

Guidelines for supporting women who smoke during pregnancy.

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The latest approved version of this document is online.
If the review date has passed please contact the Author for advice.

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Version Control

Version	Summary of Changes/Amendments	Issue Date
1	Initial Issue	April 2024
2	Addition of detail regarding e-cigarettes and nicotine replacement therapy	21/02/2025

Engagement & Consultation

Key Individuals/Groups Involved in Developing this Document

Role / Designation
Midwife
Smoking Cessation Advisor
Consultant Midwife
Clinical Supervisor for Midwives

Circulated to the following for Consultation

Date	Role / Designation
23/12/2024	Powys midwives
23/12/2024	Members of the women and children's guideline committee
23/12/2024	Powys Public Health team
23/12/2024	Safeguarding team

Groups Approved at

Date	Group
7/1/2025	Maternity guidelines Group
21/1/2025	Women and Children's policies and procedures group
27/1/2025	Executive Director of Nursing, Quality, Women and Family Approval

Evidence Base

Please list any National Guidelines, Legislation or Health and Care Standards relating to this subject area?

National Institute of Clinical Excellence (NICE) (2023). Tobacco: preventing uptake, promoting quitting, and treating dependence (NG209) [Tobacco: preventing uptake, promoting quitting and treating dependence \(nice.org.uk\)](https://www.nice.org.uk/guidance/ng209)

Impact Assessments

Equality Impact Assessment Summary					
	No impact	Adverse	Differential	Positive	Statement
					Please remember policy documents are published to both the intranet and internet .
Age	X				The version on the internet must be translated to Welsh.
Disability	X				
Gender reassignment	X				
Pregnancy and maternity				X	
Race	X				
Religion/ Belief	X				
Sex	X				
Sexual Orientation	X				
Marriage and civil partnership	X				
Welsh Language	X				
Human Rights	X				
Risk Assessment Summary					
Have you identified any risks arising from the implementation of this policy / procedure / written control document?					
No risks identified					
Have you identified any Information Governance issues arising from the implementation of this policy / procedure / written control document?					
As above					
Have you identified any training and / or resource implications as a result of implementing this?					
Ensuring staff can use carbon monoxide monitors safely and effectively. Brief intervention training is available for staff to increase confidence in conversations about smoking cessation.					

1. Policy Statement / Introduction

In 2022, 14.1% of pregnant women in Wales were reported as being a smoker at their initial assessment. 12.1% of women were then reported as being smokers at the time of birth. These statistics show an increase in the downward trend since the initiation of data collection in 2016. However, due to the covid-19 pandemic, CO monitoring was ceased, and all data were self-reported. 29% of the women reported as smokers at the initial assessment were aged 16-19 compared to 10% aged 35 and over. Additionally, 25% of women who continued to smoke at birth were aged 19 or under. 27% of women who reported smoking at booking were not smokers at birth (GOV, 2023).

Smoking in pregnancy is known to cause increased risk for mother and baby. The service aims to provide timely, accessible, evidence-based treatment and behavioral support. Using these to help women and their families to quit smoking during pregnancy and beyond. This guideline aids to ensure compliance with national policies, guidelines, and strategies relative to smoking and smoking cessation during pregnancy and following childbirth. This guideline is underpinned by NICE (National Institute for Health and Care Excellence) guideline.

Pregnant women who smoke in pregnancy are eligible for serial growth scans in Powys.

This guideline uses the terms 'woman' or 'mother' throughout. These should be taken to include people who do not identify as women but are pregnant or have given birth. Similarly, where the term 'parents' is used, this should be taken to include anyone who has main responsibility for caring for a baby. It is recognised that there are many different family arrangements.

2. Objective

This document aims to provide guidance for midwives supporting women during their pregnancy and beyond to quit or reduce smoking.

