



Prevent Poisoning: Tips from the Blue Ridge Poison Center

## CARBON MONOXIDE GAS

### THE PROBLEM:

Carbon monoxide (CO) is an invisible, odorless gas produced when fuel is burned. Common sources include: automobiles; gasoline-powered lawn equipment or other tools; wood stoves and fireplaces; charcoal or gas grills; and furnaces or other appliances that burn oil or gas.



Nearly 500 people each year die from CO poisoning, and many hundreds more are injured by it.<sup>1</sup> The *number one cause of deaths* from CO poisoning is portable power generators which have been placed too close to a home.



### HOW DOES CO MAKE PEOPLE SICK?

When someone breathes CO into their lungs, it passes into the bloodstream and binds strongly to red blood cells. This makes the red blood cells unable to carry any oxygen to the brain, organs, and other parts of the body.

### SYMPTOMS OF CO POISONING MAY INCLUDE:

- Headache
- Sleepiness
- Nausea and vomiting
- Confusion
- Weakness
- Chest pain
- Dizziness
- Seizures
- Loss of consciousness (“passing out”)

Breathing very high concentrations of CO can cause loss of consciousness in only a few breaths. A person who survives CO poisoning may suffer permanent damage to the brain or other organs.

<sup>1</sup>Hnatov, M. Incidents, Deaths, and In-Depth Investigations Associated with Non-Fire Carbon Monoxide from Engine-Driven Generators and Other Engine-Driven Tools, 2005-2017. U.S. Consumer Product Safety Commission Report. September 2018.

## PROTECT YOUR FAMILY! CO poisoning prevention tips:

- ☐ **Follow the instructions** that come with your portable power generator to make sure it is operated in a safe location. For example: it should not be placed underneath a window or near an air intake vent.
- ☐ Pull your car or motorcycle **out of the garage** to warm up the engine.
- ☐ Have your furnace and chimneys professionally **cleaned and checked** each year for leaks or worn parts.
- ☐ Use gas and charcoal grills **outdoors** in a well-ventilated spot, not in an enclosed space like your home, a porch, barn, or tent.
- ☐ Only use your **oven or stovetop for cooking**, not for heating the house.
- ☐ Any portable appliance or device that burns fuel should **never be used** inside an enclosed space such as an attic, crawl space, basement, or garage.



### CARBON MONOXIDE IS A SNEAKY POISON.

Since you cannot see or smell CO gas, you may not be aware that you are breathing it until symptoms develop. The earliest symptoms are often headache, nausea, and drowsiness, which can be easily mistaken for symptoms of the flu or other illness. **INSTALL CO DETECTORS** in your home. If the alarm sounds—or if you suspect CO poisoning—immediately move all people and pets to fresh air and call for help.

***For help with any suspected poisoning or overdose.***  
***1-800-222-1222 or [www.poisonhelp.org](http://www.poisonhelp.org).***  
***Fast, free, private.***



The **Blue Ridge Poison Center** at the University of Virginia Health System has been proudly serving Virginia since 1978. Visit our website for flyers, poisoning prevention news, tips, and more: **[www.brpc.virginia.edu](http://www.brpc.virginia.edu)**. Please share this flyer!