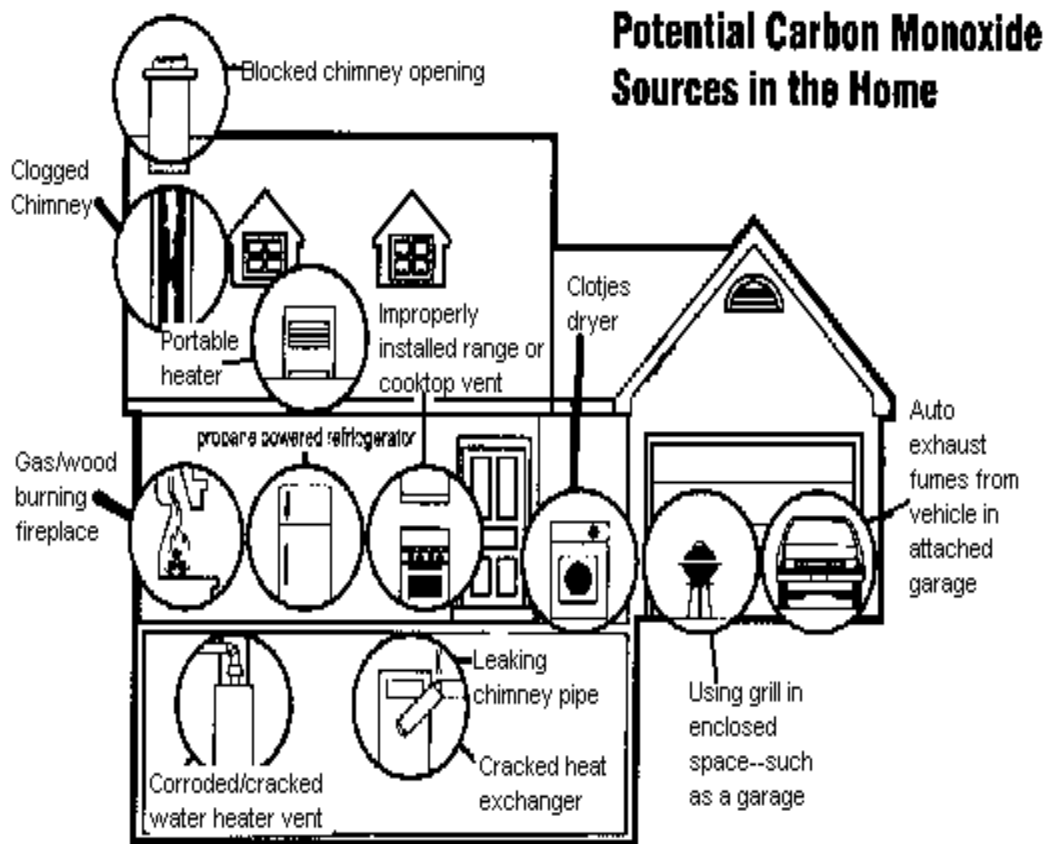


Carbon Monoxide

CARBON MONOXIDE DETECTORS

As the price of home heating has climbed in the last 20 years, advancements in home construction have made homes more energy efficient than ever before. A by-product of this efficiency is that most homes are substantially more airtight than they have been before. A buildup of toxic gases in the home can result in serious injury or even death. One of these gases, carbon monoxide (CO) is colorless and odorless and can sneak up upon residents. A relatively new tool in saving lives in the home is the carbon monoxide detector.



What is carbon monoxide? CO is a colorless and odorless gas that you cannot see, taste or smell. It can **kill** you before you know it's there.

Why is CO so dangerous? The great danger of carbon monoxide is its attraction to hemoglobin in the bloodstream. Hemoglobin is the red blood cells that carry the oxygen we all need survive. Hemoglobin absorbs CO 100 times more readily than it does oxygen. This displaces the oxygen that cells need to

function. When CO is present in the air it rapidly accumulates in the blood and will eventually displace enough oxygen that you will suffocate from the inside out, resulting in brain damage or death.

Carbon Monoxide poisoning however, does produce symptoms. Unfortunately, many of these symptoms can be confused with other common ailments.

SYMPTOMS OF CARBON MONOXIDE POISONING

- ✦ Low Concentration - slight headache and/or shortage of breath during moderate physical activity
- ✦ Higher Concentrations - Severe headache, dizziness, nausea, vomiting, mental confusion, weakness, vision and hearing impairment, collapse or fainting during exertion, loss of muscle control and/or drowsiness
- ✦ Extreme Concentration - unconsciousness, brain damage or death

If you inhale carbon monoxide, you could experience any of these symptoms. If any member of your household is affected, or if the symptoms lessen or disappear when you leave the home, you should suspect CO and take immediate action.

WHAT ACTIONS SHOULD I TAKE?

- ✦ If you are seeking a peace of mind inspection call the fire department or a certified heating contractor.
- ✦ If you have a CO concern due to a specific condition, but have no symptoms of poisoning call the fire department or a certified heating contractor
- ✦ If you are exhibiting symptoms of CO poisoning call 9-1-1 and get everyone out of the house.
- ✦ If your CO detector alarm sounds and there are no medical symptoms, open all doors and windows and call the fire department or a certified heating contractor for an inspection.

WHAT TYPE OF CO DETECTOR SHOULD I BUY?

As of October 1, 1998 significant changes in testing have occurred. This includes: low level warning is no longer allowed, threshold limit changes and a low temperature, low humidity test. The new standard is identified on packages as [UL 2034](#).

Up until now most CO detectors on the market for homeowners use one of three sensor types.

- ✦ The rarest type (and most expensive) use an electrolytic sensor. This sensor type is extremely selective to just detecting CO, but they are seldom found in homes due to the price,
- ✦ A detector using a colorimetric sensor measures the build-up of CO over time. They have the advantage of mirroring the effects of CO on humans thanks to this ability, but they can take up to 48 hours to reset after an alarm.

*Town of Menasha Fire Department
Public Education: Our first line of defense*

- ✚ Probably one of the most popular types contains a metal oxide semiconductor sensor. MOS detectors can also detect other gases including chlorine bleach and silicones. This does not make this detector inferior, it just means there may be another explanation in cases of false alarms.

In all cases CO detectors can be purchased in battery operated or 110volt (plug-in/wire-in) models. Which type you purchase is a personal decision based upon where you plan to locate the detector and cost. You should install a CO detector if you use a fuel burning heating source (gas, oil or wood), gas hot water heater or have an attached garage. One should be a minimum. but it is good to have one on each level of the home. The best place for installing a CO detector is in the bedroom. It is here that you are the most vulnerable to CO when you are asleep. When CO is detected, the alarm will wake you to the problem from a sound sleep.

HOW WILL THE TOWN OF MENASHA FIRE DEPARTMENT HELP ME?

When you dial 9-1-1, the dispatcher will question if there are any symptoms of carbon monoxide poisoning present. (This may include questions regarding whether you or any person in your home are experiencing any flu-like symptoms such as headache, nausea, dizziness or fatigue). They may send an ambulance as well as the fire department to your home.

When the firefighters arrive, they will again ask how you and your family are feeling. They will usually enter your home in complete protective clothing and breathing apparatus to verify if there are any levels of carbon monoxide in your house using extremely sensitive monitors. If any is found, they will attempt to find the source and contact the appropriate agency to deal with it or if needed assist you with contacting the appropriate agency.

At all times, our top concern will be your and your family's safety. Given this concern, all decisions made will be reflected around that safety.

