

Smoking in pregnancy
challenge group ●

Vaping

before, during
and after pregnancy

A guide for maternity and other
healthcare professionals



Smoking or exposure to secondhand smoke during pregnancy is responsible for an increased risk of stillbirth, complications during labour, premature birth, miscarriage, birth defects, low birth weight and Sudden Infant Death Syndrome (SIDS). Based on the latest evidence with adults in general, vaping (using an electronic/e-cigarette) poses a small fraction of the risks of smoking in the short and medium term and is 60% more effective than nicotine replacement therapy (NRT) for smoking cessation.¹

For pregnant women, vapes (e-cigarettes) appear to be more effective than nicotine patches for smoking cessation.^{2,3} For women trying to stop smoking, regular use of vapes or NRT during pregnancy does not appear to be associated with any adverse effects in mothers or their babies.⁴ NRT products like nicotine patches are licenced for use during pregnancy. NICE recommends that NRT “should be considered alongside behavioural support, at the earliest opportunity in pregnancy and continued after pregnancy if needed.”⁵

Vapes are currently the most popular smoking cessation aid in Great Britain.⁶ An estimated 11% of the adult population, amounting to 5.6 million people in Great Britain, currently vape.⁷ Over half (53%) of current vapers are ex-smokers, while the proportion of vapers who also smoke (known as dual users) was 39% in 2024. Only 8% of current vapers are never smokers.

National data is not available on vaping among pregnant women, but the main reasons given by pregnant women who vape are to quit/cut down their smoking.⁸

Vapes are increasingly being used by stop smoking services in the NHS and local authorities to support pregnant smokers to quit. Additionally, many women will be starting their pregnancy already using a vape to support a quit attempt or may express an interest in doing so during pregnancy. It is therefore important that healthcare professionals fully understand what vapes are and their role in smoking cessation, so that they can deliver evidence-based advice and support to pregnant women who smoke or vape. Healthcare professionals will also need to be equipped to address some of the key myths and misconceptions about vaping.

This short briefing has been produced by the **Smoking in Pregnancy Challenge Group**⁹ and includes a summary of the latest evidence on vaping and suggested responses to some frequently asked questions and misconceptions. It is primarily aimed at practitioners working in England but can be used by anyone across the UK. A summarised at-a-glance version of this briefing is available on the Challenge Group website.

Note: This document uses ‘women’ to encompass women and people who can give birth throughout.

Note: The evidence cited in this document only applies to legal vaping products which are regulated by the Medicines and Healthcare products Regulatory Agency (MHRA). Illegal vapes often exceed restrictions on nicotine content and may contain banned ingredients. People who want to quit smoking using a vape are advised to only use legal, regulated products.

Disclaimer: The Smoking in Pregnancy Challenge Group has no affiliation with e-cigarette or tobacco manufacturers.

Summary

- » **In the short and medium term, vaping poses a small fraction of the risks of smoking.** However, vaping is unlikely to be risk-free, particularly for people who have never smoked.
- » While licensed NRT products such as nicotine patches, gum and inhalators are the recommended option, vapes appear to be more effective for smoking cessation during pregnancy than nicotine patches. Regular use of vapes or NRT during pregnancy does not appear to be associated with any adverse effects in mothers or their babies. If a pregnant woman chooses to vape and if that helps her to quit smoking and stay smokefree, she should be supported to do so.
- » Smoking tobacco at any point during pregnancy can harm the developing baby. Stopping smoking is one of the best things a woman and her partner can do to protect the health of their baby through pregnancy and beyond.
- » Unlike cigarettes, vapes don't contain or burn tobacco and don't produce tar or carbon monoxide, which are known to be very harmful to babies.
- » Many services have integrated vaping into their stop smoking support offer for pregnant women. This should not be discouraged if it is helping women to quit smoking and stay smokefree.
- » It is important healthcare professionals do not conflate the risks of smoking and vaping. This will likely deter patients from using a vape to make a quit attempt and increase the risk that they continue to smoke or relapse to smoking.
- » Vaping without stopping smoking is unlikely to provide health benefits; anyone who is using both should be strongly encouraged to stop smoking as soon as they can.
- » For households with one or more smokers, vapes can be used as a way to maintain a smokefree home and protect children from secondhand smoke.
- » Based on the available evidence on vape safety, there is no reason to believe that vaping would compromise breastfeeding. Women who vape following birth should not be discouraged from doing so if it enables them to maintain a quit attempt and keep their home smokefree.
- » For data recording purposes, a woman who has stopped smoking completely and switched to vaping is classified as a non-smoker.
- » Using a vape can be much cheaper than smoking.

