GIG CYMRU NHS WALES | Bwrdd Iechyd Prifysgol Bae Abertawe | Swansea Bay University Health Board

Care of Women who Smoke

SBUHB 2024

Author: Emma Richards

Approved by: Antenatal forum

Date approved: 14 August 2024

Review Date: 14 August 2027

Contents

1.0 Introduction and Scope 3
1.1 Roles and Responsibilities 3
2.0 Purpose /Background 3
3.0 CO (Carbon Monoxide) Monitors / Care /Testing/ Readings/Training 4
3.1 Use and care of CO monitor 4
3.2 Training 5
3.3 Interpreting CO Reading (Appendix) 5
4.0 Referral to Maternity Stop Smoking Service 5
4.1 Maternity Stop Smoking Service Pathway 6
5.0 Vaping / E-cigarettes (are not currently available on the NHS) 6
6.0 Nicotine Replacement Therapy (NRT) 7
7.0 Antenatal Pathway 7
7.1 USS 8
7.2 Antenatal clinic, AAU DAU every opportunity should be taken to; 8
7.3 Anaesthetic Review (prior to hospital admission) 8
8.0 In Patient Care 8
8.1 Planned Admission IOL / Surgical Birth 8
8.2 Antenatal Ward 9
8.3 Postnatal/ Transitional Care Ward 9
9. Audits / Monitoring 10
Appendix 1 CO Monitoring pathway 11
Appendix 2 - for Prescribers 12

1.0 Introduction and Scope

The aim of this guideline is to provide a standardised pathway to improve the health of the unborn babies of women who smoke; their partners; children and others in their household who smoke in Swansea Bay.

1.1 Roles and Responsibilities

Implementation of this policy will ensure that smoking cessation practice in maternity is within national guidance (NICE 2021). The guideline supports clinicians and healthcare staff to identify pregnant women who smoke and ensure they are offered a maternity led pathway that supports them to quit and prevent relapse within maternity specialist stop smoking services (Help Me Quit for Baby). This will be delivered through combined pharmacotherapy and behavioural interventions for pregnant women.

This guideline applies to women who smoke and who are:

- Smoking at conception
- Smoking throughout pregnancy
- Smoking in the postnatal period

All healthcare workers should aspire to use a 'make every contact count' (MECC) approach as an opportunity to establish a pregnant woman's smoking status using the 3 A's framework (Ask, Advise, Act). Non-compliance with this guideline must be for valid clinical reasons only. The reason for non-compliance must be documented clearly in the patient's notes

2.0 Purpose /Background

Smoking (including shisha) during pregnancy has serious consequences on the health of the mother and baby. Smoking causes both short-term and long-term problems, from premature delivery to increased risk of miscarriage, ectopic pregnancy, placental complications, and pre-term rupture of membranes, low birth rate, stillbirth or sudden infant death.

Children whose mother smoked in pregnancy are also more likely to develop learning difficulties including autism, ADHD hyperactivity, ear nose and throat problems and obesity (NHS 2019).

Second Hand Smoke also has a serious effect on health, particularly for children, with increased reports of lower respiratory tract infections, asthma, wheezing, middle ear infections, sudden unexpected death in infancy and invasive meningococcal disease. This has implications for both the new-born babies and existing children of women who smoke.

It is estimated that smokers are 4 times as likely to quit smoking if they use a stop smoking service. There is also evidence that if women stop smoking by the second trimester they have the same rates of stillbirth, prematurity and low birth weight as non-smokers.

Helping pregnant women who smoke to quit involves communicating in a sensitive manner, as there is strong evidence to say some pregnant women may find it difficult to say that they smoke for fear of professional judgement. Such an approach is important to reduce the likelihood that some of them may miss out on the opportunity to get support. (NICE 2021)

The NCSCT 2012 (National Institute for Smoking Cessation Support) describes smoking as "the single most modifiable risk factor for adverse outcomes in pregnancy" therefore this potentially preventable activity, is an important health issue in pregnancy and stopping smoking at any stage of pregnancy will be beneficial to the fetus.

3.0 CO (Carbon Monoxide) Monitors / Care /Testing/ Readings/Training

CO monitors and relevant consumables must also be sustainably provided to support CO testing. Midwives / healthcare staff must have up to date knowledge and skills training to maximise their potential to impact positively on pregnancy outcomes.

A CO test is an immediate, non-invasive biochemical screening method for helping to assess whether someone smokes or is at risk of harm due to raised CO levels.

- It should be offered at all routine community antenatal appointments for all women, with particular emphasis on initial booking appointment and 36-week appointment (as this is an opportunity for enhance discussion that may support a quit attempt prior to birth). The rational for this is to ensure smoking women do not feel stigmatised, it will helps facilitate and identify risk around passive smoking and importance of smoke free environments but also identifies other risks to high CO exposure from other sources identified in the All Wales Handheld Maternity records.
- Prior to a CO test obtain consent, explain that CO is a harmful deadly poisonous gas.
- CO screening is a simple routine part of antenatal care.
- Cigarette smoke is the largest cause of raised CO levels whilst environmental factors such as, pollution from car exhaust fumes, faulty gas appliances and second-hand tobacco smoke can also contribute to a rise in CO readings. Explain raised CO level can be reversed by avoiding these factors. It's also Tier 1 Welsh Gov target, with 4 week reporting CO validation reading for women that have quit smoking.
- Explain that raised CO levels affects the body's ability to transport oxygen around the body, which reduces the oxygen available to the baby but is also a marker for a person's exposure to smoking. Cigarette smoke also contains over 7000 chemicals of which hundreds are toxic and may also cause damage to the fetus.

