

Consultation stage impact assessment

Title: Implementing the Tobacco and Vapes Bill: smoke-free, heated tobacco-free and vape-free places

Type of measure: Secondary Legislation

Stage: Consultation

Source of intervention: Domestic

Department or agency: Department of Health and Social Care

Other departments or agencies: N/A

IA number: N/A

RPC reference number: N/A

Contact for enquiries: tobaccoandvapesconsultations@dhsc.gov.uk

Date: February 2026

Summary: Intervention and Options

Summary of impact assessment

This impact assessment (IA) considers extending the current smoke-free places policy and introducing heated tobacco-free and vape-free places.

It should be noted that due to evidence limitations, a significant proportion of the benefits of the proposed policy are not quantified or monetised in this analysis. Additionally, where products in scope are novel, this creates further challenges and uncertainties in assessing the potential scale of the benefits. For example, the long-term health harms of vaping products are still unknown.

As a result, we have not presented a Net Present Social Value (NPSV) as we do not think it would provide a fair reflection of the overall net impact on society from this policy.

This IA was completed in October 2025. Therefore, the data and evidence used in the IA reflects the best available at the time of completion. Following this consultation, we will update the IA as appropriate, including consideration of information we gather through responses and any new data and evidence made available since the IA was published.

What is the problem under consideration? Why is government action or intervention necessary?

In this IA, we are considering three different activities under a single assessment (smoking, using heated tobacco and vaping) and assessing the impact of restricting the locations where individuals can undertake these activities.

Tobacco is a uniquely harmful product and all smoked tobacco products are harmful to health. Second-hand smoking poses a risk to health, even outdoors. Groups particularly at risk of the effects of second-hand smoking include children, pregnant women, or people with pre-existing health conditions, such as, asthma or heart disease, which may not be visible to the smoker.

In recent years, there has been an increase in the awareness of heated tobacco products and use of vapes, particularly among young people. Although the evidence on second-hand heated tobacco and vaping is still developing, there is some evidence suggesting that these activities could be harmful to health.

Regulatory action is needed to deliver a smoke-free UK and protect future generations from the harms of tobacco and risks of nicotine addiction. If the Government does not take this action, then children and medically vulnerable people will continue to be exposed to the harms of second-hand smoke, heated tobacco and vapes. Voluntary and non-regulatory action would not be sufficient to address this issue.

What are the policy objectives of the action or intervention and the intended effects?

The Government has a duty to protect and improve the health of their citizens. Specifically, it is committed to our ambition for a smoke-free UK and tackling the rise in youth vaping. The aim to reduce youth vaping needs to be balanced against the objective to support adult smokers to quit, in which vaping can play a key role.

The specific policy objectives to extend the current smoke-free places policy and introduce heated tobacco-free and vape-free places policies are:

Objective one: To reduce exposure that children and medically vulnerable people have to the well-established harms of second-hand smoke, and potential risks of second-hand emissions from heated tobacco, therefore reducing the health impacts and costs to the NHS and society as a whole.

Objective two: To reduce exposure that the public, especially children, have to second hand vaping, reducing the potential risks and unknown long-term health impacts.

Objective three: To reduce smoking and vaping prevalence, particularly around children and young people, but also non-smoking adults with the aim of reducing attractiveness and uptake whilst being mindful of the role vapes can play as an effective quit aid for adult smokers.

What policy options have been considered, including any alternatives to regulation? Please justify preferred option (further details in Evidence Base)

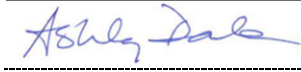
- **Option 1 ('Business as Usual')**: Smoking is not permitted in the majority of enclosed or semi-enclosed workplaces and public places in England as well as private vehicles with an individual under the age of 18 years old. There are some exemptions to these locations.
- **Option 2:** Smoke-free places would be extended to playgrounds with Local Authority (LA) involvement, outside primary and secondary schools and outside hospitals. Heated tobacco-free places would be aligned with smoke-free places for indoor and outdoor places. Vape-free places would apply to existing smoke-free places –indoor workplaces, public places and certain vehicles.
- **Option 3 (preferred option):** Smoke-free places would be extended to public playgrounds with LA involvement, outside wider education settings and outside health and care settings where medically vulnerable people are present in high numbers. Heated tobacco-free places would be aligned with smoke-free places for indoor and outdoor places. Vape-free places would apply to existing indoor smoke-free places, public playgrounds with LA involvement and outside education settings.
- **Option 4:** Smoke-free places would be extended to all playgrounds, outside wider education settings and outside a wider list of health and care settings. Heated tobacco-free places would be aligned with smoke-free places for indoor and outdoor places. Vape-free places would be aligned with smoke-free places for indoor and outdoor places (including the wider list of health and care settings).

These options are assessed against the three objectives and the critical success factors in order to determine which option would be the preferred choice. Our preferred position reflects a range of priorities between protecting the most vulnerable and ensuring that the financial impact on businesses is limited.

Will the policy be reviewed? It will be reviewed. If applicable, set review date: TBC				
Is this measure likely to impact on international trade and investment?			Yes	
Are any of these organisations in scope?	Micro Yes	Small Yes	Medium Yes	Large Yes
What is the CO ₂ equivalent change in greenhouse gas emissions? (Million tonnes CO ₂ equivalent)		Traded: N/A	Non-traded: N/A	

I have read the Impact Assessment and I am satisfied that, given the available evidence, it represents a reasonable view of the likely costs, benefits and impact of the leading options.

Signed by the responsible Minister:

 Date:
10/02/25

Description key costs by ‘main affected groups’

The costs of this option are zero, as this is the option that costs of all other options are compared against.

Key benefits by ‘main affected groups’

The benefits of this option are zero, as this is the option that benefits of all other options are compared against.

Distributional impacts

N/A

Key assumptions/sensitivities/risks

Discount rate

3.5%

- Current legislation will remain in place for smoke-free locations in indoor settings and private vehicles with children under 18 years old present.
- There would continue to be no legislation that prohibits smoking in any outside locations in England and no legal prohibitions on the use of heated tobacco or vapes indoors or outdoors.
- We assume locations with voluntary restrictions would remain in place.
- Assume individuals remain exposed to current levels of second-hand smoking, heated tobacco products and vaping.

Description key costs by ‘main affected groups’

The monetised costs are:

- Familiarisation costs (£273m)
- Communication campaign costs (£1.5m)
- Enforcement costs (£0.3m)
- Signage costs (£229m)

The non-monetised costs identified are:

- Environmental cost of disposing of old signs
- Signage design costs
- Profit loss
- Health impacts of fewer people using vapes to quit smoking

Key benefits by ‘main affected groups’

The non-monetised benefits identified are:

- Health gains from reduced second-hand smoking, heated tobacco and vaping at locations
- Health gains to individuals if smoking, heated tobacco and vaping prevalence falls
- Reduced health and social care costs
- Productivity gains
- Reduced litter
- Reduced fires
- Potential change in consumer surplus
- Utility of individuals who do not smoke, use heated tobacco products, or vape

Distributional impacts

Whilst we know smoking prevalence varies by several characteristics, including socioeconomic background, house tenure and age, we have limited evidence to be able to analyse this for heated tobacco use and vaping. Also, there are potential differences in access to locations in scope by certain characteristics including socioeconomic status, ethnicity and deprivation.

Key assumptions/sensitivities/risks

Discount rate

3.5%

The key risks identified are:

- Interactions with other policies. This has not been quantified due to lack of evidence.
- Uncertainty in existing voluntary bans in the counterfactual scenario.

Description key costs by ‘main affected groups’

The monetised costs are:

- Familiarisation costs (£279m)
- Communication campaign costs (£1.5m)
- Enforcement costs (£0.3m)
- Signage costs (£251m)

The non-monetised costs identified are:

- Environmental cost of disposing of old signs
- Signage design costs
- Profit loss
- Health impacts of fewer people using vapes to quit smoking

Key benefits by ‘main affected groups’

The non-monetised benefits identified are:

- Health gains from reduced second-hand smoking, heated tobacco and vaping at locations
- Health gains to individuals if smoking, heated tobacco and vaping prevalence falls
- Reduced health and social care costs
- Productivity gains
- Reduced litter
- Reduced fires
- Potential change in consumer surplus
- Utility of individuals who do not smoke, use heated tobacco products, or vape

Distributional impacts

Whilst we know smoking prevalence varies by several characteristics including socioeconomic background, house tenure and age, we have limited evidence to be able to analyse this for heated tobacco use and vaping. Also, there are potential differences in access to locations in scope by certain characteristics including socioeconomic status, ethnicity and deprivation.

Key assumptions/sensitivities/risks

Discount rate

3.5%

The key risks identified are:

- Interactions with other policies. This has not been quantified due to lack of evidence.
- Uncertainty in existing voluntary bans in the counterfactual scenario.

Description key costs by ‘main affected groups’

The monetised costs are:

- Familiarisation costs (£281m)
- Communication campaign costs (£1.5m)
- Enforcement costs (£0.3m)
- Signage costs (£260m)

The non-monetised costs identified are:

- Environmental cost of disposing of old signs
- Signage design costs
- Profit loss
- Health impacts of fewer people using vapes to quit smoking

Key benefits by ‘main affected groups’

The non-monetised benefits identified are:

- Health gains from reduced second-hand smoking, heated tobacco and vaping at locations
- Health gains to individuals if smoking, heated tobacco and vaping prevalence falls
- Reduced health and social care costs
- Productivity gains
- Reduced litter
- Reduced fires
- Potential change in consumer surplus
- Utility of individuals who do not smoke, use heated tobacco products, or vape

Distributional impacts

Whilst we know smoking prevalence varies by several characteristics including socioeconomic background, house tenure and age, we have limited evidence to be able to analyse this for heated tobacco use and vaping. Also, there are potential differences in access to locations in scope by certain characteristics including socioeconomic status, ethnicity and deprivation.

Key assumptions/sensitivities/risks	Discount rate	3.5%
--	----------------------	------

The key risks identified are:

- Interactions with other policies. This has not been quantified due to lack of evidence.
- Uncertainty in existing voluntary bans in the counterfactual scenario.

Evidence Base

Problem under consideration and rationale for intervention

Context

1. Tobacco is a uniquely harmful product. Smoking remains the leading cause of preventable death, illness and disability in the UK¹. All smoked tobacco products are harmful to health and evidence shows that cigars and pipe smoking have increased risk of all-cause mortality, increased rates of smoking-related cancers², cardiovascular disease, and respiratory conditions compared to never-smokers³. Non-smokers are exposed to second-hand smoke (passive smoking) which means that through no choice of their own many come to harm.
2. The World Health Organization (WHO) estimates that every year second-hand smoke kills up to 1.6 million people prematurely each year worldwide⁴. The Global Burden of Disease estimates second hand smoking caused 8.2 deaths per 100,000 people in England in 2023, and 234 Disability-Adjusted Life Years (DALYs) per 100,000 people⁵.
3. Studies have suggested that non-smokers that are exposed to second-hand smoke have an 18% increased risk of death from all causes⁶, an increased risk of Chronic Obstructive Pulmonary Disease (COPD) (66%)⁷, cardiovascular disease (CVD) (23%)⁸ and stroke (35%)⁹. There is also an increased risk of lung cancer (24%)¹⁰.
4. When measured in indoor places, short and long-term second-hand smoking has been proven to cause several health issues. Short-term exposure effects include eye irritation, headaches, coughs, sore throat, dizziness and nausea¹¹. Following longer-term exposure, increased health risks include lung cancer and heart disease¹². Second-hand smoking has also been associated with breast and other cancers, stroke and dementia¹³.
5. Groups particularly at risk of the effects of second-hand smoking include children, pregnant women, or people with pre-existing health conditions such as asthma or heart disease which may not be visible to the smoker¹⁴. In 2010, the Royal College of Physicians (RCP)¹⁵ estimated that each year second-hand smoking exposure in children causes:
 - Over 20,000 lower respiratory tract infections

¹ Institute for Health Metrics and Evaluation. Global Burdens of Disease. [VizHub - GBD Compare](#)

² Shaper et al. 2003. [Pipe and cigar smoking and major cardiovascular events, cancer incidence and all-cause mortality in middle-aged British men | International Journal of Epidemiology | Oxford Academic](#)

³ Sharma et al. 2024. [Respiratory symptoms and outcomes among cigar smokers: findings from the Population Assessment of Tobacco and Health \(PATH\) study waves 2–5 \(2014–2019\) - PMC](#)

⁴ WHO. 2025. [Tobacco](#)

⁵ Institute for Health Metrics and Evaluation. Global Burdens of Disease. <https://vizhub.healthdata.org/gbd-results?params=gbd-api-2023-permalink/d7c5aad8d4f8b6769c9b30ede6bb6002>

⁶ Lv and others. 2015. [Risk of all-cause mortality and cardiovascular disease associated with secondhand smoke exposure: a systematic review and meta-analysis - PubMed](#)

⁷ Fischer and Karemer. 2015. [Meta-analysis of the association between second-hand smoke exposure and ischaemic heart diseases, COPD and stroke | BMC Public Health | Full Text](#)

⁸ Lv and others. 2015. [Risk of all-cause mortality and cardiovascular disease associated with secondhand smoke exposure: a systematic review and meta-analysis - PubMed](#)

⁹ Fischer and Karemer. 2015. [Meta-analysis of the association between second-hand smoke exposure and ischaemic heart diseases, COPD and stroke | BMC Public Health | Full Text](#)

¹⁰ Possenti and others. 2024. [Association between second-hand smoke exposure and lung cancer risk in never-smokers: a systematic review and meta-analysis | European Respiratory Society](#)

¹¹ ASH. 2020. [Secondhand Smoke - ASH](#)

¹² ASH. 2020. [Secondhand Smoke - ASH](#)

¹³ ASH. 2020. [Secondhand Smoke - ASH](#)

¹⁴ ASH. 2020. [Secondhand Smoke - ASH](#)

¹⁵ Royal College of Physicians. 2010. Accessed via [Secondhand Smoke - ASH](#)

- 120,000 cases of middle ear disease
 - At least 22,000 new cases of wheeze and asthma
 - 200 cases of bacterial meningitis
 - 40 sudden infant deaths – one in five of all Sudden Infant Death Syndrome (SIDs)
6. Children of parents who smoke are almost three times as likely to take up smoking¹⁶. Additionally, a survey conducted in China showed that amongst people who had tried to quit but failed (of which there were 365 people in the study), lack of willpower, tobacco dependence, and influence of surrounding smokers or smoking environments to be the top three adverse factors leading to failure in quitting smoking¹⁷.
 7. Heated tobacco is a tobacco stick that is inserted into a device that heats the tobacco to temperatures less than conventional cigarettes, releasing an aerosol. There is no safe level of tobacco consumption¹⁸, and all tobacco products are harmful. Laboratory studies show evidence of toxicity from heated tobacco, and, like other forms of tobacco, the aerosol generated by heated tobacco devices contains carcinogenic (cancer causing) compounds¹⁹.
 8. Although heated tobacco use is currently low in the UK, at around 0.4% of people (aged 16 years and over)²⁰, awareness is rising. The Action on Smoking and Health (ASH) Smoke-free Adult Survey 2025²¹ reported that 28% of adults were aware of heated tobacco compared to 9% in 2017 and 19% in 2024.
 9. Vapes (also known as e-cigarettes) are handheld devices that heat substances to create vapours that are inhaled by the user. They are mostly used to deliver nicotine, though some products contain no nicotine at all (non-nicotine vaping products). However, nicotine can be added manually to non-nicotine products and some non-nicotine products have been found to contain nicotine. There are different types of vaping devices, such as refillable pods or tank devices, as well as more novel devices like e-hookah, which are designed to mimic the experience of smoking a traditional hookah.
 10. Whilst evidence shows vaping can be an effective quit aid for adult smokers^{22,23,24}, and there are likely reduced health harms compared to smoking²⁵, vaping is not risk-free and data on long-term health harms is still emerging²⁶. There is evidence of the short and medium-term potential health risks of vaping²⁷. One of the main health risks of nicotine-containing vapes is posed by their nicotine content.
 11. It is for this reason that the Government's advice on vaping is clear: if you smoke, you should switch to vaping. But if you don't smoke, don't vape, and children should never vape.
 12. Despite the potential health harms and the clear advice that children should not vape, youth vaping has become an issue of concern within the UK. Data gathered by the NHS shows that 25% of 11-15-year-olds in England had tried vaping in 2023, and that the proportion of young people regularly vaping has more than doubled

¹⁶ Royal College of Physicians. 1992. Accessed via [Young people and smoking - ASH](#)

¹⁷ Wang and others. 2023. [Attitudes and influencing factors associated with smoking cessation: An online cross-sectional survey in China - PMC](#)

¹⁸ WHO. 2025. [Tobacco](#)

¹⁹ Committee on Toxicity. 2017. [heat_not_burn_tobacco_statement.pdf \(food.gov.uk\)](#)

²⁰ UCL. 2025. [E Cigarettes Latest Trends - Graphs - Smoking in England](#) (Accessed August 2025)

²¹ ASH. [Heated tobacco - ASH](#)

²² Lindson and others. 2025. [Electronic cigarettes for smoking cessation](#)

²³ Hajek and others. 2019. [A Randomized Trial of E-Cigarettes versus Nicotine-Replacement Therapy](#)

²⁴ NCST. 2023. [Incorporating nicotine vaping products \(e-cigarettes\) into Stop Smoking Services](#)

²⁵ OHID. 2022. [Nicotine vaping in England: an evidence update including health risks and perceptions, September 2022](#)

²⁶ Scottish Government. 2024. [Vaping- Health harms: evidence briefing.](#)

²⁷ Scottish Government. 2024. [Vaping – Health harms: evidence briefing - gov.scot](#)

between 2018 and 2023²⁸. ASH UK data for Great Britain shows a similar picture, however rates appear to be beginning to flatline in 2024 and 2025²⁹. Recent ASH data also shows growing indicators of dependence amongst young people who vape that are comparable to smoking³⁰.

13. In response to these challenges, on 4 October 2023 the Department of Health and Social Care (DHSC) published a Command Paper followed by a UK-wide consultation on 12 October 2023 entitled 'Creating a smokefree generation and tackling youth vaping'³¹. This was a four-nation consultation and the Government's response was published on 29 January 2024. This led to the introduction of the Tobacco and Vapes Bill, announced in the King's Speech on 16 July 2024³². The Bill included powers to regulate tobacco and vapes, and aims to address both the issue of adult smoking and youth vaping. After the last General Election, the Government updated and introduced the Bill to Parliament in November 2024³³.
14. The Government's aim to reduce the harms of second-hand smoking, heated tobacco and vaping sits alongside several other measures we propose to introduce using powers within the Tobacco and Vapes Bill. We will consult on other measures separately.

Current legislative requirements

15. The following regulations contain provisions relating to smoke-free places:
 - Smoke-free indoor enclosed workplaces and public places - [The Health Act 2006](#)
 - Exemptions to the smoke-free indoor restrictions - [The Smoke-free \(Exemptions and Vehicles\) Regulations 2007](#)
 - Requirements for no smoking signs – [The Smoke-free \(Signs\) Regulations 2012](#)
 - Powers for smoking in a private vehicle with children present - [The Children and Families Act 2014](#)
 - Smoking in a private vehicle with children present - [The Smoke-free \(Private Vehicles\) Regulations 2015](#)
16. In England, the Health Act 2006³⁴, which came into effect on 1st July 2007, banned smoking (including tobacco and non-tobacco herbal smoking products) in indoor public places and workplaces.
17. There are a number of exemptions³⁵ to the smoke-free legislation which are set out in secondary legislation. This includes designated bedrooms in hotels and designated rooms in care homes, hospices, research or testing facilities and offshore installations. Specialist tobacconists also permit the sampling of cigars or pipe tobacco when certain requirements are met and smoking is permitted when it is appropriate for the artistic integrity of the performance.

²⁸ NHS Digital. 2024. [Smoking, Drinking and Drug Use among Young People in England, 2023 - NHS England Digital](#)

²⁹ ASH. 2025. [Use-of-Vapes-Among-Young-People-in-Great-Britain-2025.pdf](#)

³⁰ ASH. 2025. [Use-of-Vapes-Among-Young-People-in-Great-Britain-2025.pdf](#)

³¹ UK Government. 2024 [Creating a smokefree generation and tackling youth vaping - GOV.UK](#)

³² Prime Minister's Office, 10 Downing Street and His Majesty King Charles III. 2024. [The King's Speech 2024 - GOV.UK](#)

³³ DHSC. 2024. [The Tobacco and Vapes Bill: What you need to know - Department of Health and Social Care Media Centre](#)

³⁴ The National Archives. 2006. [Health Act 2006](#)

³⁵ The National Archives. 2007. [The Smoke-free \(Exemptions and Vehicles\) Regulations 2007](#)

18. Smoking in a private vehicle with an under 18 present is regulated under the Smoke-free (Exemptions and Vehicles) Regulations 2007, as amended by the Smoke-free (Private Vehicles) Regulations 2015. The law took effect on 1st October 2015.
19. There is currently no legislation in place that restricts where someone can use heated tobacco or vapes.

Problem under consideration

Second-hand smoking harms outdoors

20. There is some evidence which suggests smoking in outdoor areas may impact air quality which could have health impacts on those exposed. For example, a 2013 systematic review³⁶ looked at second-hand tobacco smoke exposure in different settings. The review concluded that available evidence indicates high second-hand smoke levels (mostly measured through Particulate Matter (PM)_{2.5}) in some outdoor smoking areas. They also found high second-hand smoke levels in indoor settings that were near to outdoor smoking areas.
21. Evidence also indicates that smoked tobacco products continue to be used around children and medically vulnerable people. A 12 country European survey³⁷, including England, outlined second-hand smoke presence identified by non-smokers, and smoking reported by smokers at eight outdoor areas in their last visit in the past six months. Amongst non-smokers, second-hand smoke presence was reported to be lowest at children's playgrounds (39.5%), followed by outdoor areas in schools (52%), stadia, parks, outdoor areas in hospitals (67.3%), public transport stops, restaurant/bar terraces, and beaches. Smoking reported by smokers was lowest at children's playgrounds (42.6%), followed by outdoor areas in schools (52.7%), outdoor areas in hospitals (68.2%), stadia, public transport stops, parks, restaurant/bar terraces and beaches.
22. Some studies looked at nicotine product usage alongside tobacco product usage in locations where children are likely to be present in high numbers. An 11 country, European study³⁸ (which included the United Kingdom) on second-hand smoking and nicotine at outdoor playgrounds, reported 40.6% of the sites had nicotine presence, 19.6% of the playgrounds had people smoking, and 56.6% had cigarette butts inside and 74.4% in the immediate vicinity.

