

HAZARDS AND THREATS

Power Outages

Carbon Monoxide Poisoning Information

Hundreds of people die accidentally every year from carbon monoxide poisoning caused by appliances that are not used properly or that are malfunctioning. Learn how to protect yourself and loved ones.

What is Carbon Monoxide?

Carbon Monoxide or CO is an odorless, colorless and poisonous gas that can cause sudden illness and death.

Where is Carbon Monoxide (CO) found?

Carbon monoxide is found in combustion fumes, such as those produced by the following:

- Cars and Trucks
- Small Gasoline Engines
- Stoves
- Lanterns
- Burning Charcoal
- Wood
- Gas Ranges
- Heating Systems

CO can build up in enclosed or semi-enclosed spaces. People and animals in these spaces can be poisoned by breathing it.

What are the Symptoms of Carbon Monoxide poisoning?

The most common symptoms of Carbon Monoxide poisoning:

- Headaches
- Dizziness
- Weakness
- Nausea
- Vomiting
- Chest Pains
- Confusion

High levels of CO ingestion can cause loss of consciousness and death. Unless suspected, Carbon Monoxide poisoning can be difficult to diagnose because the symptoms mimic other illnesses. People who are sleeping or intoxicated can die from CO poisoning before ever experiencing the symptoms.

How does Carbon Monoxide poisoning work?

Red blood cells pick up CO quicker than they pick up oxygen. If there is a lot of Carbon Monoxide in the air, the body may replace the oxygen in blood with CO. This blocks oxygen from getting into the body, which can damage tissues and result in death.

Who is at risk from Carbon Monoxide poisoning?

All people and animals are at risk for CO poisoning. Certain groups -- would include the following:

- Unborn Babies and Infants
- People with chronic heart disease, anemia, or respiratory problems

-- are most susceptible to its effects. Each year more than 500 Americans die from unintentional CO poisoning, and over 2,000 commit suicides by intentionally poisoning themselves.

Recommendations in how to prevent Carbon Monoxide poisoning

- Never burn charcoal inside homes, tents, campers, vans, trucks, garages or mobile homes.
- Don't burn charcoal in the fireplace in your home.
- Never use gasoline-powered equipment indoors.
- Never use a gas oven to heat your home, even for a short period of time.
- Never idle a car in a garage, even when the garage door is open.
- Never sleep in a room while using an unvented gas or kerosene heater.
- Make sure chimneys and flues are in good condition and are not blocked.
- Carbon monoxide warning devices may provide additional protection, but should not replace the other prevention steps.

How can I prevent CO poisoning from my home appliances?

- Have your heating system, water heater and other gas, oil, coal burning appliances service by a certified technician every year.
- Do not use portable flameless chemical heaters (catalytic) indoors. Although these heaters do not have a flame, they burn gas and can cause Carbon Monoxide to build up inside your home, cabin or camper.
- If you smell an odor from your gas refrigerator's cooling unit have an expert service it. An odor from the cooling unit of your gas refrigerator can mean you have a defect in the cooling unit. It could be giving off CO.
- When purchasing gas equipment, it is recommended by the experts to buy only equipment carrying the seal of a national testing agency, such as the American Gas Association or Underwriters' Laboratories.
- Install a battery-operated Carbon Monoxide detector in your home and check or replace the battery when you change the time on your clocks each spring and fall. CO detectors should be placed in the hallway(s) near the bedrooms in each separate sleeping area. The Carbon Monoxide detector should be certified to the requirements of the Underwriters' Laboratories (UL), IAS, or CSA standards for CO detectors.
- Look for problems that could indicate improper appliance operations: decreased hot water supply; furnace unable to heat house or runs continuously; "sooting," especially on appliance and vents; unfamiliar or burning odor; and increased moisture inside of windows.
- Operate portable generators outdoors and away from open doors, windows and vents that could allow CO to come indoors.

Visual signs of Carbon Monoxide presence

- Rusting or water streaking on vent/chimney
- Loose or missing furnace panel
- Sooting
- Debris or soot falling from chimney, fireplace or appliance
- Loose or disconnected vent/chimney, fireplace or appliance
- Loose masonry or chimney
- Moisture inside of windows

How do I vent my gas appliances properly?

- All gas appliances must be vented so that CO will not build up in your home, cabin or camper.
- Never burn anything in a stove or fireplace that is not vented.
- Have your chimney checked and cleaned every year. Chimneys can be blocked by debris. This can cause Carbon Monoxide to build up inside your home or cabin.
- Never patch a vent pipe with tape, gum or something else. This kind of patch can make CO build up in your home, cabin or camper.
- Horizontal venting pipes to fuel appliances should not be perfectly level. Indoor pipes should go up slightly as they go toward outdoors. This helps prevent Carbon Monoxide or other gases from leaking if the joints or pipes are not fitted tightly.

How can I heat my house safely or cook when the power is out?

- Never use a gas range or oven for heating. Using a gas range or oven for heating can cause build-up of CO inside your home, cabin or camper.
- Never use a charcoal grill or barbecue grill indoors. Using a grill indoors will cause build-up of Carbon Monoxide inside your home, cabin or camper unless you use it inside a vented fireplace.
- Never burn charcoal indoors. Burning charcoal—red, gray, black or white—gives off CO.
- Never use a portable gas camp stove indoors. Using a gas camp stove indoors can cause Carbon Monoxide to build-up inside your home, cabin or camper.
- Never use a generator inside your home, basement or garage or near a window, door or vent.

How can I avoid CO poisoning from my vehicle?

- Have a certified automobile mechanic check the exhaust system of your car or truck every year. A small leak in your car's or truck's exhaust system can lead to a build-up of Carbon Monoxide inside the car.
- Never run a car or truck in the garage with the garage door shut. CO could build-up quickly while your car or truck is running in a closed garage. Never run your car or truck inside a garage that is attached to a house and always open the door to any garage to let in fresh air when running a car or truck inside the garage.
- If you drive a vehicle with a tailgate, when you open the tailgate, you also need to open vents or windows to make sure air is moving through your vehicle. If only the tailgate is open Carbon Monoxide from the exhaust will be pulled into the vehicle.

If you suspect someone has been poisoned by carbon monoxide

- Move the person to a place with fresh air immediately.
- Take the person to an emergency room and tell the medical doctor and/or nurse that you suspect carbon monoxide poisoning.
- Call 911.

If you suspect you are experiencing CO poisoning in the home, cabin or camper, you are encouraged to do the following:

- Move to an area where you can get to fresh air immediately.
- Leave the home, cabin or camper.
- Call for assistance from a neighbor's home and get medical attention immediately.
- Inform the medical staff that you have been CO poisoned.
- Contact the local fire department to determine when it is safe to re-enter your home, cabin or camper.

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