3.1 Use and care of CO monitor

If the person has an obvious respiratory infection, do not perform the monitoring.

- Please see monitor user manual for instructions. https://www.bedfont.com/documents/resources/smokerlyzer/manuals/Smokerlyzer-ManualUK.pdf.
- For accurate results the CO monitor should be used at room temperature.

- It is the responsibility of the individual community midwife or clinical area manager to ensure that monitors are serviced by the date instructed by clinical engineering.
- Problems with CO monitors should be reported to the Public Health specialist midwife or one of the maternity cessation service team.
- No products containing alcohol should be used as it affects the functioning and effectiveness of the monitors.
- Spare batteries should always be available /carried.
- Single use mouthpieces should be removed and disposed of (refer to manual). D Pieces can be used up to 28 days and then replaced, cleaning should be usual infection control measures. Stock should be re ordered in accordance to other clinical stock.

3.2 Training

- Everyone using a CO monitor should watch the Bedfont training video
- Completion of mandatory Public Health training including Brief Intervention and MECC early training via ESR ELearning.
- One to one Public Health training / induction with one of the Public Health midwives for all new community and antenatal clinic staff arranged by ward /lead midwife.
- If an individual requires a training update, please contact the Public Health midwife. Training video will also be available to access via the maternity SharePoint page.
- Online training opportunities can be found at; NCSCT e-learning www.ash.org

3.3 Interpreting CO Reading (Appendix)

If the pregnant woman does not smoke but has a CO level of 4>PPM or more, help her identify the source of CO and reduce it. (Refer to P.40 handheld records)

Other factors to consider include the time since they last smoked, the number of cigarettes smoked on the test day.CO levels quickly disappear from expired breath; as a result, low levels of smoking may go undetected. *Note:* CO has a short half-life, this means that CO levels will reduce by half after around 3-4 hours.

4.0 Referral to Maternity Stop Smoking Service

All pregnant women will be referred through an 'Opt-Out' approach (i.e., the midwife should not ask if they want to be referred, it is inferred consent), and informed that a referral is going to be made for any of the criteria below to local maternity specialist stop smoking service.

- Smoke tobacco/shisha
- Have a raised CO ≥ 4 PPM
- Recent uptake of vaping (quit since conception- due to the risk of relapse).
- Early quitters (quit since conception- due to the risk of relapse).
-

Explain it is normal practice to refer pregnant women to their maternity cessation service as soon as possible.

If support is declined the referrer should accept the answer in an impartial manner; leave the offer of support and future referral opportunities. It should be highlighted

that support is flexible and may include e.g., home visits, one to one, group support from Maternity cessation practitioners and treatment with pharmacotherapy (NRT Nicotine Replacement Therapy) and behavioural support. This will be done following an individual needs assessment.

Advice should be to stop smoking completely rather than 'cutting down'. It is not recommended that smokers reduce the number of cigarettes smoked per day as this may create the false impression of risk reduction and it should be communicated that regardless of the level of smoking there are increased risks associated with harm and pregnancy loss.

- Provide verbal and written information with local and national support details.
- Discuss the benefits and importance of 'Smokefree Homes' and cars.

4.1 Maternity Stop Smoking Service Pathway

- The maternity smoking practitioners will identify smokers from the online pregnancy booking community dashboard and contact the woman within 72hrs (aim 24hrs) to offer an initial appointment within 5 working days. This will enable the earliest possible contact to offer cessation support and provide a point of contact for maternity staff and the woman.
- Following the antenatal booking appointment where midwives must clearly highlight the harms of smoking and have discussions around engagement with the maternity cessation service to encourage smoking cessation. They should highlight that following this appointment an automatic op out' referral to the maternity cessation service will also be generated and contact by text or phone call to offer support. Within 24/48 hours from a maternity smoking practitioner.
- The Maternity Specialist Stop Smoking Services are to document the care given and any NRT administration in the maternity hand-held records alongside the smokefree pregnancy platform. This promotes a team approach and increases the person's confidence and engagement in the service.
- They will have weekly appointments until the 4-week quit is achieved ensuring the quit is CO validated.
- Referrals can also be made by any healthcare worker through the digital referral form Referral Form or phone call. **01639 684532** mailto: SBU.HMQ@Wales.nhs.uk
- Feedback from the maternity practitioner will be provided to the named midwife regarding any engagement / non engagement and support.

5.0 Vaping / E-cigarettes (are not currently available on the NHS)

Vaping is designed to appear and feel like real cigarettes but allow users to inhale through vapour without the concentrated toxic compounds found in tobacco smoke. Most have three components including a battery, atomiser, and replacement cartridge, which suspends nicotine in propylene glycol, water, and flavourings. Liquid in the cartridge is heated and evaporates when users draw on the device. Varying levels of nicotine (if used) are then delivered through a vapour, and some products light up at the tip at this point to resemble a lit cigarette.

It should be noted that there is limited research conducted into the safety of e-cigarettes in pregnancy. Recent studies support the Cochrane Review findings that

Vaping can help pregnant people to quit smoking and reduce their cigarette consumption. There is also evidence that Vaping can encourage quitting or cigarette consumption reduction even among those not intending to quit or rejecting other support. A large research trial published in 2022 reported that vapes were more effective than nicotine patches in those who were pregnant and smoked. Participants allocated to vapes were less likely to have babies with low birthweight (<2500g). Using e-cigarettes is not entirely risk free but research on their use among the general adult populations shows that vaping is substantially less harmful than smoking tobacco and likely to be significantly less harmful to a pregnant woman and her baby than cigarettes.

