

Your CO reading

The CO monitor measures parts per million (ppm) of CO in your breath. From this number it works out the amount of CO in you and your baby's blood.

Breath ppm	Blood COHb (%)	Baby FCOHb (%)
30	5.43	8.46
29	5.27	8.18
28	5.11	7.9
27	4.95	7.62
26	4.79	7.34
25	4.63	7.06
24	4.47	6.78
23	4.31	6.5
22	4.15	6.22
21	3.99	5.94
20	3.83	5.66
19	3.67	5.38
18	3.51	5.09
17	3.35	4.81
16	3.19	4.53
15	3.03	4.25
14	2.87	3.96
13	2.71	3.68
12	2.55	3.4
11	2.39	3.11
10	2.23	2.83
9	2.07	2.55
8	1.91	2.26
7	1.75	1.98
6	1.59	1.7
5	1.43	1.42
4	1.27	1.13
3	1.11	0.85
2	0.95	0.57
1	0.79	0.28
0	0.00	0.00



Breath ppm

You breathe out only a tiny amount of CO because CO sticks to red blood cells so well.



Blood COHb (%)

This is how much blood is taken up by CO. Haemoglobin (Hb) is the substance in your red blood cells that carries oxygen around the body. Carboxyhaemoglobin (COHb) is haemoglobin with CO attached to it instead.



Baby FCOHb (%)

This is how much CO is taken up by your baby if you smoked. If you smoke or have a reading of 4ppm or more, your midwife will refer you for specialist support. Making your car and home smoke-free is just as important before the baby is born as when you take it home.

Remember the baby is here, but you are breathing for it!

The good news about stopping

When you stop smoking your CO levels drop very quickly. In **24 hours**, your CO levels go back to the level of a non-smoker.

- ✓ Stopping does not harm the baby.
- ✓ The baby will feel the effects straight away.
- ✓ Placental function improves
- ✓ You reduce your risk of Stillbirth, growth restriction, premature delivery and fetal malformation to that of a non-smoker.

How to stop

- ✓ Your chance of quitting is 4 times higher with the help of a stop smoking advisor. The advisors are friendly and approachable helping you understand nicotine addiction and work with you to develop a quit plan providing free nicotine medicines if required.
- ✓ Stopping smoking and not allowing smoking around you or in your car or home is the only way to protect your baby from the 7000 harmful chemicals found in tobacco smoke.

Stop Smoking Midwife

01463 706 370 or 07824 417 514

NHS Highland Stop Smoking Advisors

www.smokefreehighland.co.uk

Smokefree Homes and Cars Pack

0845 757 3077

Help is also available from you GP surgery or local community pharmacy

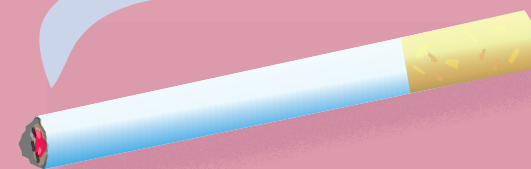
NHS Scotland

0800 84 84 84

www.quityourway.scot



Carbon Monoxide Smoking and Your Baby



NHS Highland offers Carbon Monoxide testing to all pregnant women to help reduce the incidence of stillbirth.

QUIT YOUR WAY
with our support

What is Carbon Monoxide?

Carbon Monoxide (CO) is a poisonous gas that you can't see or smell. This is not the same as the gas called Carbon Dioxide (CO₂) which is part of the air we breathe.

Where is CO found?

When materials containing carbon such as cigarettes, poorly ventilated coal fires or faulty boilers burn they give off CO. As a result if you inhale your own or someone else's cigarette smoke or someone else's second hand smoke you breathe in CO affecting your test result, the more you inhale the higher the reading.

CO in your blood stream

- When you breathe in smoke the CO is absorbed in your lungs and picked up by your red blood cells.
- It is then carried around your body and produces a thick fatty plaque that can cause heart disease, stroke and bad circulation. It also means the blood stream carries less oxygen.

The Placenta

- The Placenta is the life giving organ for your baby providing essential oxygen and nutrients.
- It is a dense smooth blob of tiny blood vessels that sticks to the inside of the womb. It gives the baby all it needs to grow, such as food and oxygen from the mother's blood.
- CO damages the placenta when the fatty plaque blocks the tiny vessels. This means it does not grow as healthy and does not carry as much oxygen and nutrition.

Unhealthy Placenta

Means

Weaker Baby

Means

Complicated Delivery

Baby's blood

- Baby's blood is different to mum's.
- More oxygen sticks to it. Unfortunately this means that CO sticks to it even more so.

Adult

CO t'ck t re l cell
200x m re th n xy en.

Baby

y fet l re l cell t'ck t CO
400x m re th n xy en.

Electronic Cigarettes

Electronic cigarettes do not contain CO, they are not completely risk free, but if using an e-cigarette helps you stay smoke free it is much safer for you and your baby than continuing to smoke.



Effects of smoking on your baby

Pregnancy

- More chance of miscarriage: a weakened placenta does not stick to the inside of the womb as well as it should.

Birth

- 1 in 225 babies are stillborn in Scotland every year, your risk of stillbirth increases by 47% if you smoke.
- You are 300% more likely to have a growth restricted baby which can result in a more complicated delivery and does not mean the baby is easier to push out
- You have a 200% increased chance of premature delivery if you smoke resulting in delivering in a specialist unit and extended hospital stay.
- There is a 30% increased chance of birth defects such as cleft lip and palate if you smoke.

Childhood

- Cot death 4x higher even in 'light' smokers.
- Higher rates of heart disease and asthma, and your child is more at risk of getting infections.

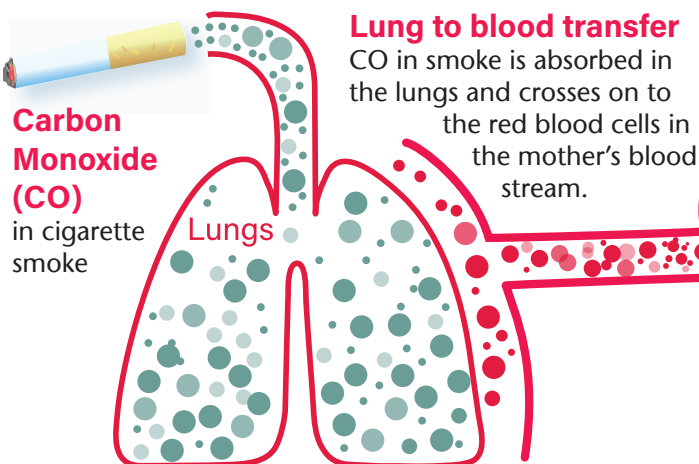
CO reading tracker Record your reading here

A high reading in someone who isn't exposed to cigarette smoke can indicate environmental exposure from various sources, our service can help you investigate the cause or call:

*Health and Safety
Executive gas safety line
0800 300 363*

Date	Reading

How Carbon Monoxide gets into your baby



Baby's blood carries twice the load

CO sticks to the baby's red blood cells twice as much as it does to the mother's. This means less oxygen is available to make the baby grow. **The baby is deprived of oxygen for 20 minutes after each cigarette.**

