

Carbon monoxide screening

Advice for
health
professionals



Public Health
Agency

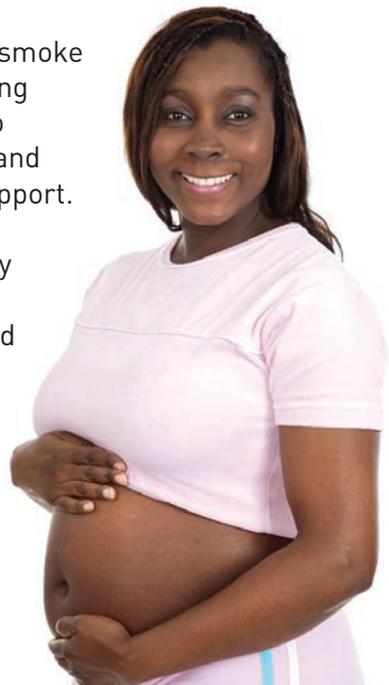
Carbon monoxide (CO) is a colourless, odourless, tasteless and poisonous gas that can kill people. CO is produced when tobacco products are burnt. It is found in inhaled, exhaled and passive smoke. CO can also be produced by exhaust fumes or emitted from malfunctioning or poorly ventilated fossil or wood fuelled heating and cooking appliances.

Exposure to CO is especially dangerous during pregnancy because it deprives the baby of oxygen, slows its growth and development, and increases the risk of miscarriage, stillbirth and sudden infant death. It is important that all pregnant women are tested for carbon monoxide.

CO screening is not only about establishing smoking status, but ensuring pregnant women and their families are safe from this poisonous gas.

Some women find it difficult to say they smoke because the pressure not to smoke during pregnancy is so intense. This can lead to women providing incorrect information and therefore missing out on appropriate support.

CO screening is a quick and painless way of assessing whether or not someone smokes, or if someone has been exposed to unsafe levels of CO from other sources, including faulty cooking and heating appliances.



What you need to do

- Assess what the woman knows about CO and fill in the gaps in her knowledge.
- Explain to the woman what exposure to CO means and the dangers it presents.
- Explain the purpose of CO screening and how it's a routine procedure.
- Explain how the CO screening results will allow the woman to see a physical measure of her exposure to CO.
- Ask if the woman, or anyone else in her household, smokes.
- Undertake the CO screen using the CO monitor.
- After carrying out the CO screen, inform the woman of the CO levels in her system.
- Record the CO results in the woman's notes and discuss the findings with her, using the following information.

What you need to say/do if the reading is below 4ppm

- A reading of less than 4ppm (parts per million) is normally that of a non-smoker.*
- Tell the woman her recent level of CO exposure is low.
- Check if she has recently given up smoking and encourage her to stay smoke-free. Offer to refer her to the local stop smoking service for ongoing support. This support increases her chances of quitting and details of all services are available on www.want2stop.info
- Explain that CO screening will be available throughout her pregnancy, if required.

Bauld L et al. Implementation of routine biochemical validation and an 'opt out' referral pathway for smoking cessation in pregnancy. *Addiction* 2012; Dec 107 S2: 53-60.



What you need to say/do if the reading is 4ppm or above

- Tell the woman the reading is at a level consistent with someone who smokes or has been exposed to CO. Ask her if she, or anyone else in her household, smokes.
- If the woman insists she is a non-smoker, has stopped smoking, or has not been exposed to second-hand smoke, remain non-judgemental in your approach and give evidence-based information (see 'Important tips').
- In addition to exposure to cigarette smoke, a high CO reading could be due to:
 - a faulty gas appliance/home heating appliance – this could be at home, at work or next door;
 - a faulty car exhaust.
- Try to find an explanation together. Ask the woman to call the free Health and Safety Executive gas safety advice line on 0800 300 363 for expert help. The woman should ensure her cooking and heating appliances are safely installed and, as an extra safeguard, she may wish to buy a CO alarm.
- If she smokes, explain your concerns and personalise the risks of continuing to smoke. Outline the effects of CO on the placenta and foetus to encourage her to quit and boost her motivation.
- Explain that quitting smoking is the best thing she can do to improve her health and the health of her baby.
- Highlight the range of support services in Northern Ireland for smokers thinking of quitting:
 - Want2stop website: www.want2stop.info offers advice and information on all the help available. Users can also set up their own quit plan.
 - Want2stop Facebook page.
 - Free SMS text service (text 'Quit' to 70004).
 - Quit Kit, which you can order free of charge through the Want2stop website.

- More than 650 free stop smoking services are available across Northern Ireland. Most of these services provide licensed nicotine replacement therapy (NRT) and are run by specially trained staff who can advise you on the best way to stop smoking. Services are offered in many GP practices, community pharmacies, Health and Social Care Trust premises, and community and voluntary organisations. Services can also be set up in workplaces. For more information on specialist services near you, visit www.want2stop.info and click on 'Stop smoking services'. Alternatively, contact one of the specialists listed on this leaflet.
- If the woman's partner or others in the household smoke, suggest they contact the local stop smoking services.

Important tips

- Remain non-judgemental in your approach and give evidence-based information.
- All discussion must be handled sensitively to encourage honesty.
- Assess the woman's interest in giving up smoking and encourage her to use the support offered by her local stop smoking service. Make a referral if she agrees.
- As with any screening test, the midwife's role is to facilitate informed choice and consent/refusal for CO screening.

Stop smoking service providers

Belfast area

Fiona McCambridge
Smoking Cessation Midwife
Mob: 079 1934 7563

Southern area

Daisy Hill Hospital

Ursula Gaffney
Mob: 077 9544 5710
Email: ursula.gaffney@shsct.hscni.net

Craigavon Area Hospital

Roisin Donohue
Mob: 077 9544 5918
Email: roisin.donohue@shsct.hscni.net

Northern area

Causeway Area Hospital

Annette Barclay
Smoking Cessation Midwife
Mob: 075 8402 3601
Email: annette.barclay@northerntrust.hscni.net

Mid-Ulster Hospital

Kerry Bate
Smoking Cessation Midwife
Tel: 028 7936 6799
Mob: 077 8222 2997
Email: kerry.bate@northerntrust.hscni.net

Antrim Area Hospital

Sonia Shirlow
Mob: 078 2733 4605
Email: sonia.shirlow@northerntrust.hscni.net

Carrick Health Centre

Andrea Howard
Mob: 078 8764 7915
Email: andrea.howard@northerntrust.hscni.net

South Eastern area

Cathy Bell
Tel: 028 9250 1376
Email: cathy.bell@setrust.hscni.net

Western area

The Western Health and Social Care Trust specialist stop smoking team provides services to pregnant women in both hospital and community settings. The Trust's smoke-free helpline is available 9am–5pm, Monday to Friday, on 0800 917 9388.

Text 'Quit' to 70004
for stop smoking SMS
text support.



You can also
follow Want2stop
on Facebook.



Acknowledgement

This leaflet has been adapted for Northern Ireland with the permission of the Smoking in Pregnancy Challenge Group: www.smokefreeaction.org.uk/SiP.html



Public Health Agency

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