

# London Smoke Free Pregnancy Week 18th - 22nd November 2024

### **EVERYONE'S JOURNEY TO GIVING UP IS DIFFERENT**

### Agenda

Time	Торіс	Speaker
1030h	Welcome from the chair	Nina Khazaezadeh, Regional Chief Midwife, NHS London
1035h	Overview of the campaign week	<b>Tracy Parr</b> Programme Director, London Tobacco Alliance and Stop Smoking London
1045h	National Smokefree Pregnancy Incentive Scheme and use of vapes by pregnant women in Manchester	Jayne Coyne Programme Director, National Smokefree Pregnancy Incentive Scheme Assistant Director, Population Health, NHS Greater Manchester
1100h	PREP2 Study on vaping in pregnancy	<b>Peter Hajek</b> Professor of Clinical Psychology, Wolfson Institute of Population Health, Queen Mary University of London
1115h	Expert Position Statement on Vaping in Pregnancy	<b>John Waldron</b> Policy and Public Affairs Manager Action on Smoking and Health
1130h	Smoking in pregnancy – scale of the issue and potential intervention in neonatal units	Caitlin Notley Professor of Addiction Sciences, University of East Anglia
1145h	Q and A	<b>Chair - Nina Khazaezadeh,</b> Regional Chief Midwife, NHS England (London)
1200h	Close	



Overview of the campaign week

**Tracy Parr** 

Programme Director London Tobacco Alliance and Stop Smoking London

### Background

<u>London Tobacco Alliance</u> – strategic partnership organisation. Aim to **make London Smoke Free by 2030** <u>Stop Smoking London</u> – smoker facing website, campaigns, resources

106,696 live births in London 2022 with SATOD rate 3.9% (4200 babies affected)

Worked with regional team and partners to develop London Smoke Free Pregnancy Week **#LDNSmokefreepreg** 

- 1. To **raise awareness of the impact of smoking during pregnancy** and provide supportive information to encourage quit attempts from pregnant women and/or significant others and women planning to be pregnant.
- 1. To raise awareness amongst healthcare professionals and partner organisations of the issue and to encourage discussion about what actions can be undertaken across the system



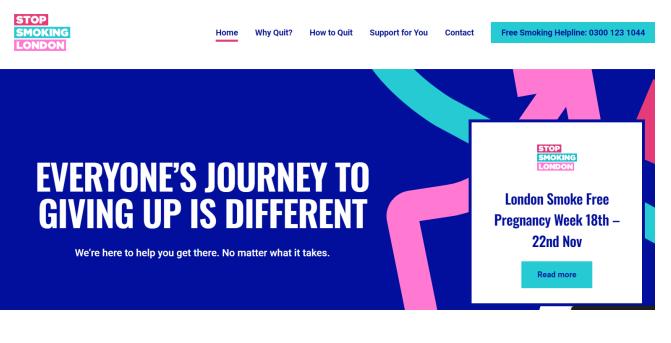
### London Smoke Free Pregnancy Week November 18<sup>th</sup> – 22<sup>nd</sup> 2024 Landing page on SSL





