

## PROPANE

Propane gas is heavier than air. If it leaks from equipment or containers, it can accumulate in low-lying areas such as basements, pits and trenches.

The dangers are explosion and asphyxiation. Asphyxiation means loss of consciousness and suffocation which could result in death.

Propane gas by itself is odourless, but suppliers add a strong-smelling chemical to the gas so that leaks can be detected by smell. The unpleasant odour is like rotten cabbage.

If enough propane gas collects in a low-lying area, it displaces air. Upon entering the area, you may be overcome and lose consciousness.

Propane is combustible and explosive. Concentrations in a basement or trench can be ignited by something as simple as turning on a light switch, starting an electric drill or from a static spark.

If propane equipment, such as a torch or heater, goes out in a **confined or low-lying space**, act quickly:

- Shut off gas and leave the area.
- Don't go back to relight the equipment until the area has been thoroughly ventilated to remove the gas.
- Never enter the area without somebody standing by to help in case you run into trouble.
- Don't let propane saturate your clothing. Clothing remains highly flammable for some time after exposure. Even if it doesn't feel or smell unusual, saturated clothing should be removed and aired outside.

To prevent leaks, propane (which is a compressed gas) containers and equipment should be handled properly.

- Compressed gas containers must be re-certified by hydrostatic test at least every 10 years.
- Always keep compressed gas containers secured and upright, whether you're transporting, using or storing them.
- Compressed gas containers that are being used should be secured with rope, wire or chain to keep them upright.

- Never transport compressed gas containers in the trunk of a car or in a closed van. Escaping gas can collect in these confined spaces and create a risk of explosion or asphyxiation.
- Never roll compressed gas containers like logs or hoist them by their collars. Use a hoisting cradle to lift or lower compressed gas containers from level to level. Never use a sling or a lifting magnet.
- Store compressed gas containers where they won't be struck by falling materials or moving equipment. With snow fencing and T-bars, it is possible to make an enclosure for storing and tying up containers. Store empty containers on one side, full ones on the other – never mix them.
- Compressed gas containers should not be dragged, slid or subjected to rough handling.
- Keep compressed gas containers at a safe distance from readily ignitable substances, including the heaters they are connected to and any other operations that produce flames, sparks or molten metal.
- Never expose any part of your skin to compressed gases, as they are extremely cold and can cause frostbite.

*[Review arrangements for storing, handling, and using propane on site.]*

In New Brunswick, the law on portable compressed gas containers can be found in the *General Regulation 91-191* under the *Occupational Health and Safety Act*, sections 74 – 79.

The law on working in confined spaces is found in *General Regulation 91-191* under the *Occupational Health and Safety Act*, sections 262 – 272.

**You can find more information on WHSCC's programs and services on the internet at <[www.whscc.nb.ca](http://www.whscc.nb.ca)>.**

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