Carbon Monoxide Exposure Brief

Common sources of Carbon Monoxide (CO) exposure are:

- Generator
- Automobile/RV
- Boat
- Kerosene/gas space heater
- Gasoline Power tools (include mower)
- Fuel burning appliances (stove/boiler/furnace)

- Portable fuel burning grill/stove
- Unvented fireplaces and stoves
- Other: fire, charcoal grills, charcoal briquettes for both cooking and heating indoors, etc.

Incident action:

- Alert comes in from Syndromic Surveillance of "chemical exposure/carbon monoxide poisoning"
 - Or report from hospital of cluster of illness
- Call hospital infection prevention
- Obtain information on patients:
 - o Demographics
 - o Symptoms
 - o Situation
 - Location of exposure (home, garage, factory, workplace, apartment complex, camp, food service, hotel, etc.)
 - One person, family, multiple families
 - Outcome (discharge, transfer, deceased)
- Follow up
 - o Education from epidemiology, environmental health
 - o Ensure source has been elimination
 - Tested by fire department or other
 - Source fire has been put out to ensure home is safe
 - Refer to EH if it is in a regulated facility

https://www.cdc.gov/disasters/carbonmonoxide.html

Patient/ household education on prevention recommendations:

- Install a CO alarm in your home if you have combustion appliances or an attached garage. Gas
 appliances such as hot water heaters, furnaces, fireplaces, and space heaters should have a CO
 alarm nearby.
- One CO detector should be placed on every floor of the home and within proximity to all bedrooms.
- Be sure all appliances are properly installed and used according to the manufacturer's instructions.
- Have fireplace, combustion heating, and ventilation systems, including chimneys, flues, and vents, professionally inspected every year.
- Do not burn charcoal inside a house, garage, vehicle, tent or fireplace.
- Do not use un-vented combustion heaters in enclosed spaces, especially sleeping areas.
- Never leave an automobile running in a closed garage or in a garage attached to the house even with the garage door open.
- While driving, keep the rear window or tailgate of a vehicle closed, as carbon monoxide from the exhaust can be pulled inside.
- If you suspect you are experiencing any symptoms of CO poisoning go outside into fresh air, open doors and windows, turn off gas appliances and call the fire department. In cases of severe CO poisoning, call 911 emergency services or call the Georgia Poison Information Center at 1-800-222-1222.

Carbon monoxide (CO) is a colorless, odorless, tasteless gas that is created when fuel is burned. High levels of CO exposure can cause sudden illness or death. You can prevent CO poisoning by installing a carbon monoxide detector. Learn the sources and symptoms of CO exposure and follow the tips below to avoid CO poisoning.



According to the Centers for Disease Control, over 400 people die each year as a result of carbon monoxide poisoning.

Learn the sources of carbon monoxide.

Carbon monoxide is produced when fuel such as natural gas, propane, gasoline, kerosene, wood, or charcoal is burned. Possible CO sources:

- Gas heating systems
- Gas stoves or gas ranges
- Grills, generators, and fuel-burning tools
- Fireplaces
- Furnaces
- Automobile and boat exhaust



CO from these sources can build up in enclosed or semi-enclosed spaces. When you breathe in CO, the toxic gas enters the bloodstream and keeps oxygen from getting into the body. Lack of oxygen can damage tissues and result in death.

Recognize the symptoms of carbon monoxide poisoning.

CO is often referred to as the "silent killer" because it is difficult to detect. Symptoms of CO poisoning are similar to the flu. Many people may unknowingly ignore the early signs of CO exposure.

Mild symptoms of CO poisoning:

- Headache
- Shortness of breath
- Dizziness
- Fatique
- Nausea or vomiting

Severe symptoms of CO poisoning:

- Confusion and irritability
- Impaired judgment and blurred vision
- Unconsciousness

Anyone can be at risk for CO poisoning. The following are most at risk:

- Fetuses and infants
- Pregnant women
- Elderly adults
- People with heart disease, lung disease, or anemia

Prevent carbon monoxide poisoning.

Prevent carbon monoxide poisoning in your home with these simple steps.

- Install a CO detector outside of every room used for sleeping. Install it within 10 feet of the room's entryway.
- Test the CO detector monthly.
- Open flues when fireplaces are in use.
- Have gas, oil, or coal burning appliances serviced frequently.
- **DO NOT** use gas ovens or gas ranges to heat living areas.
- **DO NOT** use unvented gas or kerosene space heaters in enclosed spaces.
- **DO NOT** leave a motor vehicle running in an enclosed garage
- **DO NOT** run a generator or other gas appliance inside an enclosed space without ventilation.

Act quickly if you suspect carbon monoxide poisoning.

- 1. Go outside to fresh air immediately.
- 2. Seek immediate medical attention or dial 911 for symptoms of CO poisoning,
- 3. **DO NOT** re-enter the home until it is safe.
- 4. Contact your gas utility company to identify the CO source and make repairs.



CO alarms can be hard-wired, battery powered, or plug-in devices. Make sure that alarms are UL listed. Follow the package instructions for proper placement, use, and maintenance.

For More Information

Georgia Department of Public Health Environmental Health Section Chemical Hazards Program (404) 657-6534