

Heating provides warmth and comfort during winter, especially for people living in colder climates.

However, unflued gas heaters release polluting gases directly into the room that can potentially harm your health.

This pamphlet provides information for householders and operators of schools, aged care facilities, and other community facilities on the health risks of unflued gas heaters and ways to avoid or reduce those risks.

The enHealth Council, a subcommittee of the National Public Health Partnership, brings together top Environmental Health officials at the Federal and State/Territory level along with representation from the Australian Institute for Environmental Health, the environment and public health sectors, the Indigenous community and the wider community. Further information on the enHealth Council can be obtained from their website: <http://enhealth.nphp.gov.au/>

For more information on unflued gas heaters and indoor air pollution, contact your local government, the environmental health branch of the health department in your state or territory or the maker of your heater.

This brochure has been adapted, with permission, from publications developed by NSW Health and the Department of Human Services Victoria. It is available from the enHealth Council web site at: <http://enhealth.nphp.gov.au/council/pubs/pubs.htm>.

unflued gas & heaters & YOUR HEALTH



enHEALTH

UNFLUED GAS HEATERS & YOUR HEALTH

What is an unflued gas heater?

An unflued gas heater burns gas to produce heat and has no flue or chimney to carry the combustion products outside or away. Some are portable and are plugged into a gas outlet through a wall or floor socket with a flexible hose, or may be LPG cabinet heaters. Others may be fixed to the wall.

Patio heaters are another type of unflued gas heater. This type of heater should never be used indoors.

What air pollutants do unflued gas heaters produce?

Unflued gas heaters produce a number of pollutants as a result of combustion. Pollutants that can harm your health include nitrogen dioxide and carbon monoxide.

Unflued gas heaters also produce water vapour that can indirectly affect health by increasing the growth of moulds and dust mites.

The amount of air pollutants an unflued gas heater will produce can vary depending on:

- the type of heater
- the way the heater is installed
- how you use the heater
- how often the heater is serviced.

In addition, the level of air pollutants in the room will vary depending on:

- the way you use the heater
- the size of the area you are heating
- how effectively ventilation removes pollutants from the area.

What are the potential health effects of air pollutants?

Unflued gas heaters increase the level of indoor air pollutants and also the incidence of respiratory problems amongst some people in the building.

Health effects from nitrogen dioxide and carbon monoxide may occur immediately at the time of exposure or they may occur sometime later.

Some people are more susceptible than others and may be more likely to suffer adverse health effects.

For example, there is a high rate of childhood asthma in Australia and New Zealand, and so care needs to be taken in the choice of heater, particularly where children or the elderly are involved.

Nitrogen dioxide is odourless and invisible at levels that may harm your health. People with asthma are particularly susceptible to the effects of nitrogen dioxide and may experience symptoms more often when using or exposed to an unflued gas heater.

As well, children may experience increased coughing, wheezing and shortness of breath, and may get respiratory infections more often, when they are exposed to unflued gas heaters.

Carbon monoxide is also invisible and has no odour or taste. It deprives the body of oxygen, leading to impaired thinking and reduced alertness.

If the level of carbon monoxide in a room goes above 'safe levels' people with heart disease may get chest pain or angina. Smokers with heart disease are particularly at risk. Young children, unborn babies and the elderly may also be affected.

Exposure to very high levels of carbon monoxide can cause carbon monoxide poisoning. This can affect anyone. Symptoms of carbon monoxide poisoning include tiredness, shortness of breath, headaches, dizziness, nausea, weakness and/or confusion.

Exposure to extremely high levels of carbon monoxide can cause death.

What should I do if I have an unflued gas heater?

There are several things you can do to avoid or reduce your exposure to pollutants from unflued gas heaters:

- The room needs to be well ventilated. Keep internal doors and at least one window open to allow fresh air to enter the room. Check that room vents are not blocked.
- Never use an unflued gas heater in the room where you sleep, in a bathroom, caravan or tent.
- Minimise the length of time you use an unflued gas heater.
- Make sure your heater is installed by a licensed gas fitter.
- Read and follow manufacturer's instructions for using your heater.
- Have your unflued gas heater serviced by a qualified person at least once a year. Heaters that are not in good working order can release higher amounts of pollutants into the air. Do not do any maintenance on an unflued gas heater yourself.

What alternative heating options do I have?

If you are considering buying a heater, consider one that does not produce indoor air pollution, such as:

- flued gas heating or central heating, which carry the pollutants outside
- an electric heater or reverse cycle air conditioner.

Be very careful about using an unflued gas heater, especially if the people likely to be exposed to it:

- have heart disease or asthma
- are pregnant or elderly
- are children.