

The Facts About Carbon Monoxide



Gas
Networks
Ireland

What is carbon monoxide?

The basic facts:

- Carbon monoxide (also known by its chemical symbol, CO) is a highly poisonous gas
- It has no colour, no smell and no taste and is often called 'the silent killer'
- When inhaled, it prevents blood from absorbing oxygen
- At high levels it can kill in as little as 3 minutes; at lower levels it causes illness
- It kills, on average, 6 people in Ireland every year and makes many more ill
- It can be produced by any fuel when burned – coal, turf, oil, gas, wood
- It doesn't just occur at home – in fact it can be produced anywhere that fuel is being burned: caravans, tents, mobile homes, boats, holiday homes, workplaces

How to protect yourself from carbon monoxide:

- Be aware: any appliance, burning any type of fuel, can produce carbon monoxide
- Ensure fuel burning appliances are properly installed and regularly maintained by a qualified service agent
- Keep vents, flues and chimneys clear
- Use fuel burning appliances correctly
- Have at least one audible carbon monoxide alarm installed in your home and anywhere else you burn fuel

Where does it come from?

Carbon monoxide can be released by any fuel when it is burned, including coal, turf, oil, gas and wood. Harmful levels can be produced by:

- Any badly installed, faulty, damaged or blocked heating appliance, chimney or flue, such as:
 - Open fireplaces (coal, turf, wood, briquettes)
 - Gas or LPG boilers, heaters, fires etc.
 - Oil-fired boilers
 - Solid fuel stoves
- Blocked or insufficient ventilation in rooms where a fuel burning appliance is in use
- Barbecues
 - Barbecues produce carbon monoxide when in use, but can also release carbon monoxide after they appear to be extinguished
- Petrol-driven machinery
 - Never run a car, lawnmower, generator or other engine-powered equipment in any confined, enclosed or poorly ventilated spaces
 - Ensure exhaust fumes are not drawn in through open doors, windows or vents
- Improper use of fuel-burning appliances, such as:
 - Using a cooker to heat a room
 - Using a gas grill with the door closed
 - Bringing a barbecue indoors or under cover such as into a tent or awning
 - Burning rubbish in an open fireplace or stove that could block the chimney

Carbon monoxide can also be produced by the natural oxidation of wood and biomass pellets such as those used for wood pellet heating systems, even without burning.



It's colourless, it's odourless,
It's hard to detect.
So carbon monoxide deserves
Your respect.

Beware of the odourless,
Colourless gas, carbon monoxide.
And always barbecue out in the open
Never, ever inside.



How do I prevent carbon monoxide poisoning?

There's a lot you can do

- Make sure all your fuel-burning appliances are installed by a qualified installer
- Get your boiler and any other fuel-burning appliances serviced once a year
 - Always use a qualified service agent for your fuel type
- Get your chimney swept once a year
- Keep your flues and chimneys clear at all times
- Never block room ventilators
- Make sure any building work does not interfere with your existing ventilation or flue arrangements
- Use appliances correctly and for their intended purpose
- Don't use appliances you suspect may be faulty
- If you store wood or biomass pellets, make sure your store is well ventilated

What else do I need to know about appliances?

- Get all appliances serviced annually
 - If you are not sure it is working safely, get it inspected by a qualified service agent
- Always buy appliances from a reputable outlet
- All appliances should carry the CE mark
- Read the instruction manuals carefully
- If you're moving house, leave the instruction manual for any appliance you're not taking with you
- You'll find safety notifications about appliances on www.carbonmonoxide.ie

Be sure your boiler's always kept
In excellent condition,
By getting it serviced once a year
By a registered technician.



Carbon monoxide alarms

Alarms are no substitute for prevention, but if there is carbon monoxide in your home, you need an alarm to detect it and alert you.

- Alarms should be audible; a visual indicator alone is no use if you're asleep
- Alarms should carry the CE mark and should comply with the European Standard EN 50291
- They should have an 'end of life' indicator to tell you when they need replacing
- Alarms are available in most hardware or DIY shops
- Basic models usually cost between €20 and €30
- You should have one in every room that has a fuel-burning appliance and one within 5 m (16 ft) of every bedroom
- Always follow the manufacturers' installation instructions carefully
- Check your alarm regularly by pushing the "test" button
- Alarms should also be fitted in caravans, boats or other locations where fuel is burned

What if the alarm goes off?

- Open doors and windows to ventilate the area
- Turn off / stop using any fuel burning appliances immediately
- Get everyone in the property into fresh air
- If you are sure you are not suffering any symptoms related to carbon monoxide poisoning (see next page), call a qualified service agent to check your appliances before you re-use them
- If you are still concerned, call the Carbon Monoxide Awareness Line on 1850 79 79 79

And not just any alarm now,
It has to make a beep,
So if you're in yer scratcher,
It'll wake yeh from yer sleep.



What are the signs of carbon monoxide in your home?

Signs of carbon monoxide may include:

- Staining, sooting or discolouring around an appliance
- Condensation on your windows
- A strange smell when an appliance is on (remember: carbon monoxide itself has no smell but other fumes produced by burning may smell)
- A yellow or orange flame on a gas appliance where it is normally blue

What are the symptoms of carbon monoxide poisoning?

Symptoms of carbon monoxide poisoning can include:

- Flu-like symptoms e.g. drowsiness and headaches
- Chest pains
- Nausea (feeling sick)
- Diarrhoea
- Dizziness
- General lethargy (lack of energy)

Other signs include:

- Symptoms occurring when a particular appliance is on
- Others in the property (including pets) suffering similar symptoms
- Symptoms improving when you are away from the property

What do I do?

- If you or someone you know is experiencing some of the described symptoms and you suspect carbon monoxide poisoning, visit a doctor immediately and ask them to check for carbon monoxide poisoning
- If you find someone ill or unconscious and suspect carbon monoxide poisoning, ventilate the area immediately by opening all windows and doors
- Stop using all fuel-burning appliances immediately and don't use them again until they have been inspected by a qualified service agent

What if I'm away from home?

Even when you're away from home, remember: anything that burns fuel – kerosene heaters, engines, stoves, generators, barbecues etc. – can emit carbon monoxide.

If you own a holiday home, caravan, mobile home or boat...

- Ensure appliances are installed, maintained and used correctly
- Make sure there is adequate ventilation
- Keep all vents and exhausts clear
- Install an audible carbon monoxide alarm

Many people don't realise that barbecues can emit a lot of carbon monoxide both while they're burning and after they appear to have gone out. So always use a barbecue in a well-ventilated place and never bring it under a cover or awning, or inside a tent.



Who can I talk to for carbon monoxide advice?

- **General advice**

Visit www.carbonmonoxide.ie or call 1850 79 79 79

- **Gas appliances**

Contact a Registered Gas Installer. Visit www.rgii.ie or call 1850 454 454

- **LPG appliances**

Contact a Registered Gas Installer or visit www.ilpga.ie

- **Oil appliances**

Contact a qualified professional such as an OFTEC Registered Technician.
Visit www.oftec.org or call (01) 864 5771

- **Solid fuel appliances**

Contact your appliance supplier or manufacturer

Alternatively, contact your fuel supplier.



