a CO detector that meets the most recent UL standards," Brown said.