# Carbon Monoxide Poisoning Fact sheet

# Auckland Regional Public Health Service has a role to investigate chemical injury notifications as per Section 74 of the Health Act 1956 and Section 143 of the HSNO Act. This includes Carbon Monoxide poisoning.

What is carbon monoxide?

# Carbon monoxide (CO) is a colourless, odourless gas. If inhaled, at varying quantities, it is capable of causing illness and in severe cases, death.

Where is CO found?

# Carbon monoxide comes from a range of sources, including emissions from:

* Incompletely burned carbon-based material, e.g. wood, paper, fuel
* Internal combustion engines (cars, trucks, forklifts, etc)
* Kilns and boilers
* Welding and plastics moulding
* Space heaters, oil or gas heaters
* Waterpipe smoking (alternatively known as hookah, narghile and shisha)

# CO from these sources can build up in enclosed or semi-enclosed spaces.

What are the symptoms of acute CO poisoning?

Common symptoms include headache, dizziness, weakness, confusion and nausea. High levels can cause chest pains, hallucinations, convulsions, loss of consciousness or death. **If you or someone you know has these symptoms and may have been exposed to carbon monoxide, seek medical treatment immediately.**

How does CO poisoning work?

CO competes with oxygen in binding to red blood cells in the body. CO is picked up more quickly and if there is a lot in the air, oxygen gets displaced by CO in blood. Oxygen is blocked from getting into the body. This causes tissue damage and in severe cases, death.

Who is at risk from CO poisoning?

All people and animals are at risk. However certain groups are more vulnerable - unborn babies, infants, and people with chronic heart disease, anaemia, or respiratory problems.

How to prevent CO poisoning at home?

* Move CO generating processes outside to allow good ventilation while operating
* Have your heating systems (including hot water) and any other gas, oil, or coal burning appliances serviced by a qualified technician every year.
* Do not use unflued gas heaters/ cookers or portable flameless chemical heaters (catalytic) indoors. These appliances burn gas and can cause CO to build up inside your home.
* Never run a car or truck in the garage with the garage door shut.

**This Fact Sheet has been adapted from:**

* Centre for Disease Control and Prevention: [Carbon Monoxide Poisoning](http://www.cdc.gov/co/faqs.htm)
* Worksafe New Zealand [Carbon Monoxide Safety at Work](https://worksafe.govt.nz/topic-and-industry/dust-and-fumes/fumes/carbon-monoxide-invisible-and-deadly/)
* World Health Organization: [Waterpipe tobacco smoking and health](https://apps.who.int/iris/bitstream/handle/10665/179523/WHO_NMH_PND_15.4_eng.pdf;jsessionid=94DB7FEC102D24CA004F8B869DD47075?sequence=1)

**For general advice please contact Healthline on 0800 611 116**

**For further information contact the Auckland Regional Public Health Service on 09 623 4600**

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