3. Definitions

- PTHB – Powys Teaching Health Board
- CO- Carbon Monoxide
- SSW- Stop Smoking Wales
- MW – Midwife
- MSW – Maternity support worker
- PPM – Parts Per Million

4. Responsibilities

4.1 Head of Midwifery and Sexual Health

The Head of Midwifery and Sexual Health must:

	<ul style="list-style-type: none">• Ensure all staff read and understand these guidelines.• Arrange regular review to monitor compliance with this guideline
	<p>4.2 Assistant Head of Midwifery & Sexual Health and Team Leads</p> <p>The Assistant Head of Midwifery & Sexual Health Services and team leads have responsibility for:</p> <ul style="list-style-type: none">• Ensuring dissemination of this document to all relevant staff• Ensuring compliance with this document by the teams that they manage
	<p>4.3 Consultant midwife</p> <p>The consultant midwife has responsibility for:</p> <ul style="list-style-type: none">• Supporting implementation of this document• Reviewing any new evidence or guidance that is produced that may influence the service.• Communicating any key changes in advice that might influence service provision to the Midwifery Leadership and Management team for consideration.• Being available in an advisory capacity related to care outside of guidance.
	<p>4.4 Women and Children’s Risk and Governance Lead</p> <p>The Women and Children’s Risk and Governance Lead is responsible for:</p> <ul style="list-style-type: none">• monitoring and reviewing incidents in relation to the contents of this document.
	<p>4.5 Midwives and clinical maternity support workers</p> <p>Are responsible for:</p> <ul style="list-style-type: none">- Reading and being familiar with the contents of this document- Assessing carbon monoxide exposure at the booking appointment on all women unless declined- Assessing and referring people who meet the criteria to an opt-out smoking support service.- Monitoring people at risk of increased CO levels with CO monitoring at each antenatal appointment.

5. Assessment of Carbon Monoxide (CO) in pregnancy

The smoking status of pregnant women, their partners and household members will be assessed during the booking appointment. This should be established using direct questioning and using CO monitoring as part of standard care for all women. CO monitoring can be extended to other household members to encourage smoking cessation. NICE recognizes that some people find it difficult to disclose smoking habits. This can make it difficult to ensure appropriate support is being offered.

NICE Guidance (NG 209) recommends all midwives to complete a carbon monoxide testing at the first antenatal appointment and the 36-week antenatal appointment on **all** pregnant women to assess their exposure to CO. Midwives should discuss the effects of carbon monoxide exposure to every person in their pregnancy, regardless of their smoking status.

Midwives should explain what CO is and that it is a poisonous gas and provide examples, such as car pollution, faulty gas applications and secondhand smoking. The midwife should explain that CO affects the body's ability to transport oxygen around the body; thus, reduces the available oxygen to baby. It should be discussed that increased CO exposure increases the risks of poor fetal outcomes such as stillbirth and can increase the risk of growth restriction in the unborn baby. Midwives should also explain that smoking increases the risk of neonatal death.

Midwives should offer CO monitoring at **every** antenatal and scan appointment to the following pregnant women:

- Is a smoker.
- Is quitting smoking.
- Used to smoke (quit within the last 2 weeks)
- Using E-Cigarettes or vaping
- On Nicotine Replacement therapy
- Tested with a CO of 4ppm (parts per million) or more at the first antenatal appointment.

Record CO levels and any feedback in the antenatal records. If the antenatal records are not available locally, use local protocols to record this information. An information leaflet is attached and can be shared with women if they wish from Appendix B.

5.1 Women who have raised CO

If women score a CO reading of 4ppm or more and do not report smoking, discuss the possible source of CO and how to reduce exposure. Examples of possible exposure include other smokers in the household, other exposure to second-hand smoking, faulty or poorly ventilated cooking or heating appliances or faulty car exhausts.

If women score a CO of 4ppm or more:

- Discuss the risks of carbon monoxide poisoning.
- Discuss reducing exposure to cigarette smoke. This may be quitting smoking themselves or reducing exposure to others who do smoke.
- If the person is not usually exposed to cigarette smoke, advise to contact the Gas Emergency Line which is free phone (0800 111 999)

For women who have not been exposed to smoking but have a raised CO it is imperative that professionals understand the increased risk of carbon monoxide poisoning – consider repeating CO reading within different environment (e.g., home) or checking another member of the household. Other reasons for exposure need to be considered such as the workplace, within cars, faulty boilers, cleaning fluids and some paint fumes. CO at the next antenatal appointment and throughout pregnancy is essential if concerns persist with CO levels.

