

# Don't let a killer into your home



## Your guide to the prevention of carbon monoxide poisoning

### Understanding the dangers

Carbon monoxide is the silent killer. You can stop it. Every year people needlessly die or become chronically ill due to carbon monoxide poisoning.

A few simple steps, including an annual gas safety check by a CORGI registered installer if you have gas appliances, or getting your chimney swept regularly, could prevent the deaths of you and your loved ones.

#### Be safe. Be legal

It's a legal requirement for anyone carrying out gas-related work to be registered with CORGI. If they are not CORGI registered, then they are working illegally and therefore, unsafely.

In fact, CORGI is the only body charged by the government's Health and Safety Executive (HSE) to maintain a register of competent gas installers in Great Britain, Northern Ireland, Guernsey and the Isle of Man.

The good news is that when gas is used correctly and with respect, it's a safe, economical fuel.

Simply follow the advice in this factsheet and you will have the knowledge to prevent a tragedy happening in your home.

#### So, where does carbon monoxide come from?

Gas stoves, fires and boilers, gas-powered water heaters, paraffin heaters, solid fuel powered stoves, boilers and room heaters are all capable of producing carbon monoxide if they are not appropriately installed and maintained.

Carbon monoxide can also seep into your home via shared flues (ventilation pipes) and chimneys. There have even been cases where gas fires have been vented into cavity walls, and led to the poisoning of neighbours living above.

#### What – exactly – is carbon monoxide?

Carbon monoxide is a chemical compound of carbon and oxygen. It's a colourless, odourless and extremely poisonous gas that's formed whenever carbon, such as gas, coal, wood or oil, are burned with an insufficient air supply.

This is called 'incomplete combustion'.

Causes of 'incomplete combustion' in an appliance include:

- Faults or poor maintenance/servicing.

- Incorrect installation.
- Lack of ventilation.

#### And how can carbon monoxide kill you?

When carbon monoxide is inhaled, it prevents absorption of oxygen into the body and can result in oxygen starvation.

That's because the oxygen-absorbing haemoglobin in our blood that carries the oxygen from our lungs to the rest of our body, finds it 240 times easier to absorb carbon monoxide. So the carbon monoxide attaches itself to the haemoglobin and starves the body of oxygen.

Any exertion increases oxygen demand and makes the problem worse, rapidly leading to collapse and potentially death.

What's more, the smaller the victim, the more quickly the body can be overcome by the effects of carbon monoxide. Which puts children at even greater risk.

### Making your home safe

#### Your steps to carbon monoxide safety

To make sure your home remains safe, follow these simple steps:

- Your gas appliances should be installed by a CORGI registered professional. Do not be tempted to 'do it yourself'.
- Ensure your gas appliances are serviced regularly and annually safety-checked by a CORGI registered installer.
- Never allow illegal gas workers to install or maintain your appliances.
- If an appliance is not working properly, turn it off and get it checked by a CORGI professional.
- Keep flues and vents clear. Have chimneys swept regularly.
- Install an audible carbon monoxide alarm.

#### Choosing a carbon monoxide alarm

Installing a carbon monoxide alarm is an essential second line of defence against carbon monoxide poisoning. It will cost around £25 – a small price to save a life.

There are a number of alarms available from most good DIY stores, [trustcorgi.com](http://trustcorgi.com) or your CORGI registered installer:

- Choose a detector with an audible alarm that will wake you in an emergency.

- Make sure it meets current British and European safety standards – look for the 'Kitemark'.
- Read the instructions carefully before installation.
- Some are portable so you could take it with you when you move or go on holiday.

We don't recommend the 'black spot' carbon monoxide detectors. Although significantly cheaper (about £5) than the audible alarms, they are often inaccurate and cannot alert you in the same way.

**Remember: a carbon monoxide detector is NOT a replacement for an annual gas safety check or a chimney sweep!**

### How to recognise the warning signs

You can usually tell if your gas appliance is working correctly by observing the flame. A yellow/orange, uneven flame is evidence of incomplete combustion. A 'healthy' flame should be crisp, vibrant and blue.

Other indications of incomplete combustion are:

- Soot deposits or staining around the appliance.
- The pilot light frequently goes out.
- Condensation forms in the room where the appliance is installed.

### What are the symptoms of carbon monoxide poisoning?

Carbon monoxide poisoning is often confused with flu because the symptoms include severe headaches, chest or stomach pains, drowsiness, nausea, dizziness and general lethargy. It can affect the victim's mental ability before they are even aware that there's a problem.

To confuse matters further, severe carbon monoxide poisoning turns the skin pink and the lips bright red. So despite being asphyxiated, the victim doesn't turn blue as you'd expect.

Experiencing any of these symptoms in the vicinity of a gas appliance requires urgent medical attention.

### Speak to your doctor straight away

If you suspect you have carbon monoxide poisoning, don't hesitate to visit your GP as soon as possible. Diagnosing carbon monoxide poisoning is not easy because it simulates many other conditions, so do say what you think is wrong.

The following are helpful indications for the diagnosis of carbon monoxide poisoning:

- More than one person in the house is showing symptoms.
- The patient feels better when away from the house e.g. on holiday, but becomes ill again on returning home.
- Symptoms occur when using a gas appliance or other fuel burning device.

Ask for either a blood and/or breath sample be taken without delay. That's because your body's carbon monoxide level will reduce the longer you are away from the contaminated environment, making it harder to detect.

### What should you do in an emergency?

It's vital that the victim is:

- Removed immediately from the contaminated area.
- Placed in the open air.
- Given pure oxygen if available.
- Kept at rest – avoiding all exertion.

You need to call for medical help urgently. Dial 999 and ask for an ambulance.

In short: evacuate, ventilate, communicate.

If you suspect that an appliance is leaking carbon monoxide, turn it off, open all doors and windows, and get it checked by a CORGI registered installer as soon as possible.

### Finding a CORGI registered installer

A CORGI registered installer is a gas expert. They have undergone extensive training to gain registration.

On the other hand, the majority of work carried out by illegal gas workers has been found to have serious safety defects. Therefore, by using a tradesperson who isn't CORGI registered, you are putting your life at risk.

Always ask to see their CORGI ID card. Alternatively, check their registration number with us via the website or by calling **0800 915 0485**.

If you suspect that someone is working illegally, then please report them to us by calling our Installer Safety Line on **0800 915 0485**.

CORGI registration does not automatically cover all areas of gas work. Most installers specialise, so ask if they are qualified to do the work you require. You can check with our Customer Services Team or look on the back of the installer's CORGI ID card.

### Need a CORGI registered installer?

To find a CORGI registered installer in your area, call our Customer Services Team on **0800 915 0485** or visit our website: [www.trustcorgi.com](http://www.trustcorgi.com)