Frequently asked questions & suggested responses

General Information

1. What are vapes?

Vapes, also called e-cigarettes, are designed for users to inhale nicotine through an aerosol commonly referred to as *vapour*, rather than smoke. They work by heating a solution that typically contains nicotine, propylene glycol, vegetable glycerine, and flavourings. They come in many different shapes and sizes, ranging from disposable, single-use products (which are due to be banned in England, Scotland and Wales) to larger devices which users can adapt and fill with their own liquid, as well as compact 'pod' systems which use e-liquid capsules. Unlike cigarettes, vapes don't contain or burn tobacco and don't produce tar or carbon monoxide, which are known to be very harmful to babies. For data recording purposes, a woman who has stopped smoking completely and switched to vaping is classified as a non-smoker.

Single-use, disposable vapes have become increasingly popular over the last few years. These products contain the same ingredients as reusable vapes and work the same way. However, they typically cannot be refilled once they run out and should be recycled, not thrown away. **Single-use vapes are due to be banned in England, Scotland and Wales from 1st June 2025. People using single-use vapes should be encouraged to switch to a re-usable vape before the ban takes effect.**

People can find their nearest vape recycling point here: <https://www.recycleyourelectricals.org.uk/how-to-recycle-electronics/what-electronics-can-be-recycled/recycle-vapes/>

Further info:

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Vapes generally consist of a battery, a vaporising chamber and e-liquid. The liquid can be

contained in a sealed cartridge or can be added by the user into a refillable tank. Vapes are not the same as heated tobacco or heat-not-burn products. Unlike vapes, heated tobacco products contain tobacco and although likely to be less harmful than cigarettes, they are not harmless. It is recommended that pregnant women stop using tobacco completely to maximise the benefits to their health.

2. How safe are vapes?

The most recent **evidence review** commissioned by the Office for Health Improvement and Disparities (OHID) in 2022 concluded that vaping poses a small fraction of the risks of smoking in the short and medium term. However, vaping is not risk-free, particularly for people who have never smoked.¹⁰ For pregnant women, one large trial found that vapes were more effective than nicotine patches for smoking cessation.² A secondary analysis found that regular use of vapes or NRT during pregnancy does not appear to be associated with any adverse effects in mothers or their babies.⁴ NRT products like nicotine patches are licenced for use during pregnancy. NICE states that NRT "should be considered alongside behavioural support, at the earliest opportunity in pregnancy and continued after pregnancy if needed".⁵

Although e-cigarette vapour has been found to contain some toxicants also found in tobacco smoke, these are either at much lower levels or at levels not associated with serious health risk.¹⁰ Most importantly, vapes do not contain tobacco or carbon monoxide, which is particularly harmful to developing babies. The risk of fire caused by vapes is significantly lower than the risk posed by combustible cigarettes.¹⁰

Further info:

A 2022 NIHR-funded randomised control trial looking at the safety and efficacy of vapes

for smoking cessation during pregnancy found that nicotine vapes were more effective than nicotine patches for quitting smoking (when adjusting for vaping among nicotine patch arm participants) and did not increase the risk of adverse maternal outcomes relative to nicotine patches. Vapes were also more effective in preventing low birthweight, most likely because their use reduced smoking to a larger extent than use of nicotine patches. The trial involved 1,140 participants in England and Scotland. A plain language summary of the study findings is available online. The researchers conducted a secondary analysis comparing outcomes in participants who did and did not regularly use a nicotine product (vapes or patches) during their pregnancy. This found that regular use of vapes or NRT during pregnancy did not appear to be associated with any adverse effects in mothers or their babies. The press release is available online.