During pregnancy only licensed NRT products such as patches and gum are the recommended option to help stop smoking.

- Evidence shows that using both e-cigarettes and smoking (dual using) does not confer any health benefit over using just cigarettes. If both e-cigarettes and smoking are used, they should be managed as smokers and be supported to stop smoking.
- If a person is solely using a vape, this is not considered as smoking for recording purposes and the person should be recorded as being a non-smoker.
- There is a risk of fire from the electrical elements of Vaping and a risk of poisoning from ingestion of vaping liquids. These risks are comparable to similar electrical goods and potentially poisonous household substances. All staff should be aware of the fire hazard associated with the use and recharging of vaping devices are not to be used in an oxygen rich environment.
- There is no reason to believe that using a vape would compromise breastfeeding. People who vape following birth should not be discouraged from doing so if it enables them to stay quit and maintain a smokefree home.

6.0 Nicotine Replacement Therapy (NRT)

See Appendix 2

7.0 Antenatal Pathway

In Swansea Bay it is recommended that all women are offered CO (carbon monoxide) monitoring. Prior to performing a CO test then a discussion around CO monitoring should have been undertake as per P.40 All Wales Handheld Records. Documentation around if the woman has consent and the reading should be complete in the handheld record but also on WPAS at booking and 36 weeks.

For all routine community antenatal appointments CO testing should be undertaken, their smoking status asked and documented. This provides an opportunity for further VBA (Very Brief Advice) to be given and re-referral to maternity Stop Smoking Services.

The Specialist Stop Smoking Service will give feedback to the referring midwife, or maternity practitioner, on any non-engagement with their service. This will encourage the midwife to re-address / CO test at the next antenatal contact.

7.1 USS

- Women who disclose that they smoke with no other risk factor will be offered growth surveillance scans in line with Midwife Sonography guidelines. In NPT currently smokers (no additional risk factors) are scanned by ultrasound and seen by an ANC midwife following the appointment who can facilitate CO monitors and VBA. Maternity cessation practitioners should also be encouraged to support smokers access appropriate help.
- Women with two or more risk factors (smoking one regardless of amount) will be scanned in accordance with sonography and obstetric led clinics.
- A history of recent smoking and self-disclosed a quit with no cessation support, possible smoking relapse should always be considered when palpating symphysis fundal heights and plotting on GROW charts as possible cause of FGR.

7.2 Antenatal clinic, AAU DAU every opportunity should be taken to;

- Provide MECC and confirm smoking status and document.
- Perform CO monitoring and document using clinical decision making if clinically appropriate.
- Smoking had been associated with reduced fetal movements and a risk factor in the All-Wales Fetal Movements guideline (2021). Women should be aware of this and can be used to frame cessation conversations.
- If smoker and not accepted earlier smoking referral, offer again.

7.3 Anaesthetic Review (prior to hospital admission)

Women attending an anaesthetic review to make a plan of care for hospital admission are to be advised about the impact of smoking on surgical interventions related to anaesthetic care.

- Nicotine replacement therapy (NRT) is to be discussed as an option to make the hospital stay more comfortable and prescribed on a standard drug chart.

8.0 In Patient Care

- Maternity smoking advisors will be attending maternity wards daily (Mon-Friday) to offer in patient support.
- NRT should be available on wards and reminded that hospital is a smoke free premises and patient can be fined if they smoke on property.
- If NRT is accepted best practice would be that received within 4hrs of admission in line with COIN
- Women should also be monitored for potential withdrawals and flag if a review is needed by a maternity smoking practitioner/Dr/Pharmacy
- Smoking cessation medication should also be added to any discharge summary
- CO readings for smokers should continue as antenatal care where high levels of smoking are noted. Healthcare professionals can use their own judgement to facilitate smoke free conversations. This can also be supported by smoking practitioners/ HC support workers.

8.1 Planned Admission IOL / Surgical Birth

A woman's smoking status is to be recorded within the plan when booking a date to attend for planned induction of labour / Pre- OP.

- NRT to be discussed as an option to make the hospital stay more comfortable and smoke free hospital.
- A standard drug chart can be used to prescribe NRT if not already in place. If not having Maternity Cessation Support offer referral.

(See appendix 2 for NRT prescribing guidance)

8.2 Antenatal Ward

It is important to note that women who have smoked throughout their pregnancy and not accepted cessation support are likely to experience symptoms of nicotine withdrawal during their hospital stay. Therefore, smoking status should be clearly identifiable when in patients.

As part of admission to hospital it is a requirement that they are to have a CO test on admission, if an emergency use your clinical judgement as to the timing of the CO test to assist with abstinence plan and pharmacotherapy (NRT) if required.

All maternity users should be made aware of the hospital smokefree policy antenatally and help them to make plans to be smokefree and access NRT either readily available on the unit or will be provided by their advisor from the Maternity Specialist Stop Smoking Services. If there is no provision within the unit NRT for pregnant women who are smoking at time of admission, contact your local Maternity Stop Smoking Service / pharmacy department and seek advice about access to NRT.

8.3 Postnatal/ Transitional Care Ward

The postnatal ward plays an intrinsic part in the possible period of abstinence. Encouragement should be given to those pregnant people who have remained abstinent during their hospital stay, continued availability of NRT is crucial to further facilitating the abstinence attempt.