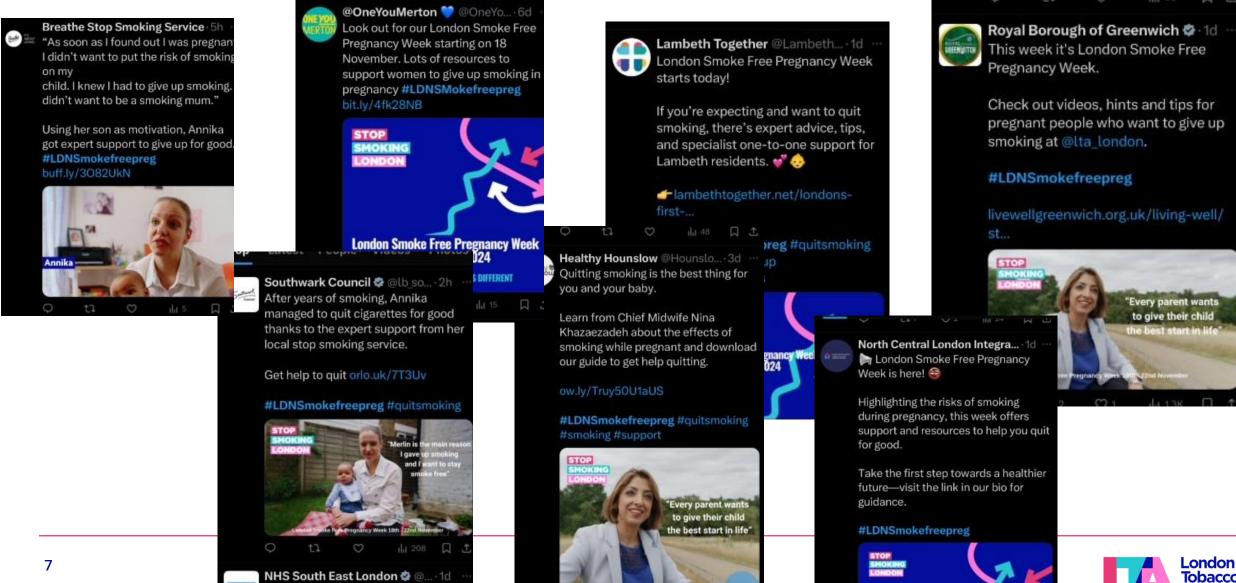
### Landing page and downloadable guide







#### Thank you for the spreading the word on social media #LDNSmokefreepreg



London Smoke Free Pregnancy Wee

8th - 22nd November 2024

MHS "Merlin is the main reason I gave up smoking and I want to stay smokefree."

on my

National Smokefree Pregnancy Incentive Scheme Use of vapes by pregnant women in Manchester

**Jayne Coyne** 

Programme Director, National Smokefree Pregnancy Incentive Scheme

Assistant Director, Population Health, NHS Greater Manchester





# Introducing the National Smoke-free Pregnancy Incentive Scheme

# Reducing smoking in pregnancy through evidence-based incentives.

Jane Coyne, Programme Director, National Smokefree Pregnancy Incentive Scheme

Treating Tobacco Dependency Lead, NHS Greater Manchester



# The Challenge of Smoking in Pregnancy



Smoking is the single most important modifiable risk factor in pregnancy

However, **7.4% of women in England were known to be smokers at the time of delivery in 2023-24**, above the national ambition of 6% or less





# The impact of smoking in pregnancy

- It's estimated that maternal smoking cost the NHS over £20 million in 2015/16 through 10,032 episodes of admitted patient care
- Smoking and exposure to second-hand smoke during pregnancy leads to complications such as low birth weight, preterm birth, miscarriage, stillbirth, and sudden infant death – putting both the mother and baby's health at risk.
- Children born to mothers who smoke are more likely to develop health problems including respiratory conditions, learning difficulties, and diabetes, and are more likely to grow up to smoke themselves.
- Smoking adds to the cost of living and pushes families into poverty. The average person who smokes spends approx. £2,500 per year, with 31% of households living in poverty once spend on smoking is taken into account.
- Younger women from the most deprived backgrounds are most likely to smoke and be exposed to second-hand smoke during pregnancy. This group has significantly higher rates of infant mortality than the general population.



# The National Smoke-free Pregnancy Incentives Scheme



## About the scheme

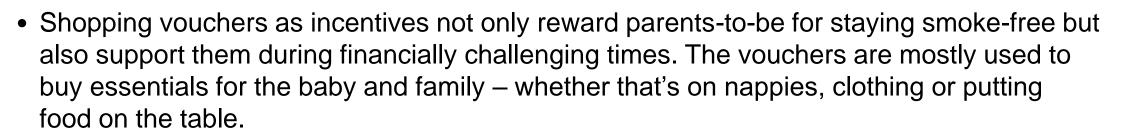
- The scheme is being introduced **across England** to support more pregnant people to stop smoking and tackle health inequalities.
- It's modelled on regional schemes that have been successful in reducing smoking in pregnancy by increasing engagement with stop smoking services.
- The scheme is **funded by the Office for Health Improvement & Disparities (OHID)**, part of the Department for Health & Social Care (DHSC), and delivered by Accenture.
- All those who are eligible can be offered the scheme

#### Incentive scheme in action: Greater Manchester case study

Greater Manchester has been running a similar incentives scheme since 2018. Since then, smoking at time of delivery (SATOD) has reduced by +40% and more than 6,000 additional babies have been born smoke-free.



# Incentives as part of a whole system approach



- Incentives schemes are highly effective in helping people to stay engaged with stop smoking support throughout pregnancy and to remain smoke-free in the months immediately following delivery, a time when relapse rates are high.
- They are both effective and cost-effective, delivering a return on investment of £4 for every £1 invested\*
- Incentive scheme's have significantly reduced smoking in pregnancy by empowering parents-to-be to take control of their health, resulting in better outcomes for both new mums and their families.



