Health & Safety Bulletin



SUBJECT: Carbon Monoxide Awareness

RECIPIENTS: All Council Services (including schools)

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Carbon Monoxide Awareness

This information bulletin gives details of health symptoms of carbon monoxide poisoning and danger signs to look for on appliances. This will be useful for staff who are delivering services in the community who can circulate to teams and pass on advice where necessary.

What is carbon monoxide- why is it a problem? - Carbon monoxide (CO) is a colourless, odourless, poisonous gas that is produced by incomplete burning of carbon-based fuels, including fuel gas. When CO gets into the body, it prevents the blood from bringing oxygen to cells, tissues, and organs. Every year approximately 20 people die from CO poisoning caused by gas appliances and flues that have not been properly installed or maintained. Last year there were 4,000 cases of carbon monoxide poisoning reported by A&E departments across the country. Fuel gas is safe to use. It is only when gas does not burn properly, as with other fuels such as coal, wood or oil, that excess CO is produced, which is poisonous. You can't see it, taste it or smell it but CO can kill quickly without warning.

What preventative measures can I take against carbon monoxide exposure?

- Ensure that any work carried out in relation to gas appliances in domestic or commercial premises is to be undertaken by a Gas Safe installer, competent in that area of work.
- HSE strongly advises that gas appliances and/or flues are serviced regularly for safety by a Gas Safe
 installer. If you live in tenanted accommodation, your landlord has a legal duty to carry out an annual gas
 safety check and maintain gas appliances. They must provide you with a copy of the completed gas safety
 check certificate.
- Always make sure there is enough fresh air in the room containing your gas appliance. If you have a chimney or a flue, ensure it is not blocked up and also ensure that vents are not covered.

Does HSE recommend the use of carbon monoxide detectors? - HSE strongly recommends the use of audible carbon monoxide (CO) detectors as a useful back-up precaution but they must not be regarded as a substitute for proper installation and maintenance of gas appliances by a Gas Safe installer. Before purchasing a CO alarm, always ensure it complies with British Standard EN 50291 and carries a British or European approval mark, such as a Kitemark. CO detectors should be installed, checked and serviced in line with the manufacturer's instructions.



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You can be particularly at risk from CO poisoning when you are asleep, because you may not be aware of early CO symptoms until it is too late. Having an audible CO detector could wake you and save your life. **What are the symptoms of carbon monoxide poisoning?** - Early symptoms of carbon monoxide (CO) poisoning can mimic many common ailments and may easily be confused with flu or simple tiredness. For more information visit NHS 111, Symptoms to look out for include:

- tiredness
- vomiting
- giddiness
- visual problems
- breathlessness

- drowsiness
- pains in the chest
- stomach pains
- headaches
- erratic behavior

If you or your family experience any of the above symptoms and you believe CO may be involved, you must seek urgent medical advice. Your doctor will need to test you for a blood or breath sample. Be aware, CO quickly leaves the blood and tests may be inaccurate if taken more than four hours after exposure has ceased.

How do I know if there is a risk from carbon monoxide? - Although carbon monoxide (CO) is a colourless, odourless gas there are signs that indicate incomplete combustion is occurring, resulting in the production of CO. These include:

- Yellow or orange rather than blue flames (apart from fuel effect fires or flueless appliances which display this colour flame)
- Soot or yellow/brown staining around or on appliances
- Pilot lights that frequently blow out
- Increased condensation inside windows

What should I do if I think an appliance is spilling carbon monoxide?

- Switch off the appliance and do not reuse until remedial action has been taken
- Shut off the gas supply at the meter control valve (if you know where it is). If gas continues to escape call National Gas Emergency number 0800 111 999
- Open all doors and windows to ventilate the room do not sleep in it
- Visit your GP urgently and tell them that you believe your symptoms may be related to carbon monoxide poisoning and request either a blood and/or breath sample
- Contact a Gas Safe registered installer to make repairs
- Further information is detailed on the HSE website: Domestic gas health and safety

For more Frequently Asked Question (FAQ's) please see: HSE Gas Safe webpage

If you require further assistance or clarification on the subject please contact:

Corporate Health & Safety Advisers (see George section: Corporate > Information for Working > Risk Management > H&S Advisers)

