

CARBON MONOXIDE: THE SILENT KILLER

Information You Should Know

Carbon monoxide is a silent killer that can lurk within fossil fuel burning household appliances. Many types of equipment and appliances burn different types of fuel to provide heat, cook, generate electricity, power vehicles and various tools, such as chain saws, weed eaters and leaf blowers. When these units operate properly, they use fresh air for combustion and vent or exhaust carbon dioxide. When fresh air is restricted, through improper ventilation, the units create carbon monoxide, which can saturate the air inside the structure. Carbon Monoxide can be lethal when accidentally inhaled in concentrated doses. Such a situation is referred to as carbon monoxide poisoning. This is a serious condition that is a medical emergency that should be taken care of right away.

What Is It?

Carbon monoxide, often abbreviated as CO, is a gas produced by burning fossil fuel. What makes it such a silent killer is that it is odorless and colorless. It is extremely difficult to detect until the body has inhaled a detrimental amount of the gas, and if inhaled in high concentrations, it can be fatal. Carbon monoxide causes tissue damage by blocking the body's ability to absorb enough oxygen. In fact, poisoning from this gas is one of the leading causes of unintentional death from poison.

Common Sources of CO

Kerosene or fuel-based heaters	Fireplaces
Gasoline powered equipment and generators	Charcoal grills
Automobile exhaust	Portable generators
Tobacco smoke	Chimneys, furnaces, and boilers
Gas water heaters	Wood stoves and gas stoves

Properly installed and maintained appliances are safe and efficient. Riviera Utilities recommends a CO detector be installed where gas appliances are used for cooking, heating and hot water. We also recommend periodic inspections of all gas appliances to make sure they are operating properly and vented in accordance with the gas code. Keep enclosed spaces where fossil fuel burning appliances operate well ventilated as a precautionary measure, and never operate a charcoal grill or light a fireplace in an enclosed, poorly ventilated space.

Risk Factors

Some factors can place certain individuals at a higher risk for carbon monoxide poisoning than others.

Babies. Infants cannot express elaborate signs and symptoms, so their crying can be misinterpreted as discomforts other than carbon monoxide poisoning. Be sure to place the crib in a well-ventilated area to decrease the risk.

Individuals who smoke. Chronic smokers have a higher risk of carbon monoxide poisoning due to a weaker respiratory system. Signs and symptoms of poisoning may be confused with side effects of smoking and those symptoms can be neglected.

Individuals who drink often. Those who abuse alcohol tend to be desensitized towards signs and symptoms of all ailments, including carbon monoxide poisoning. Since alcohol-induced slumber is also very deep, death by carbon monoxide poisoning while sleeping is a lot higher in those who often drink heavily.

Individuals with heart or respiratory problems. Since many signs of carbon monoxide poisoning coincides with heart or respiratory symptoms, people who already suffer from one of the latter two conditions may be more at risk.

Individuals who work with gas-powered equipment. Those who often work with equipment fueled by gasoline are at an occupational risk of CO poisoning. Studies have shown operating such machinery in a ventilated space still poses high risk; be sure to share such concerns with your employer and study the safety manuals to decrease occupational hazards associated with CO poisoning.

Signs and Symptoms

When signs and symptoms of CO poisoning are not addressed, permanent damage to the brain and cardiovascular system can occur, followed by death. If you are experiencing the following signs and symptoms, you may be experiencing carbon monoxide poisoning. Immediately have a trained technician check your heating system and other gas appliances for possible sources of CO. If symptoms are severe, please seek medical assistance.

Dull headache

Weakness

Dizziness

Nausea and vomiting

Chest pain

Confusion

Impaired judgment and irritability

Paranoia or erratic mood swings

In worst cases, loss of consciousness and death

Unfortunately, carbon monoxide poisoning is often confused with the flu, alcohol intoxication, or sea sickness. One way to confirm symptoms of carbon monoxide poisoning is to leave the house or suspected area. If the signs and symptoms disappear after leaving, it might indicate a gas leak. To be safe, be sure to open the windows and seek fresh air immediately if experiencing any such symptoms. Be safe and call 911 for assistance if you suspect carbon monoxide in your home or business.

Prevention

Here are some tips that can be used to minimize your risk of carbon monoxide poisoning:

Keep your garage well ventilated

Never start your car in an enclosed garage space

Conduct periodic checks of your household heaters and gas appliances

Follow the instruction manual on proper operation of gas-fueled machinery

Invest in a carbon monoxide detector

Keep your house well ventilated

Carbon monoxide is not a health threat or danger when fossil fuel equipment is in good working condition and used properly. Be sure to understand this gas so you know how to recognize it should you experience a leak. This message is provided for our customer's safety and is part of the Public Awareness plan for Riviera Utilities. If you have any questions or concerns, **please call our dispatch center at 943.4999.**