

Carbon Monoxide Poisoning

If you can't see it, smell it or taste it, how do you know if carbon monoxide is trapped in your home? Carbon monoxide is the result of incomplete combustion of liquid, gaseous or solid fuel. Before you light the first fire of the heating season, the Chimney Safety Institute of America (CSIA) recommends you take the following safety measures to keep your home free of carbon monoxide.

Take a moment to look around your home for the following warning signs that may point to potential problems with carbon monoxide levels:

- Moisture on inside of windows
- High humidity smell within the home
- Black streaks on walls and around registers and baseboard radiators

What is carbon monoxide?

Carbon monoxide (CO) is an invisible, odorless gas produced as a common by-product of incomplete combustion. It is commonly produced when fossil fuels, like oil, gas or coal, burn. Since you can't see, taste or smell it, carbon monoxide can kill you before you even know it's there. Exposure to low levels over time can make you sick.

Why is carbon monoxide so dangerous?

Carbon monoxide robs your body of the oxygen it needs to function. Oxygen is carried to your cells and tissues by hemoglobin in your blood. If you inhale even a small amount of carbon monoxide, it quickly bonds with hemoglobin and displaces oxygen. This produces a toxic compound in your blood called carboxyhemoglobin (COHb). This compound produces flu-like symptoms, such as headaches, fatigue, nausea, dizzy spell, confusion and irritability. Because the symptoms are so similar to the flu, carbon monoxide poisoning can easily be misdiagnosed. As levels of COHb rise in the blood, victims suffer vomiting, loss of consciousness and eventually brain damage and or death.

Who is at risk from CO poisoning?

Because everyone needs oxygen to live, everyone is at risk. But medical experts believe unborn babies, infants, children, seniors and people with heart and lung problems are the most susceptible to CO poisoning.

Where does carbon monoxide come from?

CO can be produced by a wide variety of appliances that burn fossil fuel. These include furnaces, clothes dryers, ranges, ovens, water heaters or space heaters. When these appliances are vented properly, and there is enough fresh air in your home to allow complete combustion, the trace amounts of carbon monoxide produced are typically not dangerous.

What can I do to combat the problem?

Since problems with CO generally are caused by malfunctioning appliances, it is important to have your furnace/heating system checked and serviced regularly by a professional. Fireplace flues and chimneys should be checked by a professional also. Be able to recognize the symptoms of CO poisoning. If you suspect that you or family members are experiencing these symptoms, call 911.

Should I install a carbon monoxide alarm?

Since early warning can save you and your family's lives, the Consumer Product Safety Commission recommends that every home have at least one carbon monoxide alarm with an audible warning signal installed near a sleeping area. Choose a CO alarm that is listed by the Underwriters Laboratory. The International Association of Fire Chiefs recommends that a CO alarm be installed on every level of a home.

Symptoms of Carbon Monoxide Poisoning

If you are heating your home by fire place or gas stove or are using a portable generator, please be aware of carbon monoxide poisoning. Low levels of carbon monoxide poisoning can be confused with flu symptoms, food poisoning or other illnesses and can have a long term health risk if left unattended. Some of the symptoms are the following.

- Shortness of breath
- Mild nausea
- Mild headaches

Moderate levels of CO exposure can cause death if the following symptoms persist for a long measure of time.

- Headaches
- Dizziness
- Nausea
- Light-headedness

High levels of CO can be fatal causing death within minutes.

There are immediate measures you can take to help those suffering from carbon monoxide poisoning.

- Get the victim into fresh air immediately.
- If you can not get the people out of the house, then open all windows and doors. Any combustion appliances should be turned off. Call 911 immediately.

Harrisburg Fire & Rescue reminds you to take special precautions during power outages to reduce your risk of illness or death from carbon monoxide poisoning.

- DO NOT run generators inside of any building, make sure they are at least 10 feet away from a building. Do not refuel running or hot generators.
- DO NOT use cooking stoves, ranges, barbecue grills, or other heating appliances not intended for indoor heating inside your home.
- DO NOT use candles for light.
- If you use gas fueled portable heaters be sure they are approved for indoor use, have tip over protection, have the correct fuel in them and are clear from combustible materials at least 36 inches.
- When using any alternative heat, be sure you have adequate ventilation in your home, crack a window open if needed.
- Do not use any alternative heating unless you have a working smoke alarm and a carbon monoxide alarm in your home.
- Be sure to have a working fire extinguisher in your home.