Second-hand heated tobacco harms

23. There is evidence that second-hand heated tobacco product aerosol could be linked to short-term health impacts such as asthma attacks and chest pain. An internet-based self-reported questionnaire survey³⁹ with over 8,000 respondents conducted in 2019 for the Japan Society and New Tobacco Internet Survey (JASTIS) examined the frequency of second-hand combustible cigarette smoke, heated tobacco product aerosol exposure, and the exposure-related subjective symptoms. The analysis found 56.8% of people exposed to second-hand combustible cigarette smoke had any symptoms, and 39.5% of people exposed to heated tobacco aerosol. Additionally, those exposed to heated tobacco aerosol more frequently reported asthma attacks and chest pains compared to second-hand smoke exposure. However, the study does have some limitations including results being based on self-reported information, the sample has an imperfect distribution, and the

³⁶ Sureda and others. 2013. [Secondhand tobacco smoke exposure in open and semi-open settings: a systematic review](#) - PubMed

³⁷ The TackSHS Project Investigators. 2021. [Secondhand smoke presence in outdoor areas in 12 European countries](#) - ScienceDirect

³⁸ Henderson and others. 2021. [Secondhand smoke exposure in outdoor children's playgrounds in 11 European countries](#) - ScienceDirect

³⁹ Imura and Tabuchi. 2025. [Exposure to Secondhand Heated-Tobacco-Product Aerosol May Cause Similar Incidence of Asthma Attack and Chest Pain to Secondhand Cigarette Exposure: The JASTIS 2019 Study](#) - PMC

challenge that some people may categorise heated tobacco products and vapes interchangeably so could have been misclassified.

24. Laboratory studies show evidence of toxicity from heated tobacco, and, like other forms of tobacco, the aerosol generated by heated tobacco devices contains carcinogenic (cancer causing) compounds⁴⁰.
25. The WHO⁴¹ has highlighted the negative health effects of exposure to second-hand emissions from heated tobacco. For example, recent evidence has indicated that exposure to second-hand emissions from heated tobacco products were associated with significant respiratory and cardiovascular abnormalities in bystanders⁴².

Second-hand vaping harms

26. Whilst there is currently limited evidence on the existence and impact of second-hand vaping in both indoor and outdoor settings, the WHO state that the vapours generated by vapes typically raise the concentration of particulate matter in indoor environments and contain nicotine and other potentially toxic substances. Vape vapours therefore pose potential risks to both users and non-users⁴³. Second-hand vapours from vapes, including both those that do and do not contain nicotine, expose bystanders to quantifiable levels of particulate matter and key toxicants and contaminants⁴⁴.
27. Research has been undertaken looking at the harms of second-hand vaping in differing locations. An observational study⁴⁵ published in 2022 found that environmental markers (measured by PM_{2.5} and PM_{1.0}) were similar between vape users' homes and control homes. However, there were low but significant differences in some biomarkers in non-users residing with vape users compared to non-users living in control homes.
28. An Office for Health Improvement & Disparities (OHID) 2022 comprehensive review⁴⁶ identified six studies assessing second-hand exposure to vaping and found that prolonged exposures to heavy and sustained vaping resulted in increases in nicotine or potential toxicants in those exposed to second-hand aerosols. However, the evidence did not find a change in nicotine levels following short second-hand vaping exposure.
29. Additionally, there are studies looking specifically at the harms of second-hand vaping on children. A recent cross-sectional study by University College London (UCL) analysing children (aged 3 to 11 years) in the US⁴⁷ found nicotine absorption was much lower in children exposed to second-hand vapour compared to second-hand smoke, but higher than those exposed to neither. Compared to children exposed to second-hand smoke only, nicotine absorption was 83.6% and 96.7% lower in those exposed to second-hand vapour only and exposed to neither respectively. A recent analysis of the Children Health Study in southern California identified that second-hand nicotine vape exposure increases the risk of bronchitis symptoms and shortness of breath in young people⁴⁸.

⁴⁰ Committee on Toxicity. 2017. [Statement on the toxicological evaluation of novel heat-not-burn tobacco products](#)

⁴¹ WHO. 2023. [Heated tobacco products: summary of research and evidence of health impacts](#)

⁴² Official Journal of the European Union. 2024. [C/2024/7425 Council Recommendation on smoke- and aerosol-free environments](#)

⁴³ WHO. 2024. [Tobacco: E-cigarettes](#)

⁴⁴ Official Journal of the European Union. 2024. [C/2024/7425 Council Recommendation on smoke- and aerosol-free environments](#)

⁴⁵ Amalia and others. 2023. [Exposure to secondhand aerosol from electronic cigarettes at homes: A real-life study in four European countries - ScienceDirect](#)

⁴⁶ OHID. 2022. [Nicotine vaping in England: 2022 evidence update summary - GOV.UK](#)

⁴⁷ Tattan-Birch and others. 2024. [Secondhand Nicotine Absorption From E-Cigarette Vapor vs Tobacco Smoke in Children | Public Health | JAMA Network Open | JAMA Network](#)

⁴⁸ Islam and others. 2022. [Secondhand nicotine vaping at home and respiratory symptoms in young adults.](#)

30. There is also some evidence indicating that seeing unhealthy behaviours influences uptake decisions. For example, a 2020 Canadian panel study⁴⁹ found of 137 individuals aged 16 to 25-year-olds studied, 41% had initiated vaping by the 12-month follow-up with social influences found to be the most important predictors of initiation. The results outlined that compared to those that did not see people vape, those who were regularly seeing anyone vape have 4.11 times the odds (AOR (adjusted odds ratio)) of initiating use, and those who very often or always saw anyone use a vape have 4.54 times the odds (AOR) of initiating vaping.

Powers in the Bill

31. The Tobacco and Vapes Bill includes new regulation making powers to enable legislation to reduce the harms from tobacco and to tackle youth vaping. Specifically, the Bill provides the Secretary of State with powers to make regulations to extend the current indoor smoking restrictions to outdoor public places and workplaces and make any place designated as smoke-free, heated tobacco-free or vape-free in England. The Government intends to focus on locations where children and the most medically vulnerable are likely to be present in high numbers in order to protect them⁵⁰. Private outdoor spaces are out of scope of the powers in the Bill.
32. Other policies implemented in the future through secondary legislation following the Tobacco and Vapes Bill are likely to interact with each other. This policy will also likely interact with other external factors and any future tobacco and vaping interventions such as changes to smoking cessation services, evolving long term health evidence on vaping and other nicotine products, introduction of novel nicotine delivery products or potential changes in population behaviours or trends. There is limited evidence on how different policies will interact with each other and external factors. How policies interact will also depend on the options taken forward to final IA stage following consultation. Therefore, this IA considers the costs and benefits of the policy on smoke-free, heated tobacco-free and vape-free places in isolation.

Rationale for intervention

Evidence to support the need for intervention

33. A number of studies and reviews demonstrate the public health benefits of the previous 2007 smoke-free legislation. Compliance with existing smoke-free places legislation was extremely high. Within the first 18 months, authorities found 98.2% of premises and vehicles were smoke-free⁵¹. The legislation resulted in a statistically significant reduction (-2.4%) in the number of hospital admissions for myocardial infarction (MI) in the year following the introduction of smoke-free legislation. This is equivalent to 1,200 fewer emergency admissions for MI. Further studies included in a Cochrane review⁵² based on international analysis, have shown national smoking bans to improve cardiovascular health and reduced deaths for smoking-related illnesses. In this review, two papers based in England found positive outcomes for asthma for example, reduced hospital admissions. However, we recognise that it highlights that across all papers included in the review impacts on respiratory health are less clear.
34. The 2011 Impact of Smokefree Legislation in England Evidence Review⁵³ concluded there was a significant body of evidence demonstrating that the smoke-free

⁴⁹ Jayakumar and others 2020. [Predictors of E-Cigarette Initiation: Findings From the Youth and Young Adult Panel Study - PMC](#)

⁵⁰ DHSC. 2024. [Smoking ban introduced to protect children and most vulnerable - GOV.UK \(www.gov.uk\)](#)

⁵¹ ASH. 2017. [10-years-of-smokefree-briefing_2022-03-24-180542_wifa.pdf](#)

⁵² Frazer and others. 2016. [Legislative smoking bans for reducing harms from secondhand smoke exposure, smoking prevalence and tobacco consumption - Frazer, K - 2016 | Cochrane Library](#)

⁵³ Bauld. 2011. [Impact of smokefree legislation in England: Evidence review](#)

legislation was effective in reducing exposure to second-hand smoke. The impact was particularly seen amongst hospitality staff, with bar workers exposure found to be reduced on average between 73% and 91% and measures of their respiratory health significantly improved.

35. These legislative measures also positively impacted children and exposure to smoke amongst children was found to have declined. A national study looking at the 11-year period between 1996 and 2007 found that second-hand smoke exposure among children declined by nearly 70%⁵⁴. The reductions were greatest in the period immediately before the introduction of smoke-free legislation, coinciding with national mass media campaigns around the dangers of second-hand smoke.
36. The previous smoke-free legislation can also be linked to increased quit attempts. A study surveyed quit attempts in England and found a statistically significant temporary increase in the number of people making a quit attempt at the time of the smoke-free legislation (July and August 2007) which was equivalent to over 300,000 additional smokers in England trying to quit⁵⁵.
37. In addition, a 2021 Lancet review also found the smoke-free policy in private cars to be effective at reducing children's (aged under 5 years) admissions to hospital for asthma⁵⁶. The Post Implementation Review (PIR)⁵⁷ on the legislation on smoke-free private vehicles with children in 2020 found that since the regulation was introduced, the proportion of children aged 11 to 15 years old being exposed to second-hand smoke in a family's or someone else's car dropped from 34% in 2014 to 23% in 2018. In 2023, 24% of young people reported being exposed to second-hand smoke in a family's or someone else's car in the last year, with 10% reporting exposure less often than once a month, 5% once or twice a month, 5% once or twice a week, and 4% every day or most days. Exposure levels in the latest year report (2023) have increased since 2018 with rates of 23% and 20% in 2018 and 2021 respectively⁵⁸.
38. Furthermore, there is evidence that outdoor smoke-free legislation internationally is effective. Individual studies have found reductions in smoke exposure on school grounds, following a smoke-free school policy, and in hospital attendances for respiratory tract infections, following a comprehensive smoke-free policy⁵⁹. An evaluation⁶⁰ published in 2016 of Canadian smoke-free school policies impact on second-hand smoke exposure concluded that exposure to smoke did decrease after the introduction of smoke-free ground policies. Furthermore, a 2018 US study⁶¹ implied that the introduction of a comprehensive smoke-free policy outside schools and playgrounds could reduce health inequalities.
39. Considering there is emerging evidence on vape-free places, we have commissioned research via the National Institute for Health and Care Research (NIHR) to better understand the potential impact of our proposed regulatory approach on vape-free places.

Stakeholder support

⁵⁴ Bauld. 2011. [Impact of smokefree legislation in England: Evidence review](#)

⁵⁵ Hackshaw and others. 2010. [Quit attempts in response to smoke-free legislation in England | Tobacco Control](#)

⁵⁶ Mackay and others. 2021. [Associations between smoke-free vehicle legislation and childhood admissions to hospital for asthma in Scotland: an interrupted time-series analysis of whole-population data - The Lancet Public Health](#)

⁵⁷ DHSC. 2021. [A Post Implementation Review Report of Tobacco Legislation Coming into Force Between 2010-2015](#)

⁵⁸ NHS Digital. 2024. [Smoking, Drinking and Drug Use among Young People in England, 2023: Data tables - NHS England Digital](#)

⁵⁹ Radó and others. 2021. [Effect of smoke-free policies in outdoor areas and private places on children's tobacco smoke exposure and respiratory health: a systematic review and meta-analysis - The Lancet Public Health](#)

⁶⁰ Azagba and others. 2016. [Smoke-Free School Policy and Exposure to Secondhand Smoke: A Quasi-Experimental Analysis | Nicotine & Tobacco Research | Oxford Academic](#)

⁶¹ Lowrie and others. 2018. [Inequities in coverage of smokefree outdoor space policies within the United States: school grounds and playgrounds | BMC Public Health | Full Text](#)

40. Around 90% of the adult population in England do not smoke cigarettes⁶² and there is strong public support to extend smoke-free legislation outdoors. ASH polling from 2025 shows that 91% of the public support banning smoking in school grounds and playgrounds, and 79% support the ban of smoking in hospital grounds⁶³. When Oxfordshire County Council, alongside Witney Town Council, implemented a voluntary smoke-free park initiative, 90% of Oxfordshire smokers agreed it was a good idea⁶⁴.
41. Several key stakeholders in the UK have called for an extension of smoke-free restrictions to outdoor places including the Royal College of Paediatrics and Child Health (RCPCH), the RCP and the British Medical Association (BMA)⁶⁵. Similarly, ASH have long advocated for the extension of smoke-free legislation to outdoor areas in order to protect young people⁶⁶. Furthermore, one of the independent 'Khan review: making smoking obsolete'⁶⁷ recommendations was to increase smoke-free places and this recommendation included outdoor public places and hospital grounds.

International context

42. The UK is a member of the WHO Framework Convention on Tobacco Control (FCTC). Article 8 of the convention requires the adoption of effective measures to protect people from exposure to tobacco smoke in indoor workplaces, indoor public places, public transport and, as appropriate, in other public places⁶⁸. The WHO has called on governments to strengthen their regulatory measures to prevent youth uptake and reduce the risk of nicotine addiction⁶⁹. Additionally, the European Commission recently recommended including heated tobacco and vapes in smoke-free places policies⁷⁰.
43. Internationally, many countries have taken action to create smoke-free outside places. Many countries have smoke-free settings where children play and interact as well as locations where medically vulnerable people are likely to be present⁷¹. This includes Scotland⁷², Wales⁷³, and Northern Ireland⁷⁴. In Scotland, legislation makes it an offence to smoke, and to knowingly permit smoking in hospital grounds within 15 metres of an NHS hospital building⁷⁵. In Wales, legislation requires hospital grounds, school grounds and public playgrounds as well as outdoor day care and childminding settings to be smoke-free⁷⁶. In Northern Ireland, Health and Social Care Trust owned grounds have a smoke-free policy⁷⁷.
44. There are also a number of other European countries that restrict smoking outdoors. For example, in Denmark, outside areas of education institutions, where the majority of attendees are below the age of 18, are smoke-free during school hours⁷⁸. In Spain it is prohibited to smoke in the outdoor premises of education settings but there is an exemption for adult education centres such as universities. It is also prohibited to

⁶² ONS. 2024. [Adult smoking habits in the UK - Office for National Statistics](#)

⁶³ ASH. 2025. [Majority of Public Support Smokefree Generation as New Polling Shows Overwhelming Public Backing for Tougher Action on Tobacco - ASH](#)

⁶⁴ Local Government Association. 2024. [Oxfordshire: De-normalising smoking through partnership work | Local Government Association](#)

⁶⁵ Royal Colleges. 2024. [royal_colleges_tobacco_vapes_letter_mps_nov2024.pdf](#)

⁶⁶ ASH. 2022. [10-High-Impact-Actions.pdf](#)

⁶⁷ OHID. 2022. [The Khan review: making smoking obsolete - GOV.UK](#)

⁶⁸ WHO FCTC. 2017. [Guidelines for implementation of Article 8](#)

⁶⁹ WHO. 2023. [Urgent action needed to protect children and prevent the uptake of e-cigarettes](#)

⁷⁰ European Commission. 2024. [Council Recommendation on smoke-free environments](#)

⁷¹ Tobacco Control Laws. [Find by Policy | Tobacco Control Laws](#)

⁷² Legislation.gov.uk. 2022. [The Prohibition of Smoking Outside Hospital Buildings \(Scotland\) Regulations 2022](#)

⁷³ Legislation.gov.uk. 2020. [The Smoke-free Premises and Vehicles \(Wales\) Regulations 2020](#)

⁷⁴ Legislation.gov.uk. 2020. [The Smoke-free Premises and Vehicles \(Wales\) Regulations 2020](#)

⁷⁵ Legislation.gov.uk. 2022. [The Prohibition of Smoking Outside Hospital Buildings \(Scotland\) Regulations 2022](#)

⁷⁶ Legislation.gov.uk. 2020. [The Smoke-free Premises and Vehicles \(Wales\) Regulations 2020](#)

⁷⁷ Nidirect government services. [Smoking and vaping laws in Northern Ireland | nidirect](#)

⁷⁸ Ministry of the Interior and Health, Denmark. 2007. [Smoke-free Environments Act Denmark](#)

smoke in the outside premises of healthcare centres, services or establishments⁷⁹. In 2025, France banned smoking in outdoor areas that are frequented by children and families, including parks and gardens, beaches and sports stadiums⁸⁰.

45. Smoke-free outdoor measures are also present outside of Europe in countries such as Taiwan where smoking is prohibited outside care homes⁸¹. Some states in Australia, such as New South Wales⁸², have banned smoking within 10 metres of children's playground equipment in outdoor public places.
46. Although heated tobacco products are a newly emerged product, several countries have introduced legislation creating heated tobacco-free places. In October 2024, Switzerland extended its indoor smoking ban to include heated tobacco⁸³. In Belarus, heated tobacco usage has been limited in many indoor public places, workplaces, public transports and in children's playgrounds since 2019⁸⁴.
47. There have also been some international examples where countries have legislated for vape-free places. For example, New Zealand requires vaping to be prohibited in settings where smoking is not permitted⁸⁵. Across Australia, it is generally illegal to vape in places where tobacco smoking is banned. In some territories this also includes vaping in some outdoor areas⁸⁶. Northern Ireland also has a vape-free policy indoors and outdoors in any Health and Social Care Trust facilities.

Why is Government intervention required?

48. In England, there is evidence of places introducing voluntary policies to limit smoking in outdoor workplaces and other public places. In 2020, a survey conducted by Public Health England (PHE)⁸⁷ reported 69% of acute hospital sites prohibit smoking on their grounds. The National Institute for Health and Care Excellence (NICE) have indicated in a Quality statement that most schools and colleges already have smoke-free grounds⁸⁸. Oxfordshire County Council, for example, runs a smoke-free school gates policy⁸⁹. Other local councils such as Warwickshire County Council⁹⁰ and Manchester City Council⁹¹ encourage smoke-free and vape-free policies in schools. In June 2023, Oxfordshire County Council, alongside Witney Town Council, also implemented a smoke-free park initiative⁹².
49. In England, there is also evidence of places introducing voluntary vape-free policies. For example, the use of vapes is prohibited across all Transport for London sites and services⁹³.
50. However, voluntary action is not sufficient to address the issue of second-hand smoke, as well as second-hand emissions from heated tobacco and second-hand vapours from vaping, particularly for children and medically vulnerable people. These voluntary policies do not cover the whole of England and so has the potential to exacerbate inequalities. For example, an analysis of outdoor spaces in the US found that playgrounds in areas with the highest incomes had a higher proportion of the population covered by smoke-free policies in comparison to the middle and

⁷⁹ Noticias Juridicas. 2005. Accessed via: [Spain-Law-282005.pdf](#)

⁸⁰ Journal Officiel de la République Française. 2025. Accessed via: [Decree No. 2025-582 - France - Law | Tobacco Control Laws](#)

⁸¹ Laws & Regulations Database of The Republic of China (Taiwan). 2025. Accessed via: [Taiwan-China-THPA.pdf](#)

⁸² NSW Government. 2000. [Smoke-free Environment Act 2000 No 69 - NSW Legislation](#)

⁸³ Alle Schweizer Bundesbehörden. 2024. [The Tobacco Products Act France](#)

⁸⁴ Decree of the President of the Republic of Belarus. 2019. Accessed via: [Belarus-Decree-No.-28-of-2002.pdf](#)

⁸⁵ New Zealand Legislation. 2025. [Smokefree Environments and Regulated Products Act 1990 No 108 \(as at 17 June 2025\), Public Act Contents – New Zealand Legislation](#)

⁸⁶ Australian Government. 2025. [Smoking and tobacco laws in Australia | Australian Government Department of Health and Aged Care](#)

⁸⁷ PHE. 2019. [PHE calls on all NHS trusts to ban smoking on hospital grounds - GOV.UK](#)

⁸⁸ NICE. 2015. [Quality statement 2: Schools and colleges: smokefree grounds | Smoking: reducing and preventing tobacco use | Quality standards | NICE](#)

⁸⁹ Oxfordshire County Council. [Smoke free Oxfordshire by 2025 | Oxfordshire County Council](#)

⁹⁰ Warwickshire County Council. [Implementing a smoke free and vape free policy – Education and Early Years providers](#)

⁹¹ Manchester City Council. [5.7 - Appendix 7 - Proposed Tobacco Control Vaping Policy.pdf](#)

⁹² Oxford City Council. [Play areas and recreation grounds | Oxford City Council](#)

⁹³ Transport for London. 2024. [FOI request detail - Transport for London \(tfl.gov.uk\)](#)

lowest incomes⁹⁴. Voluntary policies are also hindered by the lack of powers to enforce them. Typically, those responsible for the locations can ask individuals to stop smoking, using heated tobacco, or vaping in these locations, but the lack of formal penalties available could result in difficulties in ensuring compliance.

51. Communication campaigns can also have some effect. However, whilst public health campaigns can raise awareness of the health harms of these products and inform consumers; this alone is not sufficient to change behaviours. Indeed, communication campaigns should be used in tandem with other forms of action to help ensure successful implementation.
52. Further Government action is required to deliver the Government's ambition for a smoke-free UK and stopping the next generation from becoming addicted to nicotine.
53. Regulatory action is needed to deliver this smoke-free ambition. If the Government does not take this action, then children and medically vulnerable people will continue to be exposed to the harms of second-hand smoke as well as that from heated tobacco and vapes. This is in direct conflict with public health advice.

Rationale and evidence to justify the level of analysis used in the IA (proportionality approach)

54. Heated tobacco and vapes are emerging products, so the evidence base on the health harms is limited, particularly compared to the evidence of the long-term harms of smoking. This includes the second-hand health impacts.
55. Whilst the evidence base for the health harms of tobacco smoking is well established it is more limited for other smoked products including herbal smoking products. Also, the evidence on the second-hand health harms is focused on the impact in indoor locations due to existing domestic and international restrictions on indoor smoking.
56. In this IA when referring to smoking we are referring to all products in scope of smoke-free places. However, the evidence drawn upon does not always cover all products in scope, some of the evidence relates to cigarette smoking only, another specific product, all smoked products or a combination of the products in scope.
57. When analysing the impact of heated tobacco and vaping restrictions in indoor and vehicle locations on behaviour, we can use behaviour change from the indoor smoking ban to proxy potential behaviour impacts. However, due to the differences in the make-up of heated tobacco and vapes, compared to tobacco cigarettes, we do not think it is appropriate to use tobacco cigarettes as a proxy for the health impacts.
58. When analysing the impact of smoking, heated tobacco and vaping restrictions in outdoor locations on behaviour, due to the differences in the location conditions in scope, we do not think it is appropriate to use the 2007 indoor smoking ban as a proxy for potential behavioural impacts. Additionally, due to the limited evidence of heated tobacco and vapes on health harms and the impact of second-hand smoking in outdoor settings we do not think it is appropriate to use the 2007 indoor smoking ban as a proxy for the health impacts either.
59. For the restrictions in both indoor and outdoor settings we have explored potential behavioural and health impacts through non-monetised analysis. This draws on evidence where possible and/or assumptions have been made to explain potential impacts.

