

## Signs of A CO Problem

- Stuffy, stale, smelly air; exhaust fume smell; unfamiliar or burning odor
- Moisture on walls and windows; lint by dryer's exterior vent; soot on appliances
- A furnace that runs constantly but heats inadequately; loose or missing furnace panels
- Appliances that shut off, activating safety devices



## Symptoms of CO Poisoning

Symptoms can mimic a common cold, a hangover, food poisoning, depression, sea sickness, intoxication, or the flu (without body ache or fever). Look for patterns. Symptoms may disappear when away from the house (or vehicle) and reappear when you return. See if others, including pets, suffer the same symptoms at the same time.

- Dizziness, ringing in the ears
- Blurred vision, burning eyes
- Intoxicated appearance
- Persistent throbbing headaches
- Tightness across the forehead
- Pale skin
- Nausea and vomiting
- Confusion, disorientation, loss of muscle control
- Fainting, unconsciousness
- Fatigue, never feeling rested, sleepiness
- Shortness of breath
- Chest pain (angina) when exercising
- Rapid heartbeat/pulse, fluttering or throbbing heart, tightening of the chest
- Sudden death



**Get fresh air and medical attention if you have these symptoms.**

CO poisoning is especially toxic to infants and children; a pregnant woman and her child; the elderly; smokers; people with anemia, coronary or respiratory problems; and people with immune system diseases.

## CO Detectors

CO detectors sound an alarm when unacceptable levels of CO are in the air. Without testing instruments, CO is virtually impossible to detect.

- Look for UL-approval, standard 2034 or IAS 6-96 detectors.
- Install detectors on every level of the home near sleeping areas, in the vicinity of the heating unit, in RVs, and on boats.
- Be sure alarms can be heard from every sleeping area.
- Test carbon monoxide detectors once a month and replace according to manufacturer's instructions.
- A carbon monoxide detector reading of 35 or higher is considered to be dangerous.



**Carbon monoxide detectors are NOT a substitute for smoke alarms.**

## Know What To Do

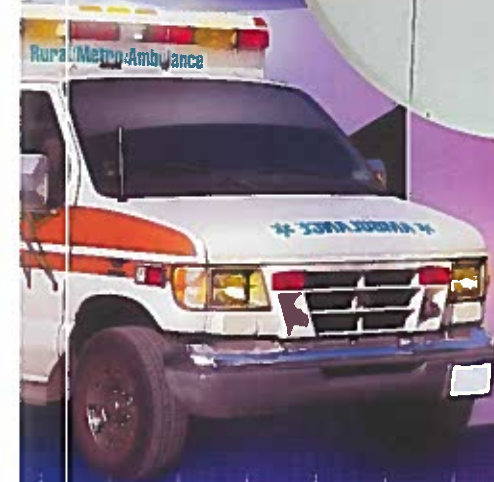
1. If the CO detector alarm is making an intermittent sound, check the battery.
2. If it is a steady alarm or you aren't sure, leave immediately *even if you do not feel symptoms*. Follow your home fire escape plan.
3. Meet other family members at your safe meeting place.
4. Dial 9-1-1 or your local emergency number and seek medical attention if you have symptoms. *If the alarm sounds and there are no symptoms, dial a qualified appliance technician.*
5. Never re-enter the home until you are told it's safe.
6. If a CO leak is suspected or you smell gas, do not wait, call the local gas company immediately.



**CO poisoning can occur both indoors AND outdoors.**

National Fire Safety Council, Inc.

# Carbon Monoxide



**Is There A Killer In Your Home?**

# “The Silent Killer”

Carbon monoxide (CO) is a colorless, odorless, tasteless, highly toxic gas that is undetectable to the human senses. Because of this, victims may become disoriented and unable to call for help or unable to get out.

Carbon monoxide poisoning can occur anywhere -- at home, in your car, on your boat, at a public place, or at work. It is a by-product of combustion, present whenever fuel is burned. It is found in, but not limited to:

- anything with a motor.
- heating systems and appliances.
- natural or liquefied petroleum (LP) gas.
- fire and smoke.
- houseboat generators.
- cooking appliances and grills.
- motorized vehicle exhaust.
- propane-powered equipment.
- tobacco smoke.

- 2,000 people die and 40,000 others are treated for CO poisoning every year.
- More than 1/2 of all unintentional, non-fire carbon monoxide poisoning deaths involve motor vehicles.
- At least 1/3 of these deaths occur in the wintertime when vehicles are left running without proper ventilation.

## Preventative Steps

Have all fuel-burning appliances installed by a professional according to manufacturer's instructions and local building codes.

- Inspect and service heating and cooling systems before each season.
- Keep fireplace flue open for adequate ventilation and until embers are completely burned out.
- Examine chimney and vents for blockages, cracks, leaks; any improper connections, rust, water streaking, stains; debris and soot; loose, damaged, discolored bricks or masonry; a hot draft or none at all.
- Never install or operate gas-burning appliances, furnaces or water heaters in unvented enclosures.
- Never use a gas range or oven for heating the home.
- Check water heater for improper burner adjustment and low supply of hot water.
- If you see a mostly yellow pilot light not positioned upright, call for service; never adjust it yourself.
- Never use unvented fuel-burning appliances such as heaters and lanterns in enclosed areas including tents, campers, RVs, or other sleeping areas.
- Do not allow smoking in rooms that are not properly ventilated.
- Do not store propane tanks indoors.
- Use paint strippers and solvents outdoors or in adequately ventilated areas. Methylene chloride converts to carbon monoxide in the body.
- Even with the door open, never use a barbecue grill in the garage or house, in a trailer, van, or camper.
- Start all gas-, diesel- or propane-powered equipment outside.
- Avoid placing power generators or pressure washers near windows or doors of your home.



**Energy-efficient homes may be more susceptible to high levels of CO.**

**Carbon monoxide can kill in as little as 10 minutes.**

## Motor Vehicle Safety

Hundreds of people die each year due to accidental CO poisoning from motor vehicle exhaust, such as when couples spend leisurely time together in a secluded area, leaving the vehicle's motor running for heat or use of the radio. CO poisoning is also caused by a faulty exhaust system or a blockage, but ANY vehicle, old or new, can create enough CO to kill.



**The greatest risk for CO poisoning is in your vehicle.**

- Never sit in a vehicle that is idling with the windows up, while waiting for it to heat up.
- Never leave a vehicle idling in an attached garage with or without the garage door open. The fumes can travel fast through the home.
- Never leave your child unattended in a vehicle that is idling for a long period of time.
- Make sure the exhaust pipe is not blocked by leaves or snow when leaving a vehicle idle.
- Have your exhaust system checked for holes in the muffler or tail pipe.
- If you smell any fumes or unusual scents inside your car, have it checked out.
- Never allow anyone to ride in the back of an enclosed pickup truck.

## Boating Dangers

Carbon monoxide can travel in the air quickly. The symptoms of CO poisoning on boats can mimic seasickness or intoxication.

- Stay away from any watercraft exhaust outlets.
- Never sit on or hang off the back deck or swim platforms if the engine is running.
- If you suspect seasickness, treat it as CO poisoning. Get the victim fresh air and medical treatment.
- Have your boat or personal watercraft inspected every year.
- Know the proper safety procedures relating to houseboats.
- Install a working carbon monoxide detector.