Stopping smoking in pregnancy:

A briefing for maternity care providers

Also available online at www.ncsct.co.uk

CPD Training and Certificate of Assessment







Authors: Yvonne Hermon and Sophia Papadakis **Editors:** Andy McEwen and Tom Coleman-Haynes

First edition editors: Susan Montgomery and Linda Bauld **Reviewers:** Katarzyna Campbell, Tim Coleman, Sue Cooper, Jo Locker, Louise Ross, Martyn Willmore and Michele Upton

Fifth edition November 2025

© 2025 NCSCT

ISBN: 978-1-915481-05-4

We would like to acknowledge the collaboration with Supporting Smokefree Pregnancies Research Project, a project funded by the National Institute for Health Research (NIHR) Collaboration for Leadership in Applied Health Research and Care East Midlands (CLAHRC EM). The views expressed are those of the author(s) and not necessarily those of the NIHR or the Department of Health and Social Care.

Contents

Background	04
Very Brief Advice on Smoking	08
NHS England (NHSE) smokefree pregnancy referral pathway	12
Intervention opportunities	13
Section 1: Ask	15
Conducting carbon monoxide (CO) testing in pregnancy	17
Ask about smoking	23
Section 2: Advise	24
Advise women on the importance of stopping smoking with support	24
Assess motivation to stop smoking	27
Pregnant women who express little or no interest in stopping smoking	28
Importance of stopping smoking vs. cutting down	30
Partners and other people who smoke in the home	31
Section 3: Act	35
Routine referral to stop smoking support	35
Evidence-based stop smoking support in pregnancy	39
Supporting pregnant women to remain abstinent from smoking	49
Documenting smoking status and interventions	51
Antenatal admission of a pregnant woman who smokes	54
Section 4: The Post-Partum Period	56
Smoking Status at the Time of Delivery (SATOD)	56
Preventing a relapse to smoking after baby's arrival	57
Inpatient care following the delivery of the baby	59
Training	61
Other Resources	64

This briefing is aimed at helping members of the maternity care team to deliver VBA to their patients

in order to maximise the opportunity for pregnant women who smoke to get expert support before, during and after their quit attempt.

This briefing is a complement to the following National Centre for Smoking Cessation and Training (NCSCT) online training modules:

- Very Brief Advice on Smoking (VBA) for Pregnant Women
- Specialty Training on Smoking Cessation in Pregnancy and the Post-partum Period

More information on available training can be found at the end of this document.

This briefing uses the term women throughout. When speaking with a person who does not identify as a woman, you should ask them their preferred pronouns and ensure these are used throughout your discussions.

Background

Smoking is the single largest modifiable risk factor for adverse outcomes in pregnancy, posing significant health risks to both mother and baby.^{1–4}

For the mother, smoking is associated with a significantly increased risk of miscarriage, ectopic pregnancy, placenta praevia, deep vein thrombosis (DVT), caesarean section, as well as post-operative complications following caesarean section.¹⁻⁶

Maternal smoking is the leading preventable cause of stillbirths, miscarriage and neonatal deaths.^{1–5,8} There is strong evidence that maternal smoking results in a significantly increased risk of premature birth, low birth weight and fetal growth restriction (FGR).^{1–7}

Babies born to mothers who smoke are twice as likely to die from sudden infant death syndrome (SIDS).^{1,9} Children born to mothers who smoke are also more likely to have behavioural problems, including attention and hyperactivity problems, learning difficulties and reduced educational performance, and respiratory problems including asthma, wheeziness and frequent chest infections.^{1,4,6–7}

Exposure to secondhand smoke during pregnancy carries much of the same risks. $^{1.4}$

Across England, maternity stop smoking services have some variation in terminology used and how they are named (e.g. maternity care stop smoking, smokefree pregnancy programme, healthy pregnancy support service), as do the job titles of those delivering support (e.g. tobacco dependence adviser, or stop smoking practitioner). In this document we have used the term stop smoking practitioner however, you will want to tailor your advice to reflect what's used in your trust or locality.

Table 1: Impact of smoking and exposure to secondhand smoke in pregnancy^{1,4-13}

Health effect	Maternal smoking	Secondhand smoke	
Low birth weight (<2500g)	Two times more likely	Average 30 – 40g lighter	
Stillbirth	47% more likely	Possible increase	
Miscarriage	32% more likely	Increased risk	
Preterm birth	27% more likely	Possible increase	
Heart defects	25% more likely	Increased risk	
Sudden infant death	Three times more likely	45% more likely	
Neonatal death and admissions	Increased risk	Increased risk	
Behavioural and learning problems	Increased risk	Increased risk	
Respiratory problems	Increased risk	Increased risk	

Smoking: the risk to a woman's health

In addition to the significant risk posed to women during pregnancy, smoking is the primary cause of preventable illness and death in women in the UK.²⁴ It is estimated that two in three women who smoke will die from smoking-related illness.²⁴ Stopping smoking is one of the best things a woman can do for both her physical and mental health, and significantly reduces the risk of cancer, heart disease, respiratory illness and other smoking-related illnesses.

Approximately one in five women in the UK smoke at some point in their pregnancy. While many women will stop smoking by themselves prior to becoming pregnant or once they learn they are pregnant, the latest data from 2024/25 indicates that more than 31,670 (6.1%) women in England continue to smoke throughout their pregnancy. This rate varies across England and in some areas more than 17% of pregnant women report smoking at the time of their delivery.

Rates of smoking in pregnancy also differ across groups, with mothers aged 20 or under being six times more likely than those aged 35 and over to have smoked throughout pregnancy (35% and 6% respectively). Women in routine and manual occupations are five times more likely than those in managerial and professional occupations to have smoked throughout pregnancy (20% and 4% respectively). Pregnant women are also more likely to smoke if they are less educated, live in rented accommodation and are single or have a partner that smokes. 16-19

Many pregnant women can find stopping smoking to be a significant challenge and need considerable support to stop successfully. This is because the nicotine contained in tobacco, while not particularly harmful (it is the tar and carbon monoxide in tobacco smoke that cause most of the health problems), is highly addictive, and smoking is a chronic relapsing condition.

The importance of stopping as early as possible

Stopping at any stage in pregnancy will have significant benefits to both the mother and baby's health. However, women who smoke should be supported with stopping as early as possible in pregnancy. This is because research has shown that women who stop smoking before 15 weeks of pregnancy reduce their risk of spontaneous premature birth and of having a low birth weight baby to the same as that of women who do not smoke.^{20–23}

We also know that there is no safe level of smoking during pregnancy. Smoking even a few cigarettes a day poses a significant risk.²³ While some women reduce their smoking, the ultimate goal should be to stop completely.

Very Brief Advice on Smoking

All maternity care providers have a role to play in addressing tobacco use and supporting women with stopping smoking. This is mainly by identifying who smokes, triggering quit attempts and referring women to evidence-based stop smoking support. This is known as Very Brief Advice on Smoking (VBA).

Very Brief Advice on Smoking (VBA) can motivate, support and facilitate women to stop smoking. It is recommended as part of routine antenatal care that midwives perform carbon monoxide (CO) testing with all pregnant women, deliver VBA and refer women who smoke or who are at risk of relapse to specialist support.

Midwives and other maternity care providers are especially well placed to deliver VBA to pregnant women.²⁷

Promoting wellbeing, ensuring that advice is evidence-based and working in partnership with the patient to help them access relevant healthcare is all part of the **Professional Standards of Practice and Behaviour for Nurses, Midwives and Nursing Associates (2024).**²⁸

Routine carbon monoxide (CO) testing of pregnant women and supporting women to access help to stop on an opt-out basis is **NICE** recommended, is a key part of the **Saving Babies' Lives Version 3** care bundle and is recognised as best practice.²⁹⁻³⁰

Saving Babies' Lives Version 3 interventions include: 29

- Routine CO testing
- Establishing smoking status with a CO test
- Referring all women who have a CO level of 4ppm or above or self-report smoking to the in-house stop smoking practitioner on an opt-out basis
- Ensuring nicotine replacement therapy is offered as soon as possible, alongside behavioural support
- Providing feedback to the lead maternity care provider

NICE Guidance [NG209] recommends midwives and all other healthcare professionals who work with pregnant women:³⁰

- understand the impact that smoking and secondhand smoke can have on a woman and her unborn child
- know why it can be difficult to stop
- know how to ask them questions in such a way that encourages them to be open about their smoking
- always recommend stopping rather than cutting down
- have received accredited training in the use of CO monitors
- know about the treatments that can help pregnant women to stop smoking, including nicotine replacement therapy
- know how to refer women to local services for treatment
- provide CO testing at the first antenatal appointment and at the 36-week appointment
- provide CO testing at all antenatal appointments if they smoke, are quitting, used to smoke or had a CO level of 4ppm or above at the initial appointment
- provide opt out referral to stop smoking support to women who report current smoking, have a CO reading of 4ppm or above, or report stopping smoking within the last two weeks

Very Brief Advice on Smoking

There are three simple steps to intervening with pregnant women who smoke:

ASK: conduct carbon monoxide (CO) testing and ask about smoking

Explain that CO testing is routinely conducted with all pregnant women. Explain what CO is, why monitoring is important and carry out the test.

Ask the woman about her past and present smoking status (smoker, recently stopped smoking, ex-smoker or non-smoker) and record this in maternity records.

ADVISE: on the importance of stopping smoking with support

Explain the health benefits of stopping smoking completely (not cutting down) for the woman and her baby:

"We know that stopping smoking is by far one of the most important things you can do to ensure your baby is healthy and you have a smooth pregnancy."

Explain that the best way of stopping is with support from a trained specialist midwife or pregnancy stop smoking pracitioner:

"We know it's not easy. The best way of stopping smoking is with specialist support, which is why we routinely introduce all pregnant woman who smoke to the Maternity Stop Smoking Service. It gives you an opportunity to have a chat with our friendly, expert stop smoking practitioner. They will offer you support and free treatments such as nicotine replacement therapy. Many pregnant women have found the support very useful."

ACT: routine referral to stop smoking support

Refer all pregnant woman who smoke, have stopped smoking in the past two weeks, or have a CO reading of 4ppm or higher to either the in-house stop smoking service or other local stop smoking support. Explain that a specialist midwife or pregnancy stop smoking practitioner will contact her.

