

Carbon Monoxide Safety

During cold and snowy weather — when we're so often buttoned up in our homes, using various heating methods to stay warm — the threat of carbon monoxide (CO) poisoning is at its worst. Carbon monoxide, often called an "invisible" or "silent" killer, is a colorless, odorless, toxic gas produced by incomplete combustion.

More than 5,000 people end up in emergency rooms with carbon monoxide poisoning in the U.S. every year. The actual number of people affected may be quite a bit higher, as the symptoms of mild CO poisoning may be mistaken for the flu. Every year in the U.S., more than 150 people die from accidental CO poisoning.

Carbon monoxide can be produced by any fuel-burning appliance. This includes furnaces, ranges, stoves, heaters, water heaters, fireplaces, wood-burning stoves, and so on. If it operates by burning any substance — solid, liquid or gas — then it's capable of producing carbon monoxide. Let me repeat: any fuel-burning appliance is capable of producing CO, regardless of what fuel it burns (wood, wood pellets, gas, diesel, propane, etc).

How can you protect yourself from carbon monoxide?

- Never run a generator or fuel-burning space heater inside a home or camper.
- Never use a charcoal grill inside a home or camper.
- Make sure all wood-burning or gas stoves are properly vented.
- Perform regular maintenance on furnaces, water heaters, stoves, fireplaces, etc.
- Clean your chimney regularly (this also helps in avoiding chimney fires).
- Do not leave a vehicle running in an enclosed garage, even if you're "just" warming it up. It's important to also note that cars with keyless ignition may run very quietly and might not shut off when you walk away with the key fob, so always verify to make sure they're really off.
- Install carbon monoxide detectors (or combined smoke and CO detectors)

- Ideally, install detectors on every floor of the house, including the basement.
- Ideally, install detectors within ten feet of every bedroom door and one near or over your attached garage, if you have one.
- If you only install one or two detectors, place them near sleeping areas and in the areas of the house where you spend the most time.
- Install detectors at least fifteen feet away from fuel-burning heating or cooking appliances to avoid false alarms. Manufacturers' recommended placement differs depending on how their units are designed, so read the manual for the CO alarms you purchased to determine proper placement.
- Change the batteries in your CO monitor every year when you change your smoke detector batteries.

What are the symptoms of CO poisoning?

As previously mentioned, the initial symptoms of low-to-moderate CO poisoning are similar to the flu (without the fever). They include:

- Headache
- Fatigue/sleepiness
- Shortness of breath

- Nausea
- Dizziness

High-level CO poisoning results in progressively more severe symptoms, including:

- Confusion
- Vomiting
- Loss of coordination
- Loss of consciousness
- Death

If your carbon monoxide detector goes off:

- Don't delay! Remember that "confusion" symptom above? If you "wait and see," you may quickly reach a point where you're no longer making good choices without realizing your thinking is muddled.
- Immediately open doors and windows to let fresh air in.
- Evacuate the home. DO NOT return until the situation is resolved.
- Call 911. Tell the operator if anyone is (or even may be) experiencing symptoms of carbon monoxide poisoning, as the fire department needs to know whether to send a medical response unit along with the fire vehicles.

Crystal Lakes VFD has portable gas and carbon monoxide detectors and may be able to determine where the CO level is highest (and thus which appliance may be the source) and/or whether your CO detector is reading correctly. Unfortunately, we are not able to fix carbon monoxide problems — for that, you need a certified repair technician. Regardless of what readings we're getting on our detectors, we nearly always recommend that, for their own safety, homeowners not return to their home until all potential sources of carbon monoxide have been checked out by an expert.

And while we're on the subject of carbon monoxide and smoke detectors.... Change the batteries in these vital safety devices every year, whether you think they need it or not (daylight savings time is a great "marker" to use as a reminder). Regardless of whether or not you're getting the dreaded low-battery beep, change those batteries! And if you haven't done it recently, now's a great time. Also, both smoke and carbon monoxide detectors do have a lifespan beyond which they aren't reliable — if you've had your smoke detectors more than ten years or your carbon monoxide detectors more than five or six years, you should be replacing them.

Having working smoke and carbon monoxide detectors can make all the difference in detecting a hazardous situation early enough to get out safely. So lay in a stock of 9-volt batteries, find your ladder, and replace those batteries. (Just be careful on that ladder!)

Please share this information with your friends and neighbors — protecting yourself from carbon monoxide and keeping your smoke and carbon monoxide detectors working properly is something everyone everywhere should be doing for their own safety.