



Carbon monoxide testing in pregnancy

Information for women, birthing people, and their families

Go Smoke Free

- For information about quitting smoking, please contact your midwife or the **Smoking in Pregnancy Specialist Midwife** on 07815 705737.
- You can also call **One You Kent Stop Smoking Services** on Freephone 0300 123 1220.

What is Carbon Monoxide?

Carbon Monoxide (CO) is a colourless, odourless, and tasteless poisonous gas. It can be found in cigarette smoke, faulty gas boilers, and car exhaust fumes. However, smoking is the most common reason for high CO readings.

How does Carbon Monoxide affect my baby?

When you smoke a cigarette (manufactured cigarettes or roll-ups) CO replaces some of the oxygen going into your lungs. This reduces how much oxygen gets into your bloodstream and therefore your baby.

CO is dangerous because it deprives your baby of oxygen. This can cause your placenta not to work as efficiently and your baby's growth and development to slow. CO can also increase the risk of miscarriage, stillbirth, and Sudden Infant Death Syndrome (SIDS).

Because of the risks involved to both mother and baby, all women will have their CO monitored throughout their pregnancy.

How will CO affect my baby's movements?

An increase in CO levels reduces the levels of oxygen that the baby can receive. This could mean that the baby's activity slows down in order to save energy.

How does the test work?

- You blow into a hand-held machine called a CO monitor. This machine measures the level of CO in your body and displays how much is getting to your baby.
- The more CO you have inhaled, the higher your CO reading will be.
- CO test results are measured in CO ppm, which means the number of CO molecules in one million parts of air.
- Women (smokers and non smokers) with a CO test reading of 4ppm or higher will be referred to the Smoking in Pregnancy Midwife and the NHS Stop Smoking Services.

Does this test check for second hand smoke?

Yes. This test can also show whether you are inhaling harmful amounts of second-hand smoke. We advise that you do not allow anyone to smoke anywhere in your home. Invisible chemicals from cigarettes can travel from room to room, even with the door closed. Opening windows and doors cannot prevent this.



I'm a non-smoker, why is my reading high?

If your CO reading is raised and you do not smoke, this could be due to a faulty appliance. You should call the Health and Safety Executive Gas Safety Line on 0800 300363.

A raised reading can also indicate passive smoking, a high level of exposure to car fumes, or you may be lactose intolerant.

A referral can also be sent to One You Kent. They will be more than happy to help you investigate why your reading may be raised.

What help is available to help me quit smoking?

As smoking is the most common cause of high CO readings, quitting smoking is the best way for you to make sure that you and your baby are free from the harmful effects of this poisonous gas.

To help you quit we will offer you a referral to One You Kent. They will discuss with you the support available to help you to stop smoking. This includes:

- Nicotine Replacement Therapy (NRT) patches, gum, and sprays.
- Behaviour support and change (referring you to the NHS Stop Smoking Services).
- Vaping / e-cigarettes (95% safer than smoking cigarettes).

We know how hard quitting smoking can be and we are here to support you. There is no harm in trying and you really will be making such a difference to the health of your baby as well as yourself.

Further resources

- One You Kent (<https://www.kentcht.nhs.uk/service/one-you-kent/>)
Telephone: 0300 123 1220
Email (kentchft.oneyoukent@nhs.net)
- The Lullaby Trust (<https://www.lullabytrust.org.uk/>)
- Tommy's: Carbon monoxide testing in pregnancy (<https://www.tommys.org/pregnancy-information/im-pregnant/smoking-and-pregnancy/carbon-monoxide-testing>)
- ASH: Smoking in Pregnancy Challenge Group (<https://ash.org.uk/about/who-we-work-with/smoking-in-pregnancy-challenge-group?>)

This leaflet has been produced with and for patients.

If you would like this information in **another language, audio, Braille, Easy Read, or large print** please ask a member of staff. You can ask someone to contact us on your behalf.

Any complaints, comments, concerns, or compliments please speak to your doctor or nurse, or contact the Patient Advice and Liaison Service (PALS) on 01227 783145 (tel://+441227783145), or email ekh-tr.pals@nhs.net (ekh-tr.pals@nhs.net)

Patients should not bring large sums of money or valuables into hospital. Please note that East Kent Hospitals accepts no responsibility for the loss or damage to personal property, unless the property has been handed into Trust staff for safe-keeping.

Further patient leaflets are available via the East Kent Hospitals website (<https://www.ekhuft.nhs.uk/information-for-patients/patient-information/>).

Reference number: EKH955

First published:
October 2021

Last reviewed:
October 2021

Next review date:
February 2025

Copyright © East Kent Hospitals University NHS Foundation Trust.