Carbon Monoxide Safety

During Extreme Cold Weather

Make sure your heating system is working properly. Malfunctioning home heating equipment can cause a fire or carbon monoxide poisoning. Check that outside furnace vents aren't blocked by snow or ice. Keep your furnace filter clean for safe, efficient operation.

Use space heaters safely. Use a space heater with an automatic shut-off, and keep children, pets and all items at least three feet away. A space heater that uses gas, propane or wood should be vented to the outside. Stoves and ovens should never be used for space heating.

Check your carbon monoxide (CO) and smoke alarms. These devices are essential to warn you of a fire or dangerous malfunction with a furnace, water heater, fireplace or stove. Test your alarms monthly and change batteries every year.

What is carbon monoxide?

Carbon monoxide (CO) is a colorless, odorless, tasteless gas that is dangerous and potentially poisonous if inhaled. When inhaled, CO combines with the blood and prevents it from absorbing oxygen. When this oxygen-deficient blood reaches the heart and brain, it can damage those organs and cause illness or death.

How can I tell if CO is present?

- Unusually high indoor humidity with persistent heavy condensation on walls and windows.
- Stuffy or stale indoor air, soot or water collecting near a burner or vent.

What are the signs of CO exposure?

Mild exposure:	**Medium exposure**:	**Severe exposure**:
• Slight headache • Vomiting • Nausea • Fatigue • Blurred Vision • Flu-like symptoms that disappear when	• Drowsiness • Confusion • Severe headache • Rapid heart rate	• Convulsions • Unconsciousness • Cardiac/respiratory arrest • Even death

Treatment for CO exposure is fresh air or oxygen. Severe exposure requires medical attention.

What do I do if I suspect CO is present?

1. Open windows to ventilate the area.
2. Shut off your furnace and other fuel-burning appliances.
3. If you're experiencing physical symptoms, get everyone, including pets, out of your building.
4. If you have an attached garage, open the largest garage door.
5. If you suspect problems with your appliances, call your gas appliance dealer or D&H Gas Co..
6. If CO is discovered, don't return to your building until the source is found and the problem corrected.
7. **Get to fresh air and call 911**.

If I smell natural gas, is that the same as CO?

No. CO has no smell. When you smell natural gas, you smell an odorant we add to natural gas for safety reasons. If you smell natural gas, leave immediately and call CenterPoint Energy from another location.

What are the sources of CO?

Carbon Monoxide is predominately produced by incomplete combustion of carbon-containing materials. Burning fuels like gasoline, coal, wood, charcoal, kerosene, natural gas, propane and heating oil, as well as almost any other combustible material such as tobacco, fibers or paper are common sources of CO.

Why does CO accumulate and not escape through the chimney?

Homes and other buildings that are tightly sealed or have large exhaust systems, such as kitchen exhaust fans, need a system that provides air to replace the air that is pulled out by the exhaust. Without adequate make-up air, air from the outside can be pulled down a chimney and cause CO to form. When adequate combustion air is available and the appliance is properly installed and maintained, all gases and other combustion byproducts will be harmlessly vented to the outdoors.

How do I prevent CO buildup?

- Never operate an automobile, lawn mower or any combustion engine, or barbecue grill or similar equipment, in an enclosed area such as your home, garage, tent, trailer or place of business, even with the door open.

- Never leave a fire smoldering in a fireplace.

- Have fuel-burning equipment regularly checked by a qualified technician (most manufacturers recommend annual check-ups).
- Check frequently for visible signs of problems, such as high indoor humidity, or soot or water collecting near a burner or vent.
- Equipment that uses natural gas should produce a clear blue flame. A yellow or orange flame may indicate a problem, and equipment should be checked by a qualified technician.
- Provide adequate combustion air for all your appliances by avoiding too many appliances vented to one vent pipe.
- Make sure your fresh air intake(s) is unobstructed.
- Be certain all fuel-burning appliances and equipment are properly vented to the outdoors.
- Keep vents and chimneys clear of debris or other obstruction and check for vent pipes that have gaps, leaks, spaces, or are rusted through.
- If you use a gas space heater that is unvented, leave a nearby window open at least an inch to allow fresh air to enter the room.
- Have your gas central heating unit checked before the heating season begins to make sure the heat exchanger is not cracked or rusted and that the burner area is clean.
- Never attempt to heat a room with a natural gas range, oven or clothes dryer.
- If you need to convert equipment from one type of fuel to another, have the conversion done by a qualified technician.

Purchase a CO detection device with an audible alarm and a digital display, installed near bedrooms for added protection. Look for the Underwriters Laboratories Standard 2034 (UL) stamp on the box and carefully follow the manufacturer's directions for operation, placement, and maintenance.