Positive response to referral

"That's great that you want to speak to the stop smoking practitioner, I will refer you now and they will be in touch with you soon."

Uncertain response to referral

"Are you feeling worried about stopping smoking?"

Respond to their concerns and explain that they don't have anything to lose by trying:

"I understand it is a difficult decision to stop smoking. The stop smoking practitioners are very friendly and they won't pressure you but speaking to them does give you the opportunity to get to know them. They can explain more about the support they provide, including free stop smoking aids. You never know, you might feel differently once you meet them.

You've got nothing to lose!"

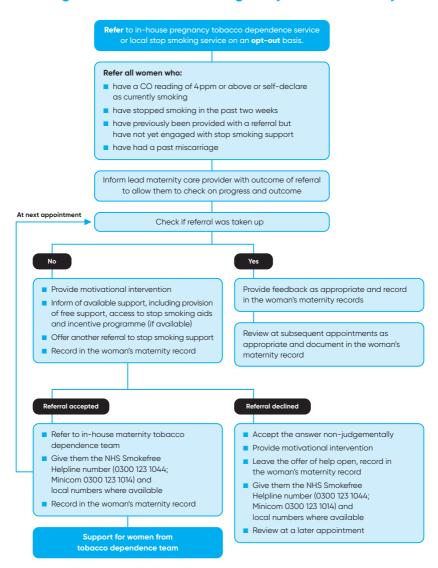
Negative response to referral

"I understand, and of course it is your choice. To reassure you, our pregnancy stop smoking practitioners are very experienced in helping people in similar situations to yourself and they are experts in supporting women to stop smoking during pregnancy. Why not have a quick conversation with them? They are very friendly and won't pressure or judge you. If you decide it's not for you, at least you know how they can help you if you change your mind later. You've got nothing to lose!"

If the woman explicitly refuses referral after further discussion, it's best not to push too hard. It's important to provide them with more information on the support available, alongside continuing to do their CO readings and offering support at every maternity appointment.

"If you do change your mind, we will be happy to give you more information about the support available to you at any time."

NHS England (NHSE) Smokfree Pregnancy Referral Pathway 30-31



Intervention opportunities

Any contact with a pregnant woman, including at antenatal appointments, offers an opportunity for the delivery of VBA.

- Pre-conceptual consultations
- During pregnancy

Up to 10 weeks	Booking Appointment by Community Midwife*
10-13 weeks	Dating ultrasound scan
16 weeks	Community Midwife appointment
18-20 weeks	Anomaly scan by ultrasound sonographers
25 weeks	Community Midwife appointment
28 weeks	Community Midwife appointment
31 weeks	Community Midwife appointment
34 weeks	Community Midwife appointment
36 weeks	Community Midwife appointment*
38 weeks	Community Midwife appointment
Term	Community Midwife appointment
Term +7 days	Community Midwife appointment
New birth visit	Health Visitor

^{*} Indicates timepoints that the NHS has identified as mandatory indicators for measuring smoking status.

One of the most important factors that can help a pregnant woman stop smoking is a positive relationship with her midwife or other practitioners involved in her care.^{32–33} Women have communicated that a positive relationship with their practitioner based on trust and mutual respect was an important part of their success in stopping smoking.^{32–33}

Pregnant women who smoke often feel they will be judged or feel like a failure for not being able to stop. Likewise, many women do not believe they will be able to cope without smoking.^{32–33} Helping women through their quit attempt in a **non-judgemental and supportive** manner and helping normalise the feelings and challenges they may be experiencing is an important part of supporting women with stopping smoking.

Building rapport is of critical importance. It is one of the core competences required for supporting people to stop smoking and is the foundation for engaging women in support. Women that were successful with stopping have identified that it was their maternity care providers' non-judgemental support that made the difference.

Section 1: Ask

Establishing smoking status and carrying out and recording of CO test results is mandatory and should be recorded on maternity systems as part of the Saving Babies' Lives data collection requirements.

At a minimum, all women should be asked their **past and present smoking status** and CO testing carried out at the first and 36-week antenatal appointments.

CO testing should be repeated and recorded at **all subsequent antenatal appointments** for women who, at their first antenatal appointment:

- reported smoking
- used to smoke
- had a CO reading of 4ppm or above
- were in the process of stopping smoking

Following this they must be asked about their current smoking status, this should be recorded in their notes and advice given at every appointment. This reiterates that stopping smoking is deemed important throughout the pregnancy, not just at the initial visit.

Women who stopped smoking prior to conception, or after the pregnancy was confirmed, are at potential risk of relapse and so it is important that the topic is raised repeatedly, even with those who are recorded as not currently smoking at the first antenatal appointment. Repeating the CO test with all women at all appointments helps to assess for any exposure to CO and identify those who may have lapsed or relapsed; this is recommended best practice.

Nicotine vape (e-cigarette, electronic cigarette) use

If a woman reports nicotine vape use only, she should be recorded as a non-smoker. For all women who report they are vaping, it is important that we check if she is also smoking cigarettes (or rollups), as dual use is common. If she is both smoking cigarettes and using a nicotine vape, she should be recorded as currently smoking and referred for support.

Cannabis use

Cannabis is the most widely used illicit recreational drug amongst pregnant women.³⁴⁻³⁵

Cannabis use in pregnancy is associated with significantly increased risk of adverse pregnancy outcomes including preterm birth, low birth weight and neonatal intensive care unit admissions. 34–38 Cannabis use has also been linked to attention deficit in infants and children. 38 Pregnant women who report not smoking cigarettes but who continue to smoke cannabis will also be putting their baby at risk because of elevated CO levels, which may be higher than those of people who do not smoke. Because of this, they should be recorded as currently smoking and referred for support, depending on local pathways and policies.

Conducting carbon monoxide (CO) testing in pregnancy

CO is a poisonous gas contained in cigarette smoke. It affects the ability to transport oxygen around the body, which reduces the oxygen available to the baby. CO also crosses the placenta and enters the bloodstream of the baby. It increases the risk of miscarriage and slows the baby's growth and development.

CO testing is an immediate and simple method for helping to assess whether or not someone smokes (or has been exposed to CO in any other way) and is a routine part of antenatal care. It is also a useful way of raising the subject of smoking.

CO testing should be carried out with ALL pregnant women, not just those who say or report they smoke. It is best practice to carry out the CO test before asking about smoking status. This is because we are identifying any exposure to environmental CO, such as from faulty gas fires and boilers, not just exposure from tobacco smoking. This is why CO testing is an important part of routine antenatal care for all pregnant women.

A raised CO level of 4 parts per million (4ppm) or above is a sign that further investigation and support is required. $^{39-40}$

■ The Saving Babies' Lives Version 3 care bundle requires all maternity care services to provide routine CO testing at the first antenatal appointment and at the 36-week appointment to assess every pregnant woman's exposure to tobacco smoke-2

Some maternity units may choose to routinely test all pregnant women at every antenatal check. This is to ensure they identify any women who may have relapsed back to smoking and to embed CO testing into routine antenatal care.

Provide a brief explanation of what the test involves and why we measure CO levels at all appointments.

Example of explaining CO and CO testing

"Carbon monoxide is a poisonous gas and is very harmful to your baby. It is present in exhaust fumes, faulty gas appliances and tobacco smoke."

"As part of routine antenatal checks we measure the carbon monoxide level in your bloodstream. It's a simple breath test and we can give you the results immediately. This machine will measure the amount of carbon monoxide in your lungs in parts per million."

For CO testing to be conducted properly, pregnant women must hold their breath for 15 seconds before blowing into the CO monitor; this allows time for the CO in the blood to pass into the air in the lungs.

Example of explaining how CO testing is conducted

"What I am going to ask you to do in a minute is to take a big deep breath, hold your breath and then exhale into this machine. You will need to hold your breath for about 15 seconds. After you have taken your breath, I will hand the machine to you, the machine will count down and I will then tell you when to exhale into it."

And then whilst conducting the test say:

"I'd like you to take a nice big breath ... well done ... keep holding your breath, only 10 seconds left now ... OK, take hold of the machine ... place your lips around the tube and 5, 4, 3, 2, 1 ... blow now."

There are a number of CO monitors available and you should follow the instructions accompanying your particular machine and ensure infection control guidelines are followed.

Using a baby CO monitor

You may be using a Baby CO monitor to assesses the amount of CO in a mother's exhaled breath, which is measured as parts per million (ppm), in addition to measuring the estimated amount of CO carried in the unborn baby's blood, which is measured as a percentage of fetal carboxyhaemoglobin (%FCOHb). To explain the result to mothers, you can say that a percentage of her baby's red blood cells are carrying CO instead of oxygen to her unborn baby's blood, which is depriving them of much needed oxygen to grow and develop.



Interpreting CO testing in pregnancy

The recommended cut-off for detecting smoking in pregnant women is 4ppm.

Even if a woman has a CO reading of below 4 ppm, it is best practice to ask about smoking status – **both current and past use** – to establish very low levels of smoking and identify women who have stopped smoking recently.

Before moving on to explain results of the CO test with women it is recommended that you ask about current and past tobacco use:

"Do you smoke?" and "Did you smoke in the past?"

If so, "When did you stop smoking?"

Although the CO test is a good measure of recent tobacco smoke intake, it will not usually detect smoking from over 48 hours ago, or even the day before. This is because **CO** is **eliminated from the body rapidly.** CO readings will typically be lower in the morning than the afternoon because CO levels build up over the course of the day as the woman continues to smoke.

> Women with CO readings below 4ppm

If a CO reading is under 4ppm (and the woman self-reports that she does not smoke) you should inform the woman that this is a normal reading (CO is produced by the body and so readings rarely reach 0 ppm), that this is good news for her and her baby and that you will repeat the test at every contact so that she can know that her and her baby are safe from high levels of CO.

Example of what to say to someone with a low CO reading who advises they do not smoke:

"Your carbon monoxide reading is X. This reading is in the normal range, between 1 and 4 parts per million, and is what we would expect from someone who does not smoke. Your baby is already benefiting from this."

If the woman self-reports she is currently smoking but records a low reading of below 4ppm, tell her:

"Any tobacco you have from now on will cause the level of carbon monoxide to rise quickly and your baby will then be at risk."

> Women with CO readings 4ppm or above

If the pregnant woman **is smoking** you will need to explain that this level of CO is harmful to her baby and her baby's health is at risk. Explaining that CO levels rapidly return to normal, for both the mother and the baby, if there is not even a single puff on a cigarette, can encourage pregnant women to stop smoking.