For those who remain smoking, utilise the 'Making Every Contact Count' and offer 'Very Brief Advice' whilst on the ward. Take any opportunity to repeat a CO test if it is felt this would enhance conversations to support a quit attempt. If possible, CO test as part of discharge process. Discuss the risks of second-hand smoke to the baby and provide information on the higher incidence of Sudden Infant Death Syndrome and importance of smoke free homes. Advice that bed sharing is especially dangerous if they and/or their partner are smokers (no matter where they smoke). Document in the postnatal notes and child health record (red book).

It is important that the smoking status is communicated between maternity and neonatal care teams. This will allow neonatal colleagues to also offer appropriate Very Brief Advice whilst the baby is an inpatient and have a useful discussion around smokefree homes upon discharge.

When supporting breastfeeding, use the opportunity to raise awareness of the physiology of breastfeeding when smoking, i.e., nicotine will be found in breast milk and that smoking can reduce the quantity of breast milk and increase the risk of colic, which may help some pregnant people to remain non-smokers.

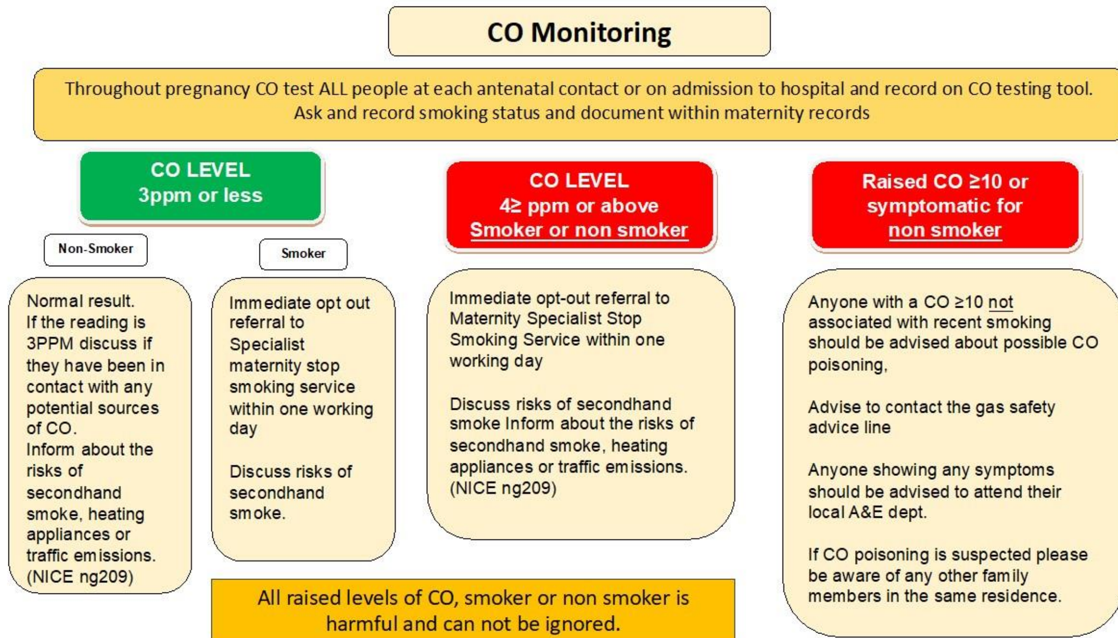
Transitional care

- Smoking status identified.
- Women are to be reminded that attempts are made to avoid the separation of mothers and babies.
- The cot alarms are not a replacement for parental supervision of their baby. Staff cannot be responsible for babies left unattended by smoking parents to smoke. This exposes baby's to safeguarding risks and is a further reason for NRT support during hospital admission.
- Consent for referrals and NRT used throughout the hospital stay is to be documented within the notes that are being taken home. This will enable the smoking cessation conversations to continue with the community midwifery team.

9. Audits / Monitoring

Audits will be conducted to monitor use of CO monitoring and record keeping alongside the maternal smoking services key performance indicators set by PHW and WAG.