⁹⁴ Lowrie and others. 2018. [Inequities in coverage of smokefree outdoor space policies within the United States: school grounds and playgrounds](https://doi.org/10.1186/s12916-018-1111-1) | BMC Public Health | Full Text ([biomedcentral.com](https://doi.org/10.1186/s12916-018-1111-1))

60. Due to the limited evidence base, we have had to make assumptions in our analysis to provide monetised cost estimates. Where assumptions have been made, they are clearly outlined in the IA. Where they have been identified as key assumptions, they have been tested in sensitivity analysis.
61. Given the limited evidence base in some areas, we have not been able to identify all differences in impacts between different short-listed options. It has been clearly outlined where impacts between options differ.
62. The UK Government is committed to upholding Article 5(3) of the FCTC which requires FCTC members to protect public health policy from the vested interests of the tobacco industry. Whilst some vaping organisations have taken steps to remove Tobacco Industry influence this is not the case across the industry as a whole and it is difficult to verify where stakeholders are free from Tobacco Industry influence unless this is stated and proven outright. Due to this consideration, engagement outside of an open government consultation is very difficult and has not taken place. To test the assumptions, we have provided thorough quality assurance and sensitivity analysis to provide a robustness check and show their influence on the quantified costs and benefits.
63. We will aim to collect additional data for final stage IA through this consultation and further research.
64. The appraisal period used in this IA is 10 years. We have used the default time horizon as suggested by HMT Green Book⁹⁵ as we do not think there is rationale for extending the appraisal period as the long-term impacts of products in scope are unknown. We expect the majority of the non-monetised benefits to arise within the appraisal period, however we are uncertain when the health gains to individuals may arise and therefore, they could also arise outside of the appraisal period.
65. We have assumed the appraisal period for this policy will be from 2027 to 2036. This is illustrative and assumes the policy will be implemented in 2027. In practice this may not be the case. In addition, there is likely to be an implementation period, this has not been included in the modelling as it will be consulted on during this consultation.
66. For this IA we are using a 2024 price base year and a 2027 present value base year. The interpretation of these figures throughout the options assessment is '*if this measure was introduced in 2027, the costs and figures in 2024 prices would be this much*'.
67. As outlined in the HMT Green Book, a discount rate of 3.5% per year has been used for all monetised costs. Non-monetised costs and benefits have not been discounted.
68. Due to evidence limitations, a significant proportion of the benefits of the policy are not quantified or monetised in this analysis. Additionally, where products in scope are novel, this creates further challenges and uncertainties in assessing the potential scale of the benefits. For example, the long-term health harms of vaping products are still unknown.
69. As a result, we do not think the presentation of a Net Present Social Value (NPSV) would provide a fair reflection of the overall net impact on society from this policy.

⁹⁵ HMT. 2022. The Green Book: appraisal and evaluation in central government - GOV.UK

Rationale for reviewing smoking, heated tobacco use, and vaping activities together

70. In this IA we are looking at three different activities (smoking, using heated tobacco and vaping) and assessing the impact of restricting the locations where individuals can undertake these activities.
71. There is not currently any legislation prohibiting the use of heated tobacco or vapes in any locations.
72. For this IA we have considered the three activities under a single assessment. The rationale behind this is:
- The quantity and quality of evidence differs across the three activities, particularly because heated tobacco and vapes are more novel products, but the information gained from the existing smoke-free places legislation has been used in places to proxy impacts.
 - We have opted to group together the three activities (smoking, using heated tobacco and vapes) in this IA due to the similarities in the proposed approach to the scope of these policies, their implementation and enforcement.
 - There are connections between the three activities. For example, we do not propose to require three separate signs at a location which is smoke-free, heated tobacco-free and vape-free. Additionally, the enforcement agents for each type of product will be the same in each area e.g. environmental health officers will enforce all three in indoor workplaces.
 - Also, the identified costs and benefits are largely similar across the three activities, although the values of these may differ between products.
 - All monetised costs, and some non-monetised costs across the activities are interlinked. For example, familiarisation costs are calculated based on the number of locations in scope multiplied by the cost of reviewing a guidance document. All locations in scope of these policies will have at least two of the activities in scope, with the majority having all three. Assuming the document contains guidance on all activities in scope, locations would only need to familiarise themselves with this document once. Considering these products in isolation could increase the risk of double counting the costs.
 - We ensure that there is clarity throughout the IA regarding the differences between these activities and each will be consulted on.
73. Whilst we have assessed these activities together, it is important to highlight the differences:
- Although most proposed restrictions on where individuals can smoke, use heated tobacco, and/or vape are intended to apply the same across all locations, such as, indoor workplaces and public places and outside many education settings and playgrounds, there are some differences in the proposed scope of locations for the activities. For example, we do not propose to make outside of health and care settings vape-free.
 - Prevalence of the products differ and therefore the impact size could differ.
 - Current cigarette smoking prevalence is 11.6% for adults⁹⁶ (18+) and 3.3% for children⁹⁷ (11-15 year olds) as of 2023 in England. Prevalence of other smoked products is lower. For example, between October 2024 and

⁹⁶ ONS. 2024. [Adult smoking habits in the UK - Office for National Statistics](#)

⁹⁷ NHS England Digital. 2024. [Smoking, Drinking and Drug Use among Young People in England, 2023: Data tables - NHS England Digital](#)

February 2025, 2.6% of adults in England reported any current non-cigarette tobacco smoking⁹⁸.

- Heated tobacco prevalence for those aged 16 and over in England is currently 0.4%⁹⁹.
 - Current vaping prevalence amongst adults aged 16 years and over in England is 9.6% as of 2023¹⁰⁰.
 - There are differences in the level and quality of evidence on the impact and health harms of second-hand smoke, second-hand emissions from heated tobacco or second-hand vapours from vaping.
 - There is more established evidence and precedent for smoke-free places, including domestic and international research into previous indoor smoking bans, and research into the health harms of second-hand smoking in indoor settings. Evidence is more limited for smoke-free on whether these findings translate to outdoor settings.
 - There is limited evidence on the impact of heated tobacco-free policies and second-hand impacts of heated tobacco.
 - There is limited evidence on the impact of vape-free policies and second-hand impacts of vaping.
74. To avoid conflating potential impacts, where possible throughout this IA when discussing the impacts, we have signposted where the impacts will be different and/or where the evidence base varies between the different activities of smoking, using heated-tobacco, and vaping.
75. All three activities will be consulted on in this consultation. Respondents will have the opportunity to provide their views on the proposed locations in scope for each of the different activities, as well as other aspects of the policy. There is a chance that the evidence and views provided result in different settings in scope to the intended proposals. This could result in inconsistencies across the activities that we have not anticipated.

Interactions

76. As explained in paragraph 14, the Government's aim to tackle second-hand smoking, heated tobacco use, and vaping sits alongside several other measures we plan to introduce using powers within the Tobacco and Vapes Bill. These other measures will be consulted on at a later date and there will be other IAs covering these measures.
77. This IA considers the costs and benefits of the smoke-free, heated tobacco-free and vape-free policy in isolation. However, we recognise that other policies implemented through secondary legislation following the Tobacco and Vapes Bill are likely to interact with each other.
78. The policy will also likely interact with other external factors and any future tobacco and vaping interventions such as changes to smoking cessation services, evolving long term health evidence on vaping and other nicotine products, introduction of

⁹⁸ Jackson et al. 2025 [Prevalence and patterns of different types of non-cigarette tobacco use in England: a population study](#) | medRxiv PRE_PUBLISHED

⁹⁹ UCL. [Top Line Findings - Graphs - Smoking in England](#) (Accessed August 2025)

¹⁰⁰ ONS. 2024. [E-cigarette use in England](#). Accessed: [E-cigarette use in England - Office for National Statistics](#)

novel nicotine delivery products or potential changes in population behaviours or trends.

79. There is limited evidence on how different policies will interact with each other and external factors. How policies interact will also depend on the options taken forward in the final stage IA following consultation.

Potential interactions

80. Future vaping and nicotine product-related policies will aim to reduce the number of young people and non-smokers that vape or consume nicotine products.
81. If there are multiple policies aiming to make vapes and nicotine products less appealing to young people, they should be seen as mutually reinforcing. They could be expected to have a larger impact on youth vaping and nicotine product use rates compared to implementing them in isolation, if implementing them together is assumed to have a larger impact on the appeal of vapes to young people.
82. Vapes are often used as a cessation aid, however, and therefore policies which reduce the appeal of vaping products may however have unintended consequences. An unintended consequence of our proposal to limit the locations where an individual can vape, for example, could be a reduction in people using vapes as a smoking cessation aid. This has been considered when deciding the preferred policy position. Our aim is to ensure that smoking and vaping are not equated by not imposing the same restrictions on both activities (e.g. the preferred position is that vaping will be possible outside health and care settings). Subject to consultation, we are seeking to ensure that whilst vaping will have a reduced appeal, vapes will still be available to use as a smoking cessation tool in the appropriate settings.
83. If this policy is implemented alongside other vaping policies, it is possible that the total impact on youth vaping rates is less than the sum of individual policies, as the policies will be targeting the same groups of people. For example, in the worst-case scenario the impact could be the estimated impact size of one policy, and any additional policies have no additional impact.
84. Despite this, evidence and modelling looking at previous packages of interventions on smoking found positive and significant impacts across a range of measures^{101,102,103}. For any future IAs developed for this policy, we will consider if there is any new evidence available to quantify how this policy interacts with other policies and other external factors.
85. A further possible unintended consequence of vaping restrictions is that it could shift harm perceptions of vaping products, leading to individuals switching or trying more harmful products. It could also reduce the number of smokers willing to use vapes for smoking cessation.
86. To further mitigate similar unintended consequences, the Tobacco and Vapes Bill will bring forward restrictions on more harmful products, notably including age of sale restrictions for tobacco products. The tobacco policies in the Bill are intended to reduce the proportion of people that tobacco can be sold to. We would expect these policies to at least partially mitigate any potential unintended consequences that might see an increase in people trying tobacco products.

¹⁰¹ Levy and others. 2013. [Tobacco control policy in the UK: blueprint for the rest of Europe?](#)

¹⁰² Anyanwu and others. 2020. [Impact of UK Tobacco Control Policies on Inequalities in Youth Smoking Uptake: A Natural Experiment...](#)

¹⁰³ Allen and others. 2016. [The effects of maximising the UK's tobacco control score on inequalities in smoking prevalence and ...](#)

Description of options considered

Policy objectives

87. The Government has a duty to protect and improve the health of their citizens. Specifically, it is committed to our ambition for a smoke-free UK and tackling the rise in youth vaping. The aim to reduce youth vaping needs to be balanced against the objective to support adult smokers to quit, in which vaping can play a key role.
88. The specific policy objectives to extend the current smoke-free places policy and introduce vape-free and heated tobacco-free places policies are:
- **Objective one:** To reduce exposure that children and medically vulnerable people have to the well-established harms of second-hand smoke, and potential risks of second-hand emissions from heated tobacco, therefore reducing the health impacts and costs to the NHS and society as a whole.
 - **Objective two:** To reduce exposure that the public, especially children, have to second hand vaping, reducing the potential risks and unknown long term health impacts.
 - **Objective three:** To reduce smoking and vaping prevalence, particularly around children and young people, but also non-smoking adults with the aim of reducing attractiveness and uptake whilst being mindful of the role vapes can play as an effective quit aid for adult smokers.
89. These objectives align with wider Government objectives:
- The Government's manifesto commitment to 'create a smoke-free generation' and 'stop the next generation from being hooked on nicotine' by extending smoke-free places and introducing vape-free places. We also expect these objectives to contribute to the wider government commitments to 'build a National Health Service fit for the future', 'support economic growth' and 'reduce waste'.
 - These objectives also align with the ambitions outlined in the Government's 10 Year Health Plan for England, to "halve the gap in healthy life expectancy between the richest and the poorest regions, while increasing it for everyone, and to raise the healthiest generation of children ever". Many of the described health harms associated with the products in scope contribute to the gap in healthy life expectancy, and preventing the starting and continued use of these products by children will contribute to achieving this goal.
 - The public health objectives within the Government's Health Mission to 'support people to stay healthier for longer', 'shorten the time people spend in ill health' and 'shift the health system away from a focus on treatment to one focused on prevention'. Smoking has the associated health harms as detailed. By reducing the use of tobacco and vapes we are aiming to prevent long-term health conditions which will improve overall population health in the UK.
 - The objective within the Growth Mission to make 'improvements to economic activity as a result of ill health'. Many of the described health harms associated with the products in scope carry substantial economic harms driven by potential reductions in economic activity as a result of long-term health conditions. Preventing the starting and continued use of these products aims to improve associated economic inactivity.
90. Other indicators for success include the critical success factors which are:

- Strategic fit – the timing and content are complementary to other regulations subsequent to the Tobacco and Vapes Bill, as well as other strategic government aims such as the 10-Year Health Plan for England.
- Potential value for money – the correct balance between indicators such as individual and population level health gains, environmental gains such as decreased littering, productivity gains, cost savings to government and individuals, and risks such as costs to businesses, deliverability risks and benefit realisation risks.
- Capacity, capability and achievability for businesses and organisations who need to deliver this policy in the required time and enforcement agencies who will be required to implement necessary measures to enforce the changes in the allocated time and with allocated resources. Ability for individuals to adapt their behaviour in the allotted time.
- Additional metrics that can be used to assess whether the objectives have been achieved are outlined in the monitoring and evaluation section of this IA - for example, monitoring vaping and smoking prevalence.

Policy options

91. The policy options were selected by assessing a long-list of options against a range of factors, such as, products in scope, geography, size of businesses, how to deliver change, and implementation.
92. The policy options considered in this IA are:
 - **Option 1:** Business as usual. Smoking is not permitted in the majority of enclosed or semi-enclosed workplaces and public places in England as well as private vehicles with an individual under the age of 18 years old. There are some exemptions to these locations.
 - **Option 2:** Smoke-free places would be extended to playgrounds with LA involvement, outside primary and secondary schools and outside hospitals. Heated tobacco-free places would be aligned with smoke-free places for indoor and outdoor places. Vape-free places would apply to existing smoke-free places – so only indoor workplaces and public places and certain vehicles.
 - **Option 3:** Smoke-free places would be extended to public playgrounds with LA involvement, outside wider education settings and outside health and care settings where medically vulnerable people are present in high numbers. Heated tobacco-free places would be aligned with smoke-free places for indoor and outdoor places. Vape-free places would apply to existing indoor smoke-free places, public playgrounds with LA involvement and outside education settings.
 - **Option 4:** Smoke-free places would be extended to all playgrounds, outside wider education settings and outside a wider list of health and care settings. Heated tobacco-free places would be aligned with smoke-free places for indoor and outdoor places. Vape-free places would be aligned with smoke-free places for indoor and outdoor places (including the wider list of health and care settings).
93. Other options considered but discounted included voluntary schemes or guidance, and differing products and locations. All options considered but not taken through to the short-list options did not meet the policy objectives and other indicators of success outlined above.

Option 1: 'Business as usual'

94. The business as usual constitutes the baseline against which the proposed policy options are assessed.
95. In the absence of implementing this policy, current legislation for indoor smoking in enclosed workplaces and public places, including vehicles for work and public transport, and smoking in a private vehicle with children present would still apply. We would expect the existing regulations to remain in place.
 - Smoke-free indoor enclosed workplaces and public places - [The Health Act 2006](#)
 - Exemptions to the smoke-free indoor restrictions - [The Smoke-free \(Exemptions and Vehicles\) Regulations 2007](#)
 - Requirements for no smoking signs – [The Smoke-free \(Signs\) Regulations 2012](#)
 - Powers for smoking in a private vehicle with children present - [The Children and Families Act 2014](#)
 - Smoking in a private vehicle with children present - [The Smoke-free \(Private Vehicles\) Regulations 2015](#)

Baselines

96. The following paragraphs outline the business as usual (BAU) option. As outlined in the Green Book, the BAU is the result of continuing without implementing the proposal under consideration, against which proposals can be compared. In this IA we have looked at the potential prevalence rates, the impact of previous policies in this area, and the potential scale of second-hand exposure if no intervention was to be introduced.
97. Cigarette smoking prevalence is at record low levels. As of 2023, in England, current smoking prevalence is 11.6% for adults¹⁰⁴ (aged 18+) and 3.3% for children¹⁰⁵ (11-15 year olds). As illustrated by Figure 1, this has been driven by a comprehensive and sustained approach to tobacco control.
98. Estimates of use of other smoked tobacco including cigars, cigarillos, pipe, and waterpipe tobacco are based on a study by UCL which estimates the prevalence in England between October 2024 and February 2025¹⁰⁶. The study has a sample size of 8,129 and is nationally representative, though the data is self-reported, and interviews were only conducted in English. The study is currently pre-published and yet to be peer reviewed. Therefore, these prevalence figures may change in the future.
99. The prevalence figures for adults in England broken down by tobacco type are 1.2% for cigars, 0.6% for cigarillos, 0.4% for pipes, and 0.9% for waterpipe. This study also includes a 0.3% heated tobacco prevalence, however more recent data published by UCL's Smoking Toolkit Study (STS)¹⁰⁷ report this to be 0.4% as described below.
100. There is limited evidence on the use of other smoked products, including herbal smoking products in England. We will assess if there is additional information available for the final stage IA.

¹⁰⁴ ONS. 2024. [Adult smoking habits in the UK - Office for National Statistics](#)

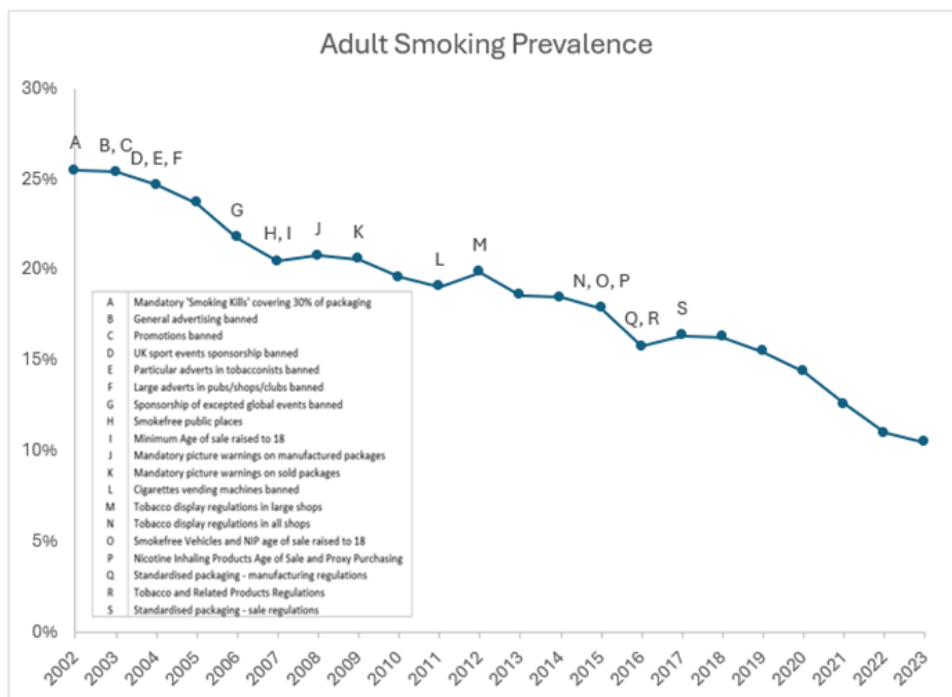
¹⁰⁵ NHS England Digital. 2024. [Smoking, Drinking and Drug Use among Young People in England, 2023: Data tables - NHS England Digital](#)

¹⁰⁶ Jackson, S. et al. 2025. [Prevalence and patterns of different types of non-cigarette tobacco use in England: a population study | medRxiv](#)

¹⁰⁷ UCL. [Top Line Findings - Graphs - Smoking in England](#) (Accessed August 2025)

101. The BAU option constitutes the baseline against which changes to the current smoke-free places policy and new heated tobacco-free and vape-free places are assessed.
102. In England, in relation to smoke-free places, current legislation would apply as outlined in paragraph 15.
103. In this option there would continue to be no legislation that prohibits smoking in any outside locations in England and no legal prohibitions on the use of heated tobacco or vapes indoors or outdoors.
104. We also expect locations with existing voluntary restrictions to remain in place. We have limited evidence on the number of voluntary restrictions currently in place, however some intelligence includes:
 - In 2019, a PHE survey taken as part of their Smokefree NHS campaign, recorded 69% of NHS acute hospitals had completely banned smoking on grounds¹⁰⁸.
 - NICE have indicated in a Quality Statement that most schools and colleges already have smoke-free grounds¹⁰⁹.
 - Some local councils can be seen to encourage smoke and vape-free policies including schools in Warwickshire County Council¹¹⁰ and Manchester City Council¹¹¹, and council property in Runcorn Council¹¹².

Figure 1: Adult smoking prevalence (people aged 16+) between 2002 and 2023 (source: ONS Adult Smoking Habits in England), and Tobacco control policies



105. Heated tobacco prevalence for those aged 16 and over in England is currently 0.4%, as reported by the STS¹¹³. For the past few years (2021 to April 2025), prevalence rates for heated tobacco use have varied, with peaks of 0.4% and lows of 0.2%.

¹⁰⁸ PHE. 2019. [PHE calls on all NHS trusts to ban smoking on hospital grounds - GOV.UK](#)

¹⁰⁹ NICE. 2015. [Quality statement 2: Schools and colleges: smokefree grounds | Smoking: reducing and preventing tobacco use | Quality standards | NICE](#)

¹¹⁰ Warwickshire County Council. [Implementing a smoke free and vape free policy – Education and Early Years providers](#)

¹¹¹ Manchester City Council. 2020. [5.7 - Appendix 7 - Proposed Tobacco Control Vaping Policy.pdf](#)

¹¹² Runcorn Borough Council. 2023. [RBC Smoke-free and vape-free workplace policyFinal Version .pdf](#)

¹¹³ UCL. [Top Line Findings - Graphs - Smoking in England](#) (Accessed August 2025)

However, when comparing with the period from 2017 to 2021 rates varied from 0% to 0.2%.

106. Current vaping prevalence amongst adults aged 16 years and over in England has increased from 8.4% in 2022 to 9.6% in 2023¹¹⁴. In adults aged 16 and over, there has been an increasing prevalence of vaping in England for the past few years. Compared to 2020, where 3.7% of adults were daily users, in 2023 5.8% were daily users¹¹⁵.

