

FREQUENTLY ASKED HAZMAT TOPICS:

CARBON MONOXIDE

The presence of CO in our home or workplace is very dangerous and can be difficult to detect. Annually, almost 300 people die from CO poisoning related to combustion devices in residential settings. Additional thousands become sick and need medical attention.

How do you protect yourself and choose the right detector for your individual situation?

- Step one: Do a survey to make sure that CO never enters your living spaces in the first place.
- Step two: Install CO detection device(s) in the structure

WHAT IS CARBON MONOXIDE (CO)?

Because it is colorless and odorless, you can't see, taste or smell it. It can affect you even *before* you notice its effects on others in your home/facility. CO is dangerous because it is attracted to the Hemoglobin in your blood and hampers the ability of your blood to carry Oxygen to the cells of your body.

SYMPTOMS OF CO POISONING:

Generally, you first exhibit mild flu-like symptoms; headache, runny nose, etc. This progresses to drowsiness, dizziness, disorientation, confusion and vomiting. Because of the effects to your ability to rationally evaluate your predicament, unconsciousness, brain damage and even death can result before anyone in the area can make the realization that escape is critical.

CO EXPOSURE LEVELS:

CO concentration in
parts per million (ppm)

Effects

35-50
100-200
>700 for an hour or more
1200

Allowable limits in workplace situations
Nausea, headache and mental impairment
Serious nervous system issues, coma, death
Immediately Dangerous to Life and Health

HOW DO I MAKE SURE IT ISN'T ENTERING MY STRUCTURE?

Good maintenance of furnaces, engines and other equipment is critical in order to prevent CO from being released by these devices. Have a licensed professional check for proper installation or maintenance of ventilation equipment and NEVER heat indoors with combustion devices not intended for this purpose (like propane heaters, charcoal briquets, etc). Other precautions:

- Inspect your fireplace for closed or blocked flues
- Never start a vehicle in a closed garage – pull the car outside and close the doors to prevent CO from entering the structure
- When you operate combustion type machinery outside, remember to prevent the exhaust gases from entering the structure, due to open windows, or wind patterns
- Regularly clean the vent from the clothes dryer and check for blockages

WHAT DO I DO IF I THINK THERE IS VICTIM OF CO POISONING?

- Immediately ventilate the structure by opening doors and windows
- Leave the building and take the victim outside into fresh air
- Call 911 for emergency assistance
- Turn off fuel-burning appliances
- Administer oxygen or start CPR if you are trained

WHAT TYPE OF DETECTION DEVICE DO I NEED?

Look for a CO detector that meets Underwriters Laboratories Inc. standards. It should have a warranty and be easily self-tested and reset to ensure proper functioning. Detectors that can display both high and low levels are more expensive, but they do provide greater accuracy and more information.

These detectors should be placed as close as possible to sleeping areas and if possible, additional detectors near heating appliances. Do not put the detectors in areas of high humidity, near vents or flues, within 6 ft of the heating unit, where they are easily damaged or exposed to the weather.