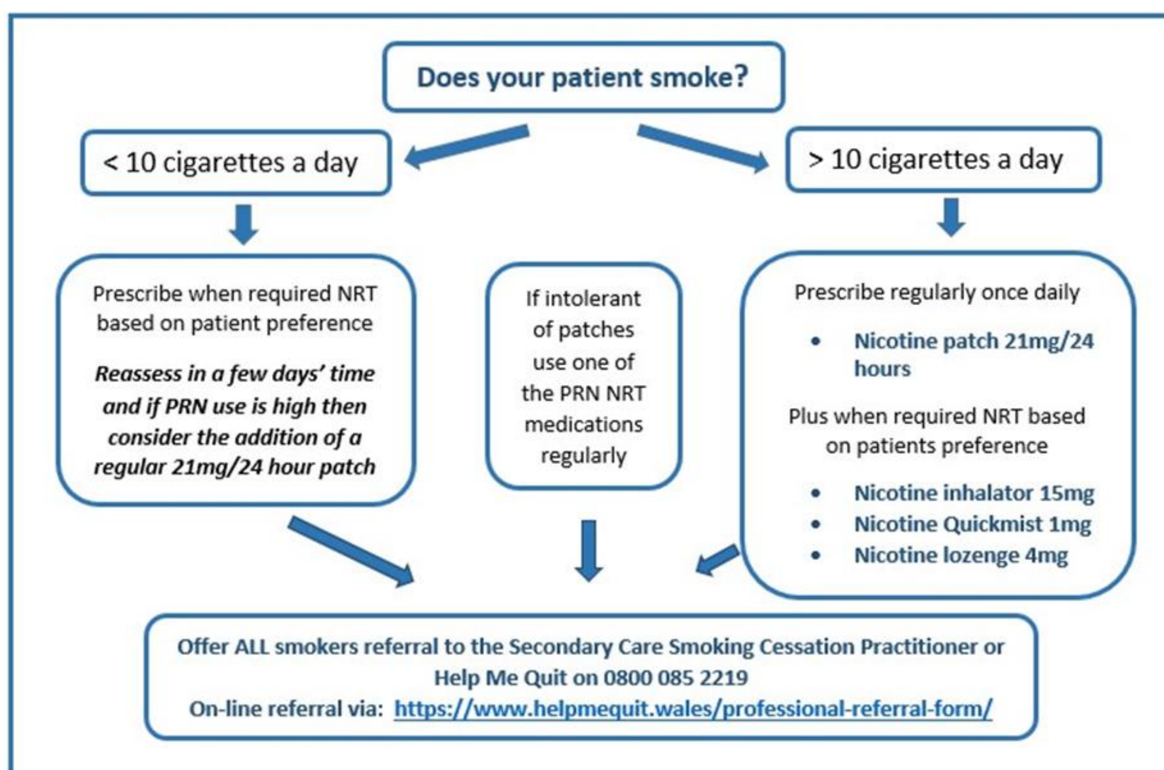
Appendix 1 CO Monitoring pathway



Symptoms of CO poisoning are not always obvious, particularly with low level exposure. However symptoms can be similar to flu and food poisoning. These include;

- Tension type headache
- Dizziness
- Feeling / being sick
- Tiredness
- Confusion
- Shortness of breath
- Difficulty breathing
- Stomach pain

Appendix 2 - for Prescribers



16-hour patch is recommended in pregnancy; remove patch at night. ■ Pregnant women may experience increased skin sensitivity/rash.

Stop smoking aids: quick reference NCSCT stop smoking aids quick reference v2

Nicotine replacement therapy (NRT)

■ NRT is both effective in increasing success with stopping smoking and safe.
■ Most common side effects are mild.
■ Combining the NRT patch with fast-acting NRT products (e.g., gum, inhalator, mouth spray) has been shown to increase success with quitting.
■ NRT products are typically used for 8–12 weeks. It is important to use the full course of the medications to increase success with quitting long-term. The amount of NRT can be reduced over this time period or full dose can be maintained. Some clients will benefit from using NRT for extended periods of time, and this is safe practice.

Guidelines for individualised dosing of NRT:

■ It is important for clients to use enough NRT.
■ The initial dose of NRT can determined based on **heaviness of smoking index** (number of cigarettes and time to first cigarette in the morning).
■ In heavily dependent smokers, higher doses of NRT (>42mg) have been shown to be more effective than standard doses (21mg) in reducing withdrawal symptoms and cravings.

Patch	How it works
16-hour skin patch: 25mg, 15mg, 10mg **24-hour skin patch:** 21mg, 14mg and 7mg **Products:** ▪ Nicorette Invisi 25mg, 15mg, 10mg ▪ Nicotinell 21mg, 14mg and 7mg ▪ NiQuitin CQ 21mg, 14mg and 7mg (Original and Clear)	▪ Delivers a steady dose of nicotine to the bloodstream via skin. ▪ Peak levels reached in 2–6 hours. ▪ Nicotine absorption: 0.6 to 1.6mg per hour (depends on strength selected). **Prescribing guidelines** ▪ Initial dose of nicotine based on heaviness of smoking index (number of cigarettes and time to first cigarette). ▪ Combining a patch with fast-acting NRT increases success with quitting. ▪ Use for 10–12 weeks or longer based on client's needs. ▪ Step down approach: Step 1 (21mg/25mg) for 8 weeks; Step 2 (14mg/15mg) for 2 weeks; Step 3 (7mg/10mg) 2 weeks OR, full dose can be used for 12 weeks and then stopped. **Instructions** ▪ Apply the patch to a clean, dry, non-hairy area. ▪ Replace the patch with a new one every 24 hours. ▪ Rotate site daily; rash from adhesive is common; topical creams may be applied. **Pregnant women** ▪ 16-hour patch is recommended in pregnancy; remove patch at night. ▪ Pregnant women may experience increased skin sensitivity/rash. **Possible side effects:** headache, dizziness, nausea, flushing, stomach upset, skin irritation, trouble sleeping (if client has difficulty sleeping, use 16-hour patch or remove the 24-hour patch at bedtime).

▪ Client experience with withdrawal and cravings can be used to guide the need to adjust the initial dose. Both the dose of NRT patch and the frequency of using the fast-acting NRT can be increased as needed to address withdrawal and cravings.

Gum	How it works
Products: - Fruit fusion, freshmintincy white, or plain - Nicorette 2 and 4mg - Nicotinell 2 and 4mg - NiQuitin CQ 2 and 4mg **2mg** (smokes their first cigarette 30 or more minutes after waking up) **4mg** (smokes their first cigarette within 30 minutes of waking up)	■ Delivers nicotine to bloodstream through buccal mucosa (lining of mouth and throat). ■ Peak levels reached in about 30 minutes. ■ Nicotine absorption: approx. 0.9mg per 2mg piece and 1.2mg per 4mg piece. ■ The flavouring in Nicorette original contains negligible amounts of medicinal alcohol and will not have any noticeable effects. * **Instructions** ■ Approx. one piece per hour every hour. ■ Special chewing technique: chew and park. ** ■ Chew-park-chew for about 20–30 minutes. After 30 minutes gum is exhausted. ■ Use up to 15 pieces. Using more than 20 pieces per day may cause nausea, consider increasing dose of patch if client requires >20 pieces. ■ Avoid acidic drinks (like fruit juice) for 15 minutes before or during use. ■ Sticks to dentures; not appropriate for people with complicated dental work. ■ Can be combined with NRT patch. ■ Duration of treatment: 8–12 weeks; can be extended as required. **Possible side effects:** nausea, headache, heartburn, coughing, hiccups, throat irritation. * Although negligible, the presence of alcohol may be an issue for some people because of their cultural and religious beliefs, or because of issues with alcohol. ** ***Chew and park:*** Chew slowly until they can taste the nicotine or feel a slight tingling in their mouth, then stop chewing. Place the gum between the cheek and gums. After one minute, repeat the process until cravings are resolved.

