Carbon Monoxide Safety

Carbon monoxide (CO) is a colorless, odorless, and tasteless gas. It is found in fumes produced when fuel is burned by cars or trucks, small engines, stoves, lanterns, grills, fireplaces, gas ranges, or furnaces. Indoors, CO can build up and poison people and animals who breathe it. It causes about 500 accidental fatalities in homes each year. Additionally, thousands of individuals are treated in hospitals as a result of CO poisoning.

Carbon monoxide is poisonous because it combines with hemoglobin in our blood, and robs our body of the oxygen it needs. Common symptoms of exposure to CO include headache, fatigue, dizziness, nausea, vomiting, and chest pain. CO poisoning may also cause impaired judgment, which can make it difficult for an individual to seek assistance. Severe cases of CO poisoning can cause victims to become unconscious, and may result in death.

Carbon monoxide is produced by combustion. Common causes are:
- Defective gas or oil furnaces and water heaters
- Cracked chimney flues
- Indoor use of charcoal grills
- Use of a gas oven or range to warm a room
- Running a car in an enclosed area
- Closing the fireplace damper before the fire is completely out

Preventing Carbon Monoxide build-up in your home:
- Have your furnace, water heater, fireplace and any other gas or coal-burning appliances checked by a qualified technician every fall.
- Make sure your fireplace is in good repair. Do not close the damper before the fire is out.
- During and after a snowstorm, make sure vents for the dryer, furnace, stove, and fireplace are clear of snow build-up.
- Make sure that generators are used in a well-ventilated location: (always outdoors) and away from windows, doors and vent openings.
- Charcoal grills are only for outdoor use.
- Never allow your car to run in an enclosed area, especially if it is attached to your house.
- Never use a gas oven or range to warm a room.

If you are concerned about whether your furnace and/or appliances are working properly, contact a qualified technician to have them inspected. Install CO alarms to give your family a warning if CO is building up in your house. There are many different types of CO alarms available. At minimal expense, CO alarms can be easily purchased online, or at many local hardware and small appliance stores. When selecting a CO alarm, be certain that it is labelled specifically for carbon monoxide, has a UL Signaling Listing Mark, and is battery operated/has a battery back-up. This way, your CO alarm will be able to function even during times when power has been lost in your home. It should be noted that CO alarms do not serve as smoke alarms; they will not detect smoke or fire. For the best protection, consider installing both smoke alarms and carbon monoxide alarms in your home.
Safety Tips for All Carbon Monoxide Alarms:
Install battery-operated or battery back-up CO alarms in a central location outside each sleeping area, on every level of the home, and in other locations where required by applicable laws, codes or standards.

- Follow the manufacturer’s instructions for placement, mounting height, maintenance, and replacement of CO alarms.
- Test CO alarms at least once a month.
- If the CO alarm sounds, everyone should seek fresh air and exit the home immediately. Call 911 from a safe location and stay there until emergency personnel declare that it is safe to enter.
- Do not stop to ventilate your home by opening doors and windows. When the fire and rescue department personnel arrive, they will obtain CO readings in different areas of your home to determine the source of the CO.

Community Risk Reduction has a limited number of carbon monoxide alarms available for Fairfax County residents who may be in need. Once requested, your local fire and rescue station will schedule a time come to your home and install the carbon monoxide alarm. For further information or to request a CO, please contact Community Risk Reduction at 703-246-3801.