2007 Smoke-free public places

107. The 2011 Impact of Smokefree legislation in England Evidence Review¹¹⁶ concluded there was a significant body of evidence demonstrating that smoke-free laws are effective in reducing exposure to second hand smoke.
- Following the implementation of the policy, exposure levels were found to be lower at locations where restrictions were in place. For example, bar workers exposure reduced on average between 73% and 91% and measures of their respiratory health significantly improved.
 - Exposure amongst children also declined. A study found that between 1996 and 2007, second-hand smoke exposure among children declined by nearly 70%. The reductions were greatest in the period immediately before the introduction of smoke-free legislation, coinciding with national mass media campaigns around the dangers of second-hand smoke.
 - Evidence has also shown the positive health impacts of the smoke-free legislation. For example, in England, the number of hospital admissions for myocardial infarction (MI) reduced by 2.4%.
 - Smoking behaviour was also seen to change following the legislation. Studies found smokers cutting down their tobacco consumption in all locations where the study took place, and an increase in people making quit attempts at the time of the legislation.
108. A 2016 Cochrane Review¹¹⁷ highlighted that whilst there is international evidence of positive impacts of national smoking bans on improving some health outcomes (acute coronary syndrome and smoking-related mortality), evidence on the impact on prevalence and tobacco consumption is inconsistent, as well as the impact on respiratory and perinatal health outcomes. Whilst some international studies provide evidence of reduction in smoking prevalence, some studies did not detect additional long-term changes in existing trends in prevalence. This makes the impact of bans on reducing the number of smokers and their cigarette use unclear.
109. Moreover, the studies from the Cochrane review on prevalence and consumption which included England had mixed results. Of the 24 studies that looked at the impact of smoking bans on behaviour (including prevalence and consumption), two looked at the impact on England. The remainder of the studies included were international and included Scotland and the Republic of Ireland (ROI).
- Lee and others¹¹⁸ found that after adjusting for smoking prevalence and consumption trends over time, implementation of the smoke-free legislation was not associated with a statistically significant change in the trend in smoking prevalence, or number of cigarettes smoked per day. They also found

¹¹⁴ ONS. 2024. E-cigarette use in England. [E-cigarette use in England - Office for National Statistics](#)

¹¹⁵ ONS. 2024. E-cigarette use in England. [E-cigarette use in England - Office for National Statistics](#)

¹¹⁶ Bauld. 2011. [Impact of smokefree legislation in England: Evidence review](#)

¹¹⁷ Frazer and others. 2016. [Legislative smoking bans for reducing harms from secondhand smoke exposure, smoking prevalence and tobacco consumption - Frazer, K - 2016 | Cochrane Library](#)

¹¹⁸ Lee and others. 2011. [Effect of Smoke-Free Legislation on Adult Smoking Behaviour in England in the 18 Months following Implementation - PMC](#)

smoking outside increased from 45% before the legislation to 63% post-ban, which suggests there could have been a displacement of smoking to other locations out of scope of the ban. However, they did report a reduction in smoking at work from 15% pre-ban to 2% post-ban, inside pubs or bars from 36% to 3%, inside restaurants, cafes or canteens from 9% to 1%, inside the home from 65% to 55%, and cars from 32% to 26%.

- Jones and others¹¹⁹ analysed smoking bans in both Scotland and England and concluded there was insufficient evidence to conclude smoking bans decrease consumption. For England, there was limited data points and their results revealed that a year after implementation, there was a reduction in consumption for men aged 18 to 34 years, however there was increased consumption amongst women aged 35 to 54. However, they note these results were driven by a change in smoking intensity of the control group. For Scotland, they found no significant effect on overall prevalence and no significant difference in the number of cigarettes smoked.

110. Following the 2007 Indoor Smoking Ban, a qualitative study between April 2007 and December 2008 in two cities in England¹²⁰ reported decreased tobacco consumption while out socialising in public social settings largely because of the inconvenience of going outdoors to smoke, but also because of a perception that their greater visibility as a smoker attracted public disapproval.
111. As illustrated in Figure 1, cigarette smoking prevalence in the UK, and England, has been declining for several decades before and after the 2007 Indoor Smoking Ban. In the year following the indoor smoking ban, cigarette smoking prevalence rates at a national scale increased, however, since then there has been a gradual declining trend. Whilst evidence is limited on the causal link between the 2007 smoking ban and its contribution to declining national prevalence rates over time, it is possible that along with the wider suite of policies delivered over the past decade it could have contributed the continuing of decline in prevalence.

Smoke-free (private) vehicles regulations 2015

112. The PIR¹²¹ in 2020 of the Smoke-free (private) vehicles regulations 2015 found that since the regulation was introduced the proportion of children aged 11 to 15 years old being exposed to second-hand smoke in a family's or someone else's care dropped from 34% in 2014 to 23% in 2018. Additionally, they found high compliance with the regulations and strong public support for the policy.
113. As of 2023, 24% of young people report being exposed to second-hand smoke in a family's or someone else's car, with 10% reporting exposure less often than once a month, 5% once or twice a month, 5% once or twice a week, and 4% every day or most days. Exposure levels in the last year have increased since 2018 with rates of 23% and 20% in 2018 and 2021 respectively¹²². Exposure in the last year includes those exposed everyday or most days, once or twice a week, once or twice a month, or less often than once a month.
114. A 2021 Lancet systematic review¹²³ found that smoke-free car policies were associated with reducing tobacco smoke exposure in cars, however this had substantial heterogeneity, and some studies had risk of bias. Of the studies

¹¹⁹ Jones and others. 2015. [Do Public Smoking Bans have an Impact on Active Smoking? Evidence from the UK - Jones - 2015 - Health Economics - Wiley Online Library](#)

¹²⁰ Hargreaves and others. 2010. [The social context of change in tobacco consumption following the introduction of 'smokefree' England legislation: a qualitative, longitudinal study - PubMed](#) accessed via: [Impact of smokefree legislation in England: Evidence review](#)

¹²¹ DHSC. 2021. [Tobacco legislation coming into force between 2010 and 2015: post implementation review - GOV.UK](#)

¹²² NHS Digital. 2024. [Smoking, Drinking and Drug Use among Young People in England, 2023: Data tables - NHS England Digital](#)

¹²³ Radó and others. 2021. [Effect of smoke-free policies in outdoor areas and private places on children's tobacco smoke exposure and respiratory health: a systematic review and meta-analysis - The Lancet Public Health](#)

included, two were based in England and had mixed results. Faber and others¹²⁴ did not find an association, however Laverty and others¹²⁵ found the policy was associated with a reduction of tobacco smoke exposure in cars. Of the meta-analysis of four studies, smoke-free car policies were associated with an immediate reduction (Risk Ratio (RR) 0.69) in tobacco smoke exposure in cars.

Current levels of second-hand smoke exposure

115. Some studies have indicated current levels of second-hand smoke exposure that we could expect to continue in the counterfactual.
- A 12 country European survey¹²⁶, including England, outlined second-hand smoke presence by non-smokers, and smoking reported by smokers at eight outdoor areas. Amongst non-smokers, second-hand smoke presence was reported to be lowest at children's playgrounds (39.5%), following by outdoor areas in schools (52.0%), stadia, parks, outdoor areas in hospitals (67.3%), public transport stops, restaurant/bar terraces, and beaches. Smoking reported by smokers was lowest at children's playgrounds (42.6%), followed by outdoor areas in schools (52.7%), outdoor areas in hospitals (68.2%), stadia, public transport stops, parks, restaurant/bar terraces and beaches. Across all eight outdoor areas, England had lower prevalence of second-hand smoke presence reported by non-smokers, compared to the EU-average (12 European countries).
 - An 11 country European study¹²⁷ on second-hand smoking and nicotine at outdoor playgrounds, reported 41% of the sites had nicotine presence, 20% of the playgrounds had people smoking, and 57% had cigarette butts inside, and 74% in the immediate vicinity.
116. In the BAU option we would expect individuals to remain exposed to current levels of second-hand smoking, heated tobacco, and vaping. In the absence of data reporting footfall at the locations in scope, illustrative estimates have been made to provide a sense of scale to individuals exposed in the counterfactual per year.

NHS second-hand exposure

117. The King's Fund¹²⁸ estimate that in 2023/24 the NHS had over 600,000,000 patient contacts. Excluding the contact with calls to NHS 111 and ambulances, patient contacts were around 570,000,000. Dividing this by the population adults (aged 18+) in England in mid-2024¹²⁹ this equates to 12 patient contacts a year per person with the NHS. Whilst some of these contacts could include online or telephone consultations or perhaps visits to locations out of scope of this policy, we think it is reasonable to assume that on average each person in England has at least one in-person visit a year to an NHS site.
118. Just looking at the adult population, if we assume smoking (cigarettes), heated tobacco and vaping prevalence of patients reflects that of the population, we can multiply this by the current population aged 18+ (46 million), and smoking rates in England¹³⁰ to estimate the number of adult smokers, heated tobacco users and people that vape that visit NHS services at least once a year. If we assume a scenario where all adult non-users will be exposed on their in-person visit, we can

¹²⁴ Faber and others. [Investigating the effect of England's smoke-free private vehicle regulation on changes in tobacco smoke exposure and respiratory disease in children: a quasi-experimental study - The Lancet Public Health](#)

¹²⁵ Laverty and others. 2020. [Impact of banning smoking in cars with children on exposure to second-hand smoke: a natural experiment in England and Scotland - PubMed](#)

¹²⁶ Henderson and others. 2021. [Secondhand smoke presence in outdoor areas in 12 European countries - ScienceDirect](#)

¹²⁷ Henderson and others. 2021. [Secondhand smoke exposure in outdoor children's playgrounds in 11 European countries - ScienceDirect](#)

¹²⁸ The Kings Fund. 2024. [Activity In The NHS | The King's Fund](#)

¹²⁹ ONS. 2025. [Estimates of the population for the UK, England, Wales, Scotland, and Northern Ireland - Office for National Statistics](#)

¹³⁰ ONS. 2025. [Adult smoking habits in the UK - Office for National Statistics](#)

estimate the number of adult non-users potentially exposed to second-hand smoking/heated tobacco/vaping from one in-person patient interaction a year.

119. These estimates do not consider dual users and assume exposure on their visit, smokers that use other smoked products, or the number of children that could also be exposed. In reality, some people may have more than one in-person interaction, and some people could have less. Additionally, some people may not be exposed to second-hand smoking, heated tobacco use and vaping on their visit. These estimates are an illustrative scenario.

Table 1: Estimated number of NHS patient interactions

NHS patient interactions	Estimated number of interactions a year
Patient interactions by cigarette smokers	5,387,000
Patient interactions by non-cigarette smokers	41,050,000
Patient interactions by heated tobacco product users	186,000
Patient interactions by non-heated tobacco product users	46,251,000
Patient interactions by vapers	4,458,000
Patient interactions by non-vapers	41,979,000

Education second-hand exposure

120. The number of children attending school (primary and secondary school) in 2024/25 was approximately 9 million¹³¹. This represents the maximum number of children who could currently be exposed to smoking, heated tobacco use, or vaping outside of their school setting in the BAU option.

Vehicle second-hand exposure

121. In the absence of data, an illustrative example on the number of children and young people exposed to second-hand heated tobacco and vaping in vehicles by adults in their family can be estimated.
122. As of Q4 in 2024, around 28 million cars were licenced in England¹³².
123. ONS report that 67% of households in the UK contain a family, and 42% of families contained one or more dependent children¹³³. If we assume the UK is reflective of England and cars are split equally across households, we can multiply these percentages by 28 million cars to estimate approximately 8 million cars are licensed to households with families with one or more dependent children.
124. Taking the above estimate, and assuming prevalence of heated tobacco (0.4%¹³⁴) and vaping (9.6%¹³⁵) prevalence of the population is reflected in car owners, we can estimate that the number of cars licenced to households with at least one dependent child and use heated tobacco or vape respectively. This equates to around 30,000 cars licensed to households with families who have at least one dependent child and use heated tobacco products, and 770,000 cars licensed to households with families who have at least one dependent child and vape.

¹³¹ DfE. 2025. [Schools, pupils and their characteristics, Academic year 2024/25 - Explore education statistics - GOV.UK](#)

¹³² Department of Transport. 2025. [Vehicle licensing statistics data tables - GOV.UK](#)

¹³³ ONS. 2025. [Families and households in the UK - Office for National Statistics](#)

¹³⁴ UCL. 2025. [E Cigarettes Latest Trends - Graphs - Smoking in England](#) (Accessed August 2025)

¹³⁵ ONS. 2024. [E-cigarette use in England. Accessed: E-cigarette use in England - Office for National Statistics](#)

125. This represents the illustrative number of children that could be exposed to second-hand heated tobacco and vaping use in a car licenced to the adult they live with.

Option 2, Option 3 and Option 4

Description of options

126. **Option 2:**

- Smoke-free places would be extended to playgrounds with LA involvement, outside primary and secondary schools and outside hospitals.
- Heated tobacco-free places would be aligned with smoke-free places for indoor and outdoor places.
- Vape-free places would apply to existing smoke-free places – so only indoor workplaces and public places and certain vehicles.

127. **Option 3 (preferred option):**

- Smoke-free places would be extended to public playgrounds with LA involvement, outside wider education settings and outside health and care settings where medically vulnerable people are present in high numbers. This differs to Option 2 with a wider list of health and care settings including GPs and other secondary care settings, and wider education settings including nurseries, childminders, and sixth-form colleges.
- Heated tobacco-free places would be aligned with smoke-free places for indoor and outdoor places.
- Vape-free places would apply to existing indoor smoke-free places, public playgrounds with LA involvement and outside education settings.

128. **Option 4:**

- Smoke-free places would be extended to all playgrounds, outside wider education settings and outside a wider list of health and care settings. This differs to Option 3, in that it includes all schools and further education sub-settings and a wider list of health and care sub-settings, not just those where medically vulnerable people are present in high numbers, meaning that other locations such as dentists, pharmacies and opticians are also in scope.
- Heated tobacco-free places would be aligned with smoke-free places for indoor and outdoor places.
- Vape-free places would be aligned with smoke-free places for indoor and outdoor places (including the wider list of health and care settings).

Potential impact size

129. Whilst limited, the existing evidence base has been outlined in this section to explore the potential impact size of this policy on the behaviour of individuals, and second-hand health harms.
130. Where possible we have used evidence from previous regulations and international analysis to explore the potential impacts of this policy.
131. Potential impacts include:
- Influence on current users (i.e. national prevalence, prevalence at locations, increased barriers/inconvenience, displacement);
 - Influence on future users/uptake;

- Influence of second-hand smoking on the health of non-users.

Impact on current users

132. If smoking, heated tobacco and vaping use is made less convenient or de-normalised by restricting where it can be used then current users may quit or reduce their consumption.
133. Assuming 100% compliance of the regulations, prevalence at the specific locations in scope of each option should be 0%. However, it is challenging to analyse how restricting the locations that people can use these products influences their consumption and cessation behaviour.
134. As outlined in paragraphs 108-109, a 2016 Cochrane review¹³⁶ concluded there is inconsistent evidence on the impact of previous indoor smoke-free regulations on prevalence and consumption at a societal level. Some studies suggested a prevalence drop, however some studies found no significant evidence of a change in prevalence or consumption.
135. Studies based in England found that following the 2007 indoor smoking ban, there was an increase in smoking quit attempts, decrease in prevalence at specific locations and reduced consumption whilst out socialising in public social settings due to the inconvenience of going outside and public disapproval^{137,138,139,140}.
136. One study of ex-smokers and current smokers in China¹⁴¹ recently found for people who had tried to quit but failed, lack of willpower, tobacco dependence, and influence of surrounding smokers or smoking environments to be the top three adverse factors leading to failure in quitting smoking.
137. The number of additional locations being restricted from smoking is smaller than in the previous indoor smoking ban, so we would expect any marginal impact of the outdoor restrictions on prevalence and consumption to also be smaller. However, there could be a similar scale impact to the indoor smoking ban for heated tobacco and vaping prevalence as, in addition to the outdoor restrictions, they are being brought in line with the previous indoor smoking ban.
138. It should be noted that this ban is only in specific locations, so there is a risk that current users are displaced to other locations. This means it may not impact prevalence of these products at a societal level. This could reduce the overall impact that the ban could have through reduced influence on current users. Evidence from the 2007 Indoor Smoking Ban, highlighted potential displacement from indoor to outdoor settings¹⁴².

Impact on future users/uptake

139. If smoking, heated tobacco use, and vaping is not seen at health and care locations, education locations, playgrounds, indoor public places and workplaces then non-

¹³⁶ Cochrane Library. 2016. [Legislative smoking bans for reducing harms from secondhand smoke exposure, smoking prevalence and tobacco consumption - Frazer, K - 2016 | Cochrane Library](#)

¹³⁷ Bauld. 2011. [Impact of smokefree legislation in England: Evidence review](#)

¹³⁸ Lee and others. 2011. [Effect of Smoke-Free Legislation on Adult Smoking Behaviour in England in the 18 Months following Implementation - PMC](#) accessed via: [Legislative smoking bans for reducing harms from secondhand smoke exposure, smoking prevalence and tobacco consumption - Frazer, K - 2016 | Cochrane Library](#)

¹³⁹ Jones and others. 2015. [Do Public Smoking Bans have an Impact on Active Smoking? Evidence from the UK - Jones - 2015 - Health Economics - Wiley Online Library](#) accessed via: [Legislative smoking bans for reducing harms from secondhand smoke exposure, smoking prevalence and tobacco consumption - Frazer, K - 2016 | Cochrane Library](#)

¹⁴⁰ Hargreaves and others. 2010. [The social context of change in tobacco consumption following the introduction of 'smokefree' England legislation: a qualitative, longitudinal study - PubMed](#) accessed via: [Impact of smokefree legislation in England: Evidence review](#)

¹⁴¹ Wang and others. 2023. [Attitudes and influencing factors associated with smoking cessation: An online cross-sectional survey in China - PMC](#)

¹⁴² Lee and others. 2011. [Effect of Smoke-Free Legislation on Adult Smoking Behaviour in England in the 18 Months following Implementation - PMC](#)

users' exposure would be reduced at these locations. This in turn could reduce those influenced to take up smoking, heated tobacco use, or vaping.

140. Whilst there is limited evidence specifically of the influence of witnessing smoking, heated tobacco use, or vaping at the locations in scope, there is some evidence which could indicate seeing unhealthy behaviours can influence uptake decisions.
141. Children of parents who smoke are almost three times as likely to take up smoking¹⁴³.
142. A 2020 Canadian panel study¹⁴⁴ found of 137 individuals (16 to 25-year-olds) studied, 41% had initiated vaping by the 12-month follow-up with social influences found to be the most important predictors of initiation among young people and young adults. The results outlined that compared to those that did not see people vape, those who were regularly seeing anyone vape have 4.11 times the odds (AOR) of initiating use, and those who very often or always saw anyone use a vape have 4.54 times the odds (AOR) of initiating vaping.
143. ASH¹⁴⁵ report that amongst young people that currently vape, 45% are usually given them. This is the second most common 'usual' source, aside from buying them from a shop.
144. It should be noted that this ban is only in specific locations, and therefore non-users can remain exposed at locations not included. This could reduce the overall impact that the ban could have through reduced influence of uptake from reduced witnessing of unhealthy behaviours.

Impact of second-hand smoking, heated tobacco product use, and vaping on health of non-users

145. Assuming 100% compliance to regulations, individuals will no longer be exposed to second-hand smoking, heated tobacco use or vaping at the locations in scope. Consequently, there is a possibility that the health of those no longer exposed could improve.

Second-hand smoke impacts

146. There is substantial evidence on the health impacts of second-hand smoke. Whilst the majority of this evidence is based on indoor exposure it could be plausible that outdoor exposure could have similar impacts. Some of this evidence has been outlined below.
147. As of 2023, the Global Burden of Disease estimates second hand smoking caused 8.2 deaths per 100,000 people in England, and 234 Disability-Adjusted Life Years (DALYs) per 100,000 people¹⁴⁶.
148. When measured in indoor places, short and long-term second-hand smoking has been proven to cause several health issues. Short-term exposure effects include eye irritation, headaches, coughs, sore throat, dizziness and nausea¹⁴⁷. Following longer-term exposure, increased health risks include lung cancer and function, breast and other cancers, heart disease, stroke and dementia¹⁴⁸.

¹⁴³ Royal College of Physicians. 1992. Accessed via [Young people and smoking - ASH](#)

¹⁴⁴ Jayakumar and others. 2020. [Predictors of E-Cigarette Initiation: Findings From the Youth and Young Adult Panel Study - PMC](#)

¹⁴⁵ ASH. 2025. [Use-of-Vapes-Among-Young-People-in-Great-Britain-2025.pdf](#)

¹⁴⁶ Institute for Health Metrics and Evaluation. Global Burdens of Disease. <https://vizhub.healthdata.org/gbd-results?params=gbd-api-2023-permalink/d7c5aad8d4f8b6769c9b30ede6bb6002>

¹⁴⁷ ASH. 2020. [Secondhand Smoke - ASH](#)

¹⁴⁸ ASH. 2020. [Secondhand Smoke - ASH](#)

149. Children and babies also face risks from second-hand smoking. In 2010, the Royal College of Physicians¹⁴⁹ estimated that each year second hand smoking exposure in children causes:
- Over 20,000 lower respiratory tract infections
 - 120,000 cases of middle ear disease
 - At least 22,000 new cases of wheeze and asthma
 - 200 cases of bacterial meningitis
 - 40 SIDs – one in five of all SIDs
150. Evidence on the impact of smoke-free outdoor settings is limited. However, there is some evidence which suggests smoke-free policies in outdoor areas may impact air quality which could have health impacts on those exposed.
151. A 2013 systematic review¹⁵⁰ concluded that available evidence indicates high second-hand smoke levels (mostly measured through PM_{2.5}) in some outdoor smoking areas. They also found high second-hand smoke levels in indoor settings that were near to outdoor smoking areas, and most studies reported a positive association between second-hand smoke measures and smoker density, enclosure of outdoor locations, wind conditions, and proximity to smokers.
152. A 2021 systematic review and meta-analysis¹⁵¹ concluded smoke-free car policies were associated with an immediate tobacco smoke exposure reduction in cars (RR 0.69), however this had substantial heterogeneity, and some studies had risk of bias. They also reported individual studies found reductions in tobacco smoke exposure on school grounds, following smoke-free school policies, and in hospital attendances for respiratory tract infections, following a comprehensive smoke-free policy.
153. A 2015 evaluation¹⁵² of Canadian smoke-free school policies impact on second-hand smoke exposure concluded that exposure to tobacco smoke did decrease after the introduction of smoke-free ground policies. However, around half of high-school aged children had still reported exposure in the last month.
154. Evidence from the Netherlands showed the number of smokers nearby was positively associated with the level of nicotine exposure outdoors¹⁵³. The intensity of tobacco smell was also found to be related to nicotine exposure.
155. A US study implies that an introduction of a comprehensive smoke-free policy outside schools and playgrounds could reduce health inequalities. Whilst based in the US, they highlighted that disparities in smoke-free outdoor space policies can potentially worsen existing health inequalities¹⁵⁴.
156. A 2012 technical paper¹⁵⁵ measured peak and time-average outdoor tobacco smoke concentrations in common outdoor settings near smokers including parks, sidewalk cafes, and restaurant and pub patios. They found that peak and average outdoor tobacco smoke levels, rivalled that of inside during periods of active smoking but that levels almost instantly dropped after smoking activity stopped. It was concluded, that

¹⁴⁹ Royal College of Physicians. 2010. Accessed via [Secondhand Smoke - ASH](#)

¹⁵⁰ Sureda and others. 2013. [Secondhand tobacco smoke exposure in open and semi-open settings: a systematic review - PubMed](#)

¹⁵¹ Radó and others. 2021. [Effect of smoke-free policies in outdoor areas and private places on children's tobacco smoke exposure and respiratory health: a systematic review and meta-analysis - The Lancet Public Health](#)

¹⁵² Azagba and others. 2016. [Smoke-Free School Policy and Exposure to Secondhand Smoke: A Quasi-Experimental Analysis | Nicotine & Tobacco Research | Oxford Academic](#)

¹⁵³ Bommele and others. 2024. [Secondhand smoke exposure in public outdoor spaces in the Netherlands: The stronger the smell, the more exposure to nicotine](#)

¹⁵⁴ Lowrie and others. 2018. [Inequities in coverage of smokefree outdoor space policies within the United States: school grounds and playgrounds | BMC Public Health | Full Text](#)

¹⁵⁵ Klepis and others. 2012. [Real-Time Measurement of Outdoor Tobacco Smoke Particles: Journal of the Air & Waste Management Association: Vol 57, No 5](#)

under certain conditions of wind and smoker proximity, it's possible for outdoor tobacco smoke to present a nuisance or hazard.

