

# Fire Safety with Natural Gas

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Natural gas is a flammable gas, commonly used to fuel household appliances such as fridges, stoves, furnaces, barbeques, portable heaters and appliances in recreational vehicles (RV). When used with care, natural gas is a safe, clean, non-toxic, inexpensive and energy efficient fuel. However, it can be a fire and carbon monoxide hazard.

## Fire Facts

- When ignited in an enclosed, unventilated area, a dangerous and potentially fatal build up of carbon monoxide can occur.
- If natural gas leaks or builds up in an enclosed, unventilated area, it can cause an explosion when it comes in contact with a spark or flame. The operation of a wall switch, a cell phone/telephone or transmitting 2-way radio can produce a hot enough spark to ignite natural gas.
- Exposure to natural gas in a confined, unventilated area can also cause an asphyxiation hazard (when a large amount of gas displaces the oxygen in the air).
- Natural gas is colourless and odourless. A distinct odour resembling the smell of rotten eggs is added to it so that you can detect escaping gas.
- Natural gas is stored in high-pressure containers almost always in a gaseous state.
- Natural gas is lighter than air and rises and dissipates in the air.

## Safety Tips

- When purchasing flammable gas appliances ensure they are certified and labelled by a recognized testing agency, such as Intertek Testing Service (ITS) or Underwriter's Laboratories (UL/ULC).
- Follow the manufacturer's instructions for using and fitting natural gas appliances to their gas supply. This will help limit the possibility of leaks.
- Only use natural gas and its equipment for their intended purpose.
- Make yearly cleaning, maintenance and safety inspections part of your routine. Where required, have containers and appliances inspected or repaired by a trained professional.
- When using natural gas appliances, keep them away from anything that can burn, such as items in and around your home, including dry vegetation, deck rails, wood balconies, twigs, etc. and items in or around vehicles.
- When handling and storing natural gas and natural gas appliances keep them well away from heat sources or flames, such as lit cigarettes.
- Use and store natural gas outdoors in a shaded area where possible to ensure ventilation.
- When using natural gas inside homes, campers, tents, sheds, vehicles or other inside areas ensure that the area is well ventilated to prevent the accumulation of dangerous gases.
- Only store enough natural gas for your immediate purposes.

For more information, please contact the Alberta Emergency Management Agency at (780) 422-9000 (dial 310-000 for toll-free access outside of Edmonton) or email: [aema@gov.ab.ca](mailto:aema@gov.ab.ca)

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- To check for leaks, brush a soap and water solution over the suspected area — bubbles will form if there is a leak.
- If you suspect a leak, leave the area immediately, shut off the gas supply if possible and remove any possible sources of ignition. Call the fire department from a neighbour's home.
- Check the flame on your natural gas appliance regularly. Appliances that use natural gas should mostly show a blue flame with yellow tips. If the flame is mostly yellow, this is a sign that the fuel isn't burning completely and may be producing carbon monoxide.
- Exposure to natural gas can result in nausea and headaches. If either of these symptoms develops, get outside **immediately** and breathe fresh air. Under extreme conditions, exposure to flammable gases can result in death.
- Always have a fire extinguisher, baking soda and water available to put out an accidental fire.
- Keep all flue vents and chimneys free of debris and other blockages, these pathways are needed to exhaust the toxic gases from the combustion source.
- Ensure fans for ventilation are on, operational, and secure at all times.
- Maintain and clean vent pipes. Clean blocked pipes and repair any rusted or deteriorated pipes.
- Have a qualified technician install, inspect, and repair your natural gas equipment and appliances.