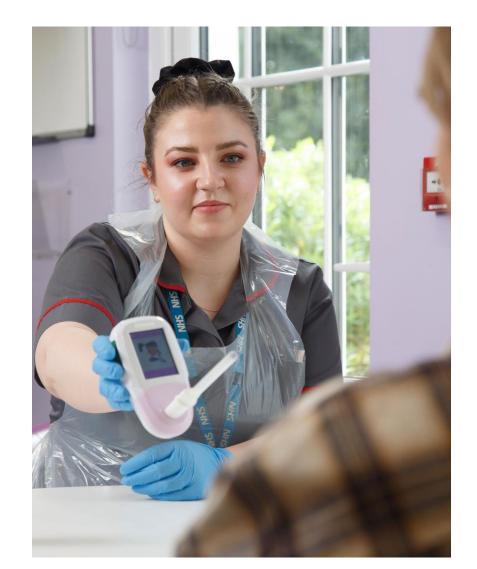
# Whole system approach...





# How it works

- The scheme provides incentives, through a Love2shop gift card, to participants throughout their pregnancy and up to three months after birth, provided they set a quit date and then regularly verify their smoke-free status with a carbon monoxide (CO) reading of 3ppm or less. In total, the maximum value of incentives someone can receive is £400.
- If a participant relapses to smoking after their quit date and before birth (i.e. they give a CO reading of 4ppm or more or tell their advisor they have smoked), **they can restart the scheme once**. If they relapse again during pregnancy or at any point after birth, they will be removed from the scheme.
- Advisors are **required to use the digital platform** to register the participant onto the scheme and record their CO reading at each appointment. This will automatically top-up their Love2shop gift card.
- The value of the vouchers can be accumulated.
- All participants enrolled by March 2025 will have their incentives funded until they reach their postpartum appointments (e.g. December 2026).





# About the digital platform

A **bespoke digital platform** has been developed for the scheme and your advisors will be given **training and a secure login** to use the platform.

Through the platform advisors can:

- **Register participants** on to the scheme (note: they must enter their NHS number)
- Send the participant **agreement** to the participant's email address
- Record the participant's quit date, which will add £20 to their Love2shop gift card
- Following their quit date, record the participant's CO reading at appointments which will trigger an automatic top-up to their Love2shop gift card if 3ppm or less

The platform works on **desktops**, **laptops**, **tablets** and **mobile devices** with an **internet connection**.

"The vouchers have been a great bonus, that's in addition to all the money you save from not buying tobacco. I've treated myself to a nice coat and we've been able to keep the freezer stocked for the family – it's been a huge help."





"Incentives **boost morale** and motivation, helping mums-to-be stay committed and empowering them to take control of their own health. The vouchers are a great reward and allow them to treat themselves or help in times of hardship."

Quote from a specialist midwife





# Doing something differently to reduce smoking in pregnancy in GM



### **Greater Manchester Smokefree Pregnancy Programme**

GM faced high smoking rates among pregnant women, a key driver of poor maternal and infant outcomes.

*"If it wasn't for the support I received from the maternity stop smoking team, I would never have given up smoking. But now, with this pregnancy, I totally stopped smoking and the baby was 8lb"* 

- New mum, Rochdale



Covering 10 localities, 1 Local Maternity System, and 6 maternity providers, supporting approximately 36,000 births annually

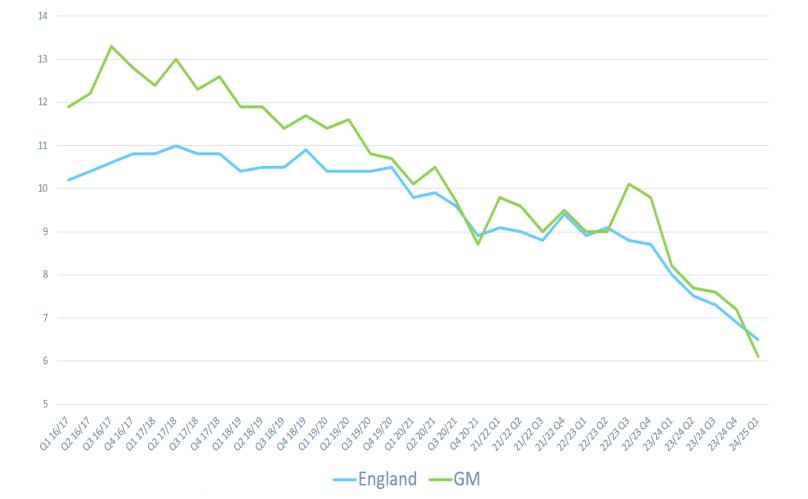


### GM whole system approach to deliver element 1 SBLCB Gre





### Spotlight on... SATOD Q1 24/25



Lowest SATOD GM has ever seen since programme inception

Below England Average

Achieved original 6% ambition



# Vaping to support quitting

- Another type of nicotine replacement in the TDA's toolkit
- Vaping is significantly less harmful than smoking
- 40% women coming through vaping initially
- Provision of safe, industry standard devices/liquids (S2S)
- Swap to Stop vape kit offer to partner/family member also
- Reduces the amount of NRT required
- Very well received by pregnant women
- Increased the number of quit attempts and successful quits