"Your reading is X and we would expect it to be below 4. Exposure to tobacco smoke is the most common cause for high readings to show up on the test. Can I ask, do you smoke, or have you smoked in the past?

The normal range for someone that does not smoke is between 1 and 4 parts per million and so you can see that your reading is X times higher. This is particularly harmful to the baby. The good news is that, by stopping smoking, you can quickly get this down to normal levels and ensure your baby is getting the oxygen and nutrients it needs to develop and grow as we would expect."

If the pregnant woman says that she has stopped smoking or does not smoke but the CO reading is higher than 4ppm, then there are other possible reasons for this high reading and you should explain to her that either:

- she may have been exposed to CO fumes from a faulty gas boiler, cooker, car exhaust or from paint stripper. It is important that you check these things out, as exposure to CO is dangerous. The Gas Safety Advice Line number (0800 300 363) should be given to her at this point.
- she may be lactose intolerant (most people know if they are) and the high reading is a consequence of her consuming dairy products, which can produce gases in your breath which affect the sensors in the monitor and give a false raised CO reading.

It is worth noting that exposure to secondhand smoke will not significantly raise a CO result.

It is, of course, possible that the woman is currently smoking but is reluctant to admit this and so any further questions should be phrased sensitively to encourage a frank discussion.

Ask about smoking

Regardless of the CO reading, it is best practice to ask about smoking status – **both current and past use** – to establish very low levels of smoking and identify women who have stopped smoking recently.

Example of how to explore whether someone smokes

Accurately recording smoking status is part of the medical history and simply involves asking: "Do you smoke, or have you smoked in the past?" and then filling in 'yes', 'no' or 'ex-smoker' in the appropriate fields.

"How many cigarettes and/or roll-ups do you usually smoke a day now? Is that always the same or do you sometimes smoke more or less?"

"Has your smoking changed since you discovered that you are pregnant? How many cigarettes and/or roll-ups were you smoking a day before?"

"What age were you when you first started smoking?"

These questions allow you to convey the message that you are not being judgmental about smoking in pregnancy and that you simply want to gather the information.

Asking if their tobacco consumption has changed allows you to give advice if they report they have recently cut down, to give information about compensatory smoking and to reinforce that there is no safe level of smoking.

The stigma around smoking in pregnancy means that some women find it difficult to disclose that they smoke and this can prevent them receiving appropriate advice and support.^{32,42}

Section 2: Advise

Advise women on the importance of stopping smoking with support

Once you have established whether a pregnant woman smokes, the next step is to provide brief advice on stopping smoking.

Many women are not fully aware or may underestimate the impact of smoking on pregnancy outcomes and the health of their baby.^{23,24,32-33} It can be helpful to provide simple, brief advice on how smoking increases risk and the importance of stopping.

Establish if she understands why smoking is harmful in pregnancy and the immediate benefits to her baby if she stops. Ask if she has any personal worries relating to any previous poor pregnancy outcomes or complications, e.g. low birth weight / fetal growth restriction / prematurity / bleeding in pregnancy.

"Can I ask if you understand why we worry about women who continue to smoke in pregnancy?"

"Is there anything that worries you about your smoking now that you are pregnant?"

A woman's chance of stopping smoking is three times greater if she uses a combination of behavioural support from a trained pregnancy stop smoking practitioner and nicotine replacement therapy, or a nicotine vape, compared with going cold turkey. 43,44

We know that pregnant women can be highly motivated to make changes in pregnancy (e.g. cutting out alcohol, avoiding certain foods, stopping smoking) because of their desire to have a healthy baby.

Pregnant women who smoke should be informed that they will be introduced to a trained stop smoking practitioner who will offer an individualised tobacco dependence treatment and behavioural support programme throughout their pregnancy. This support may be delivered by a trained midwife, a specialist stop smoking practitioner or by a commissioned Local Stop Smoking Service.

Services should be local, effective, easy to access and have staff that are well trained to motivate pregnant women to stop smoking.

Simply informing pregnant women that there is support available that is effective and that other pregnant women have found useful can help motivate them to engage with and make an attempt at stopping smoking.

Opt-out referral

All women who smoke, have stopped in the past two weeks or have a CO reading of 4ppm or above should be advised that it is part of routine care to introduce them to the Maternity Stop Smoking service. This is called an opt-out referral. Opt-out referral is a key aspect of the Saving Babies' Lives Version 3 care bundle. Women should be referred to an in-house specialist stop smoking practitioner or other locally available support, unless the woman asks not to be referred.^{29–30}

It is recommended that lay language that is friendly and not initimidating be used when speaking with patients.

Example of how to present the opt-out referral, and how to explain the best way to stop smoking and the specialist help offered by the Maternity Stop Smoking Service

"We know that stopping smoking is by far one of the most important things you can do to ensure your baby is healthy and you have a smooth pregnancy.

The best way of stopping smoking is with specialist support. Many pregnant women have found the support very useful. As you're currently smoking/your carbon monoxide reading is 4 parts per million (or above) / you have recently stopped smoking, I'm going to introduce you to our stop smoking practitioners, they are really friendly and can let you know about the options on offer to support you with a smokefree pregnancy. They're specially trained to support our pregnant women to stop smoking and can arrange to provide you with access to free nicotine replacement therapy."

The opt-out approach gives women who smoke the opportunity to speak with a trained stop smoking practitioner who can introduce them to the support they will receive and have an effective behaviour change conversation.

CO testing, combined with an opt-out referral system, has been shown to double the number of women who use stop smoking support and double auit rates. 40,41

The use of an opt-out referral system ensures all women who smoke have the opportunity to receive expert support with stopping as part of appropriate antenatal care that supports a good pregnancy outcome.

Assess motivation to stop smoking

Ask how she feels about stopping smoking.

"How do you feel about stopping smoking?"

If she sounds positive:

Reinforce her positivity by congratulating her and emphasising how important stopping smoking is to ensure she has a healthy pregnancy and baby, and that both she and her baby will benefit the moment she stops smoking.

If she sounds nervous or ambivalent about stopping:

- Reassure and empathise with her that it is normal and understandable to feel nervous about stopping smoking.
- Reinforce to her how important stopping whilst pregnant is to ensure she has a healthy pregnancy and baby.
- Inform her that with support, and by using effective strategies her chances of stopping smoking will be greatly improved.
- Inform her that "referral for stop smoking support is part of our routine antenatal care."

Pregnant women who express little or no interest in stopping smoking

Pregnant women have the right to decide to not stop smoking and so discussing smoking with those who say they do not want to stop needs to be done in a sensitive manner.

Pregnant women should be reassured that they are not being judged, but that you are keen to ensure the best possible outcome for their pregnancy.

Example of how to explain why you are discussing smoking status

"As a healthcare professional I frequently see women for whom things have gone wrong because they smoked. Women come for antenatal care because they want a safe pregnancy. My role is to do everything I can to make sure you have a healthy pregnancy and safe delivery. Stopping smoking is one of the main things you can do to reduce your risk of problems in the pregnancy and during delivery."

"I'm not going to be putting pressure on you. However, I will talk with you again about this at future antenatal appointments because there are health benefits to your baby whenever you stop and help is available throughout your pregnancy."

Women who smoke frequently deny or minimise the health risks of smoking to themselves and their baby and may avoid having a discussion on stopping smoking. They may make light of their smoking to detract from the issue.

You can communicate your understanding that stopping smoking is not easy and ask about the reasons that prevent them from being able to stop during this pregnancy. Provide encouragement and communicate the support that will be provided.

Example of how to explore a woman's ambivalence or lack of interest in stopping

Communicate your understanding that stopping is not easy.

"I can understand why you feel it might be difficult right now"

Ask about the reasons they feel prevent them from being able to stop during this pregnancy.

"What worries you about stopping smoking?"

Respond with empathy and acknowledge that stopping smoking can be difficult. Address any barriers by asking:

"What would help, or how could you overcome these difficulties?"

"Is it ok if I give you some information on why we worry about smoking in pregnancy?" – asking permission to give information is rarely denied and women are more likely to listen to what you say.

You can discuss the use of nicotine replacement therapy or nicotine vapes with women unable or unwilling to stop:

"Have you thought about trying nicotine replacement therapy or a nicotine vape (e-cigarette) to help you to stop? Although they aren't risk free, nicotine vapes are significantly less harmful than smoking, and if using a vape helps you to stay smokefree that is much better for you and your baby."

Ensure that you deliver a motivational message such as:

"With support and stop smoking aids such as nicotine replacement therapy, you are much more likely to be successful... you've got nothing to lose, it's so important you stop smoking whilst you are pregnant."

Importance of stopping smoking vs. cutting down

Many pregnant women, are aware of the health risks of smoking during pregnancy, and try to reduce their consumption of tobacco in an attempt to reduce the risks to their baby.

A reduced number of cigarettes does not, however, equate to significantly reduced health risks and stopping smoking completely is the only way of ensuring that the unborn baby is not at risk from smoking.²³

It is fairly common for women who smoke to tell their midwife at their booking appointment that they have 'cut down' their smoking. It is worth asking them why they have done this; most will say that it is because they are worried about the harm smoking might have on their baby. You can recognise that this shows some awareness of the health consequences of smoking and that these women are already doing something to try and reduce the risk to their baby.

This offers an opportunity to inform them that cutting down doesn't offer any significant health advantages and that help is available for them to stop.

"It's good you're concerned about your smoking and have made some changes. Is it ok if I explain to you why cutting down doesn't reduce the risk to your baby?"

Research indicates that among people who have stopped smoking, between 75% and 95% of those who smoke a single cigarette return to regular smoking.⁴⁵ One study found that 94% of 'lapsers' had a second cigarette and that half of these did so within 24 hours. 46

Example of how to explain the concept of compensatory smoking

"Your brain and body are used to regular doses of nicotine. When you cut down on the amount of tobacco (cigarettes or roll-ups) that you smoke, your brain and body still 'demand' these regular doses. So what tends to happen, without you realising it, is that you will get similar doses of nicotine from fewer cigarettes by smoking these cigarettes more 'efficiently' (taking more puffs, inhaling deeper and longer, smoking more of the cigarette). Similar doses of nicotine equals similar doses of tar and carbon monoxide which means little or no benefit from cutting down on your smoking."