N.B. Staff need to be aware that CO has a short half-life, this means that CO levels will reduce by half after around 3-4 hours. Be aware they may not have been exposed for some time so the result may be less than the actual exposure levels i.e., prolonged waits in ANC, appointments at the end of the day.

Discuss any symptoms that may be related to CO poisoning– tension type headache, dizziness, sickness, tiredness and confusion, stomach pains, shortness of breath/breathing difficulty, 'flu' like symptoms (unlike flu, CO does not cause an elevated temperature). Being aware that symptoms may be less severe when you are away from the source of CO - ideally CO as soon as possible on entering the clinical area.

N.B. For those with exceptionally high CO rates ≥ 15 or symptoms of CO poisoning – midwives need to understand and be confident that the levels of CO are not due to smoking, and it should be strongly recommended that they seek medical attention at local Emergency Department.

For those who identify as non-smokers we should consider urgent referral at a lower level of CO

6. Opt-out smoking cessation service.

The following women should be informed that an automatic opt-out referral is generated at the booking appointment.

- Women who say that they smoker or have stopped smoking in the past two weeks.
- Women who have a carbon monoxide reading at booking of 4ppm or above
- Women who have previously been provided an opt-out referral but have not engaged with stop-smoking services.

When discussing the automatic opt-out referral to women, explain the following:

- It is normal practice to refer all pregnant women who smoke or have recently quit due to the risks to the unborn, the woman and extended family.
- Informing the woman that they will receive a text message or a phone call from a withheld number from Help Me Quit.
- Carbon monoxide testing allows them to see the physical measure of their smoking, however, it also demonstrates when someone has been exposed in other ways which is why it is offered to all pregnant women, not simply those who smoke.
- What the carbon monoxide reading means. Take into consideration the time the woman last smoked, and the number of cigarettes smoked when carrying out the test.

If pregnant women are attending the day assessment unit (DAU) for serial growth scans they will have a CO monitoring completed by the clinical MSW or sonographer and re-offered smoking cessation support if not already accepted at each contact. This needs to be recorded in the handheld records at the time of the DAU appointment.

It is recognised that stopping smoking is one of the best things a pregnant person can do to protect the health of their baby through pregnancy and beyond. While licensed nicotine replacement (NRT) products are the recommended option, if a pregnant person chooses to use an e-cigarette to help quit smoking and stay smokefree, they should be supported to do so. Women who identify as using electronic delivery systems, with or without nicotine should be referred for smoking cessation support.

6.1 Following up people who are referred for smoking cessation (for providers of stop smoking support)

Initially contact the person referred to the stop smoking service. Discuss smoking in pregnancy and the issues they face, ensuring an impartial and person-centred approach. Invite the person to use the service.

Provide information about the risks of smoking to the unborn child and the benefits of stopping for both mother and baby.
Address any concerns the pregnant women or their family have about stopping smoking and offer personalised information, advise and support to stop.
For people who are reluctant to attend stop smoking support, offer self-help material (telephone quit lines and NHS online stop smoking service).
Address any factors that may prevent people from using the stop smoking service. For example, difficulty accessing them, lack of suitable childcare, fear or failure and concern about being stigmatised, lack of knowledge about the service offered or a lack of confidence in their ability to quit.
Consider offering home visits or visits to another venue that is more suitable.
For people who opt out of the service, send information including how to get help to quit later. Smoking cessation advice and information can be obtained from [Help Me Quit website](#).
Advise the named midwife of the outcome of the initial contact by email.

7. Completing a Referral

Midwives will be able to be automatically generate a referral through the Welsh Patient Administration System (WPAS) for the pregnant woman only. Ticking the box to say referral to smoking services will generate the automatic referral and the public health advisor service will be allocated the referral through the Help me Quit (HMQ) service.

Midwives can also refer via the Quit Manager system.