Second-hand heated tobacco impacts

157. Evidence of the existence and health implications of second-hand heated tobacco is limited.
158. An internet-based self-reported questionnaire survey¹⁵⁶ conducted in 2019 for the JASTIS suggests second-hand heated tobacco product aerosol could be linked to short-term health impacts such as asthma attacks and chest pain. The analysis examined the frequency of second-hand combustible cigarette smoke, heated tobacco product aerosol exposure, and the exposure-related subjective symptoms. The analysis found 56.8% of people exposed to second-hand combustible cigarette smoke had any symptoms, and 39.5% of people exposed to heated tobacco aerosol. Additionally, those exposed to heated tobacco aerosol more frequently reported asthma attacks and chest pains compared to second-hand smoke exposure. However, the study does have some limitations including results being based on self-reported information, the sample has an imperfect distribution, and the challenge that some people may categorise heated tobacco products and vapes interchangeably so could have been misclassified.

Second-hand vaping impacts

159. There is some evidence of second-hand vaping health impacts indoors, which is outlined below. There is limited evidence on the impact and existence of second-hand vape exposure in outside locations.
160. A recent cross-sectional study by UCL analysing children (aged 3 to 11 years) in the US¹⁵⁷ found nicotine absorption was much lower in children exposed to second-hand vapour compared to second-hand smoke, but higher than those exposed to neither. Compared to children exposed to second-hand smoke only, nicotine absorption was 83.6% and 96.7% lower in those exposed to second-hand vapour only and exposed to neither respectively.
161. An observational study¹⁵⁸ published in 2022 found that environmental markers (measured by PM_{2.5} and PM_{1.0}) were similar between vape users' homes and control homes. However, there were low but significant differences in some biomarkers in non-users residing with vape users compared to non-users living in control homes.

Costs and benefits

162. The costs and benefits of these options were identified through the production of the logic models in Figure 2, Figure 3, and Figure 4.

¹⁵⁶ Imura and Tabuchi. 2021. [Exposure to Secondhand Heated-Tobacco-Product Aerosol May Cause Similar Incidence of Asthma Attack and Chest Pain to Secondhand Cigarette Exposure: The JASTIS 2019 Study - PMC](#)

¹⁵⁷ Tattan-Birch and others. 2024. [Secondhand Nicotine Absorption From E-Cigarette Vapor vs Tobacco Smoke in Children | Public Health | JAMA Network Open | JAMA Network](#)

¹⁵⁸ Amalia and others. 2023. [Exposure to secondhand aerosol from electronic cigarettes at homes: A real-life study in four European countries - ScienceDirect](#)

Figure 2: Logic model, Smoke-free places

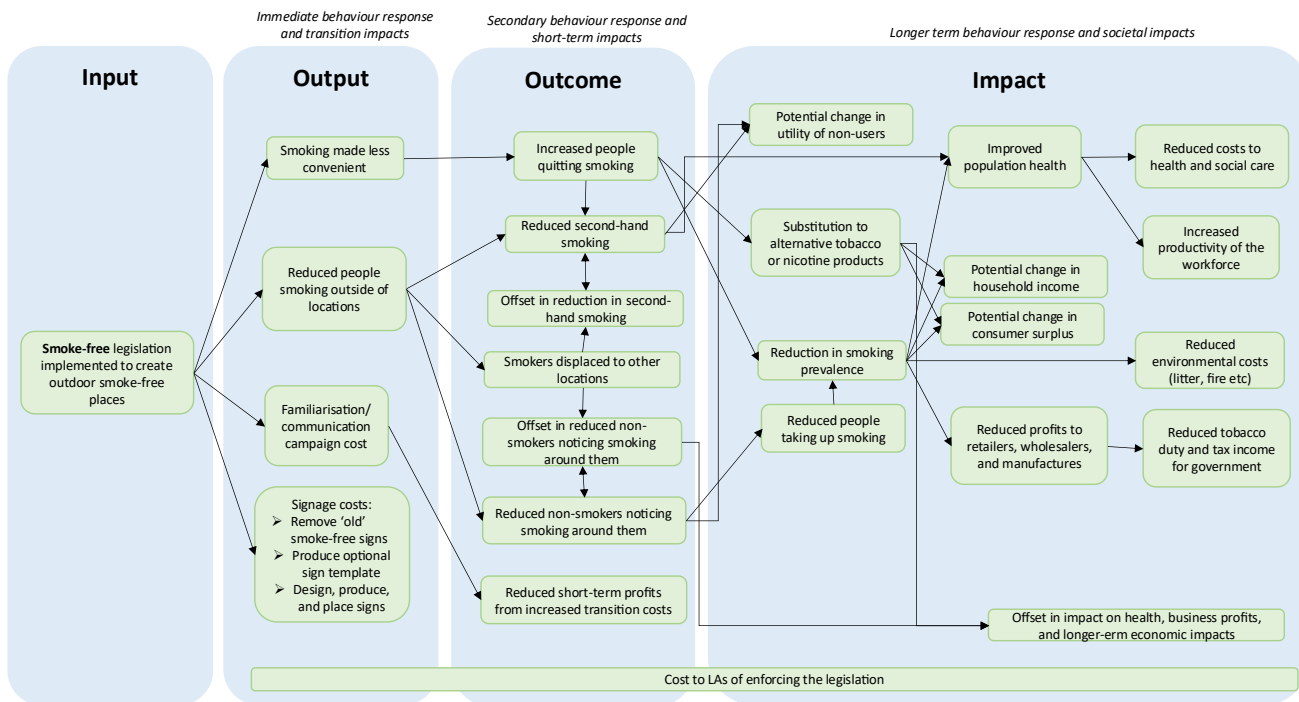


Figure 3: Logic model, Heated Tobacco-free places

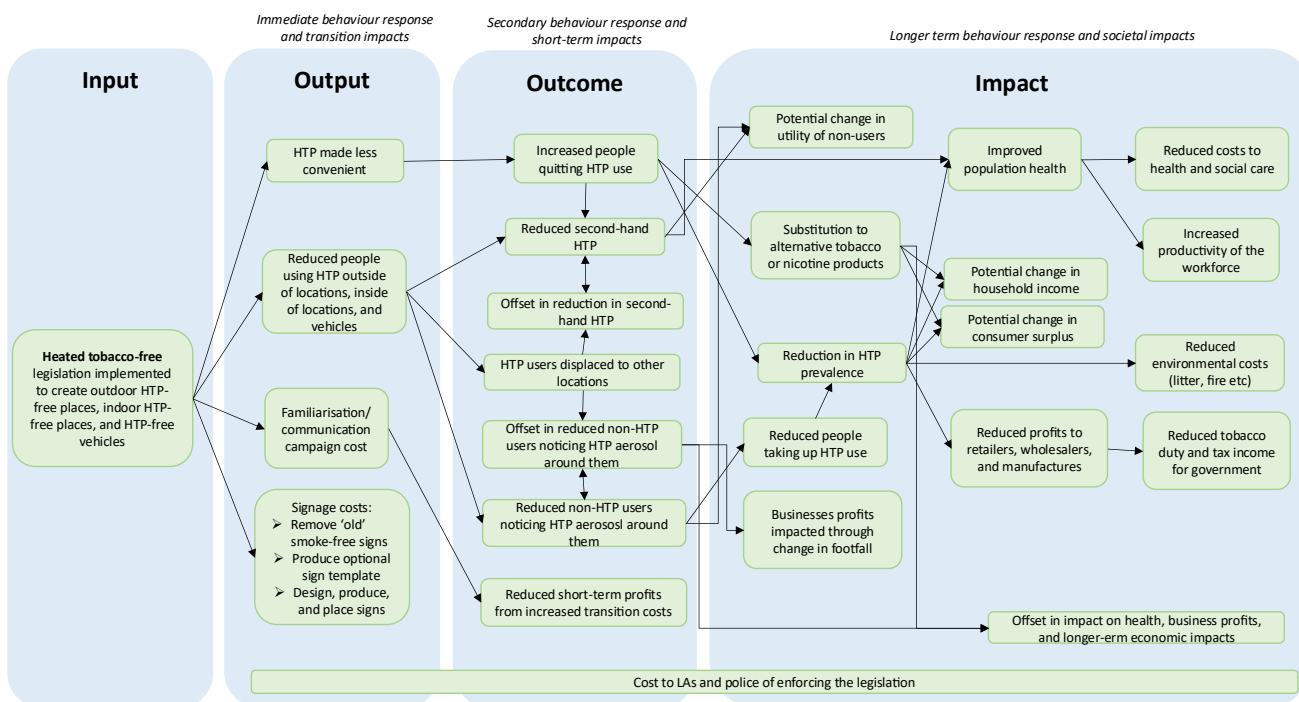
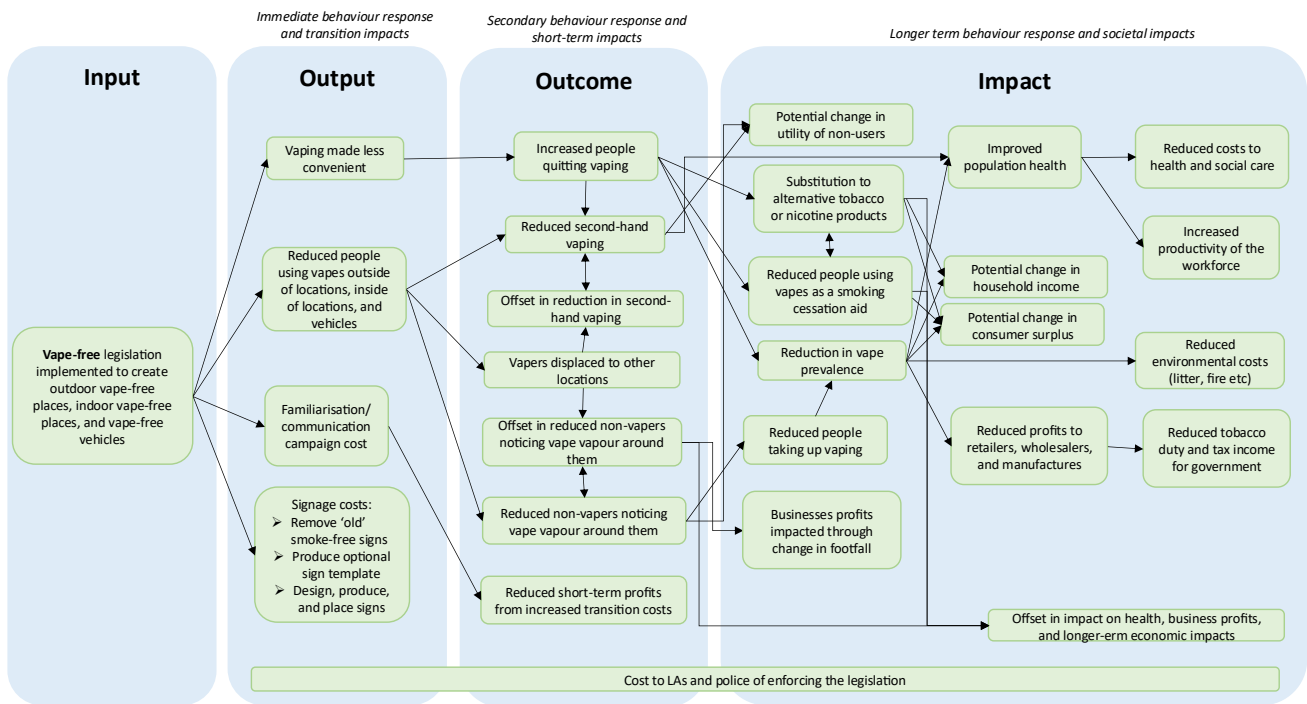


Figure 4: Logic model, Vape-free places



163. The expected costs and benefits for each option are outlined in Table 2.
164. Whilst it has not been possible to quantitatively assess all differences between options, when discussing impacts in this IA we have indicated where impacts would be expected to differ.

Table 2: Summary of economic costs and benefits to England, by option

Impact	Option 2	Option 3	Option 4
Costs	<ul style="list-style-type: none"> Familiarisation cost (£273m) Communication campaign costs (£1.5m) Enforcement costs (£0.3m) Signage costs (£229m) Environmental cost of disposing of old signs Signage design costs Profit loss Health impacts of fewer people using vapes to quit smoking 	<ul style="list-style-type: none"> Familiarisation cost (£279m) Communication campaign costs (£1.5m) Enforcement costs (£0.3m) Signage costs (£251m) Environmental cost of disposing of old signs Signage design costs Profit loss Health impacts of fewer people using vapes to quit smoking 	<ul style="list-style-type: none"> Familiarisation cost (£281m) Communication campaign costs (£1.5m) Enforcement costs (£0.3m) Signage costs (£260m) Environmental cost of disposing of old signs Signage design costs Profit loss Health impacts of fewer people using vapes to quit smoking
Benefits	<ul style="list-style-type: none"> Health gains from reduced second-hand smoking, heated tobacco and vaping at locations Health gains to individuals if smoking, heated tobacco and vaping prevalence falls Reduced health and social care costs Productivity gains Reduced litter Reduced fires Potential change in consumer surplus Utility of individuals who do not smoke, use heated tobacco products, or vape 	Benefits are expected to be at least as large as Option 2	Benefits are expected to be at least as large as Option 2 and 3
Transfers	<ul style="list-style-type: none"> Reduction in vaping duty Reduction in tobacco duty Reduction in VAT 	Transfers are expected to be at least as large as Option 2	Transfers are expected to be at least as large as Option 2 and 3

Non-monetised benefits

165. Due to the level of evidence available on the health impacts of second-hand heated-tobacco use and vaping, and second-hand smoking in outdoor settings, there are no

monetised benefits. Non-monetised benefits have been provided and where possible relevant evidence has been drawn upon to provide a sense of scale.

166. Heated tobacco products and vaping are relatively novel markets, and the health impacts are largely unknown, particularly in the long-term. Whilst evidence is currently limited there are efforts to improve the evidence base in the future. Government have recently announced three research studies into youth vaping and long-term health effects of vaping on children¹⁵⁹.
- Earlier this year, we announced a £62 million research project into adolescent health, funded by UK Research and Innovation, that will investigate the long-term health effects of vaping on young people's health and wellbeing, alongside wider influences on adolescent health.
 - We have also commissioned, via the NIHR, the most comprehensive analysis of youth vaping studies ever conducted in this area, which is set to be published in August 2025.
 - Finally, we commissioned UCL to produce yearly updates on the latest vaping research from both UK and international sources. This five-year programme is also backed by NIHR funding.

Health benefits to individuals from reduced second-hand smoking, heated tobacco product use, and vaping

167. If individuals are compliant with the regulations, there would be no smoking, heated tobacco use, or vaping at locations in scope of each option and therefore no second-hand impacts. Whilst there is more evidence on the health risks from second hand smoke exposure, compared to second-hand heated tobacco or second-hand vaping, the evidence suggests there could still be health risks. Consequently, there is a possibility that the health of those no longer exposed to second-hand impacts could improve.
168. This reduction in second-hand exposure would be expected at all settings in scope of this IA. As Options 2, 3, and 4 are scalable based on the number settings in scope, we would expect the largest reduction in exposure from Option 4, followed by Option 3, and Option 2.
169. As outlined in the BAU option in this IA, we estimate 42 to 46 million adults are potentially exposed to second-hand smoke, heated tobacco or vapes at NHS locations a year, 9 million pupils at school, and 0.8 million children and young people in cars. If compliance of the proposed regulations is 100%, these illustrative estimates could represent potential impact size of individuals no longer exposed at the locations in scope. However, this impact size would differ depending on the locations in scope.
170. It should be noted that this ban is only in specific locations, so would not prevent non-users from being exposed to second-hand smoking, heated tobacco use or vaping in other locations. There is also a risk current users are displaced to other locations so overall second-hand exposure may not fall. This could reduce the overall impact that the ban could have through reduced second-hand exposure to non-users.

Smoking

171. Whilst there is limited evidence of the second-hand smoke health harms in outside settings, evidence from indoor settings links second-hand smoke to increased risk of eye-irritations, headaches, coughs, sore throat, dizziness, and nausea in the short-

¹⁵⁹ DHSC. 2025. [10-year study to shed light on youth vaping](https://www.gov.uk/government/news/10-year-study-to-shed-light-on-youth-vaping) - GOV.UK

term¹⁶⁰. In the long-term, it has been linked to lung cancer and function, breast and other cancers, heart disease, stroke and dementia¹⁶¹. Due to differences in environment between outdoor and indoor settings we expect the health benefits to differ, however as advised by the WHO, there is no safe level of exposure to second-hand smoke¹⁶².

Heated tobacco use

172. Whilst there is limited evidence on the health harms and second-hand health harms of heated tobacco products, these products contain tobacco. We therefore think it is sensible to assume they hold some of the health risks of smoking. Moreover, as outlined in paragraph 23, a 2019 survey in Japan linked second-hand heated tobacco to short-term health impacts including asthma attacks and chest pain¹⁶³.

Vaping

173. Whilst there is limited evidence on the health harms of second-hand vaping in indoor and outdoor settings, emerging evidence on the short-term health harms of vaping suggest it is not risk free. A 2024 UCL cross-sectional study¹⁶⁴ of children in the US concluded nicotine absorption was much lower in children exposed to second-hand vapour compared to second-hand smoke, but higher than those exposed to neither.

Health benefits to individuals from reduced smoking, heated tobacco product use, and vaping

174. With the introduction of this ban, it is possible that there will be increased de-normalisation and barriers to smoking, using heated tobacco products and vaping. Consequently, this would increase cessation and reduce uptake of these behaviours, improving the health of current and future users.
175. Whilst there is more evidence on the health risks from smoking, compared to second-hand heated tobacco or second-hand vaping, emerging evidence and evidence on short- and medium-term impacts suggests there could still be health risks. Consequently, there is a possibility that the health of those no longer using heated tobacco products, or vaping improves.
176. Assuming 100% compliance to regulations, prevalence at the specific locations should be 0%. However, it is challenging to analyse how restricting the locations that people can use these products influences consumption and cessation behaviour at a societal level. There is also a risk that current users are displaced to other locations so overall prevalence at a societal level may not fall. This could reduce the overall impact that the ban could have through reduced health harms from smoking, heated tobacco use, and vaping.
177. Since 2007, smoking cigarettes has been restricted in indoor workplaces and public places. As outlined in the *Business as Usual* section of this IA, there was mixed reports on the impact on prevalence and consumption. For example, as outlined in the 2016 Cochrane review¹⁶⁵, the evidence at the time of the study led them to conclude that the introduction of legislative smoking bans led to some improved health outcomes from second-hand smoke reduction, however, there was inconsistent evidence of an impact on smoking prevalence and tobacco consumption.

¹⁶⁰ ASH. 2020. [Secondhand Smoke - ASH](#)

¹⁶¹ ASH. 2020. [Secondhand Smoke - ASH](#)

¹⁶² WHO. [Protecting people from tobacco smoke](#)

¹⁶³ Imura and Tabuchi. 2021. [Exposure to Secondhand Heated-Tobacco-Product Aerosol May Cause Similar Incidence of Asthma Attack and Chest Pain to Secondhand Cigarette Exposure: The JASTIS 2019 Study - PMC](#)

¹⁶⁴ Tattan-Birch and others. 2024. [Secondhand Nicotine Absorption From E-Cigarette Vapor vs Tobacco Smoke in Children | Public Health | JAMA Network Open | JAMA Network](#)

¹⁶⁵ Frazer and others. 2016. [Legislative smoking bans for reducing harms from secondhand smoke exposure, smoking prevalence and tobacco consumption - Frazer, K - 2016 | Cochrane Library](#)

178. This evidence highlights that we cannot conclusively say whether these policy options will impact smoking, heated tobacco product, or vaping prevalence or consumption, and therefore whether there will be an improvement on health.

Smoking

179. Smoking remains the leading cause of preventable death, illness and disability in the UK¹⁶⁶. It causes 1-in-4 of all cancer deaths in England¹⁶⁷ and around 64,000 deaths per year are attributable to smoking¹⁶⁸.
180. Cigar and pipe smokers have increased risk of all-cause mortality, increased rates of smoking-related cancers¹⁶⁹, cardiovascular disease, and respiratory conditions compared to never-smokers¹⁷⁰. Even without inhalation, taking tobacco smoke into the mouth exposes the mouth, pharynx and oesophagus to toxic compounds¹⁷¹. There is also an increased risk between use of waterpipe and lung cancer and oesophageal cancer¹⁷².
181. Herbal smoking products do not contain nicotine, but a review comparing herbal cigarettes to tobacco¹⁷³ outlines they do expose the consumer to carcinogenic (cancer-causing) and mutagenic (gene-changing) compounds and gases including carbon monoxide.
182. In the Standardised Packaging of Tobacco Products IA¹⁷⁴, it was estimated the discounted number of life years saved for each young person who does not take up smoking is 1.0. Based on HMT's Green Book, this is equivalent to a value of £70,000. The analysis calculating this figure has not been updated as part of this IA and therefore may over or underestimate the life years gained by someone not taking up smoking in the present year.
183. This would mean that for each young person that may not take up smoking because of this policy, there would be a benefit of £70,000.
184. Previous analysis for pack inserts¹⁷⁵ estimates 0.74 QALYs are gained for each adult smoker that quits smoking cigarettes and hand-rolled tobacco. This is an updated figure from previous analysis for the Standardised Packaging of Tobacco Products IA, estimating that the QALYs for each adult smoker that quits is 1.2.
185. This would mean that for each person that may quit smoking because of this policy, there would be a benefit of £51,800.

