

## Important tips

- Remain non-judgemental in your approach and give evidence-based information
- All discussion must be phrased sensitively to encourage a frank conversation
- Assess her interest in giving up smoking and encourage her to take up 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 women's informed choice and consent/refusal for CO screening
- You can also encourage her to sign up for the free Start4Life Information Service for Parents, which provides NHS approved advice throughout pregnancy and the early years. Visit [www.start4life.nhs.uk](http://www.start4life.nhs.uk)

\* Bauld, L, Hackshaw, L, Ferguson, J et al (2012) Implementation of routine biochemical validation and an 'opt out' referral pathway for smoking cessation in pregnancy, *Addiction*, 107, S2, 53-60.

# Carbon Monoxide Screening: advice for health professionals



THIS WORK IS SUPPORTED BY



Carbon monoxide (CO) is a colourless, odourless and tasteless poisonous gas which can kill people. It is present in exhaust fumes, faulty gas appliances, coal/wood fires, oil burning appliances and cigarette smoke. It 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. This is why it is important to offer and encourage pregnant women to have the CO screening.

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

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Some women find it difficult to say that they smoke because the pressure not to smoke during pregnancy is so high. This can stop women giving correct information and thereby receiving appropriate support. A CO screen is an immediate and non-invasive biochemical method for helping to assess whether or not someone smokes.

It also assesses whether someone has been exposed to unsafe levels of CO from other sources, including faulty cooking and heating appliances.

### What you need to do

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- 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 of this exposure
- Explain the purpose of the CO screen and that it is conducted routinely
- Explain to the woman that the CO screen results will allow her to see a physical measure of her exposure to CO
- Undertake the CO screen using the CO monitor
- After carrying out the CO screen, let the woman know the CO levels in her system
- Record the CO results in her notes and discuss the findings with her, using the information below

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

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- A reading less than 4ppm (parts per million) is normally that of a non-smoker
- Tell the woman that her recent level of exposure to CO is low

- Check whether she has recently given up smoking and encourage her to stay smokefree. Offer to refer her to the local stop smoking service for ongoing support to prevent relapse
- Offer CO screening at future antenatal checks

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

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- Tell her that the reading is at a level consistent with someone who smokes or who has been exposed to CO. Ask her if she, or anyone else in her household, smokes
- If the CO reading is 4ppm or higher but the woman insists that 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 over for important tips)
- In addition to exposure to cigarette smoke, a high CO reading could be due to:
  - A faulty gas appliance/home heating appliance. These could be at home, work or next door
  - A faulty car exhaust
- Try and find an explanation together. Ask her to call the *Gas Safety Advice Line 0800 300 363* for expert help. The woman should make sure her cooking and heating appliances are safely installed and, as an extra safeguard, she may wish to buy a CO alarm
- If she uses tobacco, explain your concerns and personalise the risks of continuing to smoke. Outline the effects of CO on the placenta and fetus, to encourage her to engage with the advice and boost her motivation to quit
- Explain that quitting is the best thing she can do to improve her health and the health of her baby. Refer her to the local stop smoking service and tell her about the *NHS Smokefree Helpline on 0300 123 1044 (minicom 0300 123 1014)*.
- If her partner or others in the household smoke, encourage them to contact the local stop smoking service or visit the Smokefree website at [www.smokefree.nhs.uk](http://www.smokefree.nhs.uk)