Midwives can refer women who use vapes directly to Powys Team on [Stop Smoking Powys](#)

7.1 Referral via WPAS

An automatic referral can be completed via WPAS. (Appendix A)
Open the patients maternity record on WPAS, open the section 'social status'.
Scroll down to the section 'Smoking and Carbon Monoxide Exposure'
Enter the relevant details in line with the person's smoking status.
Select yes to 'Woman referred to smoking cessation programme' and this will generate an automatic referral.

8. Postnatal Period and Handover to Health Visiting Services

Encouragement should be given to women who have remained abstinent during the postnatal period.

Carbon monoxide screening can be repeated in the postnatal period to support abstinence.

Advise women who remain smoking to try stop or cut down and offer smoking cessation support. Advise that this support is still offered to anyone else in the household that smokes.

At the first day home visit, midwives should discuss safe sleeping guidelines and reducing the risk of Sudden Infant Death Syndrome (SIDS). Midwives should establish the woman and family members smoking status.

Midwives should advise the risk of second-hand smoking to baby and how this can increase the risk of SIDS.

Midwives should advise the dangers of bed sharing when either mother or partner smoke and advise them not to bed share.

For women who are breastfeeding, discuss the physiology of breastfeeding when smoking – nicotine can be found in breastmilk and the quality of milk can be reduced when smoking. Advise the risk of colic increases in smoking mothers who breastfeed.

On discharge from maternity services, discussion around safe sleeping and reducing the risk of SIDS should be completed again. Advise the woman that smoking cessation support for herself or anyone else in the household is still available.

On discharge from midwifery services, the midwife should complete the handover to health visitor and indicate the smoking status of the woman and other family members in the household.

On verbal handover to the health visitor, midwives should advise the smoking status of the woman and family members in the household.

9. Safeguarding

Midwives should complete a routine risk assessment for lone working if there are any concerns. If there is any known risk to lone working or completing home visits, ensure the PTHB home risk assessment is shared in a timely manner with the smoking advisors and email a copy to stopsmoking.powys@wales.nhs.uk

Midwives should ensure any updates regarding safeguarding if passed to the smoking advisors.

If any safeguarding concerns or significant risk factors are identified for a child or young person/vulnerable adult, practitioners must follow Wales Safeguarding Procedures (2019) and SGP036 Safeguarding Policy [Policies & Written Control Documents - SGP 036 Safeguarding Policy.pdf \(sharepoint.com\)](#) . Advice and support concerning any safeguarding issue can be sought from PTHB Safeguarding Team via the Safeguarding Hub on 01686 252806 or email PowysTHB.Safeguarding@wales.nhs.uk (Monday-Friday 09:00-17:00, excluding Bank Holidays). Outside of office hours, Local Authority can be contacted on 0345 0544 847 or contact Silver on Call.

All registered practitioners should access appropriate safeguarding supervision and training as per guidance. [Safeguarding Supervision \(sharepoint.com\)](#)

10. Equipment

All Powys midwives should have access to their own CO monitor.

All clinical areas should have access to a CO monitor.

Each birth centre and midwife are responsible for ensuring each monitor is serviced by the date instructed.

Any problems with CO monitors should be reported and acted on immediately.

Each CO monitor should be cleaned after each use.

11. Monitoring Compliance, Audit & Review

Data is reviewed within the maternity service to establish percentage of women who smoke at booking and referral rates through WPAS. CO monitoring is also monitored. All data is available through Power BI.

Meetings take place with the public health team and maternity service to review data in relation to smoking in pregnancy.

Any adverse incidents in relation to this guideline will be reported through Datix and reviewed accordingly.

This document will be reviewed every three years or earlier should audit results or changes to legislation / practice within PTHB indicate otherwise.

12. Training available for Midwives

Training is available to support midwives provide up to date and relevant information with women and their families regarding exposure to and use of tobacco.

Online Brief intervention training is available via ESR (Electronic Staff Record) [Brief Intervention Training](#)

There is also training available via [NCSCT training](#) which is more extensive and discusses all the available tools to help someone quit smoking.