Heated tobacco

186. Evidence of rising interest and awareness of heated tobacco is concerning given that there is no safe level of tobacco consumption, including from heated tobacco.
187. Heated tobacco products are relatively new products, resulting in limited evidence on their long-term effects. An independent meta-analysis reviewed biomarkers of potential harm and found mixed results, with no clear indication of the relative risks or benefits of heated tobacco compared to cigarettes¹⁷⁶. However, data suggests

¹⁶⁶ Institute for Health Metrics and Evaluation. Global Burdens of Disease. [VizHub - GBD Compare](#)

¹⁶⁷ NHSE. 2023. [Part 2: Smoking-related mortality - NHS England Digital](#)

¹⁶⁸ OHID. [fingertips.phe.org.uk](#)

¹⁶⁹ Shaper et al. 2003. [Pipe and cigar smoking and major cardiovascular events, cancer incidence and all-cause mortality in middle-aged British men | International Journal of Epidemiology | Oxford Academic](#)

¹⁷⁰ Sharma et al. 2024. [Respiratory symptoms and outcomes among cigar smokers: findings from the Population Assessment of Tobacco and Health \(PATH\) study waves 2–5 \(2014–2019\) - PMC](#)

¹⁷¹ Mead et al. 2022. [Health Effects of Premium Cigars - Premium Cigars - NCBI Bookshelf](#)

¹⁷² Darawshy et al. 2021. [Waterpipe smoking: a review of pulmonary and health effects - PMC](#)

¹⁷³ Rahman et al. 2022 [How Do Herbal Cigarettes Compare To Tobacco? A Comprehensive Review of Their Sensory Characters, Phytochemicals, and Functional Properties](#)

¹⁷⁴ [Legislation.gov.uk. 2015. The Standardised Packaging of Tobacco Products Regulations 2015 - Impact Assessment](#)

¹⁷⁵ DHSC. 2023. [Impact assessment: tobacco pack inserts](#)

¹⁷⁶ Braznell and others. 2024. [Impact of heated tobacco products on biomarkers of potential harm and adverse events: a systematic review and meta-analysis | Tobacco Control](#)

that heated tobacco products have the potential to be harmful and that potential benefits to smokers switching to heated tobacco products may be restricted to a small number of biomarkers. This study raised concerns about bias, as 32 of the 40 studies included had high risk of bias, and unclear bias on the remaining 8. Most studies in the meta-analysis had short timeframes, with the longest being 12 months but most lasting 5 days or less. Also, only 1 study assessed the impact of heated tobacco products to non-smokers.

188. Therefore, while it is possible that heated tobacco products expose users to fewer toxins than cigarettes, heated tobacco products contain many of the same harmful chemicals as combustible tobacco and is harmful to health.

Vaping

189. While less harmful than smoking, vaping is not risk-free and data on longer-term health harms is still emerging^{177,178}. It is for this reason that the Government's advice on vaping is clear: if you smoke, you should switch to vaping. But if you don't smoke, don't vape, and children should never vape.
190. One of the health risks of nicotine-containing vapes is the nicotine content. Nicotine is a highly addictive drug¹⁷⁹. Withdrawal symptoms include cravings, irritability, anxiety, trouble concentrating and other mental and physical symptoms.¹⁸⁰
191. As outlined in the OHID 2022 evidence review¹⁸¹, there is substantial evidence that using nicotine vaping products can result in symptoms of nicotine dependency. Whilst the review concluded pulse wave velocity, a blood pressure measurement, did seem to be affected by nicotine in vaping products, it reported that there is currently limited robust evidence concluding other health harms associated with nicotine vaping. There are also some health risks associated with the other ingredients in vapes. For example, propylene glycol and glycerine (components of e-liquids) can produce toxic compounds¹⁸². There is emerging evidence that suggests vaping is associated with a higher risk of developing respiratory illness¹⁸³, could present dangers from metals in the devices¹⁸⁴ and that nicotine addiction impacts gastrointestinal disorders¹⁸⁵.
192. A recently conducted umbrella review investigating the short and long-term health effects of vaping on young people reported consistent associations between vaping and alcohol intake, asthma and other respiratory outcomes, and mental health outcomes¹⁸⁶. It also found significant associations between vaping and lower total sperm counts in young men, dizziness, headaches, migraines and oral health harms, but this evidence largely derived from limited surveys or case series/reports.
193. In the Government of Canada regulatory impact analysis statement for the Tobacco and Vaping Products Act¹⁸⁷ it was assumed that the mortality and morbidity risks associated with vaping are 20% of the mortality and morbidity impacts of cigarettes. This assumption was developed with members of an expert panel composed of five academics in tobacco control. Taking the evidence that each person who does not take up smoking gains 1.0 QALY, we could therefore estimate the number of life

¹⁷⁷ OHID. 2022. [Nicotine vaping in England: 2022 evidence update](#).

¹⁷⁸ Scottish Government. 2024. [Vaping- Health harms: evidence briefing](#).

¹⁷⁹ NHS. [Vaping myths and the facts - Better Health - NHS](#) (accessed October 2025)

¹⁸⁰ NHS. [Managing nicotine withdrawal symptoms - Better Health - NHS](#) (accessed October 2025)

¹⁸¹ OHID. 2022. [Nicotine vaping in England: 2022 evidence update](#).

¹⁸² Komura M and others. 2022. [Propylene glycol, a component of electronic cigarette liquid, damages epithelial cells in human small airways](#).

¹⁸³ Zavala-Arciniega and others. 2024. [Longitudinal associations between exclusive, dual and polytobacco use and respiratory illness among youth](#).

¹⁸⁴ Salazar and others. 2025. [Elevated Toxic Element Emissions from Popular Disposable E-Cigarettes: Sources, Life Cycle, and Health Risks | ACS Central Science](#)

¹⁸⁵ Wal and others. 2023. [An Updated Review of Nicotine in Gastrointestinal Diseases](#)

¹⁸⁶ Golder and others. 2025. [Vaping and harm in young people: umbrella review | Tobacco Control](#)

¹⁸⁷ Based on DHSC. 2015. [The Standardised Packaging of Tobacco Products Regulations 2015](#) and Government of Canada. 2021. [Canada Gazette, Part 1, Volume 155, Number 25: Order Amending Schedules 2 and 3 to the Tobacco and Vaping Products Act \(Flavours\)](#).

years gained for each young person that does not take up vaping to be 0.2, or £14,000 in monetary terms. Additionally, taking the evidence that each person who quits smoking is equivalent to 0.74 QALYs, we could therefore estimate the number of life years gained for each person that quits vaping to be 0.148, or £10,000 in monetary terms.

Reduction in health and social care costs

194. As outlined above, if prevalence of smoking, heated tobacco use and vaping falls there could be health gains for individuals. If so, it is possible that demand on health and social care services is reduced.
195. Any reduction in prevalence would also reduce second-hand exposure which could also reduce demand for health and social care services.
196. Whilst a lot of the evidence focuses on the impacts on NHS secondary care, it is possible that other parts of the health and social care system (both public and private) would also be impacted by this policy, for example primary care and social care.

Smoking

197. In 2010, the RCP identified links between second-hand smoke and several causes of morbidity in infants and children¹⁸⁸. The RCP report the estimated cost of primary care and hospital admissions related to childhood disease caused by second-hand smoke to be £23.3 million a year in the UK¹⁸⁹. Since 2010 and the introduction of further smoke-free legislation¹⁹⁰, children's exposure to second-hand smoke has decreased¹⁹¹. In 2018, the RCP produced the 'Hiding in plain sight' report¹⁹². This provided an estimate for the cost of admitted patient care in children attributable to smoking in England in 2015/16. The cost range was based on two alternative estimates of the percentage of children exposed to second hand smoke. They estimated that exposure of children to passive smoking costs the NHS in England between £5 million and £12 million in hospital costs.
198. If smoking prevalence falls there could be a large gain in NHS demand costs. ASH estimate smoking to cost to be £1.82bn for healthcare and £1.14bn to social care¹⁹³. Whilst it is not possible to estimate what proportion of this could be reduced, any reduction in prevalence could bring this cost down.
199. Based on NHS data¹⁹⁴ in 2022/23 there were an estimated 408,700 hospital admissions due to smoking, with an estimated 16% of all hospital admissions for respiratory diseases estimated to be linked to smoking, 8% of all admissions for cancers, and 7% of admissions for cardiovascular disease.

Heated tobacco use

200. We do not have evidence on heated tobacco exposure to demand on health and social care services, or demand on the private sector.

Vaping

201. Based on preliminary NHS data for 2024/25, vaping is reported as the primary or secondary cause of around 280 hospital admissions per year¹⁹⁵.

¹⁸⁸ Royal College of Physicians. 2010. Accessed via [Secondhand Smoke - ASH](#)

¹⁸⁹ Royal College of Physicians. 2015. [Passive smoking is a major health hazard to children, says the RCP | RCP](#). Accessed via [Secondhand Smoke - ASH](#).

¹⁹⁰ Legislation.gov.uk. 2015. [The Smoke-free \(Private Vehicles\) Regulations 2015](#)

¹⁹¹ Tattan-Birch. 2022. [Children's exposure to second-hand smoke 10 years on from smoke-free legislation in England: Cotinine data from the Health Survey for England 1998-2018 - The Lancet Regional Health – Europe](#)

¹⁹² Royal College of Physicians. 2018. [Hiding in plain sight: Treating tobacco dependency in the NHS | RCP](#)

¹⁹³ ASH. 2025. [ASH Ready Reckoner - ASH](#)

¹⁹⁴ NHS England. 2023. [Hospital admissions due to smoking up nearly 5% last year, NHS data shows](#)

¹⁹⁵ NHS Digital. 2024. [Hospital admissions for vaping-related disorders - NHS England Digital](#)

202. To illustrate potential cost savings from reduced vaping admissions we have estimated potential savings based on unit cost of an NHS hospital bed. The unit cost per day of NHS hospital beds in 2020/21¹⁹⁶ ranged from £345 to £2,349. Assuming every person admitted to hospital with vaping as the primary or secondary cause only spent 1 day in hospital, the cost of 280 hospital admission beds costs could range from £97,000 to £658,000 in 2020/21.
203. It should be noted that this cost is illustrative and highly uncertain. In reality this cost could differ based on length of stay, prevalence rates, population rates, or other external factors.

Productivity gains

204. Productivity gains could be achieved if population health is improved either through reduced second-hand smoking/heated tobacco, or through reduced prevalence. If individuals see improved health, this could lead to reduced sickness absence, sickness-related unemployment, and reduced premature death. We would also expect that increased productivity at a societal level would benefit business through a larger and healthier workforce in the longer term.
205. The size of this benefit is uncertain as we cannot quantify the change in smoking behaviour and second-hand smoke impacts due to this policy, which prevents us from also quantifying the expected productivity gains.

Smoking

206. Smoking has an impact on productivity through smoking related lost earnings, unemployment, and early death. ASH estimate that the total costs of smoking to society in England are £21.3 billion, of which £18 billion is the impact on productivity¹⁹⁷.

Heated tobacco use

207. A similar gain could occur due to heated tobacco, however there is limited evidence supporting this and we know prevalence for heated tobacco is much lower than cigarettes and hand-rolling tobacco. However, as reported by ASH, heated tobacco products are not risk-free and whilst possible they expose users to fewer toxins than cigarettes, all tobacco products are harmful to health and they contain many of the same ingredients as combustible tobacco¹⁹⁸.

Reduced litter associated with smoking, heated tobacco product use and vaping

208. If prevalence of smoking, heated tobacco use, and vaping falls, there could be reduced litter from reduced product and packaging litter if less products are being consumed.
209. This benefit assumes no displacement effect. As indicated in our logic models (Figure 2, Figure 3, Figure 4), there is a potential pathway that prevalence remains the same but users smoke, use heated tobacco or vape in different locations. In this case, this benefit would not be realised.

Smoking

210. If prevalence of smoking falls, there would be reduced litter from cigarette butts. This could be a cost saving to both businesses and LAs depending on the site in question.

¹⁹⁶ UK parliament. 2023. [Written questions and answers - Written questions, answers and statements - UK Parliament](#)

¹⁹⁷ ASH. 2025. [ASH Ready Reckoner - ASH](#)

¹⁹⁸ ASH. [Heated tobacco - ASH](#)

- 211. As we have not been able to estimate the size of any reduction in smoking prevalence at a national level because of this policy it has not been possible to monetise this cost.
- 212. Defra put the cost of cleaning up cigarette butts to LAs at around £40 million per year¹⁹⁹. Keep Britain Tidy's national survey of cigarette litter²⁰⁰ revealed cigarette butts to be the most common littered item in the UK.
- 213. Compared to cigarette smoking, whilst prevalence of other smoked products is lower, improper disposal would still result in litter costs.
- 214. If less products are purchased, this could also reduce the packaging litter of smoked products in scope.

Heated tobacco use

- 215. Compared to smoking cigarettes whilst heated tobacco products have a lower prevalence so litter is likely to be comparatively lower, the sticks and packaging, if not properly disposed of, could also have environmental and litter costs.

Vaping

- 216. If there was a reduction in prevalence or consumption of vapes we would expect that there would be reduced litter from people disposing of vapes. Whilst the disposable vape ban has been put in place, there still could be some associated litter from reusable vapes such as the packaging, refill pods, e-liquid containers and coils.
- 217. Research by YouGov, commissioned by Material Focus²⁰¹, found that almost 5 million disposable vapes were thrown away every week, and only 17% of people who buy vapes say that they recycle single-use vapes in a shop or local recycling centre. We do not have data on the number of reusable vapes that are littered.
- 218. Due to the lack of data on litter associated with reusable vapes, we are unable to monetise this impact. However, if reduced litter does arise because of the policy, we would expect there to be environmental benefits.

Reduced fire costs

- 219. If prevalence of smoking, heated tobacco products, and vaping falls, we can assume the number of fires caused by these products may also fall. This will reduce the cost of fires to the Government.

Smoking

- 220. ASH estimate the cost of smoking-related fires to be £332 million²⁰², with the Fire and Rescue service attending around 2,000 smoking-related fires per year. Any reduction in smoking prevalence or consumption could reduce the number of fires and this associated cost.

Heated tobacco use

- 221. Heated tobacco devices also contain a battery. Similar to vapes, there could be a fire risk from improper disposal of heated tobacco products; however, there is limited evidence on heated tobacco specific fires.

Vaping

- 222. Vapes contain batteries, often lithium-ion. According to the National Fire Protection Association (NFPA)²⁰³, the likelihood of lithium-ion batteries overheating, catching on fire, or causing explosions increases when damaged, improperly used, charged, or

¹⁹⁹ DEFRA. 2021. [Government explores next steps to clean up tobacco litter in England - GOV.UK](#)

²⁰⁰ Keep Britain Tidy. 2025. [National Survey of Cigarette Litter 2022-2024_0 \(1\).pdf](#)

²⁰¹ Material Focus. 2023. [Number of disposable single-use vapes thrown away have in a year quadrupled to 5 million per week.](#)

²⁰² ASH. 2025. [ASH Ready Reckoner - ASH](#)

²⁰³ NFPA. [Lithium-Ion Battery Safety](#)

stored. If disposed of in household waste or recycling it can cause fires in transport, landfill, or recyclers.

223. In 2024, Material Focus²⁰⁴ estimated that number of battery fires in the waste stream had increased to over 1,200 in the past year. It is estimated that 19% of lithium batteries placed on the market were accounted for by single use vapes²⁰⁵.
224. Whilst we can assume rechargeable vapes are not disposed of at the same rate, there could still be a fire risk if not disposed of correctly.
225. The unit cost of a lithium-ion fire can be estimated through the Home Office (HO) estimates of the average cost of all fires in 2020, £45,900²⁰⁶.
226. In May 2025, the BBC²⁰⁷ reported Essex Fire and Rescue have seen a rise in charger fires associated with reusable vapes, often because of unsafe charging.

Consumer surplus

227. Where people can smoke, use heated tobacco or vape may contribute to the pleasure associated with the use of these products. Restricting the locations where people can smoke, use heated tobacco or vape could be considered as a loss to the consumer, termed as a loss of 'consumer surplus'. However, due to the addictive nature of tobacco and nicotine products, applying the concept of consumer surplus is more complex.
228. It is expected that rational consumers would consider a trade-off between the utility gained from use of products in scope and the health harms of smoking. Activities that make products less appealing or reduce the pleasure of use, such as restricting use, would alter the trade-off and a lower level of smoking would become optimal. However, with addictive products such as those in scope of this legislation, from the first use, individuals can lose autonomy through addiction to tobacco or nicotine. The trade-off between the utility and harms of the use of smoked tobacco, heated tobacco or vape products may not be based on rational decisions but influenced by addiction.
229. Additionally, if consumers substitute smoked tobacco, heated tobacco or vapes with other goods such as non-smoked tobacco products this could also result in a fall in consumer surplus. However, swapping an addictive good for another may not change overall consumer surplus.
230. Therefore, measuring the impact of smoke-free, heated tobacco-free and vape-free places on consumer surplus is highly uncertain. We acknowledge that under 'rational choice' assumptions, the restriction of locations where individuals can vape may result in a loss of consumer surplus. However, it can also be argued that becoming free of addiction improves consumer surplus. Given the level of uncertainty of the direction and scale of smoke-free, heated tobacco-free and vape-free places on consumer surplus, it has not been quantified in this IA.

Utility of individuals who do not smoke, use heated tobacco products or vape

231. Not being exposed to the second-hand impact of smoking, heated tobacco products, or vaping may contribute to the pleasure (referred to as 'utility') associated with attending the locations in scope. Restricting the locations where people can smoke, use heated tobacco, or vape could therefore be considered a gain to non-users' utility if they prefer attending locations without being exposed to second-hand smoke, aerosols, and vapours.

²⁰⁴ Material Focus. 2024. [UK Battery Fires Surge 71% to 1,200, Urging Recycling Push](#)

²⁰⁵ Eunomia. 2023. [Analysis of the market for vapes: exploring the environmental impacts of single-use vapes - EV0157](#)

²⁰⁶ Home Office. 2023. [Economic and social cost of fire - GOV.UK](#)

²⁰⁷ BBC. 2025. [Rechargeable vape fire warning ahead of disposable ban - BBC News](#)

232. In particular, children and medically vulnerable individuals may prefer to attend locations where there is a lower risk of exposure to health harms. This may also increase the utility of other people in children and medically vulnerable people's lives if second-hand exposure is reduced for these groups. Ex-users could also see increased utility to assist in their continued cessation of these products.
233. Around 90% of the population in England do not smoke cigarettes²⁰⁸ and there is strong public support to extend smoke-free legislation outdoors. ASH polling from 2025 shows that 91% of the public support banning smoking in school grounds and playgrounds, and 79% support the ban of smoking in hospital grounds²⁰⁹.
234. Whilst it is difficult to infer precisely why individuals are in support of the ban, one of the reasons could be to increase their utility by being able to attend locations in scope without being exposed to the second-hand impacts of these products.
235. Additionally, following the 2007 indoor smoking ban, the ONS Opinions Survey (2008-9)²¹⁰ reported that when asked if they agreed with the legislation in public places, 75% of people who have never-regularly smoked and 62% of ex-smokers strongly agreed with the legislation, compared to only 26% of current smokers. Additionally, when asked how often they visited pubs before and after the smoking restrictions, 69% of respondents said they visited pubs prior to the legislation about as often as nowadays, whilst 17% of respondents said they visited less often than nowadays, and 14% of respondents said they visited more often. There was no significant variation by gender or socio-economic grouping, although there was some by smoking status: 19% of people who have never smoked regularly went less often than nowadays, 17% of ex-smokers, and 11% of current smokers.
236. We will assess if there is any more additional evidence to assess this impact in the final stage IA.

Monetised costs

237. Options 2, 3 and 4 are expected to have an impact on business, and through the IA process, including developing the logic models in Figure 2, Figure 3, and Figure 4, a number of costs and stakeholders have been identified.
238. There are also some methodological points that are replicated throughout and apply to multiple cost areas such as a non-wage labour cost uplift.

Identified stakeholders

239. Based on the identified costs above, we have identified stakeholders that may incur costs.
240. As set out above, between each policy options, the locations in scope have been varied. As a result, the number of stakeholders that will incur each cost will also vary.
241. Due to data limitations, it was not always possible to match the list of locations in scope in Annex A with datasets available and we had to combine multiple datasets within and across settings. Because of this, the counts used for analytical purposes may not reflect the exact number of locations in scope.
242. Table 3 shows the estimated numbers of each setting in scope under the different options.

²⁰⁸ ONS. 2024. [Adult smoking habits in the UK - Office for National Statistics](#)

²⁰⁹ ASH. 2025. [Majority of Public Support Smokefree Generation as New Polling Shows Overwhelming Public Backing for Tougher Action on Tobacco - ASH](#)

²¹⁰ ONS. 2009, version archived on 5 January 2016. Retrieved from the [UK Government Web Archive](#)

243. As outlined in the *Description of options considered* section, not all these types of locations will have restrictions for smoking, heated tobacco and vaping. For example, we are proposing that vapes will not be restricted in health and care settings.

Table 3: Number of locations in scope of option

Settings	Option 2	Option 3	Option 4
Health and care	4,000	29,000	61,000
Schools	24,000	81,000	81,000
Playgrounds	32,000	32,000	32,000
Workplaces	5,695,000	5,695,000	5,695,000
Total	5,756,000	5,837,000	5,870,000

244. To estimate the number of sites in scope for each policy option we have drawn from several datasets. These datasets are detailed in Annex B.
245. Some of the sites in scope will also have multiple buildings. For some health and care locations, there is data on number of buildings. However, for all other locations, in the absence of data, we have assumed one building per site/location.

Table 4: Number of buildings in scope of each option

Settings	Option 2	Option 3	Option 4
Health and care	11,000	36,000	69,000
Schools	24,000	81,000	81,000
Playgrounds	32,000	32,000	32,000
Workplaces	5,695,000	5,695,000	5,695,000
Total	5,762,000	5,845,000	5,877,000

Healthcare and social care locations

246. To estimate the number of health and social care locations in scope, official datasets have been used where possible. Where this is not possible, we have tried to source alternative datasets.
247. It is possible that the counts used are overestimates. This is due to potential double counting across datasets and not being able to exclude some out-of-scope settings due to data not being granular enough.
248. For NHS secondary care the data included the number of buildings at each site. For all other sub-settings, in the absence of data, we have assumed one building per site.
249. The counts used in this analysis are best estimates for those in scope. For settings in scope please see Annex A.

Table 5: Number of healthcare and social care locations (totals may not add up due to rounding)

Sub-setting	Option 2		Option 3		Option 4	
	Number of sites	Number of buildings	Number of sites	Number of buildings	Number of sites	Number of buildings
NHS secondary care	2,000	9,000	3,000	10,000	3,000	10,000
Private secondary care	2,000	2,000	2,000	2,000	2,000	2,000
NHS general practice	-	-	9,000	9,000	9,000	9,000
Private general practice	-	-	1,000	1,000	1,000	1,000
Care homes	-	-	15,000	15,000	15,000	15,000
Dentists	-	-	-	-	15,000	15,000
Pharmacies	-	-	-	-	10,000	10,000
Opticians	-	-	-	-	7,000	7,000
Total	4,000	11,000	29,000	36,000	61,000	69,000

Education settings

- 250. To estimate the number of education settings in scope, official datasets have been used where possible.
- 251. Due to an absence of data on the number of buildings per site, we have assumed one building per site.