# Thank you

**Questions?** 

Email: jane.coyne@nhs.et

For National Incentive Scheme enquiries : nhsgm.nspis@nhs.net

### PREP2 Study on vaping in pregnancy

Peter Hajek Professor of Clinical Psychology Wolfson Institute of Population Health Queen Mary University of London





www.gmul.ac.uk

# PREP 2: Safety of vaping as an aid to stopping smoking in pregnancy

Peter Hajek



What was already known about effects of nicotine use in pregnancy

PREP 2 study: Safety of e-cigarettes and nicotine patches when used by pregnant smokers to quit

## Smoking affects pregnancy outcomes

- The strongest association is with pre-natal growth (higher incidence of low/ premature birthweight (<2500g), lower average birthweight, small-for-gestational-age babies)</p>
- This is also clearly causal
- Other associations (with miscarriage, birth defects, behavioural and cognitive problems) vary in strength and also in certainty about causality. Smokers have higher drug use, stress, mental health issues, medication use, poverty – which are also linked to these outcomes

# Does nicotine affect prenatal growth?

- Trials of NRT versus placebo
  - Nicotine arm had better birth and infant outcomes than placebo arm through 2 years post-partum (smoking reduction?) Cooper et al. 2014 Lancet Respir Med
- Snus users vs non-users (detrimental effect could be due to tobacco, but 'no effect' would exonerate nicotine)
  - Lower birth weight in some studies, but many women smoked while pregnant before switching to snus
  - Siblings discordant for snus use: Birthweight not affected (4K+ sibling pairs) Juarez and Merlo 2013, PLOS ONE

## EC use and pregnancy outcomes

- More 'abnormal reflexes' in infants of smokers and vapers compared to non-smokers. Could be nicotine, or familial effects, or tobacco in early pregnancy Frogatt et al. 2020 EClinMedicine
- PATH data: No effect of EC use on adverse pregnancy or birth outcomes Cohn et al. 2022 NTR
- 176,822 US pregnancies, low gestational weight gain according to product use in the last trimester: No-nicotine: 22%; vapers 22%; smokers: 28%; dual users: 26%;

Wen et al. 2023 Int J Gynaecol Obstet

# PREP trial: RCT of EC vs NRT in pregnancy

- N=1,140 pregnant smokers
   Patches vs NRT
- Validation via postal saliva testing kits proved difficult
- Some smokers in the patch arm quit with EC

ARTICLES https://doi.org/10.1038/s41591-022-01808-0



Check for update:

#### OPEN

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

Peter Hajek<sup>®1</sup>, Dunja Przulj<sup>®1</sup>, Francesca Pesola<sup>®1</sup><sup>™</sup>, Chris Griffiths<sup>®1</sup>, Robert Walton<sup>1</sup>, Hayden McRobbie<sup>®2</sup>, Tim Coleman<sup>®3</sup>, Sarah Lewis<sup>®3</sup>, Rachel Whitemore<sup>3</sup>, Miranda Clark<sup>®3</sup>, Michael Ussher<sup>4,5</sup>, Lesley Sinclair<sup>®6</sup>, Emily Seager<sup>1</sup>, Sue Cooper<sup>3</sup>, Linda Bauld<sup>®6</sup>, Felix Naughton<sup>7</sup>, Peter Sasieni<sup>®8</sup>, Isaac Manyonda<sup>9</sup> and Katie Myers Smith<sup>®1</sup>

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

# Smoking cessation

	<b>EC</b> (N=571)	<b>NRT</b> (N=569)	Difference
Validated sustained at EOP	6.8%	4.4%	p=0.08
Quitters with other product excluded	6.8%	3.6%	p=0.02
Self-reported at EOP (7 days)	20.7%	13.7%	p=0.002
Quitters with other product excluded	19.8%	9.7%	p=0.001

# Safety outcomes

	EC (N=546)	NRT (N=549)	Difference
Low birthweight	9.6%	14.8%	p=0.01
All other adverse birth outcomes, adverse events and SAEs			ns

PREP 2: Outcomes based on nicotine use (rather than randomisation)

Use of EC was more common than use of NRT (47% vs 21%)
 No difference between regular users of patches and regular uses of EC

- Groups analysed:
  - Abstainers not using nicotine products (N=25)
  - Abstainers using nicotine product (N=166)
  - Non-abstainers (N=904, including 582 dual users)

