Maryland Poison Center
UNIVERSITY OF MARYLAND SCHOOL OF PHARMACY

Poison Center Hotline
1-800-222-1222

# PoisonPreventionPress

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## Keep Your Family Safe from Carbon Monoxide

Carbon monoxide is known by many as "the silent killer"…and it can be. Carbon monoxide is a gas produced by the incomplete burning of fuel. Examples of fuels that can produce carbon monoxide are natural gas, gasoline, kerosene, oil, wood and charcoal. The gas is colorless, odorless and tasteless.

Why is this gas so dangerous? When carbon monoxide is breathed in, the red blood cells pick up the carbon monoxide faster than oxygen. This means the body cannot get the amount of oxygen that it needs to function properly. If the carbon monoxide is breathed long enough or at a high concentration, it can kill.

All people and animals are at risk for carbon monoxide poisoning. Each year, more than 400 people die from carbon monoxide. Exposures to the toxic gas send more than 20,000 people to the emergency department. More than 4,000 of these patients require hospital admission for additional care. Although everyone is at risk, carbon monoxide is particularly dangerous for pregnant women, unborn children, infants, seniors and people with a history of anemia, heart disease or respiratory disease. Death is highest in people older than 65 years.

The symptoms of carbon monoxide poisoning are very similar to the flu. Mild exposures will result in a slight headache, nausea, vomiting, feeling tired. Moderate exposures will progress to a throbbing headache, drowsiness, confusion and an increased heart rate. Finally, severe exposures will result in seizures, coma, brain damage, heart and lung failure and death. Some effects can be delayed and can last a long time.

Oxygen is the initial treatment for carbon monoxide. For mild exposures, fresh air may be all that is needed. Moderate and severe exposures will need higher concentrations of oxygen and additional monitoring in a hospital.

To prevent carbon monoxide poisoning, follow these tips:

- Use carbon monoxide alarms. Install one on every level and near bedrooms, at least 15 feet away from fuel-burning appliances and on the wall or ceiling.
- Have gas and oil burning appliances checked on a regular basis.
- Have chimneys and venting checked yearly at the beginning of the heating season.
- Check to see that the pilot light on gas burning appliances is lit (blue flame).
- Do not use the oven to heat your home.
- Do not use portable heaters while you are sleeping.
- Do not use charcoal or gas grills in the house or garage or in a tent.
- Do not let a car run while in the garage (even if the garage door is open).
- Have the car exhaust system inspected regularly.
- Never use a generator inside your home, basement, or garage or near a window, door or vent. Place them more than 20 feet away from the home, doors and windows.

What should you do if you think you or someone else has been exposed to carbon monoxide? Remove all people and pets from the area. Turn off the suspected source of carbon monoxide. Have the appliance or suspected source inspected before using it again. Call the Maryland Poison Center at 1-800-222-1222. The poison specialist will discuss your symptoms and make recommendations about any further medical follow-up.

### Common Sources of Carbon Monoxide

- Gas, oil or wood furnaces
- Portable heaters (kerosene or propane)
- Portable generators
- Gas or oil hot water heaters
- Gas stoves
- Gas clothes dryers
- Fireplaces and wood stoves
- Gas and charcoal grills
- Cars and trucks
- Lawnmowers, trimmers and leaf blowers
- Paint strippers containing methylene chloride
- House and structure fires
- Permanent generators

### Did you know that…

- Over 50% of non-fire-related carbon monoxide exposures in the U.S. occur between November and February?
- Over 60% of carbon monoxide exposures in the U.S. happen in the home?

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