Table 6: Number of education locations (totals may not add up due to rounding)

Sub-setting	Option 2		Option 3		Option 4	
	Number of sites	Number of buildings	Number of sites	Number of buildings	Number of sites	Number of buildings
Independent school	2,500	2,500	2,500	2,500	2,500	2,500
Non-maintained special school	100	100	100	100	100	100
State-funded AP school	300	300	300	300	300	300
State-funded nursery	-	-	400	400	400	400
State-funded primary	16,700	16,700	16,700	16,700	16,700	16,700
State-funded secondary	3,500	3,500	3,500	3,500	3,500	3,500
State-funded special school	1,100	1,100	1,100	1,100	1,100	1,100
Sixth-form colleges in mainstream state schools - England	-	-	2,000	2,000	2,000	2,000

Sixth-form colleges	-	-	100	100	100	100
School-based provider: Nursery class childcare settings	-	-	9,300	9,300	9,300	9,300
School-based provider: Maintained nursery schools	-	-	400	400	400	400
Group-based provider: Private group-based providers	-	-	14,200	14,200	14,200	14,200
Group-based provider: Voluntary group-based providers	-	-	5,900	5,900	5,900	5,900
Group-based provider: School, college, LA and "other unclassified" group-based providers	-	-	1,100	1,100	1,100	1,100
Childminders	-	-	23,800	23,800	23,800	23,800
Further Education colleges	-	-	-	-	200	200
Total	24,100	24,100	81,300	81,300	81,400	81,400

Playgrounds

252. We are only able to identify playgrounds included in number of parks and play areas in local areas, England and Wales²¹¹. Data for this dataset are taken from the Sites Dataset within the Land Use theme of the Ordnance Survey NGD API Features database.
253. From this database we have selected the Play Area sub-category within Local Authority Districts (LADs) to be the most closely aligned to those in scope of the policy. Filtering for LADs in England only, we estimate around 32,000 play areas in England as of 2024.
254. Ordnance Survey define a Play Area as a public area where there are swings, slides, climbing frames, and so on.
255. Option 4 would also include private playgrounds, however we are unable to source counts for private playgrounds, including those in hospitality settings.

Table 7: Number of playgrounds

Sub-setting	Option 2	Option 3	Option 4
Playgrounds	32,000	32,000	32,000

²¹¹ ONS. 2023. [Number of parks and play areas in local areas, England and Wales](#) - Office for National Statistics

Indoor workplaces and public places

256. To estimate the number of indoor workplaces and public places in England, we have used the Business Population Estimate for the UK and Regions 2024²¹². This dataset provides information on the number and percentage of businesses and other organisations in the whole economy, private sector, central and local Government, and non-profit organisations. We have used ONS population estimates²¹³ to scale this down for the number of businesses and organisations in England.
257. The local and central government sector is comprised of all enterprises classed by ONS as having an institutional classification of either local or central Government, and private sector enterprises with Standard Industrial Classification (SIC) 2007 classification codes 841 administrative of the state and the economic and social policy of the community, 842 provision of services to the community as a whole, and 843 compulsory social security activities. We know that this is not exhaustive of all indoor workplaces, such as, health and care and education services provided by Government. However, in the absence of an exhaustive dataset for indoor workplaces and public places, we consider the Business Population Estimates as the best available.
258. When using this dataset, we have assumed all businesses/other organisations are either workplaces and/or public places, and that they would be exhaustive of the sites that are currently in scope of indoor smoke-free legislation. In practice, this number may differ.
259. When using this dataset, we have assumed each businesses/organisation has 1.16 sites/buildings in England. The ONS report²¹⁴, for businesses that are registered for VAT and/or PAYE in the UK (approximately 2.7 million businesses), only around 58,000 operate from more than one site. There are a total of around 3.2 million local units, which when averaged across the total number of VAT and/or PAYE businesses, we estimate this be equivalent to 1.16 local units per business in the UK. We have used the 1.16 as an uplift to estimate the number of buildings for indoor workplaces and public places in England. Whilst some buildings will have more, or less, than 1.16 sites and/or buildings, we have assumed this for analytical purposes.

Table 8: Number of indoor workplaces and public places

Sub-setting	Option 2		Option 3		Option 4	
	Number of business/ organisations	Number of sites/ buildings	Number of business/ organisations	Number of sites/ buildings	Number of business/ organisations	Number of sites/ buildings
Indoor workplaces and public places	4,896,000	5,695,000	4,896,000	5,695,000	4,896,000	5,695,000

Vehicles

260. The number of vehicles licenced in England as of Q4 2024 (34 million) are sourced from the Department of Transport (DfT) and Driver and Vehicle Licensing Agency Vehicle licensing statistics data tables²¹⁵.
261. Of the vehicles licensed in England, we could assume vaping and heated tobacco prevalence of car owners reflects prevalence in the population. This would result in

²¹² DBT. 2024. [Business population estimates for the UK and regions 2024: statistical release - GOV.UK](#)

²¹³ ONS. 2025. [Population estimates for England and Wales - Office for National Statistics](#)

²¹⁴ ONS. 2024. [UK business: activity, size and location - Office for National Statistics](#)

²¹⁵ DfT. 2025. [Vehicle licensing statistics data tables - GOV.UK](#) (Accessed September 2025)

9.6% of cars owned by vapers, and 0.4% by heated tobacco users assuming no dual use.

Table 9: Number of vehicles

	Option 2	Option 3	Option 4
Number of Vehicles	3,437,000	3,437,000	3,437,000

Non-wage labour costs

262. Many of the costs identified are a time cost associated with complying with this option. In order to estimate the costs, the hourly wage of relevant persons for each cost are sourced from the Annual Survey of Hours and Earnings.²¹⁶
263. These only represent the wage costs of the employees, and there are additional hourly costs associated with employment (such as national insurance contributions).
264. To account for this additional cost, the proportion of labour costs that are non-wage costs are estimated using the Index of Labour Costs per hour, seasonally adjusted.²¹⁷
265. The labour costs per hour across the whole economy in 2020 Q3 was reported to be £22.80. The wage costs per hour across the whole economy in 2020 Q3 was reported to be £19.20. Based on this, the non-wage labour costs are calculated as 1 minus the wage costs per hour divided by the labour costs per hour, or 16%.

$$\text{Non - wage labour cost} = 1 - \frac{19.2}{22.8} = 16\%$$

266. To uplift hourly wage to account for this non-wage labour cost, wages are divided by 1 minus the non-wage labour cost of 16%, or multiplied by 1.19.

$$\text{Wage uplift} = \frac{1}{1 - 16\%} = 1.19$$

Familiarisation cost

267. To comply with regulations on smoke-free, heated tobacco-free and vape-free places, the settings in scope of each option will need to review guidance to become familiar with the regulations. Time spent reviewing takes time away from other activities and therefore, presents a cost to these organisations.
268. The total cost to review the guidance is estimated by multiplying the number of organisations that would need to review guidance by the number of employees, the time to review the guidance, and the median hourly wage per employee.
269. Smoking in enclosed public places and workplaces has been illegal in England, Wales and Northern Ireland since 2007 and in Scotland since 2006. These laws have been extremely successful and well complied with. Businesses and other relevant organisations are already familiar with these restrictions and so extending them to include heated tobacco and vaping is unlikely to be overly difficult to understand or enforce. Both heated tobacco devices and vapes produce a vapour and so should be easily identifiable. As the indoor restrictions are expected to be consistent across smoke-free, heated tobacco-free and vape-free, they should be easily understood by businesses and enforcement agencies. Also, they may receive some of their information through the communication campaign instead. Therefore, the familiarisation cost to business may not be as great as currently estimated in the monetised costs.

²¹⁶ ONS. 2024. Earnings and hours worked, occupation by four-digit SOC: ASHE Table 14.

²¹⁷ ONS. 2020. Index of Labour Costs per Hour, seasonally adjusted.

270. We assume it will take 1.2 hours to read the guidance. Based on technical text reading speed, it is estimated that managers will read approximately 75 words per minute²¹⁸. Previous guidance for the 2007 Smokefree Law²¹⁹ has been around 5,000 words and we assume the guidance for smoke-free, heated tobacco-free, and vape-free places would also be around this length. Therefore, we assume it will take two managers approximately 1.2 hours each to review the guidance for smoke-free, heated tobacco-free, and vape-free places legislation.

Health and care settings

271. We assume it will require two managers per site to read the guidance.
272. ONS ASHE provide a median hourly wage for health and social care managers of £24.10 in 2024²²⁰. Adjusting this hourly wage by 19% to account for non-wage labour costs, the estimated hourly wage for a health and social manager is £28.68. It is possible that this wage could differ depending on the health and care setting in scope, and the members of staff individual locations choose to familiarise themselves with the guidance.
273. Based on this, Table 10 shows the estimate of the one-off cost to health and care settings to familiarise themselves with the new guidance.

Table 10: Familiarisation costs for health and care settings

Option	Cost
Option 2	£288,000
Option 3	£1,916,000
Option 4	£ 4,098,000

Education

274. We assume it will require two managers per site to read the guidance.
275. ONS ASHE provide a median hourly wage for education managers of £23.52 in 2024²²¹. Adjusting this hourly wage by 19% to account for non-wage labour costs, the estimated hourly wage for an education manager is £27.99. It is possible that this wage could differ depending on the education setting in scope, and the members of staff individual locations choose to familiarise themselves with the guidance.
276. Based on this, Table 11 shows the estimate of the one-off cost to education settings to familiarise themselves with the new guidance.

²¹⁸ EFTEC. 2013. *Business Impact Target: appraisal of guidance - assessments for regulator-issued guidance*

²¹⁹ HM government. Access via: https://www.preston.gov.uk/media/10970/Everything-you-need-to-prepare-for-the-new-smokefree-law/pdf/everything_u_need_new_sf_law.pdf?m=1654703519697

²²⁰ ONS. 2024. *Earnings and hours worked, occupation by four-digit SOC: ASHE Table 14 - Office for National Statistics*

²²¹ ONS. 2024. *Earnings and hours worked, occupation by four-digit SOC: ASHE Table 14 - Office for National Statistics*

Table 11: Familiarisation costs for education settings

Option	Cost
Option 2	£1,580,000
Option 3	£5,330,000
Option 4	£5,340,000

Playgrounds

277. We assume it will require two managers per lower tier LA to read the guidance and we estimate the number of LAs in England to be 296²²², who maintain 32,000 playgrounds in Options 2, 3, and 4.
278. Under Option 4, we also include private playgrounds in scope of the policy. Due to data limitations we are not able to estimate the number of private playgrounds so the estimated cost will remain the same across all three options. However, familiarisation would be at least as costly as Option 3 as more sites would need to familiarise themselves with the guidance.
279. ONS ASHE provide a median hourly wage for local Government administrative occupations of £14.94 in 2024²²³. Adjusting this hourly wage by 19% to account for non-wage labour costs, the estimated hourly wage for a playground setting is £17.78. It is possible that this wage could differ depending on the playground setting in scope, and the members of staff individual locations choose to familiarise themselves with the guidance.
280. Based on this, Table 12 shows the estimate of the one-off cost to playground settings to familiarise themselves with the new guidance.

Table 12: Familiarisation costs for playground settings

Option	Cost
Options 2, 3, and 4	£12,000

Indoor workplaces and public places

281. We assume it will require two managers per site to read the guidance and we estimate the number of indoor workplaces and public places sites to be over 5.6 million. This is potentially an overestimate as some sites in scope of new indoor restrictions may also be in scope of outdoor restrictions e.g. health and care or education locations. However, to avoid underestimating this cost we have not removed them from this estimate.
282. As explained above, the number of workplaces and public places remains the same across Option 2, 3, and 4.
283. ONS ASHE provide an overall median hourly wage in the UK of £17.09 in 2024²²⁴. Adjusting this hourly wage by 19% to account for non-wage labour costs, the

²²² ONS. 2023. [Area type definitions Census 2021 - Office for National Statistics](#)

²²³ ONS. 2024. [Earnings and hours worked, occupation by four-digit SOC: ASHE Table 14 - Office for National Statistics](#)

²²⁴ ONS. 2024. [Earnings and hours worked, occupation by four-digit SOC: ASHE Table 14 - Office for National Statistics](#)

estimated hourly wage for a manager in an indoor workplace and public place of £20.34.

284. Based on this, Table 13 shows the estimate of the one-off cost to indoor workplaces and public places to familiarise themselves with the new guidance.

Table 13: Familiarisation costs for indoor workplaces and public places

Option	Cost
Option 2, 3 and 4	£271,328,000

Enforcement

285. LAs (Environmental Health Officers), the Road Police and the British Transport Police will be responsible for enforcing this policy. LAs will be responsible for enforcing the policy in public places and workplaces including public transport and vehicles used for work. The police will be responsible for enforcing the restrictions in private vehicles. The British transport police will enforce the policy in trains.
286. To understand the regulations on smoke-free, heated tobacco-free, and vape-free places that they will be responsible for enforcing, LAs, the police and the British Transport Police will need to review guidance to become familiar with the regulations. Time spent reviewing takes time away from other activities and therefore, presents a cost to these organisations.
287. We assume there are no ongoing enforcement costs as any change in activity would be included in their existing workload. A view on whether this will impose additional burdens will be assessed for the New Burdens Assessment.
288. The total cost to review the guidance is estimated by multiplying the number of people that would need to review the guidance by the time to review the guidance and the median hourly wage per employee.
289. The costs will remain the same across Options 2, 3, and 4. There is a possibility that the more locations that are in scope the longer the guidance document may be, if this is the case the options with more locations in scope will have higher familiarisation costs for these organisations.

LAs

290. We assume the policy will require every Environmental Health Officer to read the guidance. Based on evidence from the Local Government Capacity Survey²²⁵, we estimate the number of officers to be 1,780,
291. ONS ASHE provide a median hourly wage for Environmental Health Officer of £23.13 in 2024²²⁶. Adjusting this hourly wage by 19% to account for non-wage labour costs, the estimated hourly wage for an Environmental Health Officer is £27.52.
292. Based on this, Table 14 shows the estimate of the one-off cost to LAs to familiarise themselves with the new guidance.

²²⁵ Local Government Association. 2024. Workforce Capacity Survey - Environmental Health

²²⁶ ONS. 2024. Earnings and hours worked, occupation by four-digit SOC: ASHE Table 14 - Office for National Statistics

Table 14: Familiarisation costs for LAs

Option	Cost
Option 2, 3 and 4	£57,000

Police (Road Police & British Transport Police)

- 293. We assume it will require every road police worker (in traffic units and traffic wardens/police community support officers) and transport police officer to read the guidance. It may require other areas of the police to be involved, however we believe these two areas are the most applicable to the current policy.
- 294. Based on evidence from the Home Office²²⁷ we estimate there to be 4,195 road police that would need familiarising with the new regulations (3,642 police officers, 405 staff, and 148 community support officers). Based on evidence from the British Transport Policing Plan 2025-27²²⁸ we estimate the number of British Transport Police to be 5,028. Due to data limitations, it is not possible to provide this data for England only. We have therefore included the estimate for Great Britain in order to not underestimate the cost.
- 295. ONS ASHE provide a median hourly wage for police offices (sergeant and below) of £22.36 in 2024²²⁹. Adjusting this hourly wage by 19% to account for non-wage labour costs, the estimated hourly wage for a police officer is £26.61. This could differ depending on the specific role of the member of staff and seniority.
- 296. Based on this, Table 15 shows the estimate of the one-off cost to the police to familiarise themselves with the new guidance.

Table 15: Familiarisation costs for police

Option	Cost
Option 2, 3 and 4	£287,000

Total familiarisation cost

- 297. Table 16 shows the estimated total cost of familiarisation for Options 2, 3 and 4, alongside a breakdown by stakeholder.

²²⁷ Home Office. 2025. Police workforce, England and Wales: 31 March 2025 - GOV.UK

²²⁸ British Transport Police. BTP Policing Plans 2025-27

²²⁹ ONS. 2024. Earnings and hours worked, occupation by four-digit SOC: ASHE Table 14 - Office for National Statistics

Table 16: Total familiarisation costs

Stakeholder	Option 2 cost	Option 3 cost	Option 4 cost
Health and care settings	£288,000	£1,916,000	£4,098,000
Education settings	£1,580,000	£5,330,000	£5,340,000
Playgrounds	£12,000	£12,000	£12,000
Indoor workplaces and public places	£271,328,000	£271,328,000	£271,328,000
LAs	£57,000	£57,000	£57,000
Police	£287,000	£287,000	£287,000
Total	£273,553,000	£278,931,000	£281,123,000

Signage costs

Removal of old signs

- 298. For workplaces and public places currently in scope of the 2007 indoor smoking ban, we assume they will need to replace their “no smoking” sign, with one that also includes heated tobacco and vaping. Workplaces and public places that already have signs prohibiting smoking, heated tobacco use and vaping may not need to change their signs at all. However, we have not identified any data or evidence to quantify how many locations this applies to.
- 299. This cost would apply to all indoor workplaces and public places. As set out in Table 8, the number of indoor workplaces and public places is the same across Options 2, 3 and 4.
- 300. Costs for workplaces and public places to remove old signs are estimated by multiplying the number of people needed to remove the sign by the median wage and the time taken to remove the sign.
- 301. We assume it will require one employee per site 0.5 hours to remove the sign in the estimated 5.7 million buildings.
- 302. ONS ASHE provide a median hourly wage for a caretaker of £13.23 in 2024. Adjusting this hourly wage by 19% to account for non-wage labour costs, the estimated hourly wage for a caretaker is £15.74.
- 303. Based on this, Table 17 shows the estimated cost for indoor workplaces and public places to remove old signs.

Table 17: Costs to remove old signs for indoor workplaces and public places

Option	Cost
Option 2, 3 and 4	£45,000,000

Purchasing and putting up new signs

- 304. Costs for sites to purchase and put up new signs are estimated by multiplying the number of signs needed, by the people needed to put up the sign, by the median wage and the time taken to put up the sign, and the cost of purchasing the sign.
- 305. We assume it will require one employee 0.5 hours per building to put up the new sign.
- 306. Table 4 in the *Identified stakeholder* section shows the number of buildings signs would need to be up in under each option.
- 307. ONS ASHE provide a median hourly wage for a caretaker of £13.23 in 2024. Adjusting this hourly wage by 19% to account for non-wage labour costs, the estimated hourly wage for a caretake is £15.74.
- 308. We assume each outdoor site will need at least one large weatherproof sign. We estimate the cost of one large weatherproof sign to be £104, based on the Public Health (Wales) Bill Explanatory Memorandum²³⁰. When adjusted for Gross Domestic Product (GDP) deflators the cost of signage is £133 in 2024 prices.
- 309. We assume each indoor site will need at least one paper sign. Our estimate the cost of one A4 paper sign is based on the costs of a sticker at £4.85 (mid-point of £1.20 and £8.50 in 2017 prices), based on the Public Health (Wales) Bill Explanatory Memorandum²³¹. When adjusted for GDP deflators the cost of signage is £7.75 in 2024 prices.
- 310. To account for wear and tear of signs we have assumed sites will purchase an additional sign part way through the appraisal period in case it needs replacing in the future. In the absence of evidence on when replacement may be necessary, we have modelled this halfway through the appraisal period (2031). The costs to put up these signs in year 4 of the appraisal period would be the same as in year 0, however we have adjusted by a 3.5% discount factor.
- 311. It is possible that either (a) signs will not need replacing, and (b) locations complying with the 2007 smoking ban and/or have existing voluntary signs would have replaced their signs already in the baseline. In these cases, our estimate would be an overestimate as this would not be an additional cost to business compared to the baseline. We will assess if there is additional information available for the final stage IA.
- 312. Based on this, Table 18 shows the estimated cost for all buildings in scope of the option to purchase and put up new signs.

²³⁰ Welsh Government. 2016. [Public Health \(Wales\) Bill Explanatory Memorandum](#)

²³¹ Welsh Government. 2016. [Public Health \(Wales\) Bill Explanatory Memorandum](#)

Table 18: Purchasing and putting up new signs

Option	Cost in 2027	Cost in 2031	Total cost
Option 2	£98,000,000	£86,000,000	£184,000,000
Option 3	£110,000,000	£96,000,000	£206,000,000
Option 4	£115,000,000	£100,000,000	£215,000,000

Total monetised cost - signage

313. Table 19 shows the estimated total signage costs for Options 2, 3 and 4, alongside a breakdown by stakeholder.

Table 19: Total signage costs

Stakeholder	Option 2 cost	Option 3 cost	Option 4 cost
Health and care settings	£3,000,000	£10,000,000	£18,000,000
Education settings	£6,000,000	£21,000,000	£22,000,000
Playgrounds	£9,000,000	£9,000,000	£9,000,000
Indoor workplaces and public places	£211,000,000	£211,000,000	£211,000,000
Total	£229,000,000	£251,000,000	£260,000,000

Communication campaign costs for people who use heated tobacco products and/or vape

314. We expect there to be a communication campaign by DHSC to make people that smoke, use heated tobacco or vape to be aware of the regulations. This could mitigate the familiarisation costs if locations do not feel they need to read the guidance documents in addition to the communication campaign.
315. The estimated cost of this type of communication campaign is based on previous estimates for DHSC to produce similar campaigns.
316. When the legal age of sale for tobacco products was raised from 16 to 18 in 2007, it was estimated, in the accompanying IA, that there would be a one-off cost to DHSC of £1 million for such a communication campaign²³². This was also used in the IA for making indoor public places and workplaces smoke-free²³³. Uplifted for inflation using HMT GDP Deflators²³⁴ the cost used is £1.5m.
317. This cost was based on an assessment of the costs for England and Wales. However, we expect that the cost of a communication campaign for England will be

²³²The National Archives. 2007. [The Children and Young Persons \(Sale of Tobacco etc.\) Order 2007 - Explanatory Memorandum](#)

²³³The National Archives. 2007. [The Smoke-free \(Vehicle Operators and Penalty Notices\) Regulations 2007 - Explanatory Memorandum](#)

²³⁴HMT. [GDP deflators at market prices, and money GDP - GOV.UK](#) (Accessed August 2025)

similar given the relative sizes of the population of the two countries. Also, although this policy is not related to age of sale, we expect the communication campaign for this policy to need to be of a similar scale and design.

318. Table 20 shows the estimated communication campaign costs for people use heated tobacco or vape.

Table 20: Communication campaign costs for people who vape and/or use heated tobacco products

Option	Cost
Option 2, 3 and 4	£1,500,000

Non-monetised costs

Environmental cost of signage disposal

319. As explained in the *Signage costs* section we expect approximately around 5.7 million old ‘no smoking’ signs to be disposed of as they will need replacing with new signage which includes ‘no heated tobacco’ and ‘no vaping’ elements. Removal of these signs will have a negative environmental impact from increased waste.
320. As the old signs are from indoor locations, we have assumed they will be made from paper – most which is able to be recycled, reducing the environmental impact. However, there is a risk that the signs could be disposed of into land fill. Waste Direct indicates waste paper, when decomposing produces methane, which contributes to greenhouse gas emissions²³⁵.

Signage design

Government

321. The Government will not be prescriptive on the design of the sign however templates will be provided for sites to use.
322. We intend on producing pdf templates for the required signs for the different sites and these will be freely available online for the managers of the sites to print themselves. Therefore, each individual business will not have to dedicate time designing their own signs if they do not want to – minimising the administrative cost to business.
323. The cost to Government of designing this template will be incurred through contracting an external design agency. We do not currently have estimates as to what these costs will be. We will continue to explore this for the final stage IA.

