



# Toolbox TALK

## AVOIDING CARBON MONOXIDE POISONING

Carbon monoxide (CO) is an invisible, scentless, and toxic gas. CO provides no warning, making detection methods critical.

Ways to avoid CO poisoning at home and on the job:

- Install CO detectors in the hallway near each sleeping area in your house. Check the batteries at least twice a year along with your smoke detector batteries. If the alarm sounds, leave the house, and call 911 or the fire department. CO detectors are also available for motor homes and boats.
- Know the signs and symptoms of CO poisoning, and call for help immediately if you suspect someone has been exposed to CO.
- Obtain a handheld gas meter with a CO sensor if you are on a jobsite where combustion engines are running or on trench or excavation jobs. Place the meter in the area where people are working, keeping it at about chest height.
- Consider mounting a CO detector in the job trailer if heavy equipment is operating in the area, portable generators are being used, and ventilation is poor.
- Never operate combustion equipment near a building's fresh air intake.
- Keep fuel-burning appliances and engines properly vented, and verify all vents are clear of blockage. Have equipment serviced regularly.
- Always open the door prior to starting vehicles or equipment indoors.
- Evacuate a building if CO levels are elevated. Identify the CO leak source, have the issue repaired, and properly ventilate the building.

CO poisoning can easily be avoided if you take a good common-sense approach when working around potential sources. Be smart, and more important, be safe!

CO Warning Signs and Symptoms	
Concentration in PPMs	Observations/Health Effects
1 - 3	Normal
25	Limit occupational exposure over period up to 8 hours
30 - 60	Reduced exercise tolerance
100	15-minute short-term exposure limit
60 - 150	Frontal headache, shortness of breath on exertion
150 - 300	Throbbing headache, dizziness, nausea, impaired dexterity
300 - 650	Severe headache, nausea/vomiting, confusion, collapse
700 - 1000	Coma, convulsions
1200	Immediately dangerous to life and health
1000 - 2000	Heart and lungs depressed, fatal without treatment
Above 2000	Rapidly fatal



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