nationalgrid

First responder utility safety bulletin Fall 2022

Carbon monoxide is toxic and highly flammable







Common 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

More than 50,000 people in the U.S. seek help at emergency rooms for the treatment of carbon monoxide (CO) poisoning each year.

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, which is often the result of improper equipment installation, maintenance or use.

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.

Responding to an incident involving CO

When you suspect CO poisoning, have your dispatcher notify National Grid or the local gas utility and take these steps:

- In advance, permanently equip first-in bags with CO detectors. (This best practice is now required by regulation in Massachusetts.)
- 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.
- Use full SCBA and PPE.
- Evacuate all occupants away from the involved structure.
- Make sure victims get fresh air and immediate medical attention.
- Shut off the gas at the aboveground service valve before the meter, provided you
 have been trained to do so.
- Ventilate the building.
- Work with National Grid to determine the source of the carbon monoxide and when it is safe for occupants to return.



Promote the use of CO alarms to 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.

For more safety information and training, visit firstresponder.ngridsafety.com. To report emergencies, call 911 and National Grid immediately.