

Prevent Poisoning

Properly operating gas appliances are your first line of defense. Have a reputable heating contractor inspect and tune your fuel-burning appliances and systems annually. This is the single most important thing you can do. Make certain any wood stove or other wood-burner has an outside air source. With an independent air supply, a wood stove is much less likely to trigger backdrafting.



Be particularly alert for possible carbon monoxide poisoning:

- ◆ After you've installed a new, major fuel-burning appliance, such as a new furnace or space heater.
- ◆ If you've installed a major fuel-burning appliance without professional help and a check by your utility.
- ◆ If vents may have been clogged by snow or nesting birds or insects.
- ◆ If you've taken measures to tighten up your home without the benefit of an energy audit.

 Remember, too, that backdrafting may not occur until all your fuel burning appliances have been operating for awhile.

Added CO Protection

If you'd like the extra protection that CO alarms provide, NorthWestern Energy recommends choosing a UL listed model with the following features:

- ◆ the UL Mark with the adjacent phrase "Single Station Carbon Monoxide Alarm."
- ◆ a digital display
- ◆ AC power with a battery back up

When installing a CO monitor, please be sure to read and follow all manufacturer's recommendations.

For more information on CO alarms and safety, visit www.ul.com

Contacts...

MONTANA

Customer Contact Center: (888) 467-2669
7 a.m. - 6 p.m. M-F
Emergency 24/7 Service
Call Before You Dig 811

NEBRASKA

Customer Contact Center: (800) 245-6977
7 a.m. - 6 p.m. M-F
Emergency 24/7 Service
Call Before You Dig 811

SOUTH DAKOTA

Customer Contact Center: (800) 245-6977
7 a.m. - 6 p.m. M-F
Emergency 24/7 Service
Call Before You Dig 811

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Carbon Monoxide Safety

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Delivering a Bright Future

Introduction...

Day after day, year after year, natural gas flows to your home and is used without incident. But it can be dangerous if it is not confined. If you smell gas in your home or building, take action immediately.

If the gas odors seem strong, evacuate the building immediately. Do not use a phone or flip a light switch. The spark from either could set off an explosion. Call NorthWestern from another location – we'll dispatch help immediately. Stay away until NorthWestern arrives to check things out.

 *Natural gas has no odor. We add the distinctive odor for your protection.*

What is Carbon Monoxide (CO)?

It's a colorless, odorless, poisonous gas that may be present when a fuel is not burned completely. When natural gas is burned completely, only water and carbon dioxide are produced. Neither is toxic.

But when the mixture of fuel and oxygen is out of balance, carbon monoxide may be produced. It is a deadly poison. *Any fuel – wood, coal, oil, propane, kerosene – can produce carbon monoxide.* You also may be acquainted with carbon monoxide from automobiles. It is produced by internal combustion engines – which is why we don't warm up our auto engines with garage doors closed.

What is Backdrafting?

A situation called "backdrafting" is the main cause of most carbon monoxide problems. Carbon monoxide build-up in a home can be caused by one of two conditions.

1. When fuel-burning appliances, such as water heaters and heating systems, do not have adequate combustion air, the combustion air source may be drawn from another appliance's vent. When that occurs, the appliance can no longer vent flue gas to the outside properly and may backdraft into the house.

OR

2. Flues of fuel-burning equipment are clogged and combustion gases exhaust into living areas. Or, fuel burning systems may have flaws, such as holes in exhaust flues or cracks in heat exchangers. Again, carbon monoxide escapes into living areas.

 *Backdrafting of CO laden flue gases can be caused by improperly sized and installed vent systems or old vents in need of repair. Competing building pressures, such as clothes dryers and ventilation hoods on stoves can also contribute to this affect.*



If You Suspect Carbon Monoxide Poisoning...

If the symptoms of poisoning seem acute, get the victim or victims to fresh air immediately. If a victim is not breathing, begin artificial resuscitation immediately and have someone call for emergency medical assistance.

As a NorthWestern Energy natural gas customer, call on us to check your home for carbon monoxide if you suspect you have a problem. Our NorthWestern Energy gas service people carry carbon monoxide detectors and know what to look for.

If you must ventilate the building, realize that ventilation may make carbon monoxide undetectable later. You also may choose to turn off fuel-burning appliances you suspect are not operating properly.

SYMPTOMS OF CARBON MONOXIDE POISONING:

- ◆ headache
- ◆ nausea
- ◆ vomiting
- ◆ fatigue
- ◆ confusion
- ◆ tightening of the chest
- ◆ unusual yawning
- ◆ irritation of nose, mouth, eyes

Such flu-like symptoms may affect an entire family. They may disappear when you are away from home for a period of time, then return after you're back home for awhile.