



FIRE DEPARTMENT

CARBON MONOXIDE (CO) SAFETY AND INFORMATION

WHAT IS CARBON MONOXIDE?

Carbon Monoxide is an odorless and tasteless gas. It is produced by the incomplete combustion of the fossil fuels – gas, oil, coal and wood used in boilers, engines, oil burners, gas fires, water heaters, solid fuel appliances and open fires. Dangerous amounts can accumulate from results ranging from poor insulation, fuel not burned properly, improperly vented rooms, as well as improper maintenance or damage to appliances in use. It is measured in parts per million or PPM and when exposed it enters through your body through the respiratory system and displaces the oxygen from the blood stream causing suffocation of the body's tissues and organs. CO is silent and deadly. Each year over 1,000 lives are lost. An estimated 200 of these dies from fuel burning appliances (furnace, stove, hot water heaters etc) and send more than 5,000 people to the hospital each year. Other deaths result from automobiles running in an enclosed area to people using grills in the house or garage.

WHO IS SUSCEPTIBLE?

Everyone is although it is believed by medical experts that small children, pregnant women as well as the unborn child, senior citizens, and people with respiratory and heart problems are more susceptible.

WHAT ARE THE SYMPTOMS?

They are similar to the flu but with no fever. They include:

- Headache
- Fatigue
- Shortness of breath
 - Nausea
 - Dizziness
- Mental confusion
- Unconsciousness
- Ultimately DEATH

LEVELS OF EXPOSURE AND THEIR EFFECTS

- 20 to 30 PPM can cause headaches
- 30 to 40 PPM the headaches are more severe and over 100 PPM can cause nausea if the duration last for about 45 minutes with unconsciousness soon to follow
 - 300 PPM can cause death within 30 minutes

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- 650 PPM will cause severe headaches in less than 2 minutes and death in less than 15 minutes
- 1260 PPM has been known to cause death in less than 3 minutes

REMEMBER SENSITIVITY VARIES FROM PERSON TO PERSON AND THE EXPOSUR CAN BE MORE OR LESS FOR YOU.

DANGER SIGNS

- Stuffy stale air
- Moisture on windows
- Soot or dirt build up seeping out of chimney or other exhaust vents
 - Mostly yellow, rather than blue, gas burner or pilot light flames
 - Drafts of air coming from any appliance or chimney
 - Rusting or water streaks on vent or chimney
 - Loose or missing furnace panel
 - Loose or disconnected vent or chimney connections
 - Loose masonry on chimney
- Some signs you can't see include improper burner adjustment, internal damage or malfunction of appliances, and blockage of vent pipes such as a bird's nest or leaves in them.

SAFETY TIPS

- Do not burn charcoal in your home, garage, vehicle, or tent
- Have all fuel-burning appliances inspected and cleaned yearly by a qualified technician
 - Install and maintain CO detectors
 - Never leave a car running in an enclosed area
 - Never operate gas burning appliances in an enclosed room
 - Make sure your burner flames are blue not yellow-orange
- Do not cap or cover a draft hood or exhaust pipe from any appliance
 - Clean fireplaces and chimneys regularly
- Never use portable fuel-burning camping equipment in enclosed areas including tents
 - Never use gas appliances such as ranges, ovens, or dryers to heat your home
- Avoid using gas powered appliances or tools indoors. If you must use them make sure you have proper ventilation
- Don't service fuel-burning appliances yourself without the proper tool, knowledge or skills

Remember Co detectors do not function as smoke detectors and smoke detectors do not function as CO detectors. It is recommended that every home has a CO detector in it and that it meets the requirements and bears the current UL standard 2034 label. It is recommended that you have a CO detector on every level of the home especially in the area of you furnaces and hot water



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heaters as well as in the hallway near every sleeping area. When you test your smoke detectors every month also test your CO detector following the manufacturer's instructions. Replace CO detectors and batteries as recommended by the manufacture. Treat all detector activations as real; never assume it's a false alarm. If your CO detector goes off evacuate everyone from the house if possible and call 911 from your neighbors home. Do not re-enter the home until the fire department says you can.

This is just some information and safety tips to help keep you and your family safe and prevent CO poisoning from occurring in your home. Remember CO is dangerous and can make you very ill or even cause death.

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