Partners and other people who smoke in the home

Addressing smoking in the family and household will be an important part of the support you provide to all pregnant women regardless of whether the mother herself smokes.

Exposure to secondhand smoke carries the same risk to the baby as maternal smoking. 100% smokefree environments are recommended for all women during pregnancy. Working with families or significant others to reduce secondhand smoke exposure is important. This can include agreeing to house rules about not smoking indoors (i.e. going outside to smoke) and not smoking in cars or around the pregnant woman.

All pregnant women should be asked whether their partner smokes or if there are other people who smoke in the home.

"Are there other people in your home who smoke?"

"Is smoking allowed in your home?"

"Do you spend a lot of time with someone who smokes or in an area with a lot of smoke?"

If the woman does not live with people who smoke:

- Tell her that this is good news, as having other people smoke around her could make her ability to stop harder.
- Explain that other friends or family members who smoke also pose a risk; ask whether she can ask these individuals to not smoke around her.

If the woman does live with a person(s) who smoke:

- It is important that she understands that living with a person who smokes or being around people who smoke will present an extra challenge for her. Explain the dangers of secondhand smoke during pregnancy.
- Explain the dangers of exposure to cigarettes and other people who smoke when trying to stop smoking and suggest she ask these individuals to not smoke around her and not leave their cigarettes in view.
- Ask her what she would need to make house rules around keeping her home smokefree and offer some suggestions that will support this.
- Assess the partner's or significant other's interest in stopping smoking and arrange support as appropriate.

For women who smoke or have recently stopped smoking, having a partner or living with someone who smokes greatly increases the chance of having an unsuccessful quit attempt or relapsing after stopping. 16, 19, 32, 33 Likewise, the support of family and friends, particularly partners who share the home, has been shown to play a particularly important role in the ability of pregnant women to stop smoking. 16, 19, 32, 33

Research shows that women who live with a person who smokes are six times more likely to smoke throughout pregnancy and those who manage to stop are more likely to relapse once the baby is born. ¹⁹ If partners or significant others also make an attempt to stop smoking, pregnant women stand a better chance of stopping themselves.

Partners, other family members or friends may wish to use this as an opportunity to stop smoking. In some services, support for partners or other family members may be offered alongside supporting the pregnant woman. If this is not the case, support can be arranged for partners and family members interested in stopping via referral to the Local Stop **Smoking Service.**

Even if partners or other family members are not interested in stopping at this time, a totally smokefree environment is a priority for all pregnant women and is ideally maintained during the post-natal period for newborns and children.

Example of how to ask about the partner's or other family members' interest in stopping smoking

"Would they be interested in stopping smoking with you? If so, we can arrange for support to be provided to them as well. The arrival of this new baby can be a good motivation for everyone to stop."

Be mindful that stopping as a couple can also create tension in their relationship. You should emphasise the importance of avoiding conflict or acting in competition, which would not be helpful.

Section 3: Act

Routine referral to stop smoking support

The ACT element of VBA involves:

- referring pregnant women who smoke for stop smoking support
- acting on womens' response to advice

All women who smoke or have recently stopped smoking should be routinely referred to available stop smoking support.

Maternity Stop Smoking Services

The evidence-based, multi-session, face-to-face behavioural support programme provided by a specialist pregnancy stop smoking practitioner offers pregnant women their best chance of stopping before, during and after a pregnancy.^{30,47}

Since 2021, all maternity care services have specialist midwives or stop smoking practitioners in place who are trained in working with pregnant women. Immediate referral and consultation with the stop smoking practitioner is the ideal, but as a minimum women should be contacted within one working day and seen (ideally face-to-face) within five working days.

Specialist pregnancy stop smoking practitioners provide multi-session behavioural support to help pregnant women make a plan for stopping and support them with remaining smokefree throughout their pregnancy.

As part of the support provided, practitioners help women make informed choices about using nicotine replacement therapy (NRT) or nicotine vapes to help them stop smoking and can supply these aids free of cost. Some services can also provide stop smoking support for womens' partners and significant others.

Local Stop Smoking Services

In addition to in-house Maternity Stop Smoking Services, Local Stop Smoking Services provide stop smoking support to pregnant women and their partners or significant others in the community. It is important that healthcare professionals know what support is available locally or nationally and know what that support involves.

Being aware of Local Stop Smoking Services allows you to advise patients and family members on their nearest option for accessing stop smoking support.

You can find contact details for the stop smoking support services in your area by visiting NHS Better Health: https://tinyurl.com/better-health-sss

As a healthcare professional, you can also make pregnant women aware of the smoking in pregnancy information available on the NHS website and provide them with the number for the NHS Smokefree National Helpline: 0300 123 1044.

Positive response to referral

If a woman is positive about referral to the stop smoking practitioner we should be positive and encouraging.

"That's great that you want to speak to the stop smoking practitioner, I will refer you now and they will be in touch with you soon."

Uncertain response to referral

If a woman expresses uncertainty about speaking to a stop smoking practitioner, it is useful to explore any concerns.

"Are you feeling worried about stopping smoking?"

Respond to their concerns and explain that they don't have anything to lose by trying.

"I understand it is a difficult decision to stop smoking. The stop smoking practitioners are very friendly and they won't pressure you, but speaking to them does give you the opportunity to get to know them. They can explain more about the support they provide, including free stop smoking aids. You never know, you might feel differently once you meet them. You've got nothing to lose!"

Pregnant women who decline the referral

Pregnant women have the right to decline a referral for help to stop smoking. Always respect a woman's decision but be clear on the advice that you are giving. It can be worth clarifying to women who initially decline that:

"It is part of routine antenatal care that we refer you for support to stop smoking, as stopping is so important to a healthy pregnancy." If a woman says she doesn't want to be referred, we have to respect her wishes, however we will check at subsequent antenatal checks. The National Smoke-free Pregnancy Incentive and Swap-to-Stop schemes, where available, are both enablers to encourage engagement.

Example of what to say if a pregnant woman does not feel able to stop now or is reluctant to receive help

"I understand, and of course it is your choice. To reassure you, our pregnancy stop smoking practitioners are very experienced in helping people in similar situations and are experts in supporting women to stop smoking during pregnancy. Why not have a quick conversation with them? They are very friendly and won't pressure or judge you. If you decide it's not for you, at least you know how they can help you if you change your mind later. You've got nothing to lose!"

If the woman explicitly refuses referral after further discussion, it's best not to push too hard. It's important to provide them with more information on the support available, alongside continuing to do their CO readings and offering support at every maternity appointment.

"If you do change your mind, we will be happy to give you more information about the support available to you at any time."

If they do not want help stopping smoking, this should be recorded in their notes and they should be informed that they can ask for help at any point in the future. It is recommended to also provide the contact number for the NHS Smokefree National Helpline: 0300 123 1044.

Evidence-based stop smoking support in pregnancy: the latest guidance

Behavioural support

We know from research that pregnant women who smoke will gain significant benefit from behavioural support from a trained stop smoking practitioner.⁴⁷ Pregnant women often require regular, *individualised contacts* to remain smokefree; therefore, face-to-face support is recommended.^{32,33,47} However, this can be supplemented with telephone, video and digital support. Relapse is common and often occurs late into pregnancy when anxieties about the impending birth can develop. As such, support throughout the pregnancy is important.¹⁵

For pregnant women, face-to-face interventions that help build rapport, learn about the pregnancy and address any misconceptions and myths about smoking are important. Face-to-face contact also provides the opportunity to carry out CO tests to reinforce the importance of stopping.

As part of behavioural support, trained practitioners will work with pregnant women to:

- assess current smokina
- address concerns and provide a motivational intervention
- assist with setting a quit date
- choose a stop smoking aid and demonstrate use to encourage confidence and compliance
- address daily routines and coping strategies for withdrawal symptoms, and managing stress without smoking
- look at the triggers for smoking and alternatives, boost motivation and confidence to stay smokefree and address other people who smoke in the home
- provide regular (often weekly) support throughout pregnancy and deal with issues as they arise

Additional support using text messaging and phone calls can help to keep pregnant women on track and let them know you're thinking of them.

Incentives schemes

Incentive schemes involve providing women with monetary incentives to promote and reinforce stopping smoking. Most often, schemes issue vouchers that can be exchanged for goods (excluding alcohol and cigarettes) that are provided to women who reach smokefree milestones throughout pregnancy.

Incentives have been found to be highly effective in increasing rates of engagement in stop smoking and rates of stopping, and are highly cost-effective.⁴⁸⁻⁵² There is good evidence that incentive schemes can double the rates of stopping smoking among pregnant women, both at the end of pregnancy and post-partum. 48-52

Incentive schemes for pregnant women have been recommended by NICE alongside behavioural support throughout pregnancy and ideally into the post-partum period.³⁰ Where possible, involving partners or significant others who smoke in incentives schemes is good practice.

In 2024 the Department of Health and Social Care launched the National Smoke-Free Pregnancy Incentive Scheme. Women taking part in the scheme who engage with stop smoking support and are smokefree (verified by expired air CO test) receive vouchers at regular intervals throughout pregnancy and post-partum. The vouchers can be used to purchase any products other than tobacco, alcohol and gambling products, such as lottery tickets.

If your trust or organisation is part of the National Smoke-free Pregnancy Incentive Scheme, you will be able to inform women about the opportunity to take part, providing you with another way to motivate them to make an attempt to stop smoking and have a smokefree pregnancy.

Example of how to explain the incentive scheme to pregnant women

"We also now have a voucher scheme which means that, when you reach key points in your smokefree journey, you will receive a voucher which you can spend on yourself, your family or the new baby."

"People who smoke in pregnancy have found that this keeps them motivated and gives them something to aim for and a reward to treat themselves or their baby."

See the NCSCT Training section of this document for information on training to deliver the National Smoke-Free Incentive Scheme.

Nicotine replacement therapy (NRT)

Pregnant women can also benefit from the use of NRT. NRT works by reducing urges to smoke and other withdrawal symptoms, thereby making stopping smoking a bit easier.^{27,53-56} These products are safer than continuing to smoke and can be particularly beneficial to women with high levels of tobacco dependence, significant urges to smoke or smoking triggers (e.g. partner's continued smoking or lack of support from family and friends).48,55-58

NRT should be initiated at the earliest opportunity in pregnancy and continued after pregnancy if the woman needs it to prevent a relapse to smoking, including if the pregnancy does not continue.³⁰ NRT should be made easily accessible, with best practice being to directly provide NRT to reduce any barriers to access.

