



Carbon Monoxide Poisoning

As it gets colder outside, people are turning up the heat. If heaters are not working well, they can cause carbon monoxide poisoning. Carbon monoxide gas or CO is a silent killer, since it is invisible and has no taste or smell. Furnaces, gas stoves, and other appliances that burn fuel make CO gas. Normally, the air we breath has little CO in it, but near stoves and furnaces CO can build up to toxic levels. High levels of CO can cause serious injury or death.



Where does CO come from?

Any time fuels like wood, gas, charcoal, or oil are burned they create some CO gas. Furnaces, gas stoves, and space heaters that use these fuels all produce CO. Normally, indoor appliances that burn fuels have exhaust systems to remove CO from your home, but if there is something wrong with these systems (like if a flue is stuck or an exhaust vent is blocked) the gas can build up. CO build up can also come from using appliances (such as barbecue grills) that belong outside indoors. If CO builds up in the air, it can poison people and animals.

Is winter the only time to worry about CO poisoning?

No, CO poisoning is a problem all year round. It can happen anytime you burn fuel with poor ventilation (such as running the car in the garage).

CO poisoning often happens after disasters (like hurricanes and ice storms) when the power is out. This is because people use fuel-burning appliances such as generators to keep warm, cool their homes, or to cook. When you use generators indoors or place them too close to your home's air intake vent or an open window, this can cause CO gas to build up. Cooking indoors with a barbecue grill or using a gas oven to heat your home also makes CO gas build up.

People can get CO poisoning from using gas-powered tools in enclosed spaces (like using a power washer in a barn) or from being too close to the exhaust pipes on boats, trucks, and other vehicles.

Who is most at risk of CO poisoning?

People most at risk of CO poisoning include:

- Infants and young children
- The elderly
- Pregnant women
- Those with chronic heart disease, anemia or lung problems

What are the symptoms of CO poisoning and how is it treated?

- Early symptoms of CO poisoning may feel like the flu. This makes them easy to overlook. Symptoms include headache, fatigue, nausea, and dizziness. Another difference is that the CO symptoms get better or go away when you go outdoors, or move away from where the CO is present. If you have these symptoms and they get better when you go outdoors and return when you are in your home CO may be the cause. If everyone in your home starts to have the symptoms at the same time, CO may be the cause.
- As CO poisoning gets worse, it can make you lose consciousness. It can also cause damage to your heart and brain. If you do not get away from the source of the CO, CO poisoning can cause death. If it is found early, CO poisoning is treatable. It is usually treated with oxygen.

What should I do if I suspect CO poisoning?

- Leave your home right away!
- If anyone has severe symptoms of CO poisoning, call 911 after leaving your home so that you can get help.
- Call your fire department to test for CO.

How can I prevent CO poisoning?

- Install CO detectors near sleeping areas. You can buy them from most hardware stores for \$20-\$60. Starting in 2009, all buildings with attached garages or fuel-burning appliances will be required by law to have these detectors, so get a head start and buy one now.
 - Use only detectors certified by Underwriter Laboratories (UL).
 - Detectors can be battery powered or electric with battery backup.
 - Change batteries every year (make it a routine by doing it when you switch to standard time in the fall).
 - Remember that even with a detector, you still need to use fuel-burning appliances safely to prevent CO poisoning
- During cold weather:
 - Have your heating system cleaned and inspected every year before turning it on.
 - Never use a gas oven or range for heat, even for a short time.
 - Make sure the chimney is clean and working properly before lighting a fire.
 - Only use fuel-burning space heaters when they are properly vented.
 - Do not let your car idle in garages or other enclosed spaces, as CO can build up fast.
- Only use generators outdoors and away from open windows, doors, and air vents.
- Do not use barbecue grills in garages, enclosed or covered porches or other indoor places (even with windows and doors open).
- Use gas-powered tools (such as power washers) only in areas with good ventilation.

Where can I find out more about carbon monoxide?

- The Centers for Disease Control and Prevention have frequently asked questions (FAQs) on CO: <http://www.cdc.gov/co/faqs.htm>
- The Consumer Product Safety Commission has FAQs with in-depth information on CO detectors: <http://www.cpsc.gov/CPSCPUB/PUBS/466.html>
- The Environmental Protection Agency has an overview on carbon monoxide with links to other resources: <http://www.epa.gov/iaq/co.html>



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