# Results

- Abstainers using nicotine products had babies with higher birthweight (3.3 kg) than smokers and dual users (3.1 kg both), p<0.05</li>
  - Abstainers not using nicotine did not differ from either (small sample)
- Regular use of nicotine products was not associated with any adverse pregnancy outcomes; no difference between smokers and dual users
  - EC users reported more improvements in cough and phlegm

### Conclusions on EC safety

Use of EC/NRT does not reduce the benefit of stopping smoking and does not increase risks if women also smoke



RESEARCH REPORT 🔂 Open Access 🛛 😨 🛈

Safety of e-cigarettes and nicotine patches as stop-smoking aids in pregnancy: Secondary analysis of the Pregnancy Trial of E-cigarettes and Patches (PREP) randomized controlled trial

Francesca Pesola 🔀, Katie Myers Smith, Anna Phillips-Waller, Dunja Przulj, Christopher Griffiths, Robert Walton, Hayden McRobbie, Tim Coleman, Sarah Lewis, Rachel Whitemore ... See all authors 🗸

First published: 17 January 2024 | https://doi.org/10.1111/add.16422 | Citations: 2

### Implication for clinical practice

- Clinicians and stop smoking services now routinely recommend EC as one of treatment options to non-pregnant clients
- Some recommend EC to pregnant clients too, but this has been limited by lack of data
- The approach can now be extended to smokers who are pregnant as well

https://onlinelibrary.wiley.com/doi/10.1111/add.16422

### With thanks to PREP Trial team

- Dunja Przulj, Francesca Pesola, Chris Griffiths, Robert Walton, Hayden McRobbie, Tim Coleman, Sarah Lewis, Rachel Whitemore, Miranda Clark, Michael Ussher, Lesley Sinclair, Emily Seager, Sue Cooper, Linda Bauld, Felix Naughton, Peter Sasieni, Isaac Manyonda & Katie Myers Smith
- Queen Mary University of London; University of New South Wales; University of Nottingham; St George's University of London; University of Stirling; University of East Anglia; Kings College London; St George's University Hospital NHS Foundation Trust

### **Expert Position Statement on Vaping in Pregnancy**

### **John Waldron**

Policy and Public Affairs Manager Action on Smoking and Health





# **ASH resources**

# Vaping before, during and after pregnancy

### John Waldron

Policy and Public Affairs Manager john.Waldron@ash.org.uk

ASH receives funding from:

- Cancer Research UK
- British Heart Foundation

20 November 2024



# Who we are

- ASH is an independent public health charity working to end the harms from smoking.
- ASH coordinates the <u>Smoking in Pregnancy Challenge Group</u>, a coalition of third sector organisations, academics and professional membership bodies (representing midwives, obstetricians etc.) which has campaigned for policies to reduce rates of maternal smoking since 2012.

Our approach:

- 1. National advocacy and campaigning
- 2. Practical support and guidance for health professionals

Disclaimer: ASH has no affiliation with e-cigarette or tobacco manufacturers.



# Why are we talking about vaping?

- Vapes are currently the <u>most popular</u> smoking cessation aid in Great Britain, used by <u>5.6</u> <u>million</u> adults.
- Over half of those who stopped smoking in the last 5 years used a vape (2.7 million people).
- 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.
- Vapes are increasingly used by stop smoking services in the NHS/local authorities to support pregnant smokers to quit.
- It is 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.
- Chief Medical Officer, Sir Chris Whitty: "*If you smoke, vaping is much safer; if you don't smoke, don't vape; marketing vapes to children is utterly unacceptable.*"



# Background

- Challenge Group guidance on vaping during pregnancy has been updated to cover the latest evidence/policy developments.
- Our resources include:
  - Detailed FAQ-style briefing for professionals
  - Key messages briefing for professionals
  - Infographic for patients
- The updated resources will be published imminently.
- These can be ordered for free from our website here: <u>https://ash.org.uk/resources/smokefree-nhs/smoking-in-</u> <u>pregnancy-challenge-group</u>





# Key messages

- 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 inhalers 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.
- 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.



# Key messages

- Youth vaping Vaping is an effective quitting aid for adult smokers but should not be used by under-18s. It is illegal to sell/provide vapes to someone aged under 18.
- Illicit vapes People who want to quit smoking using a vape are advised to only use legal, regulated products.
- Non-smokers vaping Someone who vapes and has never smoked should consider quitting vaping as it is not risk-free and is addictive.
- Vaping cessation Pregnant women who have quit smoking through vaping should be advised to keep vaping as long as necessary to stay smokefree. It is important not to pressure people to stop vaping as this may cause them to relapse to smoking.
- Secondhand vapour There is no evidence of harm to others from e-cigarette vapour, although it is possible that longer term exposure may carry some low-level risk to people who don't vape or smoke. Pregnant women could consider not allowing vaping in the home and car as a precaution. The key thing is that pregnant women and babies are not exposed to secondhand tobacco smoke which is very harmful.