It is important that women are instructed on correct use and encouraged to use their NRT as often as they need to reduce withdrawal symptoms. Women should be reassured about the relative safety of nicotine and encouraged to use their NRT for as long as necessary to remain smokefree during pregnancy, the post-natal period and beyond.



Why do we recommend using NRT in pregnancy?

NRT is effective in supporting pregnant women to stop smoking and there is no evidence that using NRT during pregnancy is harmful to the mother or fetus. Unlike smoking, NRT delivers a clean form of nicotine and no carbon monoxide – which is the main risk of smoking during pregnancy - is produced. While nicotine is a known neurotoxic chemical, long-term studies have shown that no harm has been found in the fetus from using NRT in preanancy. 53-59

Because of this, NRT can be recommended for any pregnant woman who is unable to stop smoking on her own and those at risk of relapse to smoking.^{27,30,60}

There are a variety of NRT products available (patch, inhalator, mouth spray, gum, lozenge, microtab and nasal spray). NRT can be provided free via direct supply, local voucher system or free on prescription during pregnancy.

Importantly, pregnant women who use two or more nicotine products (combination NRT) are more successful at stopping than those who use a single NRT product.⁶¹ Combination NRT can be used for pregnant women who smoke and might be particularly helpful to those who are more dependent or who are struggling with withdrawal symptoms and/or urges to smoke. Combination NRT may be important because pregnant women have increased nicotine metabolism.

It is recommended that pregnant women use a 16-hour patch (i.e. remove at night) in combination with a faster-acting product (e.g. inhalator, spray, gum, lozenge) to assist with managing cravings throughout the day and night.30

Women should be encouraged to use NRT for the full 12-week course as this is essential to increase success with stopping. It is not unusual for pregnant women to stop or reduce NRT use earlier than recommended and this can lead to relapse. 53,55,56,62-64

Pregnant women should be reassured about, and informed on, the safety of NRT and its correct use in pregnancy, as there tend to be concerns and issues with treatment compliance that can undermine success with stopping. Clear, consistent messages about the safety of NRT use from healthcare professionals and stop smoking practitioners is best practice.

Women can be encouraged to discuss any concerns or difficulties they may have with using NRT with a stop smoking practitioner, as these can often be easily addressed. It can be useful at follow-up appointments for maternity care providers to reinforce this message and the importance of compliance with using NRT.

Using NRT for as long as necessary to prevent relapse is important. This includes into the post-partum period.

Data on rates of quitting among pregnant woman who smoke from Local Stop Smoking Services in England has shown that NRT, when combined with specialist stop smoking support, can be particularly helpful.61

- No Meds = 16% quit
- Single NRT = 25% quit
- Combination NRT = 36% quit

Nicotine vapes

Some women will choose to use nicotine vapes (also known as e-cigarettes or electronic cigarettes) during their pregnancy or may already be using one when they become pregnant.

Nicotine vapes are a first-choice stop smoking aid for the general population and are now the most widely used stop smoking aid in the UK. $^{30,65-67}$ Available evidence, primarily from a large UK trial, indicates that **nicotine** vapes are an effective aid for pregnant women who want to stop smoking.67-76 Vapes may be preferred by some pregnant women to NRT.69

Unlike smoking the use of nicotine vapes does not involve the combustion (burning) of tobacco and therefore they do not produce tar or carbon monoxide, which are particularly harmful to developing babies. The vapour produced by vapes contains some toxicants and nicotine; however, these are either at much lower levels than those found in tobacco smoke or at levels not associated with serious health risks.⁶⁷ Based on the largest ever review of evidence, we know that, in the short and medium term, vaping is significantly less harmful than continuing to smoke tobacco.67

There has been limited research on the effects of long-term use and risks to unborn babies. However, we can be confident that the risks are likely to be insignificant compared to the risks of continued smoking. 67,70-72 A recent trial compared the safety and efficacy of NRT patches and nicotine vapes in a sample of more than 1,000 pregnant women from England and found that use was not associated with any adverse outcomes.70-72 Importantly, this study found that both nicotine vapes and NRT helped pregnant women to stop and their use was associated with increased birth weight.^{70–72}

While licensed NRT products such as nicotine patches, gum and inhalators are the recommended option, if a pregnant woman chooses to use a nicotine vape, or has already stopped smoking with the use of a vape, and if that helps them to stop smoking and stay smokefree, they should **be supported to do so.**73-74 If the use of the nicotine vape helps a pregnant woman stay smokefree, it is much less harmful for both her and her baby than continuing to smoke.73-74

Pregnant women should be given accurate and current information on what is known about vapes so they can make an informed decision about whether to use them.

You may provide guidance and support by saying:

"Many people who smoke find vaping helpful for stopping, and evidence shows that it can be effective. If you do choose to vape, and if that helps you to stop and stay smokefree, it is far less harmful for you and your baby than continuing to smoke. Specifically, vapes do not produce carbon monoxide, which is the poisonous gas produced when you smoke cigarettes that is most harmful to the baby."

It is important to emphasise that any smoking of tobacco is harmful. Women who are smoking and using vapes should be encouraged to switch completely from tobacco to vaping.

"It's very important to keep baby healthy that you switch completely to vaping. The stop smoking practitioner can help ensure you are using your vapes correctly to help with any urges you may have to smoke."

E-liquids that contain nicotine are a form of nicotine replacement and dosing guidelines generally follow the same principles as with NRT. Women can be advised that the stop smoking practitioner can assist with advising on an appropriate amount of nicotine to manage withdrawal symptoms and urges to smoke.

"If you choose to use a vape, the stop smoking practitioner can help you choose the amount of nicotine that you need to feel comfortable and keep you smokefree."

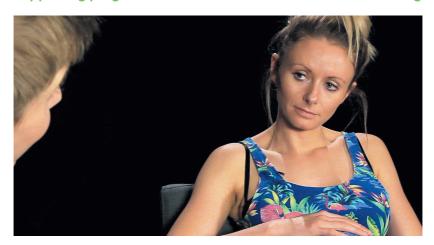
Based on available evidence there is no reason to believe that using a nicotine vape would compromise breastfeeding.⁷⁵ Women who vape following birth should not be discouraged from doing so if it enables them to stay guit and maintain a smokefree home.

"You can continue to use your vape after baby arrives. This will help keep you and baby healthy. There is no concern if you are breastfeeding and it's much less harmful than smoking cigarettes."

Principles of nicotine vape use

- Women attempting to stop smoking should use a vape with nicotine-containing e-liquid with sufficient nicotine to manage withdrawal and urges to smoke.
- The action of vaping is different to smoking, which generally involves taking a deep lungful of smoke from a cigarette. Women new to vaping should inhale gently, drawing the vapour into the mouth and then inhaling into the lungs. Practice is often needed and women shouldn't be put off by this.
- Nicotine vapes should be used regularly throughout the day and when cravings occur. Women should be advised to use their vape as often as they need to, in order to manage urges to smoke. More frequent and consistent vaping ('grazing on nicotine') is typically needed to get sufficient nicotine compared to smoking cigarettes ('bingeing on nicotine').
- Women will need to recognise when atomisers need replacing.
- Women should be advised to always take their fully charged vape with them when they go out, to avoid the risk of smoking when they haven't got their vape to hand.
- For safety reasons, it is important to only use the charger that is provided with the vape.
- Simply drinking water can help avoid the dry mouth that can be experienced.
- Women should be told that the benefits of vaping are greatest when they stop smoking tobacco completely.

Supporting pregnant women to remain abstinent from smoking



Pregnant women can find stopping smoking incredibly difficult and the relapse rate in pregnancy is high.^{15,77} We know that many people who smoke lack the confidence to succeed and may lose heart if stopping smoking is more difficult than they anticipated. Boosting their motivation to quit and their confidence in stopping successfully is a crucial ingredient of the behavioural support programme offered by the stop smoking support service.

Community midwives who see the pregnant woman regularly can be a valuable extra source of support to complement the intervention provided by the specialist pregnancy stop smoking practitioner and can help pregnant women maintain their resolve to stay off tobacco.

It is important to congratulate pregnant women on their achievement thus far, to record recent non-smoking status in their notes and to encourage them to remain smokefree. Also, continue to conduct CO monitoring throughout the pregnancy. These readings will provide powerful evidence of the benefits of not smoking to themselves and the baby, and motivation to remain abstinent.

Example of how to enquire about how pregnant women are doing with their attempt to stop smoking:

"How are things going in terms of not smoking? Have you found it easy or a struggle?"

"Are you still in touch with the Maternity Stop Smoking Service? How is it going?"

"Have you thought about what you will do in place of smoking if you feel tempted to smoke?"

"Are you using any stop smoking aids?"

As post-natal relapse is common, ask:

"Have you thought about what you might do to remain smokefree after your baby is born?"

Use the discussion to emphasise the advantages for the new baby of a smokefree home.

Provide information on how the NHS Smokefree National Helpline can continue to offer help and encourage them to continue with their quit attempt at every opportunity. Let them know that as each day goes by without a cigarette they are significantly increasing their chances of never smoking again.

Documenting smoking status and interventions

It is important for all healthcare professionals to keep a written record of the stop smoking advice given to each woman throughout her pregnancy. **Systematic recording** is an important motivation for healthcare workers in supporting women to stop. It shows we work as a team to achieve the best possible outcomes in pregnancy and it helps keep all staff informed 'on message'.

All records on smoking should be consistent in the woman's handheld and hospital notes, and on computerised records (if available), to allow everybody involved in antenatal care to monitor progress and to track their success. Accurate recording of current smoking status is important as it needs to be submitted nationally at key points in pregnancy, such as at delivery.

Any personal information collected from the pregnant woman by a stop smoking practitioner is subject to the usual confidentiality, data protection regulations and safeguards and pregnant women should be reassured of this.