Another study looking at the impact of adolescent vaping during late pregnancy on small-for-gestational-age (SGA) birth found that vaping was not associated with an increased risk of SGA birth, although the study was limited by a small sample size.

3. Is there carbon monoxide in vapes?

No. Vapes do not contain carbon monoxide (CO) or many of the other harmful chemicals found in cigarettes. Someone who is only using vapes and is not exposed to other sources of CO, such as from secondhand smoke, should have the same low reading as any other non-smoker from a CO test. CO is especially dangerous during pregnancy because it deprives the baby of oxygen, slows its growth and development, and increases the risk of miscarriage, stillbirth and sudden infant death. **CO is especially dangerous during pregnancy because it deprives the baby of oxygen, slows its growth and development, and increases the risk of miscarriage, stillbirth and sudden infant death.**

4. What about the risks from nicotine?

The harm from smoking comes from inhaling tobacco smoke which contains

over 7,000 chemicals, of which at least 70 are known to cause cancer and many more which are toxic. While it is nicotine that makes tobacco so addictive, it is relatively harmless on its own and is significantly less addictive when delivered through nicotine replacement products such as patches, gum and inhalators (NRT). While vapes are probably more addictive than some NRT products, they appear to be less addictive than cigarettes and carry only a fraction of the risks. People who have quit smoking through vaping should vape as much as they need to help them stay smokefree. Nicotine delivered through NRT is widely used to help people stop smoking, can be prescribed to pregnant women and is recommended by NICE for smoking cessation during pregnancy.¹¹ Licensed NRT products are normally free when prescribed during pregnancy and may help some women quit successfully,^{12 13} particularly when combined with support from a stop smoking specialist.

5. What about illegal vapes?

To be sold legally in the UK, nicotine-containing vapes and refill containers have to meet minimum standards for safety and quality and be notified with the Medicines and Healthcare products Regulatory Agency (MHRA). They are not allowed to include ingredients which pose a risk to human health in heated or unheated form, and the maximum nicotine strength is limited to 20mg/ml. More information **can be found on the MHRA website**. Any vapes which have not been notified to the MHRA are on sale illegally in the UK. Illegal vapes often exceed restrictions on nicotine content and may contain banned ingredients. People who want to quit smoking using a vape are advised to only use legal, regulated products.

To check if a vaping product is legal or not, search the MHRA's online register: **<https://cms.mhra.gov.uk/ecig-new>**

Any e-cigarette or refill not on the MHRA register cannot legally be sold in the UK.



Vaping in pregnancy

6. Can I use a vape to help me quit smoking?

If you are pregnant and you smoke, quitting is the best thing you can do for yourself and your baby. Nicotine replacement therapy (NRT) products such as patches, lozenges and gum are the recommended quitting support option as these are medicines that are licensed for use during pregnancy. However, if you find using a vape helpful for quitting smoking and staying smokefree, it is far safer for you and your baby than continuing to smoke. For pregnant women, vapes appear to be more effective than nicotine patches for smoking cessation.² Regular use of vapes or NRT during pregnancy does not appear to be associated with any adverse effects in mothers or their babies.⁴ NRT products like nicotine patches are licenced for use during pregnancy. NICE recommends that NRT "should be considered alongside behavioural support, at the earliest opportunity in pregnancy and continued after pregnancy if needed." Most stop smoking services are vape-friendly and will be able to support you to stay smokefree while using a vape.

Whatever method you choose to quit smoking, you will give yourself the best chance if you get free advice and support from a specialist stop smoking professional. Evidence shows that you are up to three times as likely to quit successfully with their help.¹⁴ If you are using a vape to quit smoking, you should use it for as long as you feel necessary, in the same way you would use NRT.