### Shoking in pregnancy

### Vaping before, during and after pregnancy

A guide for maternity and other healthcare professionals



### 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 and/or 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-torecycle-electronics/what-electronicscan-be-recycled/recycle-vapes/

### Further info:

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 refilable tank. Vapes are not the same as heated tobacco or heat-notburn products. Unlike vapes, heated tobacco products contain tobacco and although likely to be less harmful than cigartites, they are not harmless. It is recommended that pregnant women stop using tobacco completely to maximise the benefits to their health.

### 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.<sup>10</sup> For pregnant women, one large trial found that vapes were more effective than nicotine patches for smoking cessation.<sup>2</sup> 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

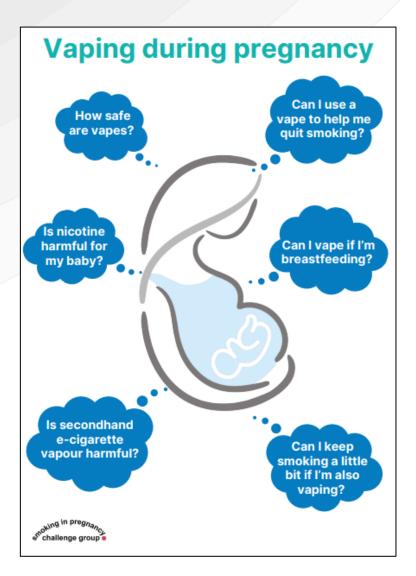
Although e-cigarette vapour has been found to contain some toxicants also found in tobacco smoke, these are either at much lower levels or at levels not associated with serious health risk<sup>100</sup> Most importantly, vapes do not contain tobacco or carbon monoxide, which is particularly harmful to developing bables. The risk of fire caused by vapes is significantly lower than the risk posed by combustible cigarettes<sup>100</sup>

### Further info:

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

# Briefing for professionals





### How safe are vapes?

- Vapes (e-cigarettes) are significantly less harmful to health than
  tobacco cigarettes
- If using a vape (vaping) helps you stay smokefree, it is far safer for you and your baby than continuing to smoke
- Vapes should not be used by children or non-smokers

### Can I use a vape to help me quit smoking?

Yes, vapes can help you to quit and are much less harmful than
 smoking

Nicotine replacements such as patches and gum are licenced for use during pregnancy

You should only

use legal vapes

from a reputable source. Illegal vapes often exceed

restrictions on nicotine

content and may contain

banned ingredients.

purchased

### Can I keep smoking a little bit if I'm also vaping?

- NO Every cigarette causes damage both to you and your baby
- Stopping smoking early in pregnancy significantly reduces the risk of damage to your baby
   You can vape as often as you need to stay smokefree

### Is secondhand e-cigarette vapour harmful?

- There is no evidence of harm to others from e-cigarette vapour, although you could consider not allowing vaping in your home and car as a precaution
- Secondhand tobacco smoke is very harmful to you and your baby

### Is nicotine harmful for my baby?

Both vapes and cigarettes contain nicotine, which makes them addictive. However, most of the harm from smoking comes from the other chemicals in tobacco smoke. Nicotine replacement products like patches and gum are licensed for use during pregnancy

### Can I vape if I'm breastfeeding?

Yes. If vaping is helping you to quit smoking and stay smokefree, you should carry on with it, including while breastfeeding. As a precaution, you could avoid vaping directly around babies when feeding them



# Infographic for patients



# **Key links and resources**

- Smoking in Pregnancy Challenge Group website.
- OHID. Nicotine vaping in England: 2022 evidence update.
- Hajek P et al. <u>Electronic cigarettes versus nicotine patches for smoking cessation in</u> pregnancy: a randomized controlled trial. 2022. A secondary analysis comparing outcomes for participants who did and did not regularly use a nicotine product (vapes or patches) during their quit attempt is <u>here</u>.
- Hartmann-Boyce J. et al. <u>Cochrane review: Electronic cigarettes for smoking cessation</u>. 2022.
- Royal College of Midwives. Position statement: Support to Quit Smoking in Pregnancy.
- ROSPA: Use of e-cigarettes (vaping) in the home: advice for parents.
- NCSCT. E-learning: Vaping: a guide for healthcare professionals.
- NCSCT. Standard Treatment Programme for Pregnant Women.