13. References / Bibliography

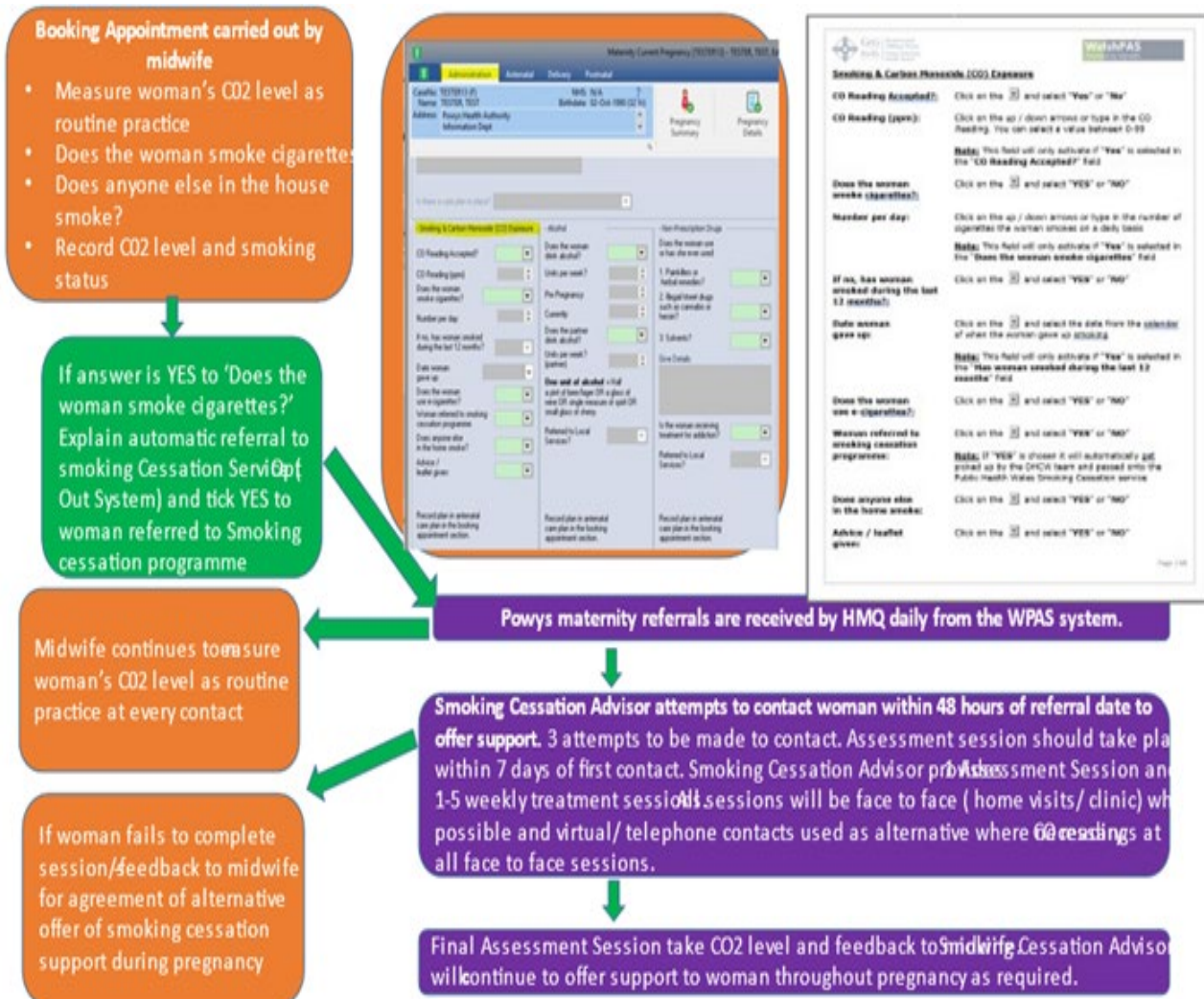
The Lullaby Trust [Smoking during pregnancy or after birth increases the risk of SIDS - The Lullaby Trust](#)

