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Carbon Monoxide

What is Carbon Monoxide?

Carbon monoxide (CO) is a deadly gas produced by burning any fuel. When inhaled, CO rapidly displaces oxygen in the victim's blood, resulting in serious illness, even death. Since Carbon Monoxide is completely invisible, odorless and tasteless, many people have no idea that they are being poisoned until it is too late. For this reason, CO is often called "*The Silent Killer*." Airtight design in today's modern energy efficient homes can contribute to the problem by confining CO contaminated air within the home.

Carbon monoxide is a common byproduct of vehicle exhaust and appliances that run on flammable fuel, such as gas. Appliances should always be checked to ensure that they are in good working order and properly ventilated by a qualified professional if necessary.

What are the symptoms/dangers?

The symptoms of CO poisoning often imitate those of common illnesses such as the flu. Some studies have indicated an estimated 23.6% of people who have flu or stress symptoms could actually be suffering from CO poisoning.

∇ Victims of low level CO poisoning often experience the following symptoms:

- Mild Headaches
- Drowsiness
- Shortage of Breath
- Dizzy spells
- Nausea

∇ At higher levels CO poisoning can cause:

- Severe Headaches
- Impaired Vision/Hearing
- Mental Confusion
- Loss of Consciousness
- Fatigue
- Vomiting
- Coma

∨ Severe CO poisoning can cause:

Irregular Heartbeat

Coma

Amnesia

Death

Brain Damage

What can I do to protect my family?

Medical studies have shown a high percentage of the population is particularly vulnerable to CO, especially low levels over a long period of time. This high-risk group includes fetuses, children, the elderly, and those with heart and lung disorders. When inhaled, CO combines with hemoglobin in red blood cells to form substances that work to decrease oxygen levels and eventually asphyxiate the victim.

The awareness of the dangers of carbon monoxide combined with the use of CO detectors in the home will dramatically reduce the incidents of tragic deaths and frightening near misses that result from CO leaks.

It is recommended that at least one CO detector be installed near the sleeping area of your home. Additional detectors are advised for the common living areas of the home or installed near (but not directly over) other emission sources such as heating appliances. However, detectors should not be located near a bathroom where humidity from a shower may affect its operation. Also, fingernail polish and hair spray adversely affect CO sensors.

Common Sources of CO

- ▽ Blocked chimney opening
- ▽ Clogged chimney
- ▽ Portable heater
- ▽ Gas or wood burning fireplace
- ▽ Improperly installed gas kitchen range or cook top vent
- ▽ Gas clothes dryer
- ▽ Operating barbecue grill in enclosed area such as a garage
- ▽ Corroded or disconnected water heater vent pipe
- ▽ Leaking chimney pipe or flue
- ▽ Cracked heat exchanger

What do I do if my detector goes off?

If your CO detector does activate, the first thing you should do is call 911. After calling 911 you should calmly evacuate family members and pets to outside the home or a neighbors house. **DO NOT** open windows and doors to air out the home, this will prevent firefighters from detecting the source. When the fire department arrives they will inspect the home with monitoring devices and then let fresh air in the house if it is necessary.

Never hesitate to call for help if your CO detector is activated, helping you in these situations is what firefighters spend so much time training for and we are always willing to help. 🚒