



Carbon monoxide testing in pregnancy

Information leaflet

What is Carbon Monoxide?

- Carbon Monoxide (CO) is a poisonous gas.
- You cannot smell it, see it or taste it. CO is absorbed into your blood stream when you breathe it in.
- CO is found in both indoor and outdoor air. Some of the causes for it are:

Indoor air

- Tobacco smoke
- Second hand smoke or passive smoking of any tobacco product
- Smoke from burning charcoal
- Open fire and woodburning stove
- Smoke from burning candles and incense
- Unvented kerosene heaters
- Fumes from faulty gas appliances (gas boilers, gas cookers and heaters)

Outdoor air

- Tobacco smoke
- Second hand smoke or passive smoking of any tobacco product
- Traffic exhaust fumes
- Fumes from leaking chimneys and furnaces

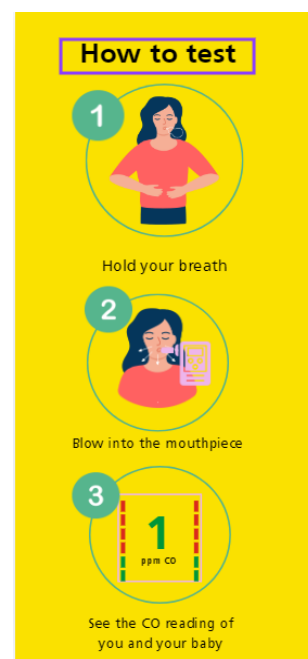


How can CO affect my baby?

- When you breathe in CO, the gas is absorbed into your bloodstream and replaces some of the oxygen going into your lungs.
- This reduces the amount of oxygen going into you and your baby's body. This is because CO is absorbed into your bloodstream 200 times more quickly than oxygen.
- Breathing in CO is very dangerous when you are pregnant as it deprives your baby of oxygen.
- CO in your blood (and your baby's blood) can make your placenta not work as well as it should. This might cause your baby to move less to save energy, which can affect how your baby grows and develops.
- Breathing in CO can also increase the risk of miscarriage, stillbirth and Sudden Infant Death Syndrome (SIDS).

How can you test for Carbon Monoxide?

- During your pregnancy you will be regularly tested for CO levels in your blood using a CO monitor. This tests the amount of CO in your bloodstream through a simple breath test.
- The CO test results are measured in part per million (ppm), which means the number of CO molecules in one million parts of air.
- Pregnant people with a CO reading of 4ppm or higher will be referred to our Maternity Tobacco Dependency Specialist for advice.



Why 4ppm or higher?

- The reason we will refer pregnant people with a reading of 4ppm is because during pregnancy you absorb CO much more quickly, so you and your baby will be exposed to higher levels more quickly.
- Whilst you can get rid of the CO in your bloodstream (for example, by breathing it out), your baby cannot. This means that your baby will have 10-15% higher levels of CO in their bloodstream.



Why will a referral to the Tobacco Dependency Specialist be done even if I am a non-smoker?

- The Tobacco Dependency Specialist can advise you about the possible causes of higher levels of CO in the environment (outdoor air) and exposure to second-hand tobacco smoke, faulty boilers and other causes (indoor air).
- They can also advise you about CO levels inside your property such as a landlord's legal obligation to ensure gas appliances comply to gas safety standards plus other causes of raised levels of CO in indoor air.
- Advice and support are also available for smokers living in or visiting your property.

Where can I find out more information?

- Gas Safe Register: Carbon monoxide poisoning

<https://www.gassaferegister.co.uk/gas-safety/carbon-monoxide-poisoning/#:~:text=The%20most%20important%20thing%20you,a%20Gas%20Safe%20registered%20engineer>

- Domestic gas health and safety

<https://www.hse.gov.uk/gas/domestic/index.htm>

- NHS: Carbon monoxide poisoning

<https://www.nhs.uk/conditions/carbon-monoxide-poisoning/>



Who to contact if I am worried about Carbon Monoxide exposure?

- If you are worried about a faulty or leaking boiler or gas appliance, please contact the gas emergency line on 0800 111 999 immediately and ensure that you contact your landlord if applicable.
- If you think you or any of your household have symptoms of CO poisoning, then contact 999/111.
- If you have any questions in relation to treating tobacco dependency and CO, please contact your Midwife or the Maternity Tobacco Dependency Service.

Useful Contacts

Whittington Health Maternity Service: 020 7288 5586

Whittington Health Maternity Tobacco Dependency Service: whh-tr.maternitytds@nhs.net

Patient advice and liaison service (PALS)

If you have a compliment, complaint or concern please contact our PALS team on 020 7288 5551 or whh-tr.PALS@nhs.net

If you need a large print, audio or translated copy of this leaflet please email whh-tr.patient-information@nhs.net. We will try our best to meet your needs.

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