# Any questions?

john.Waldron@ash.org.uk



Smoking in pregnancy – scale of the issue and potential intervention in neonatal units

**Caitlin Notley** Professor of Addiction Sciences University of East Anglia



Smoking in pregnancy – scale of the issue and potential intervention in neonatal units

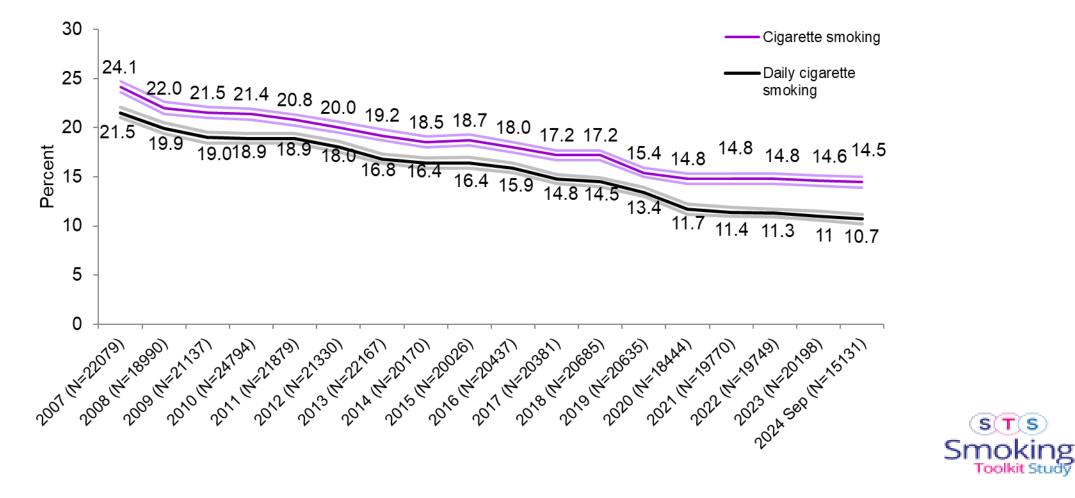
Professor Caitlin Notley Norwich Medical School University of East Anglia c.notley@uea.ac.uk @AddictionUEA

No Conflicts of interest





### SMOKING PREVALANCE (Who still smokes?)









## SMOKING PREVALANCE (health disparities)



Women of childbearing age - 20.1% of women aged 15-44 were current cigarette smokers (Lopez et al, 2018)



around 1 in 4 (23.4%) people in routine and manual occupations smoked, this is around 2.5 times higher than people in managerial and professional occupations (9.3%) (ONS, 2019)



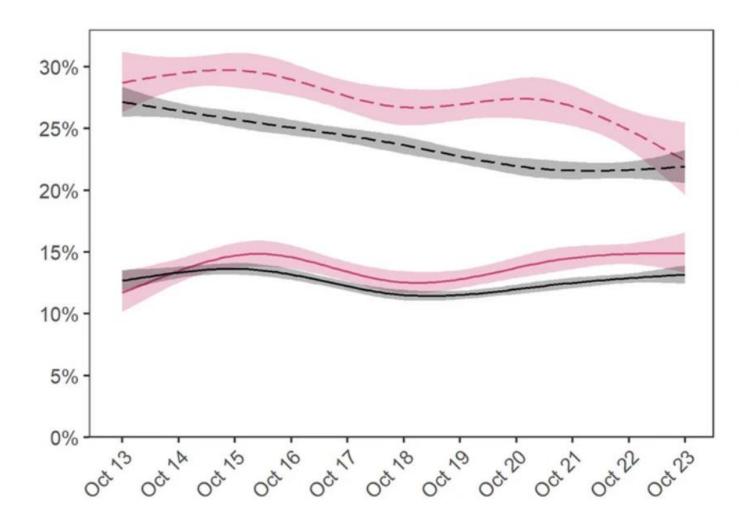
Only 27.8% ( of NICU) families earning less than \$25,000 reported having a total smoking ban in place relative to almost 60% of families earning more (p < .01). (Stotts et al, 2011)







### Smoking in women, stratified by social grade



- -- Women of reproductive age C2DE
- Women of reproductive age ABC1
- All adults C2DE
- All adults ABC1

Jackson, S.E., Brown, J., Notley, C. *et al.* Characterising smoking and nicotine use behaviours among women of reproductive age: a 10-year population study in England. *BMC Med* **22**, 99 (2024). https://doi.org/10.1186/s12916-024-03311-4



# SMOKING PREVALANCE – NICU families

Nichols A, Clarke P, Notley C Parental smoking and support in the NICU. Archives of Disease in Childhood - Fetal and Neonatal Edition 2019; 104: F342.







