

Prevent Carbon Monoxide Poisoning

You can't see, feel or smell carbon monoxide. However, this deadly gas can make you very sick or even kill you. Over 5,000 people in the United States die every year after breathing too much carbon monoxide. Several thousand people go to hospital emergency rooms for treatment for carbon monoxide poisoning.

When inhaled, carbon monoxide bonds with the hemoglobin in blood, displacing oxygen and resulting in oxygen starvation within the body. The brain and heart require large amounts of oxygen and quickly suffer from the oxygen shortage. This makes even small amounts of carbon monoxide dangerous.

The risk of carbon monoxide poisoning increases when the heating season approaches. Children, unborn babies, people with asthma, older adults, or people with heart or lung problems are more likely to get hurt from breathing carbon monoxide. But remember, carbon monoxide harms even healthy people. Carbon monoxide poisoning can cause neurological problems, learning disabilities, memory loss and personality changes in children. Because of the higher oxygen requirements of smaller bodies, carbon monoxide's interference with oxygen delivery can lead to permanent damage to a child's developing nervous system.

Many carbon monoxide poisoning victims are young children. Young children are vulnerable to misdiagnosis because they cannot fully explain the

onset, progression and severity of their symptoms and because children spend most of their time in the home, they are more likely to be exposed to carbon monoxide produced by gas, oil, wood or propane burning appliances and heating systems.

Chronic exposure to low levels of carbon monoxide can cause vague symptoms that are easily mistaken

for other common illnesses.

During the past five years, three families have contacted the Wisconsin Division of Public Health to report illnesses that may have been caused by chronic exposure to carbon monoxide. Members of these families were diagnosed with a variety of conditions including chronic fatigue syndrome, depression and influenza.

Carbon monoxide exposure was not suspected as a cause of these illnesses until heating contractors discovered that gas appliances in these families' homes were not properly vented.

Signs of Carbon Monoxide Poisoning

Protect your family by learning the signs of carbon monoxide poisoning. Symptoms of carbon monoxide poisoning are similar to the flu, but without the fever. They include headaches, fatigue, nausea, dizziness, confusion and irritability. Continued exposure can lead to vomiting, loss of consciousness, brain damage, muscle weakness and death. Because the symptoms resemble many other illnesses, carbon monoxide poisoning can be hard to identify.



Guidelines to Prevent Carbon Monoxide Poisoning

- Have your furnace or boiler serviced every fall to be sure it is working properly. Make sure they use a tool that measures carbon monoxide. If you rent, ask your landlord to have the heating system checked.
- Make sure chimneys are clean and working right. Have your chimney, wood-burning fireplace, or wood stove swept every year. Burning wood nearly always makes a lot of carbon monoxide. It is very important that all the smoke goes out the chimney.
- Never warm up a vehicle inside the garage. Warming up your car for just a few minutes, even with the garage door open, can make enough carbon monoxide to make you sick.
- Never use charcoal grills or run small gasoline engines (snow blowers, chain saws, lawnmowers, etc.) inside your home, garage, or basement.
- If you use unvented kerosene or gas heaters or a vent-free gas fireplace, follow instructions carefully and open a window for fresh air. Do not use them while sleeping.
- Never use gas appliances such as ranges, ovens, or clothes dryers for heating your home.

Detecting Carbon Monoxide

The Consumer Product Safety Commission (CPSC) recommends that every home in America install at least one carbon monoxide detector with an audible alarm, located near the sleeping area. Additional detectors on every level and in every bedroom provide an extra measure of safety.



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A carbon monoxide detector that meets requirements of Underwriters Laboratories (UL) standard 2034 (1998 revision) sounds an alarm before the level of carbon monoxide in a person's blood becomes crippling. They cost between \$25 and \$30 and are available at most hardware and discount stores.

Carbon Monoxide Alarms

Never ignore the alarm from a carbon monoxide detector. Treat all alarm soundings as an emergency.

If you think you or a family member is experiencing any of the symptoms of carbon monoxide poisoning:

- Get outside right away.
- Call your poison control center (1-800-222-1222) if you suspect that someone has been exposed to carbon monoxide. If a person has any symptoms, call 9-1-1 or your local emergency number from a phone outside your home.
- Seek medical attention right away to have your blood and breath checked for carbon monoxide and to learn if you need more medical care.
- Have your home checked out by a qualified heating contractor.
- Don't go home until all problems have been fixed.

Sources:

Greiner, Thomas. (2002). Carbon monoxide: should you be concerned? Iowa State University Cooperative Extension. Carbon monoxide questions and answers. Consumer Product Safety Commission. Retrieved May 20, 2005 at <http://www.cpsc.gov/cpsc/pub/pubs/466.html>

This document can be made available in alternative formats, such as large print, Braille, or audio tape, by contacting your county Extension office. (TTY 1-800-947-3529)

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