



POISON EMERGENCY  
POISON INFORMATION

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## Carbon Monoxide Poisoning

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Carbon monoxide (CO) exposure is the leading cause of poisoning in the United States. There are 5,000 cases of accidental exposures to CO each year. CO is an odorless and colorless gas that is formed when a fuel such as charcoal, wood, gasoline, kerosene and propane fail to completely burn off. A person is poisoned when they breathe in this gas. The carbon monoxide that they breathe in takes the place of oxygen in a person's red blood cells causing a lack of oxygen to circulate throughout the body.

The majority of carbon monoxide poisoning cases occur during the winter months and are the result of malfunctioning furnaces, propane gas heaters, car exhaust, the indoor use of charcoal grills, generators, the use of gas stoves as a heat source, fires and propane fueled equipment. An example of CO poisoning can occur from unexpected sources such as a Zamboni. A Zamboni is a truck that is used to clean and smooth out the ice on an ice rink. This very effective tool is dangerous if used in a poorly ventilated indoor rink.

### What are the symptoms?

The initial signs and symptoms of CO poisoning are headache, dizziness and nausea. People often describe their symptoms as being "flu like". Long-term exposure to CO can cause heart and brain damage, which ultimately lead to death. Delayed effects caused by failure to get treatment or chronic exposure to low levels of CO includes memory loss, impaired thinking and confusion.

### How is carbon monoxide poisoning diagnosed?

The diagnosis of carbon monoxide poisoning is determined by a blood test. A small amount of blood is taken and a carboxyhemoglobin level is run to determine if there is a high level of CO in the bloodstream.

The initial treatment for suspected exposure to CO is to get out of the house and into fresh air. The next step is to get medical attention so that additional oxygen can be given to you and the blood test can be taken to determine if you are poisoned.

### Tips to prevent carbon monoxide poisoning

- Install a carbon monoxide (CO) alarm near bedrooms and on each floor of your home. If your alarm sounds, the U.S. Consumer Product Safety Commission suggests that you press the reset button, call emergency services (911 or your local fire department), and immediately move to fresh air (either outdoors or near an open door or window).

- Know the symptoms of CO poisoning: headache, fatigue, dizziness, and shortness of breath. If you experience any of these symptoms, get fresh air right away and contact a doctor for proper diagnosis or call the poison center at 1-800-222-1222.
- Make sure heating equipment is installed properly. Have a trained specialist inspect and tune up your heating system each year.
- Keep portable space heaters at least 3 feet from anything that can burn, including bedding, furniture, and clothing. Never drape clothing over a space heater to dry.
- Keep children and pets away from space heaters. Never leave children in a room alone when a space heater is in use.
- If you use a kerosene heater, use only the fuel recommended by the manufacturer. Never put gasoline in a kerosene heater--it could explode. Before you refuel the heater, turn it off and let it cool down. Refuel outside only.
- When using a kerosene heater, keep a door open to the rest of the house or open a window slightly. This will reduce the chance of carbon monoxide build-up in the room.
- Have your fireplace chimney and flue inspected each year and cleaned if needed. Open the flue and use a sturdy fireplace screen when you have a fire. Burn only untreated wood; never burn paper or pine branches--pieces can float out the chimney and ignite your roof, a neighbor's roof, or nearby trees.
- If you use a wood-burning stove, have the chimney connection and flue checked each year. Make sure the stove is placed on an approved stove board to protect the floor from heat and coals.
- Never use your range or oven to heat your home, even for a short time.

