

Standard Operating Procedures

Use of Vapes in addition to NRT for smoking in pregnancy

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Approved by	Maternity Governance
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Aim and scope of Standard Operating Procedure

The following standard operating procedure outlines the addition of vaping products/e-cigarettes alongside behavioural support and nicotine replacement therapy by Maternity services as part of the Smoking Cessation in Pregnancy programme and will provide pregnant smokers with the opportunity to use an e-cigarette/vape to support their quit attempt.

The requirements for staff who will provide advice and supply of the products.

Details of who will provide the products and the requirements for safe storage.

Target Staff Categories

This standard operating procedure applies to staff that work within the specialist Maternity Stop smoking service that is provided by Worcester Acute NHS Trust. Midwives, Maternity Support workers, and all smokefree advisors.

Key amendments to this Standard Operating Procedure

Date	Amendment	Approved by:
June 2023	New Guideline	Maternity Governance

Background

In recent years, e-cigarettes have become a very popular stop smoking aid in the UK. Also known as vapes or e-cigs, they're far less harmful than cigarettes, and can help to quit smoking. They are not recommended for non-smokers and cannot be sold to people under 18 years old.

Cigarettes deliver nicotine along with thousands of harmful chemicals. E-cigarettes allow you to inhale nicotine through a vapour rather than smoke. By itself, nicotine is relatively harmless. An e-cigarette is a device that allows the inhalation of nicotine, they do not burn tobacco and do not produce tar or carbon monoxide, two of the most damaging elements in tobacco smoke. Carbon monoxide is particularly harmful to developing babies. They work by heating a liquid (called an e-liquid) that typically contains nicotine, propylene glycol, vegetable glycerine, and flavourings.

Using an e-cigarette is known as vaping. Many thousands of people in the UK have already stopped smoking with the help of an e-cigarette. There's evidence that they can be effective. A 2021 review found people who used e-cigarettes to quit smoking, as well as having expert face-to-face support, can be up to twice as likely to succeed as people who used other nicotine replacement products, such as patches or gum. Using an e-cigarette can help manage nicotine cravings. To get the best out of it, it should be used with the right strength of nicotine in the e-liquid.

In the UK, e-cigarettes are tightly regulated for safety and quality. Vaping is not completely risk-free, but it poses a small fraction of the risk of smoking cigarettes. The long-term risks of vaping are not yet clear. The liquid and vapour contain some potentially harmful chemicals also found in cigarette smoke, but at a much lower level.

While nicotine is the addictive substance in cigarettes, most of the harm from smoking comes from the thousands of other chemicals in tobacco smoke, many of which are toxic. In relation to pregnant smokers, electronic cigarette vapour offers the important advantage that it doesn't contain carbon monoxide (CO), which is particularly harmful to developing babies. Anecdotally, we know women are using the devices during pregnancy as a replacement for smoking and members of the midwifery team are frequently being asked for advice and support.

Nicotine replacement therapy (NRT) has been widely used for many years to help people stop smoking and is a safe treatment.

Little research has been conducted into the safety of e-cigarettes and e-liquids in pregnancy, and it is not fully known whether the vapour is harmful to the baby. However, if using an e-cigarette is helpful for quitting and staying smoke-free, it's much safer for mom and baby than continuing to smoke. During pregnancy, licensed NRT products such as patches and gum are the recommended option to help stop smoking.

There is no evidence so far that vaping causes harm to other people. This is in contrast to passive smoking (second-hand smoke), which is known to be very harmful to health.

Purpose

This guidance will provide pregnant smokers with the opportunity to use an e-cigarette to support their quit attempt and reduce harm from smoking. Enabling Advisors to provide this aid alongside behavioural support and nicotine replacement therapy to those who wish to stop smoking but find using only NRT not enough.

There is evidence <https://www.ncsct.co.uk/usr/pub/NCSCCT%20OHID%20e-cig%20v7.pdf> that using vaping products can increase quit rates and therefore improve outcomes and the health of our mothers and babies.

Vaping products

Totally Wicked Products

1. Totally Wicked Skope S Kit (includes vape, atomizers, e-liquid, charger)
2. Totally Wicked Switz e-liquid flavours and strengths:
 - Mixed Fruit, Menthol, Tobacco - 1.6% (16mg/ml)
 - Mixed Fruit, Menthol Tobacco - 1% (10mg/ml)
 - Mixed Fruit, Menthol, Tobacco - 0.6% (6mg/ml)
3. Replacement atomizers/ coils

Recommendations for strength:

When a smoker is making the switch to vaping, it is important to ensure they have enough nicotine in their system to combat the smoking cravings, especially in the early weeks of quitting smoking. Totally Wicked recommendation is to initially offer the 1.6% strength e-liquid to smokers regardless of how many cigarettes they smoke, it doesn't increase nicotine dependence, it just helps to stop them smoking. If lower strengths are considered, Totally Wicked recommend:

- For people that smoke 1-5 cigarettes a day, offer the 0.6% strength e-liquid.
- For people that smoke up to 15 cigarettes per day, offer the 1.0% strength e-liquid.
- For people that smoke above 15 cigarettes per day, offer the 1.6% strength e-liquid.

