

# CARBON MONOXIDE

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## **What is Carbon Monoxide?**

Carbon Monoxide is a by-product of incomplete combustion. Unsafe levels of carbon monoxide in the home can be produced by malfunctioning or poorly vented fuel-burning appliances such as furnaces, ranges, water heaters, room heaters or gas powered motors that are not vented properly such as running your car in the garage. The amount of CO in the air may rise to a level that can cause illness or even death.

## **What are the sources of Carbon Monoxide?**

Malfunctioning furnaces, ranges, water heaters and room heaters. Other sources of unsafe levels of CO include portable generators, fireplaces, and charcoal that is burned in homes and other enclosed areas. Propane, natural gas, wood burning fireplaces, pellet stoves, oil burning appliances, and attached garages are other sources.

## **What are the symptoms?**

CO poisoning victims may initially suffer flu-like symptoms including nausea, fatigue, headaches, dizziness, confusion and breathing difficulty. Symptoms may vary between family members due to the individual's body size and health. Because CO poisoning often causes a victim's blood pressure to rise, the victim's skin may take on a pink or red cast. If a person continues breathing CO, they may experience cardiac trauma, brain damage, coma or death.

## **How do I have my home checked and how do I protect myself and my family?**

Have your fuel-burning appliances inspected by a qualified technician at least once a year. A qualified technician should have practical knowledge of the operation, installation and proper ventilation of fossil-fuel burning appliances. Install UL Listed CO alarms inside your home. If you currently suspect CO in your home, please notify your local Fire Department via 911, or your local gas company.

## **What type of CO monitor should I buy? Should I buy the CO/Smoke Detector Combo units?**

The optimal CO Detector is the plug in style that includes a battery backup. The combination smoke detectors with CO detectors that are commonly placed on the ceiling are most effective when combined with a second CO detector placed closer to the floor. Detectors can be purchased at any home improvement store. CO detectors will not detect methane gas or natural gas in its purest state.

## **Should I pay the extra money for a CO detector that has a digital readout that shows the CO ppm? (parts per million)**

These types of CO detectors can identify any appliances in your home that may not be working properly. These may give you advance warning of a potential problem with an appliance. The alarms without digital readouts will only sound if the CO amount is at a dangerous level.

## **Where should I install it? How many should I have?**

Follow manufacturer's instructions for placement and installation. Each CO detector is different. A CO detector should be on each occupiable level of the home.

But in general, there should be an alarm located on the wall, ceiling or other location outside each separate sleeping area (you do not need one outside each bedroom but in the immediate vicinity of the bedrooms). A CO detector should be on each occupiable level of a dwelling unit including basements. (not attics and crawl spaces) Follow the installation height per the manufacturer's instructions. Each CO detector is different.

Keep 15 feet away from appliances that produce carbon monoxide like a gas stove or fireplace.

CO gas can be anywhere and everywhere. CO gas is equal to or slightly lighter than air, and disperses evenly with the air in a room. Therefore, install a CO alarm where air circulation is best. Do not mount a CO alarm within 1 foot of the ceiling/wall intersection or other dead air spaces. For earliest warning of CO presence we recommend that you install at least one CO alarm on every separate living level of your home.

Avoid installing a CO alarm near bathrooms or in shower areas; in closets, crawlspaces, unused attics or unheated areas; within 5 feet of any fuel burning appliance; within one foot of any wall or corner; in rooms where chemicals or cleaning supplies are frequently used; directly above a sink, bathtub or basin; directly above or below air exchange or heating vents and behind drapes, furniture or appliances or in any other dead air space.

#### **What do I do if my alarm is beeping / chirping?**

Read your manufacturer's instructions to determine the sounds your CO detector makes when sounding an alarm or notifying you of low batteries. Do not ignore a chirping sound as it may mean that you have dangerous levels of CO in your home.

CO Detectors may chirp when they detect carbon monoxide. Unlike smoke detectors that chirp when their batteries are low, CO detectors can chirp when they initially detect carbon monoxide and they will generally emit a persistent chirp or alarm as the detection of gas increases or is prolonged. This is determined by the individual manufacturer of the alarm.

#### **Combination Alarms – How do you tell if it is the smoke detector part or the CO part that is chirping or sounding?**

You will need to read your manufacturer's instructions to determine the sounds your alarm makes. Unlike smoke detectors, CO monitors are not standard in the alarm sounds that they make.

#### **If a combination alarm is beeping for CO and it is hardwired with other combination alarms, will they all beep for CO?**

Yes, they function like hardwired smoke detectors. If a hardwired combination Smoke/CO detectors sounds indicating a detection of unsafe levels of CO, other units in the house will also sound.

#### **Meridian's new updated Carbon Monoxide Rules / Ordinances**

As of January 1<sup>st</sup>, all new homes and remodels on homes built after Jan 1, 2005, must have CO Detectors if they have a fuel burning appliance or attached garage (propane, natural gas, wood stove, pellet stove, oil burning appliance).

Buildings requiring CO detectors include the following: New apartments complexes, hotels, motels, boarding houses and dormitories. Residential rental properties must have CO detectors as well.

**Does the Meridian Fire Department provide CO detectors free of charge?**

Not at this time.

**When we get a call... My CO alarm is beeping/sounding...**

1. Have you read your manufacturer's instructions to identify what the alarm sound means? Try to identify what the alarm is telling you.
2. If you suspect that you have CO in your home, please leave the home immediately and move to a fresh air location outdoors. Make sure everyone is accounted for.
3. Call 911 or your local gas company.
4. Do not reenter the house until it is safe to do so and emergency responders have given you permission.