Inhalator Plastic holder containing cartridge with 15mg of nicotine	**How it works** ■ Puffing on inhalator draws nicotine vapour into the mouth: absorbed into bloodstream through buccal mucosa (lining of mouth and throat). ■ Behavioural replacement for ‘hand to mouth’ action. ■ Peak levels reached in 15–20 minutes. ■ Nicotine absorption: 20 minutes puffing for 1mg nicotine depending upon technique. **Instructions** ■ Line up ridges of plastic holder to open and insert cartridge (you will hear a click). ■ Use every hour and puff for about 20 minutes or as needed to manage cravings. ■ Special puffing technique: take slow shallow puffs to avoid throat burn. ■ Each cartridge lasts for about 40 minutes of intense use. ■ 6 cartridges per day. ■ Avoid acidic drinks (like fruit juice) for 15 minutes before or during use. ■ Can be combined with NRT patch. ■ Duration of treatment: 8–12 weeks; can be extended as required. **Possible side effects:** nausea, mouth/throat irritation.

Mouth spray	How it works
A 1mg mouth spray: Nicorette, brand name QuickMist	■ Delivery through buccal mucosa (lining of mouth and throat), faster acting (about two minutes to reach bloodstream). ■ Nicotine absorption: peak levels reached within 16 minutes of administration. ■ Each spray contains 1mg nicotine; bottle contains about 150 sprays. ■ Contains negligible amounts of medicinal alcohol (7mg/spray) and will not have any noticeable effects. * **Instructions** ■ 1–2 sprays every 30 minutes to an hour, as required throughout the day to minimise withdrawal symptoms and urges to smoke. ■ Child-proof lock (push lever and slide up or down). First use: prime the pump (point away and spray). ■ Open mouth wide; point inside mouth toward cheek and spray (press firmly); repeat on other side of mouth. ■ Hold in mouth and refrain from swallowing for a few seconds immediately after spraying. ■ Avoid acidic drinks (like fruit juice) for 15 minutes before or during use. ■ Can be combined with NRT patch. ■ Duration of treatment: 8–12 weeks; can be extended as required. **Possible side effects:** headache, nausea, vomiting, changes in taste, tingling. * Although negligible, the presence of alcohol in these products may be an issue for some people because of their cultural and religious beliefs, or because of issues with alcohol.

Nasal spray Bottled nicotine solution: 10mg/ml	**How it works** ■ Delivers nicotine to bloodstream through nasal mucosa; faster acting (about two minutes to reach bloodstream). ■ Peak levels reached in about 10 minutes. ■ Nicotine absorption: approx. 0.5mg nicotine each shot. ■ Each bottle = 200 sprays = 6 days. **Instructions** ■ Remove the protective cap. Prime the spray by placing the nozzle between first and second finger with the thumb on the bottom of the bottle. Press firmly and quickly until a fine spray appears, this can take a few 'pumps'. ■ Insert the spray tip into one nostril, pointing the top towards the side and back of the nose (45-degree angle). Press firmly and quickly. Give a spray into the other nostril. ■ Warn patients that initial use may not be pleasant. Inform patients these adverse effects will pass with time (usually 2 days). Have a box of tissue on hand. ■ 1–2 shots of spray in each nostril every hour. ■ Initially at least 30 shots a day. ■ Can be combined with NRT patch. ■ Duration of treatment: 8–12 weeks; can be used longer as required. **Possible side effects:** during the first 2 days of treatment, nasal irritation, sneezing, running nose, watering eyes, cough. Both the frequency and severity decline with continued use. Other possible side effects include nausea, headache.

Lozenge and mini lozenge Sugar-free compressed tablet ■ Nicotinell 1mg and 2mg (mint) ■ NiQuitin CQ Original and Mini Lozenge 1.5mg, 2mg and 4mg (Original, Mint) ■ Nicorette Mini Lozenge 2mg and 4mg (mint)	**How it works** ■ Delivers nicotine to bloodstream through buccal mucosa (lining of mouth and throat). ■ Peak levels of 4mg reached within 30 minutes. ■ Nicotine absorption: approx. 1.5mg per 4mg lozenge. **Instructions** ■ Placed in mouth, allow to dissolve (20–30 minutes) by moving around mouth periodically; avoid crushing or chewing. ■ 1 lozenge every 1–2 hours as required to minimise withdrawal symptoms and urges to smoke. ■ Avoid acidic drinks (like fruit juice) for 15 minutes before or during use. ■ Can be combined with NRT patch. ■ Duration of treatment: 8–12 weeks; can be extended as required. **Prescribing guidelines** ■ Greater tobacco dependence (smokes within 30 mins of waking): use 4mg. **Possible side effects**: sore mouth or throat, throat irritation, jaw pain, hiccups, nausea, headache.
Microtabs Nicorette: small white tablet 2mg nicotine	**How it works** ■ Each tablet delivers nicotine to bloodstream via buccal mucosa (lining of mouth and throat). ■ Peak levels reached in about 30 minutes. ■ Nicotine absorption: approx. 0.9mg per tablet. **Instructions** ■ Used sub-lingually: placed under the tongue until dissolved (30 minutes); should not be chewed or swallowed. ■ Use 1–2 per hour; 16–40 tablets a day. ■ Avoid acidic drinks (like fruit juice) for 15 minutes before or during use. ■ Can be combined with NRT patch. ■ Duration of treatment: 8–12 weeks; can be used longer as required. ■ 1 week s supply = 2 boxes of 100 each. **Possible side effects:** throat irritation, hiccups, nausea, headache.

