

Residential Inspection Aid

Carbon Monoxide (CO)

You are:

- Inspecting a privately rented/owner occupier/social housing property
- Following up reported exposure to CO
- Following up a reported odour complaint

COULD THE PREMISES YOU ARE INSPECTING CONTAIN A LOW LEVEL SOURCE OF CO WHICH IS MAKING THE OCCUPANTS ILL?

1

Be aware that you could be entering a contaminated environment and that you should take appropriate precautions. Do not put yourself at risk.

If you suspect high levels of CO in the property and/or serious occupant exposure dial:

999 - Fire and Ambulance

0800 111 999 - National Gas Emergency Service

2

Look for:

- Presence of gas (flued or unflued), oil or solid fuel burning appliances (including cookers).
- Presence of sooty stains/deposits around the fuel burning appliance.
- Sufficient means of ventilation for combustion appliances to work properly [see Notes].
- Sufficient means of ventilation for the room – extract fan, trickle vents, openable windows.
- Flames to gas appliances burning yellow instead of mostly blue.
- Flues and appliances sited safely and well maintained by registered engineer [see Notes].
- A properly sited and working carbon monoxide alarm (test it and take a reading if possible).
- An integral garage.

TAKE READINGS IF YOU HAVE A DEVICE TO MEASURE CO

3

Ask the occupant:

- Do you ever use your oven or gas stove for heating purposes as well as cooking?
- Has the double glazing been recently fitted? (if present) [see Notes].
- Do you feel in better health at home or at your place of work? [see Notes].
- Do you or any other occupants suffer from headache, flu like symptoms, drowsiness, nausea?
- Do you notice odours coming from adjacent properties?
- Have you started using appliances after a long break?

COULD THE PROBLEM ORIGINATE FROM AN ADJOINING PROPERTY?

4

Stopping further exposure:

- Make sure appliances are turned off and windows are opened.
- Make sure the relevant safety service is contacted.
- Advise the occupant to have all appliances checked by a registered engineer before using again.
- Notify the local Health Protection Unit (HPU).

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Recommend that the occupant:

- Installs a CO alarm (EN 50291 compliant).
- Contacts other agencies for assistance, eg, Social Services.
- Contacts their GP or attend A&E immediately, especially if they have young children or babies.

Follow-up actions to take:

- Check adjoining properties under the appropriate legislation.
- Consider serving a notice on the landlord of a rented property [see Notes].

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Box 1 Property inspections and carbon monoxide

Referrals leading to the inspection of a property can be from a number of different sources: PCT, HPU, health visitor, social services, housing association, complaint from the occupier or a neighbour.

NB. CO poisoning is not limited to those from lower income groups.

Box 2 Carbon monoxide is a lethal gas at high levels

CO is a colourless, odourless, tasteless gas. Remember, malfunctioning ventilation equipment may cause the presence of an odour as well as cause CO to accumulate. If you suspect high levels of CO are present call the emergency services. Every employee has a duty to take reasonable care for the health and safety of himself and other persons (Section 7, HSW 74).

Box 3 Identification of carbon monoxide sources in premises

Gas, oil, coal, coke and wood heating appliances are the commonest sources in the home. Visual inspections are important. Flames to malfunctioning appliances may burn yellow/orange instead of mostly blue (if it is not a decorative fire) and you may see soot stains on radiants or the wall adjacent to the appliance. Some properties containing malfunctioning appliances may suffer from permanent condensation during the winter months if ventilation is inadequate. Powerful extract fans are capable of drawing fumes back into properties. Remember, there may be more than one source of CO. Ask to see safety certificates for appliances in rented accommodation. Ask when chimneys and flues were last swept.

Use the HHSRS to assist you in identification of possible sources and causes of CO leakage.

Box 4 Occupant behaviour

Inappropriate appliance use, particularly flueless ones such as gas ovens and stoves, can lead to a build up of CO, so questioning the occupant on their use of the appliance is important. The recent fitting of double glazing or blocking vents will suddenly reduce ventilation rates in a previously well ventilated or 'leaky' house. The reduced ventilation rate will cause CO to build up in the property. It is also important to ascertain if heating appliances have started being used due to a sudden change in the weather, or if an appliance has been newly installed.

Asking the occupier in which environment they feel better is important as exposure to CO could be linked to their job which might involve exposure to smoke, fumes or motor vehicle exhaust. CO exposure can be linked to leaking car exhaust systems, inappropriate use of generators or BBQs and to activities such as go-karting or shisha smoking.

Box 5 Stopping further exposure

Preventing further exposure is essential. If you strongly suspect a CO leak, make sure that fossil fuelled appliances are turned off, that windows are opened and the correct emergency service is called. If the occupiers have been exposed and have experienced any of the symptoms listed in Box 4, advise them to seek medical attention immediately. This is especially important if the occupants include children, babies or pregnant women. If occupants experience more severe symptoms such as vomiting, chest pains or loss of consciousness, call an ambulance.

Box 6 Recommendations and follow up requirements

Recommend the purchase of an audible carbon monoxide alarm for installation in the home, but stress that an alarm is not a substitute for regular maintenance of appliances using an appropriately registered engineer. If you are suspicious that the problem could be from an adjoining property, carry out an investigation under the appropriate legislation. Consider serving a notice on the landlord of rented accommodation where appliances are found to be a source of CO or are poorly maintained.

Useful contact numbers	999	- Ambulance/Police	0800 408 5500	- Gas Safe Register enquiries (gas)
	0844 892 0555	- Local HPU (24h hotline)	0845 658 5080	- OFTEC enquiries (oil)
	0800 111 999	- Gas Emergency	0845 634 5626	- HETAS enquiries (solid fuel)
	0800 300 363	- HSE Gas Safety Line	0845 4647	- NHS Direct



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