Carbon Monoxide Poisoning

Carbon monoxide (CO) is a colorless, odorless, toxic gas which interferes with the oxygen-carrying capacity of blood. CO is non-irritating and can overcome persons without warning. All people and animals are at risk for Carbon Monoxide (CO) poisoning, but unborn babies, infants, and people with chronic heart disease, anemia, or respiratory problems are most susceptible to its effects. Each year, more than 400 Americans die from unintentional CO poisoning, more than 20,000 visit the emergency room and more than 4,000 are hospitalized. Fatality rates are highest among Americans 65 and older.

**Effects of CO Poisoning**
- Severe carbon monoxide poisoning causes neurological damage, illness, coma and death.

**Symptoms of CO Exposure**
- Headaches, dizziness and drowsiness.
- Nausea, vomiting, tightness across the chest.

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### At Work

**Some Sources of Exposure**
- Portable generators/generators in buildings.
- Concrete cutting saws, compressors.
- Power trowels, floor buffers, space heaters.
- Welding, gasoline powered pumps.

**Preventing CO Exposure**
- Never use a generator indoors or in enclosed or partially enclosed spaces such as garages, crawl spaces, and basements. Opening windows and doors in an enclosed space may prevent CO buildup.
- Make sure the generator has 3-4 feet of clear space on all sides and above it to ensure adequate ventilation.
- Do not use a generator outdoors if placed near doors, windows or vents which could allow CO to enter and build up in occupied spaces.
- When using space heaters and stoves ensure that they are in good working order to reduce CO build-up, and never use in enclosed spaces or indoors.
- Consider using tools powered by electricity or compressed air, if available.

### At Home

- Have heating system, water heater and any other gas, oil, or coal burning appliances serviced by a qualified technician every year.
- Do not use portable flameless chemical heaters (catalytic) indoors. Although these heaters don’t have a flame, they burn gas and can cause CO to build up inside your home, cabin, or camper.
- An odor from the cooling unit of a gas refrigerator can mean a defect in the cooling unit, have an expert service it. It could be giving off CO.
- When purchasing gas equipment, buy only equipment carrying the seal of a national testing agency, such as the CSA GroupExternal Web Site Icon.
- Install a battery-operated or battery back-up CO detector and check or replace the battery each spring and fall.
- All gas appliances must be vented so that CO will not build up in a home, cabin, or camper.
- Never burn anything in a stove or fireplace that isn’t vented.
- Have the chimney checked or cleaned every year.
- Never patch a vent pipe with tape, gum, or something else.
- Horizontal vent pipes to fuel appliances should not be perfectly level. Indoor vent pipes should go up slightly as they go toward outdoors.

If you experience symptoms of CO poisoning get to fresh air right away.

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from OSHA.gov, CDC.gov, NSC.org