

## First responder utility safety bulletin

Fall 2022



### Carbon monoxide is toxic and highly flammable



According to the CDC's National Center for Environmental Health, more than 50,000 people in the U.S. seek help at emergency rooms for the treatment of carbon monoxide (CO) poisoning. At least 430 of them die.

Literally a "silent killer," CO is a highly poisonous, colorless, odorless and tasteless gas that is also extremely flammable. It is produced when propane, wood, heating oil, natural gas or other fuels burn without sufficient oxygen. CO can build up in enclosed areas quickly, exposing victims to harmful or even fatal levels without them realizing it. Children and the elderly are the most likely to get sick from CO exposure, but everyone is vulnerable. People who are sleeping or intoxicated can die from CO poisoning before they notice any symptoms.

**Most CO poisoning incidents are due to improper equipment installation, maintenance or use, which means such incidents are almost entirely preventable.**

Some possible sources of dangerous CO levels include:

- A vehicle running in an enclosed garage.
- A generator running indoors, or outdoors within 20 feet of a door, window or vent.
- A gas range or oven used for heating.
- Fuel-burning space heating or water heating equipment that is inadequately vented.
- A propane camping stove, charcoal barbecue or kerosene lantern used indoors.
- A fireplace with a blocked chimney or vent pipe.
- Equipment and appliance exhaust vents that become blocked by flooding, ice, snow or debris.
- Smoldering insulation on overheated electrical wires. This can send CO through electrical conduits and into buildings.



#### Signs of CO poisoning

Watch for these common signs of CO poisoning:

- Cherry red skin color
- Impaired mobility
- Headaches
- Dizziness
- Weakness
- Nausea and vomiting
- Confusion
- Sleepiness
- Tight chest

When you suspect CO poisoning, evacuate all occupants into fresh air and away from the involved structure. Seek medical attention for the victims immediately.

#### Responding to an incident involving CO

If a CO incident is reported or suspected, have your dispatcher notify National Grid or the local gas utility and take these steps:

- Permanently equip first-in bags with CO detectors. (This best practice is now required by regulation in Massachusetts.)
- **Use full SCBA and PPE.**
- **Evacuate the building.**
- **Make sure victims get fresh air and immediate medical attention.**
- **Ventilate the building.**
- **Shut off the gas at the aboveground service valve before the meter**, provided you have been trained to do so.
- **Work with National Grid to determine the source of the carbon monoxide** and when it is safe for occupants to return.
- **Exercise extreme caution.** CO is not only highly toxic, but also **highly flammable**. It will ignite when its concentration is 12 to 74 percent gas-in-air.
- **Use your four-gas CGI** to confirm that levels are below the lower explosive limit (LEL) and monitor carefully for spark hazards.



#### CO alarms save lives

CO poisoning can be prevented with the installation of CO alarms, which alert people before CO reaches dangerous levels. These devices are required in private dwellings in New York and Massachusetts. The Consumer Product Safety Commission recommends installing a CO alarm in the hallway outside every separate sleeping area of a home.

**Keep yourself, your team and the public safe this winter. Visit [firstresponder.ngridsafety.com](https://firstresponder.ngridsafety.com) today to register and complete your utility safety training.**

To report emergencies, **call 911** and **National Grid** immediately. Always **call 911** if you suspect a gas leak!

In case of gas emergencies:

Long Island and the Rockaways:  
**911 and 1-800-490-0045**

Metro New York:  
**911 and 1-718-643-4050**

Upstate New York:  
**911 and 1-800-892-2345**

Massachusetts:  
**911 and 1-800-233-5325**

In case of electric emergencies:

Upstate New York:  
**911 and 1-800-867-5222**

Massachusetts:  
**911 and 1-800-465-1212**

**IMPORTANT TERMS AND CONDITIONS – PLEASE READ PRIOR TO USE.**



Know what's below.  
**811 before you dig.**