For more information

See Summary of Product Characteristics (SPC) where you can find all the information on effects, side effects, and drug interactions:

www.ncsct.co.uk/pub_stop-smoking-medications.php or
www.medicines.org.uk/emc/

Vapes (e-cigarettes, electronic cigarettes)

■ Nicotine-containing vapes are effective for stopping smoking and are significantly less harmful than smoking.
■ Vapes do not contain tobacco and there is no combustion, so they do not produce tar or carbon monoxide, two of the most damaging elements in tobacco smoke.
■ Vapes are consumer products and currently none are licensed as a medicine. They are regulated for safety and quality by the Tobacco and Related Products Regulations 2016. **Guidelines for nicotine concentrations**
■ Smokers attempting to quit should use a vape with nicotine-containing e-liquid.
■ E-liquid (juice) is typically available with nicotine concentrations of 0mg/ml, 3mg/ml, 6mg/ml, 12mg/ml and 18mg/ml. The maximum nicotine concentration is 20mg/ml.
■ Most smokers are likely to need 18mg/ml (at least to begin with). Some more dependent smokers may initially benefit from vaping 18mg/ml nicotine e-liquid with a nicotine patch (NRT), using the vape as their faster acting nicotine product.
■ Experience can guide how much nicotine is required; the aim should be to use sufficient nicotine to significantly reduce or eliminate withdrawal symptoms and urges to smoke.

How it works

■ Vaping devices heat a solution to create an aerosol that is inhaled. The solution typically contains nicotine, propylene glycol, vegetable glycerine and flavourings.
■ Like NRT, the nicotine in a vape reduces the urge to smoke and is an effective substitute for smoking, delivering nicotine without harmful tobacco smoke.

Instructions

■ Use regularly throughout the day and when cravings occur. Clients should be advised to use their vape as often as they need to, in order to manage urges to smoke. However Vaping is not permitted in hospital
■ The action of vaping is different to smoking, which generally involves taking a deep lungful of smoke from a cigarette. Clients new to vaping should inhale gently, drawing the vapour into the mouth and then inhaling into the lungs. Practice is often needed and clients shouldn't be put off by this.
■ More frequent and consistent vaping ('grazing on nicotine') is typically needed to get sufficient nicotine, compared to smoking a cigarette every couple of hours ('bingeing on nicotine').
■ Clients 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.
■ Advise clients not to leave their vape to charge overnight.
■ Clients should be told that the benefits of vaping are greatest when they stop smoking tobacco completely.

Possible side effects

■ The most common side effects of vaping tend to be a dry mouth and tickly cough.

■ These can generally be remedied by drinking more water, as the vapour can have a drying effect on the mouth and throat.

For more information

NCSCT online course 'Vaping: a guide for healthcare professionals' https://elearning.ncsct.co.uk/vaping-registration **NHS Live Well – Using e-cigarettes to stop smoking** https://www.nhs.uk/live-well/quit-smoking/using-e-cigarettes-to-stop-smoking/ **Making the Switch – short films for smokers considering a move to vaping** https://nnalliance.org/nnaresources/switch-videos

Main types of vaping devices

■ There are many types of vapes on the market, with a wide variety of appearance, battery size, and effectiveness. All devices deliver a flavoured aerosol, usually containing nicotine.
■ Rechargeable devices with a refillable tank will deliver nicotine more effectively and quickly than a disposable model and for this reason may give clients a better chance of quitting smoking.

Tanks	■ Typically the size of a large pen, they have a more powerful battery than disposable devices and a 'tank' that the client fills with their choice of e-liquid. ■ These devices can often be used with an interchangeable range of atomisers, cartomisers and tanks and may have adjustable power settings. ■ The client can choose their own flavour and strength of e-liquid. With repeated use, experienced users can obtain blood nicotine levels comparable to that achieved from cigarettes.
Regulated mods	■ These contain a chip that controls the power being delivered to the atomiser which prevents the device from short-circuiting. ■ Many devices allow the client to adjust the voltage or wattage applied to the coil and some offer temperature control as well. ■ Some mods come with puff counters or downloadable software that allow clients to program their own voltage and wattage level, and to monitor their patterns of use. ■ They come in a variety of shapes and sizes (from simple pen-style to larger box shaped devices) and are designed to allow modifications and substitution of individual components according to client preference and allow for more control over nicotine delivery.