The following are the core indicators the NHS has identified as mandatory:

- Proportion of women who smoke at booking
- Proportion of women who smoke at 36 weeks of pregnancy
- Proportion of women who smoke at time of delivery
- Proportion of women with elevated CO levels referred for specialist stop smoking interventions

36-week smoking status

The Saving Babies' Lives care bundle and Maternal Neonatal Collaborative recommend all pregnant women have their smoking status assessed at the initial booking and all other antenatal appointments.^{29,75} They have identified as a new indicator assessing smoking status at the 36-week community midwifery appointment by both self-report and CO measurement. The window of opportunity to collect the 36-week smoking status and CO test is between 35+0 and 36+6 weeks.

Summary of action to be taken to support stopping smoking among pregnant women:

- Provide information on the effects of smoking to pregnancy outcomes and reinforce the importance of stopping early in pregnancy.
- Use CO measurements to assess tobacco use and provide feedback on the health effects of continued smoking for themselves and their unborn child.
- Describe what support is available and boost their motivation to make a quit attempt.
- Arrange referral to available stop smoking support. Follow up on uptake of referrals at each contact. Provide support and encouragement for remaining smokefree.
- Assist partners and significant others with stopping by referral to available stop smoking support.
- Give advice on exposure to secondhand smoke in the home, car and other places where they spend time.
- Reinforce the importance of stopping completely as the goal versus cutting down, as this can help focus their attention on the effort required.
- Discuss and help them plan ahead to remain smokefree following delivery.
- Document and communicate to relevant colleagues conversations you have had and advice you have given, and use in assessing the appropriate individual management of antenatal care.

Antenatal admission of pregnant women who smoke

Antenatal problems may emerge during pregnancy and women may be unaware of the link between the problem and their smokina, or the immediate health benefits to them and their pregnancy of stopping smoking.

Women who smoke are more likely to be admitted for antenatal care than woman who do not smoke, especially to monitor for fetal growth restriction (FGR). Whilst in hospital, some women will suffer from acute nicotine withdrawal symptoms and request to leave the ward frequently to smoke to relieve them.

If behavioural support and NRT are available and offered to treat their nicotine withdrawal, it will help improve compliance, making their treatment more effective and increasing their chances of a successful pregnancy outcome.

Best practice

As part of the NHS Long Term Plan, women should have a CO test on admission and be asked about their smoking status. If they are identified as currently smoking or having stopped within the past two weeks, they should be offered NRT within two hours of admission. This should be a combination of a patch and an oral product, such as an inhalator.

An admissions protocol for tobacco dependence treatment for pregnant women should be in place in all NHS acute trusts. It should:

- Include a system that ensures that the smoking status of pregnant women is recorded as part of the hospital admission procedure.
- Include the delivery of Very Brief Advice on Smoking (VBA) to all pregnant women admitted for antenatal care.
- Ensure that pregnant women and family members are aware of the hospital smokefree policy.
- Provide encouragement to stop smoking during any antenatal admission, using the opportunity to link smoking to the presenting medical problem.
- Refer all women identified as smoking to the Maternity Stop Smoking Service to assess smoking, provide ongoing behavioural support and an offer of NRT during their admission and following discharge.
- Arrange or provide training for all inpatient maternity care providers in the use of NRT for temporary abstinence and stop smoking advice and treatments.
- Provide access to NRT to help manage withdrawal symptoms, made available via the hospital pharmacy.
- Provide the contact number of the NHS Smokefree National Helpline: 0300 123 1044.

The progress of pregnant women who stop smoking should be monitored. They should be encouraged to stay stopped and to use NRT if necessary, for withdrawal relief and to prevent lapse, once they are discharged.

Section 4: The Post-Partum Period

Smoking Status at Time of Delivery (SATOD)

Smoking Status at Time of Delivery (SATOD) is used to generate data on the prevalence of smoking at the time of delivery (child birth). SATOD data collection is the primary method for tracking rates of smoking among pregnant women both locally and nationally

Hospital trusts in England are required to submit figures each month on the following:

- Number of maternities
- Number of women known to have been smoking at time of delivery
- Number of women known not to have been smoking at time of delivery

Asking about the smoking status of women at the time of delivery offers another opportunity to raise the topic of smoking and secondhand smoke, and can influence the support given to women immediately after the baby is born, including referral to local stop smoking support.

Ideally, CO testing should be used to assess smoking status, although many women may have gone for a number of hours without smoking, which will result in a low CO reading. It is important to pre-empt a low reading by asking when they last smoked and explain about how quickly CO is eliminated from the body.

Any woman who reports vaping only is classified as a non-smoker. Women who report dual use (vaping and use of tobacco products) are classified as smoking.

Example of how midwifery staff could ask about smoking status and explain using CO testing to collect SATOD data:

"Are you currently smoking, or have you recently stopped smoking?"

"When did you last have a cigarette?"

"We routinely ask all women to blow into a monitor so that we can record the amount of carbon monoxide in their lungs. The main source of carbon monoxide is from smoking. Are you currently smoking, or have you recently given up smoking?"

Preventing a relapse to smoking after baby's arrival

Post-partum relapse rates are extremely high among women who are successful with stopping smoking during pregnancy. Some women who stop smoking during pregnancy may do so with the intention of resuming smoking after the birth of their child. Others simply return to smoking without planning to, often as a way to relax, deal with the stress of having a new baby, upon returning to their social circle of friends who smoke or if they develop post-natal depression. Concerns about weight gain, having a partner who smokes and lower socio-economic status are also known to contribute to relapse. Social circle of the status are also known to contribute to relapse.

Supporting women to remain smokefree following pregnancy is an important secondary target for intervention for both baby and mum's health.

An estimated 47 – 63% of women who stop smoking during pregnancy will relapse within six months of delivery. 15,77

There is a strong relationship between tobacco use and decisions related to breastfeeding. Mothers who smoke tobacco after delivery are at least twice as likely not to breastfeed their babies. Respecially for babies born prematurely, supporting a mother's efforts to remain smokefree into and during the post-partum period may be an important factor to initiate and prolong the duration of breastfeeding.

Asking about a woman's thoughts about smoking once the baby arrives can be useful for understanding the risk of relapse.

"I was curious to know if you are feeling committed to staying smokefree after the baby's arrival?"

"Have you thought about what you might do to remain smokefree after your baby is born?"

Use the discussion to emphasise the advantages to staying smokefree for the baby (e.g. a smokefree home, breastfeeding) and the woman (e.g. financial, personal health benefits, setting an example for her children). Helping women identify the benefits of staying smokefree once their baby arrives and strengthening her commitment can be part of the support offered in the weeks leading up to her baby's arrival.

Help women with planning ahead for what they may do to address temptation to smoke post-partum as well as where smoking fits in their mind in terms of relaxing and socialising. The time leading up to their baby's arrival also offers the opportunity to discuss ways to deal with the stress of being a new mother, other than smoking. Advising on the continued use of NRT or a nicotine vape can be helpful, including ensuring they carry these products with them to use should they feel tempted to smoke. The provision of ongoing support to women in the post-partum period will help to remind them that they've come so far and encourage them to set the goal of not returning to smoking after their baby's arrival.

Inpatient care following the delivery of the baby

Women who have smoked throughout their pregnancy are likely to experience symptoms of nicotine withdrawal following the delivery of their baby. This will be particularly pronounced in women who have a prolonged post-natal admission (e.g. following a premature birth or a caesarean section). New mothers may ask maternity staff to look after their baby while they go outside to smoke. Many trusts now have smokefree site policies that restrict this. It is important that protocols for discussing smoking, referral of women who smoke and recording smoking-related information are established. This will help the discussion of smoking to become part of routine practice. If pregnant women are aware of hospital policies they can plan accordingly for their admission and might even be prompted to stop smoking, if only temporarily.

The use of NRT in the delivery suite and post-natal wards may be helpful for women in dealing with their enforced temporary abstinence from smoking.

Actions to take:

- Ensure that a protocol for inpatients is developed and operational by the hospital midwifery team, including:
 - Make women aware of the hospital smokefree policy and maternity ward policies regarding leaving the ward to smoke. Ensure that these policies reinforce to patients the risks of secondhand smoke and of holding their newborn child after smoking
 - Deliver Very Brief Advice on Smoking (Ask Advise Act)
 - Refer women who smoke to the in-house tobacco dependence team for support with remaining smokefree whilst in hospital
 - Ensure there is prompt access to NRT, either via the hospital pharmacy or, where possible, by including it on the midwives' exemption list of medicines, whether women are stopping smoking or need help with managing temporary abstinence
 - Provide referral to outpatient stop smoking support
- Ensure that there are clear and simple referral procedures to tobacco dependence treatment/stop smoking support in place
- Agree what, and where, information relating to smoking is recorded in the patient record (e.g. handheld notes, electronic patient records, post-natal discharge summary, Personal Child Health Record 'red book')

NCSCT Training

The NCSCThas developed a number of resources for members of the maternity care team.

Very Brief Advice on Smoking (VBA) for Pregnant Women:

This short online training module provides members of the maternal care team training in how to deliver VBA as part of routine antenatal care, including carbon monoxide (CO) monitoring. The training includes videos to demonstrate both VBA and CO testing.

For more information:

https://elearning.ncsct.co.uk/vba_pregnancy-launch

National Smoke-free Pregnancy Incentive Scheme (NEW)

This online course will equip frontline maternity care providers with the knowledge and skills to feel confident in having that first discussion about stopping smoking and how the National Smoke-free Pregnancy Incentive Scheme supports this. In addition, pregnancy stop smoking practitioners providing multi-session behavioural support should complete pages 14 to 32 of this course to incorporate discussion about incentives into initial behavioural support sessions.

For more information:

https://elearning.ncsct.co.uk/financial_incentives-launch

Specialty course on Smoking Cessation in Pregnancy and the Post-Partum Period:

This module offers individuals who have completed the NCSCT Practitioner Training and Assessment Programme further training in addressing tobacco use during pregnancy. The course provides information on the health effects of smoking in pregnancy, the benefits of cessation, best practice, effective methods to help pregnant women stop smoking and links to useful resources.

For more information:

https://elearning.ncsct.co.uk/pregnancy_specialty_module-launch

Very Brief Advice on Secondhand Smoke:

This short training module focuses on how to raise the issue of secondhand smoke exposure and promote smokefree homes and cars.

For more information:

https://elearning.ncsct.co.uk/shs vba-launch

Other Training

eLearning for Healthcare: Saving Babies' Lives

This training focuses on delivering Very Brief Advice on Smoking (VBA) to pregnant women, including carbon monoxide (CO) screening.

