Gas heating - health and safety issues

Summary

- Have your gas heater serviced and tested by an appropriately trained and licensed gasfitter at least once every two years.
- When using a gas heater, be aware of how to use it safely. Always follow the operating instructions on the appliance or in the manual.
- Health problems that seem to be worse or only occur when the heating is on may be caused by carbon monoxide from a faulty gas heater. Be aware of the symptoms of carbon monoxide and seek medical attention if necessary.
- If you have an old open-flued gas heater, consider safe alternative heating or replacing with a room-sealed gas heater or split system at the next opportunity.
- Consider buying an audible carbon monoxide alarm that meets EU or US standards.

Gas heaters need to be professionally installed and serviced by a trained and qualified gasfitter. An unsafe heater can cause a house fire or pollute your home with dangerous fumes including carbon monoxide. Having your gas heater serviced at a minimum of every two years by a qualified gasfitter, can help keep your family safe.

Some gas heaters have been identified as posing a serious health risk. The Department of Health and Human Services Victoria advises that you do not use a Vulcan Heritage or Pyrox Heritage gas heater in your home until it has been tested and serviced by a qualified gasfitter.

Health problems linked to faulty gas heaters

A faulty gas heater can cause serious health problems. Health problems that seem to be worse or only occur when the heating is on may be caused by carbon monoxide (CO) from a faulty gas heater.

Carbon monoxide is colourless and odourless. High levels of carbon monoxide in the air are very dangerous and may cause people to pass out or even die. Children, pregnant women and their unborn babies, older people, and people with chronic illnesses such as heart and lung disease are at increased risk from air pollutants, including carbon monoxide.

Symptoms of carbon monoxide poisoning include:

- tiredness
- shortness of breath
- headaches
- dizziness
- nausea
- weakness
- confusion
- chest pain

If you suspect you may be affected by carbon monoxide, open windows and doors, turn off the appliance and go outside to breathe fresh air. See your GP and ask whether your symptoms may be related to carbon monoxide, and get your gas heater serviced before you use it again.

If you are not using your gas heater, consider safe alternative ways of keeping warm, as cold temperatures may also cause health problems, particularly for young children, older people and those with chronic illnesses. If you know someone in this situation, consider checking on them and what you might be able to do to help.
**Have your heater serviced regularly**

All types of gas heaters should be serviced a minimum of every **two years** by a licenced gasfitter and tested for carbon monoxide spillage. This includes all central heating units, space heaters, wall units and gas log fires.

Only use a licensed gasfitter who has completed training on detecting and correcting risks of carbon monoxide spillage. Before you book, make sure to ask if the gasfitter has the right equipment and has completed this training, as poorly functioning or faulty gas appliances can be a source of carbon monoxide exposure, which is a risk to health and sometimes life.

Professional servicing, including inspection of the flue or chimney, is recommended. Get your heater serviced if:

- it has not been serviced for two years.
- there is a yellow or sooty flame (unless it is a decorative gas log fire).
- the pilot light goes out unexpectedly, or ‘pops’ or ‘bangs’ when lighting.
- there are signs of heat damage such as discoloration of the walls or heater panels.
- the walls become too hot to touch while the heater is on.
- there are soot stains around the heater.
- immediately if there is any sign of trouble.

Manufacturers and suppliers usually have recommended service agents. You can use these if you wish. You can also enquire with your gas company, search online, or check the Yellow Pages (under ‘h’ for heating).

If you do find a gas heating specialist from the Yellow Pages or online, make sure that they are a licensed gasfitter endorsed for gas appliance servicing. You can check this on the Victorian Building Authority (VBA) website, or in person, by asking to see the tradesperson’s VBA licence. If they are registered and licensed, they will have a photo ID card that states what kinds of work they are allowed to do. They should carry this with them, and you can ask to see it at any time.

**Using carbon monoxide alarms**

Consider buying an audible carbon monoxide (CO) alarm. Carbon monoxide alarms can be a useful back-up precaution, but should not be considered a substitute for the proper installation and maintenance of gas heating appliances. There is no standard in Australia that covers the design, manufacture, installation or servicing of CO alarms for domestic premises. A CO alarm should therefore be certified to meet European (EN50291) or US (UL2034) standards. CO alarm manufacturers suggest installing CO alarms in or near to every room that has a gas heating appliance. When selecting installation locations, make sure the alarm is audible from all sleeping areas. If you are intending to purchase CO alarms, consider alarms that provide visual and audible alarms indicating when the electrochemical sensing cell has expired.

**How to use a gas heater safely**

Always follow the operating instructions on the appliance or in the manual if you have one. If you have an open-flued gas heater, limit how much you use it and consider safe alternative forms of heating.

**Always:**

- have plenty of ventilation – ventilation is very important as it allows fresh air to come in and fumes to go out
- avoid running exhaust fans (bathroom, kitchen) if you have an un-flued or open-flued gas heater, as this may cause carbon monoxide to leak back into the room; this possibility should be tested when you have your heater serviced
- clean your heater (when the heater is off and cool) to reduce dust build-up by vacuuming out any duct registers and cold air return vents (the register is the central heating duct opening in each room, which can be seen when the cover grill is lifted).
- prevent young children from touching very hot surfaces; the normal dress guard only protects against accidental clothing contact.
- be careful when drying clothes inside – keep all flammable materials at least one metre away from the heater

**Never:**
• leave a gas heater running when you go to bed
• use an unflued gas heater in a bathroom, bedroom or caravan. Toxic gases may cause serious health problems in these situations.
• use or store solvents, aerosols or pressure pack cans near a gas heater – even if the heater is turned off, the pilot light may still be on.
• dispose of rubbish such as tissues, cotton buds or other things in a gas fire – this can affect combustion and produce dangerous pollutants.
• use an outdoor appliance inside (this includes barbeques and patio heaters).

Replace old gas heaters
Heaters do not last forever. Some heaters cannot be repaired for safety reasons and, sometimes, spare parts are not available for older heaters. If your heater is very old (around 15 to 20 years), it may not be possible or worthwhile for your service person to repair it. Be advised by your licensed gasfitter.

Consider replacing open-flued gas heaters with room-sealed gas heaters or split systems at the next opportunity.

Old unflued gas heaters
Old unflued gas heaters within the home may not meet current emission standards. Unflued gas heaters draw air from within the room and emit combustion products back into the same space where the heater is located which can lead to serious health problems including death.

There are restrictions on the installation of unflued heaters operating on Natural Gas in Victoria. Consult with your licensed gasfitter before considering purchasing or installing.

Unflued gas heaters require ongoing ventilation to external spaces to allow fresh air to fuel the burner and discharge combustion products. Replace any unflued heaters that are more than 10 years old, or if you feel that your health is being affected by them.

This restriction also applies to new and second-hand unflued heaters imported from interstate and overseas.

Extra safety tips for gas heaters
• Always make sure that a patio heater is stable or fixed, and only use them outdoors.
• Never use or store a gas cylinder indoors.
• Never use an industrial-type heater in a domestic situation.
• Never use a cabinet heater. A cabinet heater is an indoor gas heater that is fuelled by an LPG gas bottle, which is housed inside the heater itself.

Where to get help
• Energy Safe Victoria  Tel. 1800 800 158
• Environmental Health Unit, Department of Health and Human Services Tel. 1300 761 874
• Your GP
• Licensed gasfitter
• Victorian Building Authority – to check that you’re dealing with a licensed gasfitter Tel. 1300 815 127