Further info:

*A major **systematic review** carried out by researchers at Cochrane has concluded that nicotine-containing vapes are estimated to be around 60% more effective than NRT in supporting adult smokers to quit successfully. This equates to between 8 and 12 people per 100 successfully quitting through vaping, compared to only 6 people per 100 quitting through NRT.*

*We now have good evidence from a **2022 NIHR-funded randomised control trial** with pregnant women that nicotine vapes were more effective than nicotine patches for quitting smoking (when adjusting for vaping among nicotine patch arm participants) and did not increase the risk of adverse maternal outcomes*

*relative to nicotine patches. Vapes were also more effective in preventing low birth-weight, most likely because their use reduced smoking to a larger extent than use of nicotine patches. The trial involved 1,140 participants in England and Scotland. The researchers conducted a **secondary analysis** which found that regular use of vapes or NRT during pregnancy did not appear to be associated with any adverse effects in mothers or their babies. The press release is available **online**.*

If you do relapse to smoking, you should continue to use a vape and/or NRT products to help manage your nicotine cravings and keep trying to quit until you succeed. It is not uncommon for people to need multiple attempts to quit smoking. A brief lapse doesn't have to mean full blown relapse, so it is important to keep trying to stay smokefree.

7. Can I get a vape on prescription?

There are currently no vapes with a medicinal licence available in the UK, meaning they cannot be prescribed by GPs or other healthcare professionals. However, some maternity/community stop smoking services do provide vapes to pregnant smokers for free, in addition to NRT. If you want to give vapes a go, ask your midwife or stop smoking adviser if they provide vapes. Alternatively, it's a good idea to visit a specialist vape shop as they can provide advice on the different vaping and e-liquid products and how to use them. Often it is helpful to try different products, strengths, and flavours to see what might work best for you. The NHS Better Health website has more info here: <https://www.nhs.uk/better-health/quit-smoking/vaping-to-quit-smoking/>

8. Can I keep smoking a little bit if I'm also using a vape?

Every cigarette causes damage both to you and your baby. The only way to completely prevent this damage is to stop smoking. Stopping smoking early in pregnancy, particularly in the first 15 weeks, significantly reduces the risk of damage to the baby. Stopping at any time during pregnancy reduces the risk of harm. Cutting down the number of cigarettes you smoke with the intention of quitting later is unlikely to significantly reduce the risks of harm to the baby and will just delay the benefits of quitting.

Further info:

It is important to communicate to women that they need to quit smoking completely to benefit from the reduced risk of vaping. However, some women will continue to smoke while vaping, potentially because they want to cut down their smoking before quitting completely, while others may relapse to smoking while continuing to vape. It is important that these women are not cut off from support to quit smoking using a vape as this will just make them more likely to keep smoking. Instead, they should be supported to keep trying to quit smoking completely until they succeed.

9. I've been using a vape to help me stop smoking – now I'm pregnant, should I stop using it?

If vaping is helping you to stay smokefree or if you think stopping vaping is likely to cause you to relapse into smoking, you should continue to vape as existing evidence suggests that it is a much safer option for you and your baby. If you feel able to stop vaping or to switch to nicotine replacement therapy without going back to smoking then you could try to do so. It would be best to also seek support from a stop smoking service to help you with this.

10. I have never smoked but I use a vape. What should I do?

If you are using a vape to maintain a quit attempt then you should use it for as long as you need to avoid relapsing to smoking. However, if you vape but have never smoked you could consider stopping vaping. Vapes are an effective quitting aid for people who smoke but they are not risk free and contain nicotine, which is addictive.

The Chief Medical Officer, Prof Chris Whitty sums this up: "If you smoke, vaping is much safer; if you don't smoke, don't vape."¹⁵

You could try switching to NRT products like patches and gum which are licenced for use during pregnancy. Or if you find it difficult to quit vaping right away, you could try gradually reducing the nicotine strength in your vape to make it easier to quit completely.

The most important thing is not to take up smoking as this is extremely harmful for both you and your baby.

11. I want to use a vape to quit smoking but I'm under the age of 18. What should I do?

It is illegal to sell or provide a vape or tobacco to anyone under the age of 18. While it is not illegal for you to try to purchase a vape underage, anyone who sells you/gives you a vape is breaking the law.

