

## Be Carbon Monoxide Aware – Wherever You Are



Carbon monoxide is a colourless, tasteless, odourless gas, which can cause sudden illness and death. Carbon monoxide is produced when carbon containing fuels burn without enough oxygen. Carbon containing fuels include:

- Gas (domestic and bottled);
- Oil (domestic and those used in portable heaters, such as paraffin); and
- Solid fuels (such as coal, wood, biomass and charcoal).

Exposure to high levels of carbon monoxide can be lethal and at non-fatal levels can cause acute and chronic health effects. Carbon monoxide causes around 40 known accidental deaths and around 200 serious injuries in England and Wales each year<sup>1</sup>. Exposure to carbon monoxide is also the reason for 4,000 patients attending A&E in England each year.<sup>2</sup> At lower levels it may produce symptoms which resemble flu or food poisoning.

HPA urge the public to be aware of the risks of carbon monoxide at all times of the year and to recognise the symptoms of carbon monoxide poisoning which include:

- Headache
- Dizziness
- Nausea
- Confusion
- Memory loss
- Coma, and
- Death.

Pregnant women and their unborn child and children are at particular risk from carbon monoxide poisoning.

The following are potential sources of carbon monoxide:

### At home

- Boilers using a carbon containing fuel (e.g. oil, gas and solid fuel) have the potential to produce carbon monoxide if they are not installed correctly or are poorly maintained.
- Heating and cooking appliances (e.g. fires, ovens and hobs) which burn carbon containing fuels, have the potential to produce carbon monoxide if they are not installed correctly, are poorly maintained or used inappropriately. It is important that flues and chimneys are cleaned, vent to the outside and are not blocked or covered.
- Any un-flued heating or cooking appliance (those which are meant to work without a flue) should not be used in small, closed-up rooms. Adequate ventilation is required to ensure these appliances work correctly. It is also important that these appliances are maintained by an appropriately registered engineer.

<sup>1</sup> [http://www.dh.gov.uk/prod\\_consum\\_dh/groups/dh\\_digitalassets/documents/digitalasset/dh\\_121501.pdf](http://www.dh.gov.uk/prod_consum_dh/groups/dh_digitalassets/documents/digitalasset/dh_121501.pdf)

<sup>2</sup> <http://gp.dh.gov.uk/2011/09/27/carbon-monoxide-poisoning-alert/>

### Out and about

- Barbecues **ALWAYS** produce carbon monoxide due to the use of smoldering charcoal. **NEVER** use a barbecue in a confined space, such as a tent or awning or inside a building.
- Portable generators which burn fuel such as gas, petrol or diesel can produce carbon monoxide. **NEVER** run a generator in a confined space, such as inside a building or a boat.
- Be aware that 'mobile' lodgings, such as boats and caravans may contain heating and cooking appliances, which have the potential to produce carbon monoxide. These should be maintained by an appropriately registered engineer. Carbon monoxide can build up to dangerous levels very quickly in small spaces such as caravans and boats. Adequate ventilation in these environments is essential.
- Portable heating and lighting appliances, such as paraffin lamps, can produce carbon monoxide and should not be used in confined spaces, with inadequate ventilation.

### Some other sources

Wherever a carbon containing fuel is used, there is the potential for carbon monoxide to be produced and to accumulate:

- **NEVER** run your car engine in a confined space, such as a garage or integral garage.
- Be aware that smoking also produces carbon monoxide. This is particularly relevant when water pipes (also known as Shisha or Hukka) are being used in confined spaces.
- Be aware that carbon monoxide, like any gas, can travel within building structures and therefore has the potential to travel to your property from a source outside of your control; for example within a block of flats or from a neighboring property.

### REMEMBER

- **Always** ensure your appliances are professionally installed and maintained by an appropriately registered and qualified engineer;
- **NEVER** use portable cooking or heating appliances in confined spaces;
- Install an audible carbon monoxide alarm which is EN50291 compliant in your home. Also, take one with you on holiday, if you might be at risk of carbon monoxide.

Be aware of the risks of carbon monoxide wherever you stay and whatever the time of year.

**Be aware of the symptoms of carbon monoxide poisoning: headaches, tiredness, difficulty in thinking clearly and feeling sick.**

**Carbon monoxide can and does kill.**

For more information on carbon monoxide see: [www.hpa.org.uk/chemicals/co](http://www.hpa.org.uk/chemicals/co)

Useful contact numbers:

999	Emergency services	0800 408 5500	Gas Safe Register
0800 111 999	Gas Emergency	0845 658 5080	OFTEC (oil)
0845 4647	NHS Direct	0845 634 5626	HETAS (solid fuel)

