WHAT SHOULD BE DONE?

It is essential that adequate building ventilation to the outside is maintained to ensure adequate air flow even if the heater is working properly. Doorways and windows should never be sealed up.

Regularly check the colour of the flame in the heater. A blue flame burning within the heater is normally an indication of a good flame and that the heater is working properly.

A yellow or sooty flame indicates a faulty heater – apart from appliances where yellow flames are deliberately used for decorative effect.

Look for the following visible warnings that problems exist:

- Soot or discolouration around the gas appliance;
- Yellow flame;
- Heater goes out after a short time for no apparent reason;
- Debris falling down the flue pipe;
- Missing or damaged cowl on the top of the flue pipe.

If property owners and tenants have any concerns about the adequacy of the ventilation in their homes they should arrange an inspection by a registered or licensed gasfitter. Alternatively call ESV on 1800 652 563 or the Plumbing Industry Commission (PIC) on 1300 815 127.

The gasfitter who services your appliance must have a carbon monoxide (CO) analyser/detector that has been calibrated correctly in the required time frame to detect CO. The CO reading must be less than 10 parts per million (ppm).

ADVICE FOR LANDLORDS

The Residential Tenancies Act 1997 requires a landlord to ensure that rented accommodation is maintained in good repair.

"Good repair" includes all gas appliances provided by the landlord. They must be safe to use and properly maintained.

Landlord responsibilities relating to gas appliances

- Ensure only licensed or registered gasfitters carry out all gasfitting work;
- Before re-letting, ensure all appliances are safe and any unsafe appliance is repaired or removed;
- Ensure all gas appliances, pipework and flue systems are maintained in a safe condition;
- Ensure all ventilation openings are clear and unobstructed:
- Ensure all pipes are sealed correctly if an appliance has been removed;
- Record all safety checks and details of work carried out on a gas installation.

ADVICE FOR TENANTS

Tenants should be aware that they have responsibilities for the safe use and care of gas appliances within the properties they rent.

Tenant responsibilities relating to gas appliances

- Use gas appliances appropriately;
- Allow reasonable access for the landlord's contractor to carry out gas safety checks;
- Report any fault or malfunction in a gas appliance to the landlord or agent;
- Stop using any appliance which is obviously faulty;
- Do not illegally install, remove or tamper with any gas appliance;
- Do not use damaged appliances.

Energy Safe Victoria Phone (03) 9203 9700 or the Gas Technical Helpline 1800 652 563 Web www.esv.vic.gov.au Email info@esv.vic.gov.au

Issued by Energy Safe Victoria

GAS SAFETY BEWARE CARBON MONOXIDE







INTRODUCTION

It's called the silent killer. You can't see it. You can't smell it. It's carbon monoxide and it can kill.

Because it is an odourless gas, people will not know that it is present.

Therefore, owners and tenants of properties with gas heaters must be aware of the possibility that carbon monoxide (CO) is present and that it is dangerous.

Landlords and their agents have particular responsibilities under the Residential Tenancies Act 1997 to ensure gas appliances in rented accommodation are safe to use and properly maintained.

Tenants should also be aware of their responsibilities when it comes to the care and use of gas appliances.

It is mainly faulty, unserviced gas heaters which can cause carbon monoxide to be produced. If carbon monoxide spills into the room as a result of any one of a range of issues, including an obstruction in the flue terminal or inadequate building ventilation to the outside, carbon monoxide poisoning may occur.

Gas safety regulator, Energy Safe Victoria (ESV) and the Plumbing Industry Commission (PIC) strongly recommend that gas appliances be serviced regularly by a licensed or registered gasfitter before the start of winter or at least every two years.

If a person is exposed to a large amount of carbon monoxide for a long period, that person may die from carbon monoxide poisoning.

While there have been a number of deaths from CO poisoning in Victoria in the last few years, ESV is also aware of countless near misses where people have nearly died from carbon monoxide poisoning.

WHAT IS CARBON MONOXIDE (CO)?

Carbon monoxide (CO) is a by-product of hydrocarbon combustion and can be produced in large quantities when combustion is incomplete due to obstruction of the flame, incorrect gas operating pressure, poor air/gas ratio control or simply a bad burner. When hydrocarbons such as Liquefied Petroleum Gas (LPG) and Natural Gas (NG) are burnt, the carbon and hydrogen react with the oxygen in the air to form carbon dioxide and water.

When combustion is incomplete, however, large quantities of carbon monoxide can be produced.

CO can build up in a small room such as a bathroom or toilet very quickly if the spillage is excessive and there's no ventilation. For a larger room such as a living room, it would take longer for the CO to build up.

WHAT ARE THE DANGERS OF CARBON MONOXIDE?

As mentioned, carbon monoxide has claimed the lives of a number of people over the years. If the products of combustion from a gas appliance installed inside a building are dispersed to the outside atmosphere as they should be via a suitable, sound flue, there is not a problem.

The danger arises when large quantities of carbon monoxide are being produced during combustion and the flue products are not being dispersed to the outside atmosphere.

Flue products may not be dispersed to the outside atmosphere if:

- 1. The flue does not terminate outside the building;
- 2. The appliance heat exchanger is split;
- The flue terminal of an open flued appliance is blocked;
- 4. The flue is broken or blocked;

The danger is highly accelerated when the carbon monoxide is spilling into:

- A bedroom or caravan where all the door and window openings are tightly sealed.
- A confined space such as a toilet or bathroom where people spend some amount of time.

WHAT ARE THE SYMPTOMS OF CARBON MONOXIDE POISONING?

Early CO poisoning symptoms include tiredness, shortness of breath, mild headaches and nausea.

When CO poisoning gets worse, people may experience:

- severe headaches;
- dizziness;
- weakness and sleepiness;
- nausea and vomiting.

If the poisoning is extreme, it may lead to confusion, loss of consciousness and death.

Loss of consciousness can occur quickly.

Some people are especially sensitive to CO. This includes people with:

- heart disease;
- anaemia;
- young children;
- unborn babies;
- the elderly.

It is very important to note that small children are more susceptible to CO poisoning than adults.

Symptoms may occur when using, or immediately after using, a gas appliance. Doctors should be alerted when CO poisoning is suspected. Tests can be conducted but they need be done quickly after exposure to CO so that it registers on the results. A pattern of symptoms in more than one person is a very strong warning of CO poisoning.

Unfortunately there have been instances where people suffering from CO poisoning have not been appropriately diagnosed by their doctor.

Not all doctors are fully aware of the symptoms of CO poisoning, but this is being addressed through an awareness programme.