National Institute of Clinical Excellence (NICE) (2023). Tobacco: preventing uptake, promoting quitting, and treating dependence (NG209) [Tobacco: preventing uptake, promoting quitting and treating dependence \(nice.org.uk\)](#)

Welsh Government (2023) Maternity and birth statistics: 2022 [Maternity and birth statistics: 2022 | GOV.WALES](#)

Appendix A


Flow Chart for Midwives






Appendix B

Carbon Monoxide information leaflet

Smokerlyzer®



Breath carbon monoxide monitors
Helping people to stop smoking

Adult		Maternity	
COppm	%COHb ¹	COppm	%FCOHb ²
30	5.43	20+	5.66
29	5.27	19	5.38
28	5.11	18	5.09
27	4.95	17	4.81
26	4.79	16	4.53
25	4.63	15	4.25
24	4.47	14	3.96
23	4.31	13	3.68
22	4.15	12	3.40
21	3.99	11	3.11
20	3.83	10	2.83
19	3.67	09	2.55
18	3.51	08	2.26
17	3.35	07	1.98
16	3.19	06	1.70
15	3.03	05	1.42
14	2.87	04	1.13
13	2.71	03	0.85
12	2.55	02	0.57
11	2.39	01	0.28
10	2.23		
09	2.07		
08	1.91		
07	1.75		
06	1.59		
05	1.43		
04	1.27		
03	1.11		
02	0.95		
01	0.79		

Having a reading in this zone indicates you may well be a **regular smoker** with higher levels of CO in your blood. Do not despair! Help is at hand and your stop smoking advisor can help you to give up smoking and lower your reading into the target "Green zone".


Having a reading in this zone would indicate a **light smoker** or a **non-smoker** breathing in poor air quality or passive smoke. Your stop smoking advisor will be able to advise on the best course of action to lower this reading to the target "Green zone".

This is where you really need to be!
 It means you have less than 2% carbon monoxide (CO) in your blood. Most people have a small amount of CO in their breath, this is due to the air quality around you.

References:

1. COppm - %COHb calculation taken from: Jarvis M et al (1996) "Low cost Carbon Monoxide monitors in smoking assessment." *Throat* 41 pp 884-887.

2. COppm - %FCOHb calculation taken from: Downes C, et al (2008) "Exposed air carbon monoxide concentrations in mothers and their spouses above 1ppm is associated with decreased fetal growth." *Prenatal Medicine* 10 pp 10-15



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Bedfont® (Bedfont) Ltd.
 Broom Road, Hemel Hempstead, Herts, AL2 1JF, UK
 Tel: +44 (0)1462 881000 Fax: +44 (0)1462 880800
 Email: uk@bedfont.com www.bedfont.com

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Appendix C

Smoking Cessation Support Referral Form

Please complete the form below and a member of the smoking cessation team will contact your client/patient. For further details on how the health board processes patient and staff information, please visit our Privacy Notice [Privacy - Powys Teaching Health Board \(NHS. Wales\)](#). Completed forms to be sent to: stopsmoking.powys@wales.nhs.uk

Referral Date:	
Referrer Name and Title	
Profession	
Referrer Address	

Patient Demographics:	Full Name	
	Address Including Postcode	
	Date of Birth	
	Contact Numbers	
	Email Address	
	Registered GP (General Practitioner)	

Patient History / Current Medication	Pregnant Comments.....	No. of Weeks? <input style="width: 50px; height: 20px;" type="text"/> <input style="width: 50px; height: 20px;" type="text"/>
	Patient History * Optional to complete	
	Medication * Optional to complete	

Preferred Contact Type: Please place an X in the box	Face to Face Contact <input style="width: 40px; height: 25px;" type="checkbox"/>	Telephone <input style="width: 40px; height: 25px;" type="checkbox"/>
	Attend Anywhere <input style="width: 40px; height: 25px;" type="checkbox"/>	

Please discuss the referral with the client and confirm that consent has been granted for the referral to be made by signing this section.	Signature:
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Completed forms to be sent to: stopsmoking.powys@wales.nhs.uk