Recommendations for reducing strength as part of a 12-week quit attempt:

Totally Wicked recommend a person stays on the strength that is working for them until such a time they feel really confident to reduce in strength. It's a conversation during behavioural support from an advisor on when that time is. It is important that they are really ready to reduce down. Some may stay on the same strength/ the high strength but reduce the frequency on using the vape.

Liberty Flights Dot Pro Vape Kit Nicotine 20mg/ml Tobacco/ Berry Nice/ Mint Flavours

Liberty Flights Dot Pro Vape Pod 20mg/ml Tobacco/ Berry Nice/ Mint Flavours

Liberty Flights Dot Pro Vape Pod 10mg/ml Tobacco/ Berry Nice/ Mint Flavours

Dot pro pod kit comes with 2 packs of refills (each has 2 products in) On average smokers will use 3ml of liquid per day= 1.5 pods per dayx7 days= 10.5 pods/2 = 5x 2 pack refills per week

Supplies will be obtained through the National Procurement platform by Crown Commercial Services that was launched specifically for use by the NHS and Local authorities to ensure safety and efficacy of vapes purchased through the site. Providers who are selling through the platform are also providing training for staff on the use of the vapes.

Treatment plan

1st Appointment – face to face

Use Fagerström questionnaire to determine nicotine dependence level - see appendix 1

1-2 = Low – smokes less than 10 a day = less than 1 x 1% pod a day (LF), 1% or 1.6% liquid (TW) as per individual need.

3- 7 = Moderately – smokes 10-20 a day = 1 x 1% or 2% pod a day (LF) 1.6% liquid (TW)

8+ = High smokes 20-25 a day = 1 x 2% pod a day, 1.6% liquid (TW)
 smokes 25-30 a day – plus 10/7mg patch
 smokes 30-35 a day – plus 15/14mg patch
 smokes 35 or more a day – plus 25/21mg patch

Follow up with phone call 1 week after quit date

Visit 2 weeks after quit date to set plan for coming weeks

Inclusion criteria

All pregnant smokers, their partners and household members.

All smokers should be referred to the stop smoking service when they are identified as a smoker at the booking appointments. This is an opt out referral and should be discussed as such. The pregnancy is automatically high risk for all women who smoke and will be consultant led.

Exclusion criteria

- Non-smokers.
- Those purely vaping already
- Under 18 years of age

Caution – The following list should prompt further information and discussion with named Obstetric lead.

- Cardiac abnormalities or severe cardiovascular disease.
- History of cerebrovascular disease.
- History of severe renal impairment (including adrenal gland impairment).
- Insulin dependent diabetic (smoking and to a lesser extent nicotine replacement can increase resistance to insulin doses so insulin doses may need to reduce as the patient weans off nicotine).
- Hyperthyroidism.
- Systemic hypertension.
- Severe hepatic failure.
- Currently taking any of the following medication: aminophylline, chlorpromazine, clomipramine, clozapine, fluvoxamine, imipramine, insulin, methadone, olanzapine, ropinirole, theophylline and warfarin.
- Diabetes (Nicotine can stimulate production of adrenaline) Care plan needed on an individualised basis as not all patients with diabetes are excluded.
If the e-cigarette is thought to be appropriate to supply, but the above conditions are not met, please refer to an obstetrician or GP for review.

Exclusion criteria taken from <http://NICE.org>

Training requirements

All Smokefree advisors will complete training on vaping products:

Full NCSCT certification to include:

The NCSCT eLearning module – Vaping: a guide for healthcare professionals

<https://elearning.ncsct.co.uk/vaping-launch>

Training on products supplied – provided through Public Health

Awareness of: “Incorporating e-cigarettes into your stop smoking Service: Making the case and addressing concerns” ncsct.co.uk December 2021

<https://www.ncsct.co.uk/usr/pub/NCSCT%20OHID%20e-cig%20v7.pdf>

Usage

- E-cigarette to be used as and when required. User will titrate amount of nicotine from e- cigarette vapour.
- Treatment time is for as long as is required with a minimum usage of 5 weeks to maximise likelihood of quitting smoking.
- Behavioural support will be available for as long as is required and agreed with the client. Continued provision of vapes/e-liquids is dependent on ongoing engagement and will be provided for up to 12 weeks for pregnant smoker and their household members – although longer provision is possible under the recommendation of the Smokefree Pregnancy Support Worker.

