

## Safety Facts:

# Carbon Monoxide Safety\*

**Carbon monoxide (CO) is a colourless, odourless, tasteless gas and is one of the leading causes of gas poisoning in North America.**

Carbon monoxide is a by-product of incomplete combustion of fossil fuels which you can find anywhere a fuel-powered engine operates. The gravity of carbon monoxide is almost identical to normal air, which means it can disperse quickly throughout an area or collect in pockets where there is little air movement.

### Why is it important?

Vehicles or fuel-powered equipment should never be run within an enclosed or semi-enclosed space, such as trenches unless there is adequate ventilation. In addition, ensure that fuel-fired furnaces, boilers, and water heaters are correctly inspected and maintained to ensure they operate efficiently and do not create dangerous levels of carbon monoxide.

Because you can't detect carbon monoxide by sight, smell, or taste, you need detectors to identify and determine the level of carbon monoxide in the air. Electronic detectors for the workplace should be used at specific times and turned off when not required.

### Associated risks/hazards

Designated as a reproductive toxin, long-term exposure to carbon monoxide can have adverse reproductive effects on female and male reproductive systems, the embryo, or the fetus. It may contribute to developmental abnormalities and other issues in a newborn.

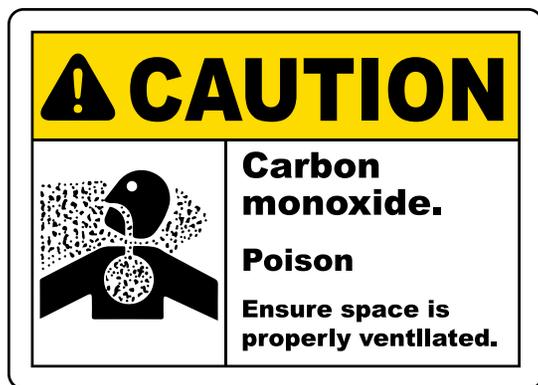
Breathing carbon monoxide into the lungs allows it to enter the bloodstream and bind to hemoglobin. This limits the blood's ability to transport oxygen throughout the body resulting in oxygen deprivation to various organs, including the brain. Symptoms can include dizziness, loss of consciousness, and even death.

### Preventive next steps

Never ignore the warning signs of carbon monoxide exposure when working with internal combustion engines or in enclosed or partially enclosed areas where equipment has been recently used. Those warning signs are:

- Headache
- Dizziness
- Nausea

If you should experience any of these symptoms, report immediately to your first aid attendant and the area supervisor for appropriate action.



## \* For additional resources visit:

[Carbon monoxide in industry](#) – WorkSafeBC

[Carbon monoxide](#) – WorkSafeBC

[Internal Combustion Engines](#) – Occupational Health and Safety Regulations Part 5: Chemical Agents and Biological Agents

[Carbon Monoxide at the Work Site](#)

