

# CARBON MONOXIDE

Carbon monoxide (CO) is a colorless, odorless, tasteless, highly toxic gas that is undetectable to the human senses. Because of this, victims may become disoriented and unable to call for help or unable to get out. Carbon monoxide poisoning can occur anywhere, at home, in your car, on your boat, at a public place or at work. It is a by-product of combustion, present whenever fuel burned. It is found, but not limited to anything with a motor, heating systems and appliances, natural or LP gas, fire and smoke, houseboat generators, cooking appliances and grills, motorized vehicle exhaust, propane powered equipment and tobacco smoke.

2,000 people die and 40,000 others are treated for CO poisoning every year. More than ½ of all unintentional, non-fire carbon monoxide poisoning deaths involve motor vehicles. At least 1/3 of these deaths occur in the wintertime when vehicles are left running without proper ventilation.

Carbon monoxide can kill in as little as 10 minutes! Effective January 1, 2007, all newly constructed single family homes and multi-family dwelling units for which building permits were issued on or after January 1, 2007, shall be provided with approved carbon monoxide alarms. Effective August 1, 2008, all existing single family homes shall be equipped with approved carbon monoxide alarms and effective August 1, 2009, all other multi-family or apartment dwelling units shall be provided with approved carbon monoxide alarms.

## *General Location Requirements:*

Every single family dwelling and every multifamily dwelling unit shall be provided with a minimum of one approved and fully operational carbon monoxide alarm installed within 10 feet of each room used for sleeping. If bedrooms are located on separate floors, additional carbon monoxide alarms will be required. It is the owner's responsibility of a multi-family dwelling that is required to be equipped with carbon monoxide alarms to provide and install an approved and operational carbon monoxide alarm within 10 feet of each room lawfully used to sleeping and to replace any required carbon monoxide alarm that has been stolen, removed, found missing or rendered inoperable during a prior occupancy of the dwelling unit and which has not been replaced by the occupant prior to the commencement of a new occupancy of a dwelling unit. No person shall remove batteries from or in any way render inoperable, a required carbon monoxide alarm.

## *Preventive Steps:*

- Have all fuel burning appliances installed by a professional according to manufacturer's instructions and building codes.
- Inspect and service heating and cooling systems before each season.
- Keep the fireplace flue open for adequate ventilation and until embers are completely burned out.
- Examine chimney and vents for blockages, cracks and leaks; any improper connections, rust, water streaking, stains; debris and soot; loose, damaged, discolored bricks or masonry; a hot draft or none at all. Have your home heating systems professionally inspected once a year.
- Never install or operate gas burning appliances, furnaces or water heaters in unvented enclosures.
- Never use a gas range or oven for heating the home.
- Check the water heater for improper burner adjustment and a low supply of hot water.
- If you see a mostly yellow pilot light not positioned upright, call for service; never adjust it yourself.
- Never use unvented fuel burning appliances such as heaters and lanterns in an enclosed area, including tents, campers, RV's or other sleeping areas.
- Do not allow smoking in rooms that are not properly ventilated.

- Do not store propane tanks indoors.
- Use paint strippers and solvents outdoors or in adequately ventilated areas. Methylene chloride converts to carbon monoxide in the body.
- Even with the door open, never use the barbecue grill in the garage or house, in a trailer, van or camper.
- Start all gas, diesel or propane powered equipment outside.
- Avoid placing power generators or pressure washers near windows or doors of your home.
- Keep your vents clear for your furnace, clothes dryer, stove and fireplace.

### *Motor Vehicle Safety:*

- Never sit in a vehicle that is idling with the windows up, while waiting for it to heat up.
- Never leave a vehicle idling in an attached garage with or without the garage door open. The fumes can travel fast through your home.
- Never leave your child unattended in a vehicle that is idling for a long period of time.
- Make sure the exhaust pipe is not blocked by leaves or snow when leaving a vehicle idle.
- Have your exhaust system checked for holes in the muffler or tail pipe.
- If you smell any fumes or unusual scents inside your car, have it checked out.
- Never allow anyone to ride in the back of an enclosed pickup truck.

### *Boating Dangers:*

- Stay away from any watercraft exhaust outlets.
- Never sit on or hang off the back deck or swim platforms if the engine is running.
- If you suspect seasickness, treat it as CO poisoning. Get the victim fresh air and medical treatment.
- Have your boat or personal watercraft inspected every year.
- Know the proper safety procedures relating to houseboats.
- Install a working carbon monoxide detector.

### *Signs of a CO Problem:*

- Stuffy, stale, smelly air, exhaust fume smell; unfamiliar or burning odor.
- Moisture on walls and windows; lint by dryer's exterior vent; soot on appliances.
- A furnace that runs constantly but heats inadequately; loose or missing furnace panels.
- Appliances that shut off, activating safety devices.

### *Symptoms of CO Poisoning:*

Get fresh air and medical attention if you have these symptoms:

- Symptoms can mimic a common cold, a hangover, food poisoning, depression, sea sickness, intoxication or the flu (without bodyache or fever). Look for patterns. Symptoms may disappear when away from the house or vehicle and reappear when you return. See if others, including pets, suffer the same symptoms at the same time.
- Dizziness, ringing in the ears
- Blurred vision, burning eyes
- Intoxicated appearance
- Persistent throbbing headaches

- Tightness across the forehead
- Pale Skin
- Nausea and vomiting
- Confusion, disorientation, loss of muscle control
- Fainting, unconsciousness
- Fatigue, never feeling rested, sleepiness
- Shortness of breath
- Chest pain when exercising
- Rapid heartbeat/pulse, fluttering or throbbing heart, tightening of the chest
- Sudden death

### *CO Detectors:*

CO detectors sound an alarm when unacceptable levels of CO are in the air. Without testing instruments, CO is virtually impossible to detect. Remember carbon monoxide detectors are NOT a substitute for smoke alarms.

- Look for UL-approved, standard 2034 or IAS 6-96 detectors.
- Install detectors on every level of the home near sleeping areas, in the vicinity of the heating unit, in RV's and on boats.
- Be sure alarms can be heard from every sleeping area.
- Test carbon monoxide detectors once a month and replace according to manufacturer's instructions.
- A CO detector reading of 35 or higher is considered to be dangerous.

### *Know What To Do:*

- If the CO detector alarm is making an intermittent sound, check the battery.
- If it is a steady alarm or you aren't sure, leave immediately, *even if you do not feel symptoms*. Follow your home fire escape plan.
- Meet other family members at your safe meeting place.
- Dial 9-1-1 or your local Fire Department and seek medical attention if you have symptoms from a fresh air location. Remain at the fresh air location until emergency personnel arrive to help you. If the alarm sounds and there are no symptoms, dial a qualified appliance technician.
- Never re-enter the home until you are told it is safe.
- If a CO leak is suspected or you smell gas, do not wait; call the local gas company immediately.
- Replace CO alarms every seven years in order to benefit from the latest technology upgrades.

***Call the Brainerd Fire Department at 218-828-2312***

***if you have any questions regarding your carbon monoxide detector!***