## **IMPACTS (Northrup et al)**

- Smoking particles have been found on NICU furniture and incubators
- Smoking chemicals found in urine of NICU babies of smokers (including formula fed babies or where only partner smokes)
- Babies of smokers likely to stay longer on NICU (Adams et al, 2002)
- •NICU babies with greater exposure to smoking particles have less diverse microbiome









### IMPACTS

- Babies born to smokers weigh 200g less than those born to non-smokers and are at 40% higher risk of being preterm
- •Lung development is incomplete. Many babies need significant medical intervention and protracted respiratory support. These infants are vulnerable to infection.
- •SHS exposure in home environment increases rates of SIDS, respiratory conditions, and other infections in NICU babies.
- •Children of smokers are 4 times more likely to go on to be smokers themselves.











### WHAT MIGHT HELP?

- Stopping smoking, or remaining abstinent, is one of the few things that parents can do to significantly improve the longer-term recovery and health of their offspring.
- •NHS Long-term plan, NICE guidance, Kahn review
- •NICU admission may represent a 'teachable moment' for smoking cessation but there is no UK intervention.
- •NRT & Behavioural advice (Northrup, 2020, feasibility trial)
- •NRT and incentives (Stott et al, 2020)
- "More robust interventions that include maternal and partner/household smoking cessation are likely needed"











# 

3

• Systematic review of interventions to reduce environmental smoke exposure for children

- 42 interviews with NICU parents
- Focus groups with 23 NICU HCPs

 Person centred interviews with 10 NICU parents focusing on intervention components



Environmental Research

International Journal of Environmental Research and Pablic Health

stematic Review of Behaviour Change Techniqu ithin Interventions to Reduce Environmental

Development of a smoke-free home intervention for famil



### A SMOKE-FREE HOME INTERVENTION FOR FAMILIES OF BABIES ADMITTED TO NEONATAL INTENSIVE CARE





### 'Love my Lungs' is a whole unit approach – a smokefree NICU

The package has three parts according to parents' situations:

- 1. Advice, guidance and support to create a smoke-free home environment
- 2. Supporting parents to stop smoking
- 3. Supporting parents to stay stopped from smoking ('relapse prevention')

The package includes training for NICU staff to offer this support





### Support from NICU staff: VERY BRIEF ADVICE

### ASK

Identify babies at risk of tobacco smoke

### **ADVISE**

Inform parents about the risks to babies' health, and what is the best way to maintain a smoke free environment

### ACT

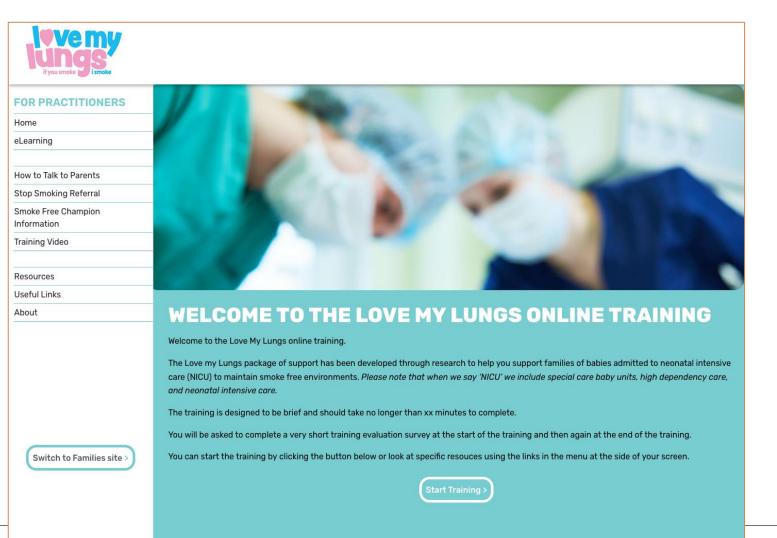
Offer parents support to maintain a smoke free environment for baby







### Support from NICU staff : Practitioner Training









### Support to stop smoking: NRT or an e cigarette





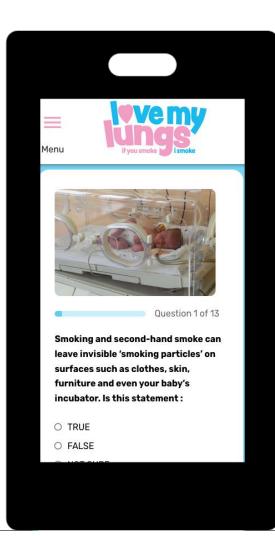






### SUPPORT TO STAY SMOKEFREE: LOVE MY LUNGS WEBSITE













### **A SMOKE-FREE HOME INTERVENTION FOR** FAMILIES OF BABIES ADMITTED TO **NEONATAL INTENSIVE CARE**









Q and A

**Chair: Nina Khazaezadeh** 

Regional Chief Midwife, NHS England (London)