For more information:

www.e-lfh.org.uk/programmes/saving-babies-lives

eLearning for Healthcare: Supporting a Smokefree Pregnancy

These resources focus on the delivery of Very Brief Advice on Smoking (VBA) and carbon monoxide (CO) monitoring. There is also a series of new educational materials to support local training on these topics, including two short films.

For more information:

www.e-lfh.org.uk/programmes/smoking-in-pregnancy

Other Resources

Saving Babies' Lives Version Three care bundle (2023)

https://tinyurl.com/saving-babies-lives-v3

NICE quideline NG209: Tobacco: preventing uptake, promoting quitting and treating dependence. Recommendations on treating tobacco dependence in pregnant women.

www.nice.org.uk/guidance/ng209

Carbon monoxide screening: advice for health professionals (Smoking in Pregnancy Challenge Group)

https://tinyurl.com/CO-screening-advice-for-hcp

Evidence into practice: CO monitoring and data collection throughout pregnancy

https://tinyurl.com/evidence-into-practice

Vaping: a guide for health and social care professionals

www.ncsct.co.uk/publications/vaping briefing

Vaping before, during and after pregnancy: A guide for maternity and other healthcare professionals (2024)

https://tinyurl.com/vaping-pregnancy

NHS Start4Life

Gives information about the effects of smoking in pregnancy and advice on getting support to quit: www.nhs.uk/start4life/pregnancy/smoking/

References

- Royal College of Physicians (RCP). Passive Smoking and Children. London: RCP; 2010. www.rcplondon.ac.uk/news/passive-smoking-major-health-hazard-children-says-rcp
- Action on Smoking and Health (ASH). Smoking, pregnancy, and fertility. ASH; 2021. https://ash.org.uk/resources/view/smoking-pregnancy-and-fertility
- Lyus L. Impact of smoking on future rates of stillbirth, neonatal and infant mortality and poor birth outcomes in England. The Luulyby Trust; 2018.
- Royal College of Physicians (RCP). Hiding in plain sight: treating tobacco dependency in the NHS. London: RCP; 2018. www.rcplondon.ac.uk/projects/outputs/hiding-plain-sight-treating-tobaccodependency-nhs
- Action on Smoking and Health (ASH) & the Smoking in Pregnancy Challenge Group.
 A manifesto for smokefree beginnings. London: ASH; December 2023.
 https://ash.org.uk/resources/smokefree-nhs/smoking-in-pregnancy-challenge-group/challenge-group-reports
- Pineless BL, Park E, Samet JM. Systematic review and meta-analysis of miscarriage and maternal exposure to tobacco smoke during pregnancy. Am J Epidemiol. 2014 Apr 1;179(7):807–23.
- Abraham M, Alramadhan S, Iniguez C, et al. A systematic review of maternal smoking during pregnancy and fetal measurements with meta-analysis. PLoS ONE. 2017;12:e0170946.
- Marufu TC, Ahankari A, Coleman T, Lewis S. Maternal smoking and the risk of still birth: systematic review and meta-analysis. BMC Public Health. 2015 Mar 13;15:239. doi: 10.1186/s12889-015-1552-5. PMID: 25885887; PMCID: PMC4372174.
- Zhang K, and X Wang. Maternal smoking and increased risk of sudden infant death syndrome: A meta-analysis. Legal Medicine. 2013;15(3):115–121.
- McCrory C, and R Layte. Prenatal exposure to maternal smoking and childhood behavioural problems: a quasi-experimental approach. Journal of Abnormal Child Psychology. 2012;40(8):1277–88.
- den Dekker HT, Voort AMMS, de Jongste JC, et al. Tobacco Smoke Exposure, Airway Resistance, and Asthma in School-age Children. Chest. 2015;148(3):607–17.
- Zhao L, Chen L, Yang T, et al. Parental smoking and the risk of congenital heart defects in offspring: An updated meta-analysis of observational studies. Eur J Prev Cardiol. 2020 Aug;27(12):1284–1293.
- Action on Smoking and Health (ASH). Secondhand Smoke. London: ASH; 2020. https://ash.org.uk/uploads/SecondhandSmoke.pdf?v=1650647816
- Cooper S, Orton S, Leonardi-Bee J, et al. Smoking and quit attempts during pregnancy and postpartum: a longitudinal UK cohort. BMJ Open. 2017;7:e018746.
- NHS Digital. Statistics on Women's SMoking Status at Time of Delivery England. Quarter, 2024/45. https://digital.nhs.uk/data-and-information/publications/statistical/statistics-on-women-s-smoking-status-at-time-of-delivery-england/statistics-on-womens-smoking-status-at-time-of-delivery-england-q4-2024-25
- NHS Digital. Smoking at Time of Delivery data collection, 2018–2019. digital.nhs.uk/data-andinformation/ publications/statistical/statistics-on-women-s-smoking-status-at-time-of-deliveryengland/statistics-onwomens-smoking-status-at-time-of-delivery-england-quarter-4-january-2019-to-march-2019

- Gray R, Bonelle SR, Chalmers J, et al. Contribution of smoking during pregnancy to inequalities in stillbirth and infant death in Scotland 1994–2003: retrospective population based study using hospital maternity records. BMJ. 2009;339:b3754.
- Riaz M, Lewis S, Naughton F, Ussher M. Predictors of smoking cessation during pregnancy: a systematic review and meta-analysis. Addiction. 2018;113(4):610–622.
- Raisanen S, Sankliampi U, Gissier M, et al. Smoking cessation in the first trimester reduces most obstetric risks, but not the risks of major congenital abnormalities and admission to neonatal care: a population-based cohort study of 1,164,953 singleton pregnancies in Finland. Journal of Epidemiology and Community Health. 2014;68(2):159–64.
- Bjornholt SM, Leite M, Albieri V, Kjaer SK, Jensen A. A Maternal smoking during pregnancy and risk of stillbirth: results from a nationwide Danish register-based cohort study. Acta Obstetrecia et Gynecologica Scandanavia. 2016;95(11):1305–12.
- McCowan L, Dekker GA, Chan E, et al. Spontaneous preterm birth and small for gestational age infants in women who stop smoking early in pregnancy: prospective cohort study. BMJ. 2009;338:b1081.
- England KJ, Kendrick JS, Wilson HG, et al. Effects of smoking reduction on birth weight of term infants. Am J Epidmiol. 2001;154:694–701.
- Office of National Statistics. Statistics on Public Health, England. London: ONS; 2024. https://digital.nhs.uk/data-and-information/publications/statistical/statistics-on-public-health/2023/part-2-mortality
- Taylor GMJ, Lindson N, Farley A, et al. Smoking cessation for improving mental health. Cochrane Database of Systematic Reviews 2021, Issue 3. Art. No.: CD013522. DOI: 10.1002/14651858.CD013522.pub2.
- Aveyard P, Lawrence T, Croghan E, Evans O, Cheng KK. Is advice to stop smoking from a midwife stressful for pregnant women who smoke? Data from a randomized controlled trial. Prev Med. 2005;40(5):575–82.
- Royal College of Midwifery. Position Statement: Support to stop smoking in Pregnancy rcm_position-statement_conference_2024_smoking_in_pregnancy_digital.pdf
- Nursing and Midwifery Council (NMC). Professional standards of practice and behaviour for nurses, midwives and nursing associates. NMC; 2024. https://www.nmc.org.uk/standards/code
- NHS England. Saving Babies' Lives: Version Three. A care bundle for reducing perinatal mortality. London: NHS England, 2023. https://www.england.nhs.uk/long-read/saving-babies-lives-version-3
- National Institute of Health and Care Excellence (NICE). Tobacco: preventing uptake, promoting quitting and treating dependence. NICE guideline [NG209]. NICE; 2021 (updated 2023). https://www.nice.org.uk/guidance/ ng209/chapter/recommendations-on-treating-tobacco-dependence-in-pregnant-women
- NHSE. NHSE maternity care referral pathway. Pathway https://future.nhs.uk/connect.ti/NHSpp/view?objectID=32438672
- Campbell KA, Fergie L, Coleman-Haynes T, Cooper S, Lorencatto F, Ussher M, et al. Improving behavioral support for smoking cessation in pregnancy: what are the barriers to stopping and which behavior change techniques can influence these? Application of the Theoretical Domains Framework. International Journal of Environmental Research and Public Health. 2018;15(2):359.
- Bauld L, Graham H, Sinclair L, Flemming K, Naughton F, Ford A, et al. Barriers to and facilitators of smoking cessation in pregnancy and following childbirth: literature review and qualitative study. Health Technol. Assess. 2017;21(36).
- Gunn JKL, Rosales CB, Center KE, Nunez A, Gibson SJ, Christ C, et al. Prenatal exposure to cannabis and maternal and child health outcomes: a systematic review and meta-analysis. BMJ Open. 2016;6:e009986.

