

Beware carbon monoxide— It's a silent killer

Gas appliance safety



Creating a safer state
with electricity and gas

Is your home harbouring a **silent killer**?

Carbon monoxide (CO) is an odourless, colourless gas that can be produced at high levels by faulty, unserviced gas heaters and portable LPG appliances if they are misused.

Carbon monoxide poisoning can be fatal or it can cause chronic illness that can go undiagnosed. This brochure describes the risks and how to minimise them for you and your family.

Deadly consequences

Carbon monoxide stops your blood from carrying oxygen.

Carbon monoxide poisoning can be fatal or cause chronic illness. Sometimes difficult to diagnose, symptoms can include:

- tiredness
- shortness of breath
- mild or severe headaches
- nausea and vomiting
- weakness and sleepiness.

If the poisoning is extreme it may lead to confusion, loss of consciousness and death. Loss of consciousness can occur quickly if carbon monoxide concentrations are high.

Some people are especially sensitive to carbon monoxide. They include people with heart disease or anaemia, young children, unborn babies and the elderly. Symptoms can occur when using, or immediately after using, a gas appliance that produces too much carbon monoxide.

Every type of gas fuel burning heater should be serviced regularly, including central heating units, space heaters, wall furnaces and water heaters.

Installed gas heaters

Gas heaters must be serviced regularly

Regular servicing of gas heaters is the only way to reduce the risk of carbon monoxide poisoning caused by faulty appliances.

Energy Safe Victoria and the Victorian Building Authority recommend getting your gas heater serviced at least every two years by a licensed gasfitter with the appropriate equipment to test for carbon monoxide spillage.

What causes the problem?

Carbon monoxide can be produced in high concentrations if the heater does not completely burn the gas it uses.

This can happen for a number of reasons but the most common causes are faults, lack of servicing, lack of ventilation or a blocked flue.

The danger is greater when carbon monoxide is spilling into a bedroom or caravan where the door or windows are tightly sealed, or into a confined space such as a toilet or bathroom. Exhaust fans can also draw carbon monoxide **back into** your home through the flue of open-flued space heaters and open-flued indoor water heaters.

Signs of a faulty heater may include:

- soot or discolouration around the gas appliance
- yellow flames (although these are deliberately used for decorative effect in some appliances such as gas log fires)
- the heater going out for no apparent reason
- debris falling down the flue pipe
- missing or a damaged cowl on the top of the flue pipe.

Landlord and agent responsibilities

The Residential Tenancies Act 1997 requires landlords and their agents to ensure that rented accommodation is maintained in 'good repair'. This includes all gas and electrical appliances provided by the landlord, which must be safe to use and properly maintained.

For further information, refer to ESV's Landlords and Tenants: Your Responsibilities guide which may be found on the ESV website.

Tip

When choosing a gasfitter to service your heater, ask if they use **carbon monoxide detection equipment**. If they don't, find another gasfitter who does.

Portable gas appliances

Are you bringing a silent killer in from the cold?

Never bring portable gas appliances designed for outdoor use inside your home, caravan, car or tent. In an enclosed area carbon monoxide can build up quickly, causing serious illness or death.

Convenient and easy to use, portable LPG appliances are increasingly popular. Appliances such as portable heaters, patio heaters, BBQs, water heaters, LPG-powered lights, fridges and ring burners are designed for **outdoor use only**.

There are some exceptions, but **always follow the manufacturer's instructions and take note of the warning label attached to your appliance.**

What causes the problem?

When LPG is burnt, one of the natural products is carbon monoxide. LPG appliances also consume oxygen, which in an enclosed area can make them produce even more carbon monoxide.

The danger is when carbon monoxide builds up in a confined or poorly ventilated space like a room, caravan, mobile home, car, or tent.

What to look for

All portable LPG appliances approved for use in Australia will carry a warning, such as:

- **Carbon monoxide hazard – using this appliance in an enclosed space may cause death. Do not use in caravans, tents, marine craft, cars, mobile homes or similar locations.**
- **Use only in a well ventilated space**

Appliances designed for outdoor use only will also display the following warning:

- **Use outdoors only – indoor use may cause death. See operating instructions.**

Although you and your tent are in the great outdoors, gases like carbon monoxide can still build up quickly. Your tent, car or caravan is an enclosed space!

Never misuse an outdoor gas appliance – the consequences could be deadly.

Take action to protect your family

- **Get your gas heater serviced every two years**

Have your gas heater serviced a minimum of every two years by a licensed gasfitter. Make sure the gasfitter you choose uses carbon monoxide detection equipment. Search the internet to find a gasfitter in your area or look in your local newspaper.

If you live in rental accommodation, make sure your landlord or their agent arranges to have gas heaters in your home serviced regularly.

If your heater shows any signs of problems (including yellow flames, soot or going out after a short time) have it inspected immediately.

- **Never use an outdoor gas appliance in an enclosed space**

Unless specifically labelled otherwise, never use a portable gas appliance in an enclosed, confined or poorly ventilated area.

If in doubt, play it safe and take it outdoors.

- **Tell your doctor immediately if carbon monoxide poisoning is suspected.**

On average, one Victorian a year dies from carbon monoxide poisoning and many more suffer chronic, debilitating illness.

In 2010, Vanessa and Scott Robinson lost their two sons, aged six and eight, to carbon monoxide poisoning caused by a faulty gas heater in their rented home.

Deaths from portable gas appliances have included a double fatality from using a gas cartridge heater in a car, a death from using a patio heater in a unit, and a death from using a portable LPG refrigerator in a car.

Tip

If you're unsure whether a portable gas appliance should be used anywhere other than an outdoor, well-ventilated area, **play it safe and take it outside.**




For further information go to
www.esv.vic.gov.au or phone
ESV on **(03) 9203 9700**.



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A photograph showing a close-up of a window frame with dark grey or black trim and a wooden floor.