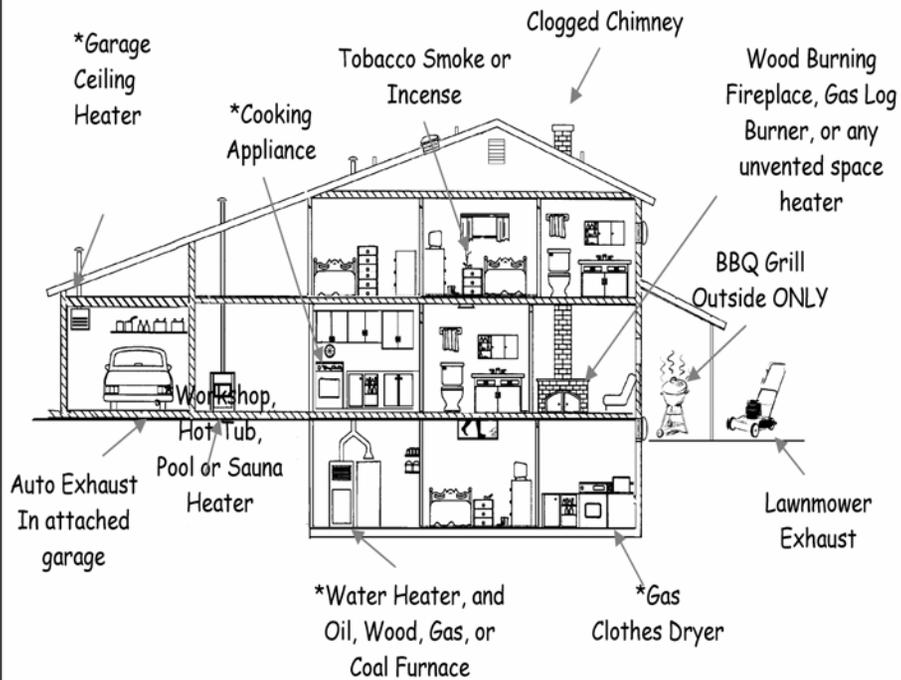


WHAT ARE THE SOURCES OF CARBON MONOXIDE?



Remember there are many more possible sources
& causes of Carbon Monoxide:

- Appliances in cabins or campers
- Recreational Vehicles, Tents
- Lack of adequate ventilation
- Space Heaters, Boats
- Bathroom & clothes dryer exhausts vented to outside in an airtight home can interfere with other vented appliances & create CO.

*Common household appliances should not normally produce Carbon Monoxide, but CO production is possible if they are malfunctioning or not vented properly. Have all combustion appliances tested yearly.

IF YOU DON'T TEST, YOU DON'T KNOW!

What You Should Know to Protect Your Family from **CARBON MONOXIDE**

Presented by the
**Alexander Martin Rowland
Charitable Foundation**



www.amrfoundation.org

For more information, go to
www.cosafety.org

*PPM = parts per million molecules of air.

Carbon Monoxide- #1 Poison Killer!

Carbon monoxide (CO) poisoning kills at least 1,500 people each year and 10,000 others need medical attention because of it. Because it is invisible, odorless, and tasteless, it can hurt you before you even know it's there. Read on to learn more.

What is Carbon Monoxide?

CO is an odorless, tasteless, invisible poison gas produced whenever a carbon-containing material (like wood, gasoline, coal, natural gas) is burned 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.

You may be exposed to Carbon Monoxide when:

- You leave your car, motorcycle, boat, RV or other gas-powered vehicle running
- You burn charcoal, alcohol, or gasoline in an enclosed tent, camper, or room
- You smoke a cigar, cigarette, or pipe
- Your home contains an incorrectly vented or malfunctioning hot water heater, furnace, dryer, space heater, fireplace, or stove

These sources 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, even killed.

How does Carbon Monoxide harm you?

When CO enters the lungs, it quickly attaches to 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.

Who is at risk?

Everyone is at risk of being poisoned by carbon monoxide. It is especially dangerous for children, pregnant women, people with heart disease, and the elderly.

HOW MUCH IS TOO MUCH?

These levels should be referenced to the effects on healthy people. Health effects can vary significantly based on age, sex, weight, and overall state of health.

- 12,000 PPM* Death within 1 – 3 minutes
- 1600 PPM* Nausea within 20 minutes, death within 1 hour
- 800 PPM* Nausea and convulsions – death within 2 hours
- 400 PPM* Frontal headaches 1-2 hours life threatening within 3 hours
- 50 PPM* Maximum level for continuous exposure in an 8 hour workday. Health alert for vulnerable populations.
- 10–35 PPM* Marginal - Small children, elderly, and those suffering respiratory or heart problems cautioned. Prolonged exposure may cause drowsiness.
- 9 PPM* The concentration often found on busy city streets
- 1 – 9 PPM* Any increase of CO from outside warrants further investigation though may not be an immediate health risk

Common symptoms associated with carbon monoxide poisoning:

- Headaches
- Loss of hearing
- Dizziness
- Blurry vision
- Weakness
- Vomiting
- Nausea
- Disorientation
- Rapid heartbeat
- Seizures
- Loss of consciousness
- Coma
- Cardiac arrest
- Respiratory failure

CO poisoning mimics many common illnesses, such as the flu and food poisoning. If you suddenly experience headache, sleepiness, nausea, and/or dizziness, open windows or go outside. If fresh air brings relief, have your home inspected.

What can I do to protect myself and my family?

- Use non-electrical space heaters only in well-ventilated areas.
- Don't start or leave running cars, trucks, or other vehicles in an enclosed area.
- Every home, building or recreational device should have at least one carbon monoxide detector accurate enough to protect all.
- Have your furnace and other fuel burning appliances cleaned and inspected by a qualified professional once a year or before each heating season.
- Make sure your service professional tests each appliance using a testing instrument that can detect carbon monoxide.

Installation

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. At a minimum, place one CO alarm near all sleeping areas. For the next level of protection, install one additional alarm on each level of the home. It is smart to have some plug-ins and some battery-operated CO alarms in your home.

Respond Correctly

CALL

If your CO alarm sounds, do not panic. First, find out if you or anyone is feeling sick. Early symptoms of CO exposure are headache, sleepiness, nausea, and dizziness. If anyone has symptoms, leave the home immediately and call your local fire department or 911.

CHECK

If your CO alarm sounds and no one has symptoms of carbon monoxide poisoning: First, turn off any fuel-burning appliances, open windows for ventilation and reset the alarm. If the alarm sounds again or cannot be reset, contact a certified service or repair company who can test for CO with proper test instruments as soon as possible.

ALWAYS

If you think you have symptoms of carbon monoxide poisoning and you do not have a detector, leave your home, and call your fire department or 911 immediately!

BE SAFE!

IF YOU DON'T TEST, YOU DON'T KNOW.