If you are aged under 18 and smoke, you can use NRT products like patches and gum which are licenced for use from age 12+. Your maternity provider should be able to provide you with free NRT directly or via a local pharmacy or stop smoking service.

12. Is secondhand vapour from e-cigarettes harmful to pregnant women?

Current evidence suggests that short term exposure to e-cigarette vapour is not harmful to health, although it is possible that longer term exposure may carry some low-level risk to people who don't vape or smoke. However, any potential risks from secondhand vape exposure are significantly lower than the proven harms from secondhand smoke. Exposure to secondhand smoke from cigarettes during pregnancy leads to many of the same adverse birth outcomes experienced by

women who smoke, including stillbirths, miscarriages and increased likelihood of Sudden Infant Death Syndrome (SIDS).

Whether you allow partners and others to vape near you is a decision for you to make. Household members who choose to use a vape to help them quit smoking pose significantly less risk to those around them than if they continued to smoke. As a precaution, you could consider not allowing vaping in confined spaces at home or in your car and encouraging others to use nicotine replacement products such as patches, gum and inhalators in these areas instead.

Further info:

Women who live with a smoker are six times more likely to smoke throughout pregnancy and those who live with a smoker and manage to quit are more likely to relapse to smoking once the baby is born.¹⁶ Women exposed to secondhand smoke in the home throughout their pregnancy will experience many of the same adverse birth outcomes as women who smoke.¹⁷

*The 2022 OHID **vaping evidence review** assessed 6 studies on secondhand vaping and found that there was no significant increase of toxicant biomarkers after short-term secondhand exposure to vaping among people who do not smoke or vape (toxicant biomarkers are measurements of potentially harmful substance levels in the body). However, longer exposures during heavy sustained vaping were associated with increases in potential toxicant biomarkers, although these were at far lower levels than would result from exposure to secondhand cigarette smoke.*

Vaping once the baby is born

13. Can I use a vape around my baby after they are born?

Current evidence suggests that short term exposure to secondhand e-cigarette vapour is not harmful to health, although it is possible that longer term exposure may carry some low-level risk to people who don't vape or smoke. However, any potential risks from secondhand vape exposure are significantly lower than the proven harms from secondhand smoke. The most important thing is to stay smokefree and protect your baby from toxic secondhand smoke from cigarettes.

If allowing the use of vapes indoors helps you or other members of your household to maintain a smokefree home, it is a far safer option than allowing smoking. However, newborns and young children have small, developing lungs and it may be advisable to take extra care around them. As a precaution, you could consider not allowing vaping in confined spaces at home or in your car and using nicotine replacement products such as patches, gum and inhalators in these areas instead.

14. Can I vape if I'm breastfeeding?

Based on the available evidence on vape safety there is no reason to believe that using a vape would compromise breastfeeding. If vaping is helping you to quit smoking and stay smokefree, you should carry on with it, including while breastfeeding.¹⁸ As a precaution, you could avoid vaping directly around babies when feeding them and consider not allowing vaping in your home and car.

15. What steps should I take to minimise any risks from vapes to babies and children?

You should take steps to prevent children from accidentally swallowing e-liquid or small parts of vaping devices. As is the case

with medicines and cleaning products, vapes and e-liquids should be kept out of the reach of children. As with all rechargeable electrical equipment, to reduce the risk of fire you should always use the correct charger and should not leave your vape charging unattended or overnight. Vapes should be charged away from babies and toddlers. Vapes contain lithium batteries and plastic, and **should be recycled, not thrown away.**

Further info:

For more information on safe use of vapes in the home, see **ROSPA: Use of e-cigarettes (vaping) in the home: advice for parents.**⁴⁹

People can find their nearest vape recycling point online: <https://www.recycleyourelectricals.org.uk/how-to-recycle-electronics/what-electronics-can-be-recycled/recycle-vapes/>

Further information available from:

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This document has been endorsed by the following member organisations of the Smoking in Pregnancy Challenge Group:



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