Documentation, Audit and Safe storage

- Document provision of e-cigarette and details of behavioural support on Badgernet.
- E-cigarettes and NRT will be stored in a clinic location in a locked cabinet, and stock records must be completed by the staff member who is issuing the treatment.
- Initial treatment to be recorded on Badgernet. All ongoing appointments should be recorded in the smoking in pregnancy smart form.

References and Resources

The Royal college of General practitioners has published a position statement on e-cigarettes:

<https://www.rcgp.org.uk/policy/rcgp-policy-areas/e-cigarettes-non-combustible-inhaled-tobacco-products>

An accompanying video:

<https://www.youtube.com/watch?v=AqkB1iZOrdI>

Support for healthcare professionals in their conversations with patients on the different options available for stopping smoking and their effectiveness can be found at:

<https://www.gov.uk/government/publications/stop-smoking-options-guidance-for-conversations-with-patients>

Myth Busting:

<https://ukhsa.blog.gov.uk/2018/02/20/clearing-up-some-myths-around-e-cigarettes/>

Government publication on E-cigarettes and vaping: policy, regulation, and guidance

<https://www.gov.uk/government/collections/e-cigarettes-and-vaping-policy-regulation-and-guidance>

Further guidance for smokers and professionals can also be found at:

<https://www.vapesmokefree.co.uk>

NICE Tobacco: preventing uptake, promoting quitting, and treating dependence

<https://www.nice.org.uk/guidance/ng209/chapter/Recommendations-on-treating-tobacco-dependence-in-pregnant-women#providing-support-to-stop-smoking>

Electronic cigarettes versus nicotine patches for smoking cessation in pregnancy: a randomized controlled trial

<https://www.nature.com/articles/s41591-022-01808-0>

Appendix 1

Fagerstrom Test for Nicotine Dependence

PLEASE TICK (✓) ONE BOX FOR EACH QUESTION			
How soon after waking do you smoke your first cigarette?	Within 5 minutes	<input type="checkbox"/>	3
	5-30 minutes	<input type="checkbox"/>	2
	31-60 minutes	<input type="checkbox"/>	1
Do you find it difficult to refrain from smoking in places where it is forbidden? e.g. Church, Library, etc.	Yes	<input type="checkbox"/>	1
	No	<input type="checkbox"/>	0
Which cigarette would you hate to give up?	The first in the morning	<input type="checkbox"/>	1
	Any other	<input type="checkbox"/>	0
How many cigarettes a day do you smoke?	10 or less	<input type="checkbox"/>	0
	11 – 20	<input type="checkbox"/>	1
	21 – 30	<input type="checkbox"/>	2
	31 or more	<input type="checkbox"/>	3
Do you smoke more frequently in the morning?	Yes	<input type="checkbox"/>	1
	No	<input type="checkbox"/>	0
Do you smoke even if you are sick in bed most of the day?	Yes	<input type="checkbox"/>	1
	No	<input type="checkbox"/>	0
Total Score			
SCORE	1- 2 = low dependence 3-4 = low to mod dependence	5 - 7= moderate dependence 8 + = high dependence	

Add up the scores from the test:

Score of 1-2 = low dependence on nicotine. This suggests that they may not need NRT but should be monitored for withdrawal symptoms.

Score of 3-4 = moderate dependence and could be offered patches, inhaler, lozenges, or gum.

Score of 5-7 = moderate to high dependence, they could be offered combined therapy

Score of 8 and over = highly dependent on nicotine and can be offered a combination therapy

NRT recommendations chart

Dependence level	Nicotine Replacement Therapy Dosage	Combination Therapy
High	Patches: 21mg/24hr or 15mg/16hr Inhaler: 6 –12 cartridges per day Lozenge: 4mg Gum: 4mg	Patches: 21mg/24hr or 15mg/16hr AND Lozenge or Gum: 2mg
Moderate	Patches: 21mg/24hr or 15mg/16hr Inhaler: 6 –12 cartridges per day Lozenge: 4mg Gum: 4mg	Patches: 21mg/24hr or 15mg/16 hr AND Lozenge or Gum: 2mg
Low to moderate	Patches: 14mg/24hr patch or 10mg/16hr Inhaler: 6 –12 cartridges per day Lozenge: 2mg Gum: 2mg	Patches: 14mg/24hr or 15mg/16hr AND Lozenge or Gum: 2mg
Low	May not need NRT Monitor for withdrawal symptoms Patches: 7mg/24hr patch or 5mg/16hr Lozenge: 2mg Gum: 2mg	

Use chart above for NRT only

When using Vapes or a combination of NRT and vapes

Low to moderate smokers = 10mg (1% or 1.6%) strength, may be combined if necessary

Moderate to high = 20mg (1.6%) strength, combination if necessary

Strength should be reduced over the quit programme to work towards smokefree goal.

<https://www.nhs.uk/better-health/quit-smoking/vaping-to-quit-smoking/>