	■ The devices are generally recommended for more experienced vapers.
Pods	■ Compact rechargeable devices, often shaped like a USB stick. ■ They use pods (small refills of e-liquid) made specifically for the device, often using nicotine salts. Pods are replaced when empty. ■ Most of these pods come pre-filled with a chosen flavour, although some newer models have refillable pods that allow a choice of flavour. ■ Pods offer clients simplicity (you don't refill) and are more compact in size and appearance than tanks. ■ In the UK the maximum strength of nicotine currently allowable for use in pod systems is 20mg. ■ Due to their smaller battery and the limit on nicotine content, delivery of nicotine is currently not comparable to other devices.
Disposables	■ Newer to the market, they are compact, disposable and prefilled with flavoured e-liquid or nicotine salts. ■ They are most commonly pre-loaded with one strength of 20mg nicotine salt. ■ They are draw-activated and once the flavour/taste diminishes, they are designed to be disposed of and replaced with a new one. ■ They require no filling or practice to use and are relatively cheap. Smokers not ready to commit to vaping may experiment with them. ■ The effectiveness of nicotine delivery is yet to be established, although reports from users are favourable.

Prescription only stop smoking medications

Varenicline (Champix) Currently NOT AVAILABLE **How it works** Varenicline works directly at the level of the nicotine receptors in the brain. Partially alleviates craving and withdrawal symptoms by partially stimulating nicotine receptors and blocks the rewarding effects of nicotine if the client smokes. **How it is used** ■ **Days 1–3:** 0.5mg once daily ■ **Day 4– 7:** 0.5mg twice daily (breakfast and dinner) ■ **Weeks 2– 12:** 1mg twice daily (breakfast and dinner) **Instructions** ■ Set quit date and begin taking varenicline 7–14 days before quit date. ■ Swallow tablet whole; take with water and after a meal. ■ Take tablets at last 8 hours apart. ■ May have minor or moderate influence on the ability to drive and use machines. Make sure medication does not affect mental alertness before commencing these activities. ■ Clients unable or unwilling to stop smoking after target quit date within 7–14 days of medication use may continue using the medication. It is recommended that they set a new quit date within 5 weeks of use. ■ Varenicline is used for 12 weeks and clients should use full course of treatment. An additional course of 12 weeks treatment may be prescribed for	**Possible side effects** Side effects generally resolve over time (first 2 weeks). ■ Nausea (30%): mostly mild to moderate (3% severe). Verify clients are taking medication with/after a meal. Clients can be advised to lie down if this helps (the nausea will generally pass) and anti-emetics can be taken if persists. ■ Headaches (15%) ■ Insomnia (18%)* ■ Abnormal (vivid) dreams (13%)* *Option to take dose earlier in the evening. The dose may be reduced to 0.5mg twice daily as required to address side effects. **History of psychiatric disorder** ■ The use of varenicline in smokers with or without a history of psychiatric disorder has **NOT** been associated with an increased risk of serious neuropsychiatric adverse events compared with placebo. ■ Practitioners should be aware of the possible emergence of serious neuropsychiatric symptoms in smokers attempting to quit with or without treatment. ■ Care should be taken with clients with a history of psychiatric illness and clients should be advised and monitored accordingly. The possible risks of taking this medication should be weighed against the benefits of stopping smoking.

those clients who think that they need it.

Contraindications

- **Pregnant and breastfeeding women**, adolescents.
- End stage renal failure.

Cautions

- Severe renal impairment (creatinine clearance <30ml/min) reduce dose to 0.5mg twice daily.
- Severe psychiatric disorder.

Prescription only stop smoking medications

Bupropion (Zyban)

How it works

Mechanism not known; reduces withdrawal and desire to smoke possibly by inhibiting neuronal reuptake of dopamine.

How it is used

- 150mg daily for 6 days, then
- 150mg twice daily, at least 8 hours apart.

Instructions

- Set quit date and start tablet use 1–2 weeks before this date.
- Treatment for 9 weeks; some clients may continue to take it for up to 24 weeks, or as required.

Contraindications

- Pregnancy/breast feeding, people under 18, history of seizure disorder, abrupt alcohol/sedative withdrawal, CNS tumour, use of irreversible monoamine oxidase inhibitors (allow 14 days), history bulimia, anorexia nervosa, history bipolar disorder.
- Use with caution in clients with renal insufficiency or hepatic impairment. The recommended dose in these clients is 150mg once a day.
- See Summary of Product Characteristics (SPC) for full list of contraindications

Possible side effects

- >1/10 patients experience insomnia.
- Less common symptoms (>1/100).
- Rash/urticaria.
- Headache/dizziness.
- Fever.
- Gastrointestinal problems, e.g. dry mouth, nausea.
- Low risk (<1/1000) seizure.

www.medicines.org.uk/emc/product/3827/smpc	

For more information

See Summary of Product Characteristics (SPC) where you can find all the information on effects, side effects, and drug interactions:
www.ncsct.co.uk/pub_stop-smoking-medications.php or
www.medicines.org.uk/emc/

Title of Guideline:	Care of Pregnant Women that Smoke
Name(s) of Author:	Emma Richards Public Health Specialist Midwife
Chair of Group or Committee approving submission:	Antenatal Forum
Brief outline giving reasons for document being submitted for ratification	To implement a structured approach and pathway for women that smoke when accessing maternity services
Details of persons included in consultation process:	Susan O'rourke HMQ Manager
Name of Pharmacist (mandatory if drugs involved):	
Issue / Version No:	1
Please list any policies/guidelines this document will supercede:	None
Date approved by Group:	14 August 2024
Next Review / Guideline Expiry:	14 August 2027
Please indicate key words you wish to be linked to document	Smoking – Help Me Quit – SIDS – Stillbirth – Nicotine replacement therapy
File Name: Used to locate where file is stores on hard drive	Z:\Maternity\Policies and Guidelines\Obs\2020 onwards\smoking policy\Care of Women who Smoke Final Draft v1.2 final 23.09.24.docx