- Metz TD, Stickrath EH. Marijuana use in pregnancy and lactation: a review of the evidence.
 Am J Obstet Gynecol. 2015;213(6):761–78.
- Marchand G, Masoud AT, Govindan M, Ware K, King A, Ruther S, Brazil G, Ulibarri H, Parise J, Arroyo A, Coriell C, Goetz S, Karrys A, Sainz K. Birth Outcomes of Neonates Exposed to Marijuana in Utero: A Systematic Review and Meta-analysis. JAMA Netw Open. 2022 Jan 4;5(1):e2145653. doi: 10.1001/jamanetworkopen.2021.45653
- Avalos LA, Adams SR, Alexeeff SE, Oberman NR, Does MB, Ansley D, Goler N, Padon AA, Silver LD, Young-Wolff KC.
 Neonatal outcomes associated with in utero cannabis exposure: a population-based retrospective cohort study.
 Am J Obstet Gynecol. 2024 Jul;231(1):132.e1-132.e13. doi: 10.1016/j.ajog.2023.11.1232.
- Sorkhou M, Singla DR, Castle DJ, George TP. Birth, cognitive and behavioral effects of intrauterine cannabis exposure in infants and children: A systematic review and meta-analysis. Addiction. 2024 Mar;119(3):411–437. doi: 10.1111/add.16370
- The Smoking in Pregnancy Challenge Group. Carbon Monoxide Screening: advice for health care professionals. https://ash.org.uk/uploads/CO-Screening-Advice-for-HCP.pdf?v=1655901362
- 40 Bauld L, Hackshaw L, Ferguson J, Coleman T, Taylor G, Salway R. Implementation of routine biochemical validation and an 'opt out' referral pathway for smoking cessation in pregnancy. Addiction. 2012;107(S2):53–60.
- 41. Campbell KA, Cooper S, Fahy SJ, Bowker K, Leonardi-Bee J, McEwen A, et al. 'Opt-out' referrals after identifying pregnant smokers using exhaled air carbon monoxide: impact on engagement with smoking cessation support. Tob Control. 2017;26(3):300–306.
- Shipton D, Tappin DM, Vadiveloo T, Crossley JA, Aitken DA, Chalmers J. Reliability of self reported smoking status by pregnant women for estimating smoking prevalence: a retrospective, cross sectional study. BMJ. 2009;339:b4347.
- 43. Bauld L, Hiscock R, Dobbie F, Averyard P, Coleman T, Leonardi-Bee J, et al. English Stop-Smoking Services: One year outcomes. Int J environ Res Public Health. 2016;13(12):E1175.
- West R, May S, West M, Croghan E, McEwen A. Performance of English stop smoking services in first 10 years: Analysis of service monitoring data. BMJ. 2013;347:f4921.
- Shiffman S, Hickcox M, Paty JA, Gnys M, Kassel JD, Richards TJ. Progression from a smoking lapse to relapse: prediction from abstinence violation effects, nicotine dependence, and lapse characteristics. J Consult Clin Psychol. 1996:64(5):993–1002.
- Kenford SL, Fiore MC, Jorenby DE, Smith SS, Wetter D, Baker TB. Predicting smoking cessation: Who will quit with and without the nicotine patch. JAMA. 1994;271(8):589–94.
- 47. Chamberlain C, O'Mara-Eves A, Porter J, et al. Psychosocial interventions for supporting women to stop smoking in pregnancy. Cochrane Database of Systematic Reviews 2017, Issue 2. Art. No.: CD001055.
- Notley C, Gentry S, Livingstone-Banks J, Bauld L, Perera R, Hartmann-Boyce J. Incentives for smoking cessation. Cochrane Database of Systematic Reviews 2019. Issue 7. Art. No.: CD004307.
- Action on Smoking and Health (ASH). Evidence into Practice: Supporting smokefree pregnancies through incentive schemes. ASH;2019. https://ash.org.uk/resources/view/evidence-into-practice-supporting-smokefree-pregnanciesthrough-incentive-schemes
- 50. National Institute for Health and Care Excellence. Resource impact report: financial incentives for pregnant women. London: NICE; 2021. Available from:
 - https://www.nice.org.uk/guidance/ng209/resources/resource-impact-report-pdf-10892454877

- Ussher M, Best C, Lewis S, et al. Effect of 3 months and 12 months of financial incentives on 12-month postpartum smoking cessation maintenance: A randomized controlled trial. Addiction. 2024 Aug;119(8):1352–1363
- Tappin D, Sinclair L, Kee F, et al. Effect of financial voucher incentives provided with UK stop smoking services on the cessation of smoking in pregnant women (CPIT III): pragmatic, multicentre, single blinded, phase 3, randomised controlled trial. BMJ. 2022;379:e071522.
- Claire R, Chamberlain C, Davey MA, Cooper SE, Berlin I, Leonardi-Bee J, Coleman T. Pharmacological interventions for promoting smoking cessation during pregnancy. Cochrane Database of Systematic Reviews 2020, Issue 3. Art. No.: CD010078. DOI: 10.1002/14651858.CD010078.pub3.
- Hartmann-Boyce J, Chepkin SC, Ye W, Bullen C, Lancaster T. Nicotine replacement therapy versus control for smoking cessation. Cochrane Database of Systematic Reviews 2018, Issue 5. Art. No.: CD000146.
- 55. Cooper S, Taggar J, Lewis S, Marlow N, Dickinson A, Whitemore R, Coleman T, for the Smoking, Nicotine and Pregnancy (SNAP) Trial Team. Effect of nicotine patches in pregnancy on infant and maternal outcomes at 2 years: follow-up from the randomised, double-blind, placebo-controlled SNAP trial. The Lancet Respiratory Medicine. 2014;2(9):728–737.
- Vaz LR, Aveyard P, Cooper S, Leonardi-Bee J, Coleman T. The association between treatment adherence to nicotine patches and smoking cessation in pregnancy: a secondary analysis of a randomized controlled trial. Nicotine Tob Res. 2016;18:1952–9.
- Blanc J, Tosello B, Ekblad MO, Berlin I, Netter A. Nicotine replacement therapy during pregnancy and child health outcomes: a systematic review. Int J Environ Res Public Health. 2021;18:4004.
- 58. Morales-Suárez-Varela M, Puig BM, Kaerlev L, Peraita-Costa I, Perales-Marín A. Safety of nicotine replacement therapy during pregnancy: a narrative review. Int J Environ Res Public Health. 2023;20:250.
- Hickson C, Lewis S, Campbell KA, et al. Comparison of nicotine exposure during pregnancy when smoking and abstinent with nicotine replacement therapy: systematic review and meta-analysis.
 Addiction. 2019;114(3):406–424.
- Taylor L, Claire R, Campbell K, Coleman Haynes T, Leonardi-Bee J, Chamberlain C, Berlin I, Davey MA, Cooper S, Coleman T. Fetal safety of nicotine replacement therapy in pregnancy: systematic review and meta-analysis. Addiction. 2021 Feb; 116(2):239-277. doi: 10.111/add.15185
- Brose LS, McEwen A, and R West. Association between nicotine replacement therapy use in pregnancy and smoking cessation. Drug and Alcohol Dependence. 2013;132(3):660–664.
- Bowker K, Campbell KA, Coleman T, Lewis S, Naughton F, Cooper S. Understanding pregnant smokers' adherence to nicotine replacement therapy during a quit attempt: a qualitative study. Nicotine Tob Res. 2016;18(5):906–12.
- 63. Campbell K, Coleman-Haynes T, Bowker K, Cooper SE, Connelly S, Coleman T. Factors influencing the uptake and use of nicotine replacement therapy and e-cigarettes in pregnant women who smoke: a qualitative evidence synthesis. Cochrane Database of Systematic Reviews 2020. Issue 5. Art. No.: CD013629.
- Clark MM, Cooper S, Naughton F, et al. Smoking, nicotine and pregnancy 2 (SNAP2) trial: protocol for a randomised controlled trial of an intervention to improve adherence to nicotine replacement therapy during pregnancy. BMJ Open 2024:14:e087175.
- Jackson, S., Brown, J., & Beard, E. Associations of prevalence of e-cigarette use with quit attempts, quit success, use of smoking cessation medication, and the overall quit rate in England: a time-series analysis of population trends 2007–2022. Nicotine Tob Res. 2024 Jun 21;26(7):826–834.

- Smoking Toolkit Study. Latest Statistics Resources Smoking in England. 2024.
 Available from: https://smokinginengland.info/resources/latest-statistics
- 67. McNeill A, Simonavičius E, Brose LS, et al. Nicotine vaping in England: an evidence update including health risks and perceptions. 2022. London: Office for Health Improvement and Disparities: 2022.
- Lindson N, Butler AR, McRobbie H, et al. Electronic cigarettes for smoking cessation. Cochrane Database Syst Rev 2024;1(1):CD010216.
- Lutman-White E, Patel R, Bell L, Lycett D, Hayward K, Sampson R, Arulrajah J, Whelan M. Provision of E-Cigarettes for Smoking Cessation in Pregnancy: Perceptions and Experiences of Pregnant Women from Two UK Sites. Int J Environ Res Public Health. 2024 Apr 12;21(4):472.
- 70. Hajek, P., Przulj, D., Pesola, F. et al. Electronic cigarettes versus nicotine patches for smoking cessation in pregnancy: a randomized controlled trial. Nat Med. 2022;28:958–964.
- Przulj D, Pesola F, Myers Smith K, et al Helping pregnant smokers quit: a multi-centre randomised controlled trial
 of electronic cigarettes versus nicotine replacement therapy. Health Technol Assess. 2023 Jul;27(13):1–53.
- Pesola F, Smith KM, Phillips-Waller A, et al. Safety of e-cigarettes and nicotine patches as stop-smoking aids in pregnancy: Secondary analysis of the Pregnancy Trial of E-cigarettes and Patches (PREP) randomized controlled trial. Addiction. 2024 May;119(5):875–884.
- National Centre for Smoking Cessation and Training (NCSCT). Vapes: A guide for health and social care
 professionals (Version 3). NCSCT; 2023. ISBN 978-1-915481-00-9. www.ncsct.co.uk/publications/Vaping briefing
- 74. Smoking in Pregnancy Challenge Group. Vaping before, during and after pregnancy: a guide for maternity and other health care professionals. https://ash.org.uk/resources/view/use-of-electronic-cigarettes-before-duringand-after-pregnancy-leaflets-and-infographics
- Maternal and neonatal health collaborative. Driver diagram and Change Package. Increase the proportion of smoke free pregnancies. NHS improvement. https://s42140.pcdn.co/wp-content/uploads/DD-Smoking-V4.2.pdf
- Harmer C, and A Memon. Factors associated with smoking relapse in the postpartum period: an analysis of the child health surveillance system data in Southeast England. Nicotine and Tobacco Research. 2013;15(5):904–9.
- 77. Jones M, Lewis S, Parrott S, Wormall S, Coleman T. Restarting smoking in the postpartum period after receiving a smoking cessation intervention: a systematic review. Addiction. 2016;111:981–90.
- Liu J, Rosenberg KD, Sandoval AP. Breastfeeding duration and perinatal cigarette smoking in a population-based cohort. Am J Public Health. 2006;96:309–314.
- Collins BN, DiSantis KI, Nair US. Longer previous smoking abstinence relates to successful breastfeeding initiation among underserved smokers. Breastfeed Med. 2011;6(6):385–91.
- 80. Higgins TM, Higgins ST, Heil SH, Badger GJ, Skelly JM, Berstein IM, et al. Effects of cigarette smoking cessation on breastfeeding duration. Nicotine Tob Res. 2010;12(5):483–8.

This briefing gives expert, concise guidance for Maternity Health Providers on how to deliver Very Brief Advice (VBA) to pregnant women who smoke and how to carry out routine carbon monoxide (CO) testing with all pregnant women.