Workplaces, public places, health & social care locations, education locations, and playgrounds

324. If sites do not wish to use the voluntary template, they may incur additional costs to design a bespoke sign.
325. The previous IA for the effect of repealing the Smoke Free Sign Regulations (2007) highlighted that for some business the previously prescriptive smoke-free signs were inflexible and inappropriately intrusive in many cases, often compromising the character of the buildings on which they are placed.
326. Whilst we have limited intelligence on how much designing the sign would cost or how different businesses would design their sign, we would expect costs to vary for locations depending on the design and size requirements they choose.

²³⁵ Waste Direct. 2025. Paper Waste Statistics & Trends (UPDATED 2025)

327. To illustrate how costs could vary, in the Public Health (Wales) Bill Explanatory Memorandum²³⁶, Wales have estimated the following varying costs for purchasing signs:
- Large weatherproof signs estimated to cost £104
 - Smaller weatherproof signs for pedestrian exists estimated to cost £72 for a small weatherproof sign
 - Commercial A4 weatherproof signs were identified, costing £11.50 for rigid plastic signs or £28.00 for aluminium signs.
 - Door stickers, if ordered nation-wide, were estimated at £1.20 per sign. Individual commercial stickers may cost to £8.50 per sign.
328. It should be noted that if sites do choose to design a bespoke sign this will be their choice and therefore is not a direct cost of this policy.
329. It is possible that voluntary restrictions and subsequent signage are already in place in some locations which would mitigate this cost further.

Lost profit

330. There are two main reasons why there may be profit loss because of this policy.
- A. A reduction in prevalence or consumption reducing sales and profits for retailers, wholesalers, and manufacturers.
 - B. A reduction in footfall to locations if there is an overall reduction in consumers at sites, reducing sales and business profits.

Profit loss from a reduction in prevalence or consumption reducing sales and profits for retailers, wholesalers, and manufacturers

331. Restricting the locations in which people can smoke, use heated tobacco products, or vape could both reduce consumption and/or prevalence through increased cessation or reduced uptake.
332. As outlined in the logic models in Figure 2, Figure 3, and Figure 4,
- If less locations are available for people to smoke, use heated tobacco, or vape this could act as a barrier for current users which could reduce their consumption or increase cessation.
 - If less people are seen smoking, using heated tobacco, or vaping this could change social norms and influence both users and potential future users from using the products.
333. In a scenario where people that currently use heated tobacco products or vapes quit and/or non-users are deterred from taking up such behaviours, prevalence and consumption of these products would fall, and in turn reducing sales and impacting profits for manufacturers, wholesalers and retailers.
334. Due to data limitations, it has not been possible to monetise profit loss to business. However, it should be noted that had it been possible to monetise lost profits to tobacco manufacturers we would have assumed that loss in profits are mostly borne by transnational tobacco companies, not based in England. Data from the ONS Annual Business Counts²³⁷ provides data that there are 5 tobacco manufacturers in England in 2024. While some of the lost profits to tobacco manufacturers will be incurred by businesses in England, we have not been able to identify data that would

²³⁶ Welsh Government. 2016. [pri-ld10796-em-e.pdf](#)

²³⁷ ONS Nomis. 2024. [UK Business Counts - enterprises by industry and employment size band - Nomis - Official Census and Labour Market Statistics](#)

allow us to estimate the proportion of lost profits for England-based tobacco manufacturers.

- 335. For retailers and wholesalers, any lost profits from reduced sales of products in scope that had been monetised would have been assumed to be incurred by businesses based in England. Retailers and wholesalers may not be able to offset the reduced profits from the sale of products in scope through the sale or distribution of alternative goods.
- 336. Outlined below are three scenarios of potential profit loss: profit loss from indoor restrictions, from vehicles restrictions, and from outdoor restrictions.

Profit loss from indoor restrictions (on heated tobacco and vaping) reducing prevalence or consumption

- 337. Restricting the indoor locations in which people can smoke, use heated tobacco products or vape could both reduce consumption and/or prevalence through increased cessation or reduced uptake.
- 338. In a scenario where people that currently use heated tobacco products or vape quit and/or non-users are deterred from taking up such behaviours, prevalence and consumption of these products would fall, and in turn reducing sales and impacting profits for manufacturers, wholesalers and retailers.
- 339. In England, we estimate there to be around 300 vape manufacturers²³⁸, 14,000 wholesalers of food, beverages, and tobacco²³⁹, and 63,700 retailers (43,900 convenience stores²⁴⁰, 4,900 supermarkets²⁴¹, 3,000 vape stores²⁴², and 1,400 tobacconists²⁴³, 10,400 pharmacies²⁴⁴) that could sell heated tobacco products or vapes.
- 340. The profit margins represent the lost profit per each product that potentially does not get sold because of the regulations. Based on different sources we have identified estimates for the profit margins of different products in scope of the policy. Table 21 shows the estimated profit margins of retail sales price for heated tobacco products and vapes for retailers, wholesalers and manufacturers.

Table 21: Estimated profit margins of retail sales price for heated tobacco products and vapes

	Heated tobacco products	Vapes
Retailers	9.20%	45%
Wholesalers	1.90%	6.60%
Manufacturers	2.84%	7.26%

- 341. Vape profit margins are based on margins assumed in the Tobacco and Vapes Bill IA²⁴⁵ based on Defra’s IA²⁴⁶.
- 342. The heated tobacco profit margin for retailers is sourced from written evidence from ASH for the Public Bill Committee on Tobacco and Vapes²⁴⁷. For wholesalers and manufacturers, profit margins for cigarettes are used as a proxy, outlined in the

²³⁸ MHRA data reports this to be 394 producers in the UK, this has been scaled down by population estimates.
²³⁹ ONS. 2025. [Non-financial business economy, UK: Sections A to S - Office for National Statistics](#)
²⁴⁰ Association of Convenience Stores. 2024. [The Local Shop Report | ACS](#) (estimate has been scaled down for England using GB and England population estimates, using GB as a proxy for mainland UK)
²⁴¹ IGD. 2024. [UK Grocery Store Numbers 2024](#). (estimate has been scaled down for England using UK and England population estimates)
²⁴² Local Data Company. 2023. Accessed via Tobacco Reporter here: [Number of U.K. Vape Shops Up in 2023 - Tobacco Reporter](#) (estimate has been scaled down for England using UK and England population estimates)
²⁴³ ONS. 2025. <https://statics.teams.cdn.office.net/evergreen-assets/safelinks/2/atp-safelinks.html>
²⁴⁴ NHS BSA. 2025. [Pharmacy Openings and Closures - PHARMACY OPENCLOSE 202506 - Open Data Portal](#)
²⁴⁵ DHSC. 2024. [Tobacco and Vapes Bill: impact assessment](#)
²⁴⁶ Defra. 2024. [The Environmental Protection \(Single-use Vapes\) \(England\) Regulations 2024](#)
²⁴⁷ ASH. 2025. [Public Bill Committee on Tobacco and Vapes: Written evidence on the retail licensing and product registration power in the bill submitted by Action on Smoking and Health.](#)

Tobacco and Vapes Bill IA²⁴⁸. Wholesaler profit is assumed to be £0.16 per pack of cigarettes sold at retail in 2014 prices, and manufacturers at £0.22 per pack in 2013. Using the ONS Retail Prices Index (RPI): Ave price – Cigarettes 20 king size filter²⁴⁹ prices in 2013 and 2014, this is equivalent to 1.90% and 2.84% profit margins respectively for heated tobacco wholesalers and manufacturers. As this is based on data from 2013 and 2014, and there has since been changes to prices and tax rate of tobacco products, there is a risk this does not reflect current profit margins.

343. However, there is limited evidence exploring the health impacts from primary and second-hand vaping, and similar legislation on smoking products saw inconsistent evidence on the impact of prevalence and consumption. Therefore, it has not been possible to estimate the potential impacts on heated tobacco products or vape prevalence, consumption and profits because of this policy.
344. Since 2007 smoking cigarettes has been restricted in indoor workplaces and public places. As outlined in the BAU option in this IA, there was mixed reports on the impact on prevalence and consumption. For example, as outlined in paragraphs 108 and 109, in the 2016 Cochrane review²⁵⁰ the evidence at the time of the study led them to conclude that the introduction of legislative smoking bans led to some improved health outcomes from second-hand smoke reduction, however, there was inconsistent evidence of an impact on smoking prevalence and tobacco consumption.
345. This evidence highlights that we cannot conclusively say whether these policy options will impact smoking, heated tobacco product or vaping prevalence, and therefore whether there will be a reduction on business profits.

Profit loss from private vehicle restrictions (on heated tobacco and vaping) reducing prevalence or consumption

346. Restricting heated tobacco product and vape use in vehicles could deter individuals from using these products causing increased quits or reduced uptake. If prevalence of heated tobacco products and vaping falls, this would reduce sales and therefore profits to retailers, wholesalers, and manufacturers.
347. As outlined in the BAU option we estimate around 3 million vehicle owners are vapers, and around 0.1 million are heated tobacco product users.
348. If reduced consumption in vehicles translated to societal level reduced consumption or prevalence this could result in profit loss to business.
349. As in potential profit loss due to indoor restrictions, the profit loss per product can be illustrated through profit margins of heated tobacco products and vapes. Table 21 shows the estimated profit margins for retailers, wholesalers and manufacturers for heated tobacco products and vapes.

Profit loss from outdoor restrictions (on smoking, heated tobacco, and vaping) reducing prevalence or consumption

350. As with potential lost profits from indoor regulations, there is a risk that if prevalence falls due to outdoor smoking, heated tobacco product, and vaping regulations, consumption could fall and in turn business profits.
351. As outlined in the *Potential impact size* section of this IA, there is limited evidence on the influence of outdoor regulations on cessation and uptake rates. However, there is a possibility that prevalence rates fall following implementation of outdoor

²⁴⁸ DHSC. 2024. [Tobacco and Vapes Bill: impact assessment](#)

²⁴⁹ ONS. [RPI: Ave price - Cigarettes 20 king size filter - Office for National \(Accessed August 2025\) 90Statistics](#)

²⁵⁰ Frazer and others. 2016. [Legislative smoking bans for reducing harms from secondhand smoke exposure, smoking prevalence and tobacco consumption - Frazer, K - 2016 | Cochrane Library](#)

regulations. If prevalence falls, profits to retailers, wholesalers, and manufacturers would also likely fall.

352. Profit margins for cigarettes and hand-rolling tobacco are estimated to range from 8.0% from factory-made cigarettes and 9.6% for roll your own cigarettes²⁵¹. The mid-point of these is 8.8% which we can assume to be the retailer profit margin for cigarettes.

353. As outlined in Table 21, profit margins for retailers, wholesalers and manufacturers would represent the profit lost per heated tobacco product and vape if consumption falls.

Profit loss from a reduction in footfall to locations if there is an overall reduction in consumers at sites reducing sales and business profits

354. There is a possibility of an impact on footfall to locations if current users reduce their visits to locations if they can no longer smoke, use heated tobacco products or vape. However, this would at least partially be mitigated by non-users increasing their footfall if they are no longer exposed to second-hand health harms at locations.

355. This impact could vary between Options 2, 3, and 4 due to the increasing number of businesses in scope. However, most businesses in all options remain constant at 5.7 million sites for indoor workplaces and public places so there may not be a large marginal difference between options.

356. Following the 2007 indoor smoking legislation, similar risks were raised for the impact on the hospitality sector. However, evidence points to there being limited impact on sales, revenue, and employment. The 2011 evidence review conducted for DHSC, discussed analysis in this area:

- A 2009 scoping study funded by the Department for Health (DH) found no impact of the smokefree legislation on UK bar and restaurant employment trends in analysis of the Labour Force Survey in 2008, however results should be considered preliminary as there is insufficient data to robustly analyse employment effects²⁵².
- They conclude IARC²⁵³ evidence points to evidence from developed countries suggesting that smokefree laws have a net positive effect on business.
- They highlighted findings from a Cochrane review²⁵⁴ where three studies found no significant decrease in bar patronage pre and post legislation, two reported no significant decrease in restaurant attendance, and one found a significant increase in the number of non-smokers that attended restaurants.

357. A 2014 systematic review and meta-analysis of studies internationally found no impact of smoking bans on overall hospitality venues on measures of absolute sales or employment²⁵⁵. They concluded that whilst differential impacts were observed across individual business types and outcome variables, at an aggregate level these appear to balance out.

²⁵¹ ASH. 2025. [ASH-PBC-evidence-licensing-and-registration-FINAL-v2.docx](#)

²⁵² Ludbrook and others 'Smokefree legislation in England and Scotland: secondary analysis of data relating to the hospitality sector.' Report submitted to the Department of Health (2009). Referenced in Bauld L 'Impact of smokefree legislation in England: Evidence review'. Report commissioned by Department of Health, March 2011

²⁵³ IARC. 2009. IARC Monographs on the evaluation of carcinogenic risks to humans. Vol. 13: Evaluating the effectiveness of smokefree policies. Accessed via: [Impact of smokefree legislation in England: Evidence review](#)

²⁵⁴ Callinan and others. 2010. Legislative smoking bans for reducing secondhand smoke exposure, smoking prevalence and tobacco consumption. Accessed via: [Impact of smokefree legislation in England: Evidence review](#)

²⁵⁵ Cornelsen L and others. 2014. [Systematic review and meta-analysis of the economic impact of smoking bans in restaurants and bars](#) - Cornelsen - 2014 - Addiction - Wiley Online Library

358. There was also evidence suggesting overall footfall was not impacted in the hospitality sector, including the ONS Opinions Survey (2008-9)²⁵⁶. Within the survey, 69% of respondents said they visited pubs about as often nowadays as before the introduction of the smoking ban, whilst 17% of respondents said they visited less often than nowadays and 14% of respondents said they visited more often than nowadays²⁵⁷. There was no difference by gender or socio-economic grouping, although there was some by smoking status: although most current smokers said they visited the pub about the same nowadays as before the ban (64%), this group reported larger proportions visiting more often than nowadays (25%) than ex-smokers (13%) or those who have never smoked regularly (10%).
359. Additionally, some locations are also expected to already impose voluntary bans, so the legislation would have minimal impact on these businesses.
360. Whilst previous evidence suggests a limited impact on footfall, and therefore profits, there remains a risk to business. As with potential lost profits from indoor regulations, there is a risk that if prevalence falls due to outdoor smoking, heated tobacco product, and vaping regulations, consumption could fall and in turn business profits.
361. As outlined in the *Potential impact size* section of this IA, there is limited evidence on the influence of outdoor regulations on cessation and uptake rates. However, there is a possibility that prevalence rates fall following implementation of outdoor regulations. If prevalence falls, profits to retailers, wholesalers, and manufacturers would likely fall. As outlined in Table 21, profit margins for retailers, wholesalers and manufacturers would represent the profit lost per heated tobacco product and vape if consumption falls.

Health impacts of fewer people using vapes to quit smoking

362. The latest evidence has found that in the short- and medium-term vaping poses a small fraction of the risks of smoking²⁵⁸ and vapes can be an effective tool in supporting smoking cessation, especially when combined with expert support²⁵⁹.
363. This IA has demonstrated that this policy could reduce the number of vapes that are consumed by limiting the locations where vaping can occur. Due to data limitations, we have not been able to estimate who reduces their consumption and how much consumption is reduced by. However, the reduced consumption could include people that use vapes as a smoking cessation aid. By introducing locations where vapes cannot be used, this could increase barriers to vaping by making it more inconvenient and less socially acceptable to use these products. We have tried to mitigate against this by not restricting vapes outside health and social care locations in scope.
364. According to ONS data on adult vaping prevalence in England²⁶⁰, 31.0% of adults that smoke are also current users of vapes (daily and occasional user), and 18.8% of ex-smokers are also current users of vapes. Data from ASH²⁶¹ on adult vaping in Great Britain shows that among current smokers 16% say the main reason they vape is to cut down on smoking, and among ex-smokers 26% say it is to help them quit smoking entirely. Amongst children aged 11 to 17 in Great Britain, ASH²⁶² report that current use of vapes is higher amongst children who smoke (49%), than former

²⁵⁶ Office for National Statistics 'Smoking-related Behaviour and Attitudes' Opinions Survey Report Number 40 (2009), version archived on 5 January 2016, Retrieved from the [UK Government Web Archive](#)

²⁵⁷ Office for National Statistics 'Smoking-related Behaviour and Attitudes' Opinions Survey Report Number 40 (2009), version archived on 5 January 2016, Retrieved from the [UK Government Web Archive](#)

²⁵⁸ Office of Health improvement & disparities. 2022. [Nicotine vaping in England: 2022 evidence update main findings - GOV.UK](#)

²⁵⁹ Lindson and others. 2023. [Pharmacological and electronic cigarette interventions for smoking cessation in adults: component network meta-analyses - Lindson, N - 2023 | Cochrane Library](#)

²⁶⁰ ONS. 2024. [Adult smoking habits in the UK - Office for National Statistics](#)

²⁶¹ ASH. 2025. [Use of vapes \(e-cigarettes\) among adults in Great Britain - ASH](#)

²⁶² ASH. 2025. [Use of vapes \(e-cigarettes\) among young people in Great Britain - ASH](#)

smokers (27%), and never smokers (2%). They also report that in 2025, 2.8% of children are dual users of cigarettes and vapes.

365. Banning vaping in indoor and outdoor settings could also indirectly affect this group if reduced consumption impacts supply of vapes or decreases the social acceptance of products so using them as a smoking cessation tool is less appealing.
366. Whilst smoking prevalence in the UK has been falling for many years²⁶³, the risk of this policy is that the potential health gains from reduced vaping consumption, could be offset by a slowing of smoking cessation at a societal level. These potential offsets in benefits have been illustrated in the logic model in Figure 4.

Reduction in vape and tobacco duty, and VAT

Vape duty

367. At the Autumn budget 2024, the Government confirmed Vaping Products Duty would be introduced from 1 October 2026. The duty will be a flat rate of £2.20 per 10ml of vaping liquid, applied to all vaping products regardless of nicotine products. Given that we have flagged there could be a reduction in prevalence and hence consumption of vape products, this would likely have a knock-on effect on the total revenue collected as part of the duty. This reduction in the vaping duty revenue represents a transfer from the Government collecting this tax to the people in society previously paying the tax. The people that no longer vape because of this policy benefit from an increase in the amount they can spend on other goods and services, and the Government loses an equal amount that they can spend. Therefore, this reduction in tax revenue does not make society as a whole better or worse off.

Tobacco duty

368. Cigarettes and heated tobacco products are subject to the Tobacco Products Duty²⁶⁴. Tobacco products are subject to duty rates, including:
- Cigarettes are subject to a duty rate of either 16.5% of retail price plus £334.58 per 1,000 cigarettes or £446.67 per 1,000 cigarettes, whichever is highest.
 - Hand-rolled tobacco are subject to a rate of £476.83 per kg
 - Tobacco for heating is subject to a duty rate of £343.91 per kg.
369. Given smoke-free regulations could reduce the prevalence and hence consumption of smoking and heated tobacco, this could have a knock-on effect on the total revenue collected as part of the duty.
370. This reduction in the tobacco products duty revenue represents a transfer from the Government collecting this tax to the people in society previously paying the tax. The people that no longer use heated tobacco because of this policy benefit from an increase in the amount they can spend on other goods and services, and the Government loses an equal amount that they can spend. Therefore, this reduction in tax revenue does not make society as a whole better or worse off.

Reduction in VAT

371. Cigarettes, heated tobacco products, and vapes are also subject to VAT. As we outlined, there could be a reduction in sales of these products as a result of the regulations, we would also expect there to be a reduction in tax revenue from VAT.
372. However, this reduction in tax revenue represents a transfer from Government collecting the revenue to consumers paying the VAT. The consumers that no longer use these products benefit from an increase in the amount they can spend on other

²⁶³ ONS. 2024. [Adult smoking habits in the UK - Office for National Statistics](#)

²⁶⁴ HMRC. [Tobacco Products Duty - GOV.UK](#) (Accessed August 2025)

goods or services. This reduction in tax revenue does not make society as a whole better or worse off.

Sensitivity analysis

373. Given there are uncertainties throughout the impact assessment we have tested some of the key assumptions in sensitivity analysis. This includes:

- Signage costs
- Voluntary bans

374. The sensitivity analysis in this IA has just been produced for the preferred option.

Signage costs

Number of signs per building

375. As outlined in the *Monetised cost* section, we assume one sign per building would be necessary for the outdoor regulations, and one sign per building would be necessary for indoor regulations. However, it could be the case where some buildings will require more than one sign. We have tested this assumption below.

376. The Public Health (Wales) Bill Explanatory Memorandum²⁶⁵ model the following number of additional signs needed at each site:

- Two large weatherproof signs, two smaller weatherproof signs, and 25 stickers for major hospitals [*for the purposes of this sensitivity analysis, we have assumed this to be acute hospitals*]
- One large weatherproof sign and two door stickers for all other hospitals [*for the purposes of the sensitivity analysis, we have assumed this to be the necessary signage for all health and social care sites in scope of Option 3 apart from acute hospitals*]
- One A4 weatherproof sign and two A4 stickers for schools
- One small weatherproof sign for playgrounds

377. Using the same assumptions used in Option 3 but increasing the number and type of signs necessary to align more with Wales's analysis, and the corresponding costs outlined in paragraph 327 we estimate the signage costs of purchasing and putting up new signs would differ.

378. Table 22 shows the estimated signage costs in the central scenario and scenario where more than one sign is needed per building.

Table 22: Sensitivity analysis for number of signs per building in outdoor settings

	Signage costs in 2027	Signage costs in 2031	Total signage costs
(Central scenario)	£21,000,000	£18,000,000	£40,000,000
Sensitivity	£82,000,000	£72,000,000	£154,000,000

Costs of indoor signage

²⁶⁵ Welsh Government. 2016. [pri-ld10796-em-e.pdf](#)Public Health (Wales) Bill Explanatory Memorandum

379. Whilst indoor restrictions were not in scope of Wales' policy, as outlined in our *Monetised costs* section we have proxied the cost of an indoor paper sign on the cost Wales reported for a sticker.
380. In our central scenario we used the mid-point of two sticker costs reported by Wales. In this sensitivity analysis we have tested this using the higher cost from the range.
381. The high cost a sticker is £8.50 in the Public Health (Wales) Bill Explanatory Memorandum. Uplifted to 2024 prices this is equivalent to £10.90.
382. Table 23 shows the signage costs in the central scenario and if we adjust our analysis to use the higher cost from the range.

Table 23: Sensitivity analysis for cost per sign

Cost per sign	Signage costs in 2027	Signage costs in 2031	Total signage costs
£7.75 (Central scenario)	£89,000,000	£78,000,000	£167,000,000
£10.90	£107,000,000	£93,000,000	£200,000,000

Voluntary bans

383. If there are already voluntary bans in place, the impact of the regulations will not be as large as outlined in this IA.
384. As outlined in the *BAU* option, due to limited evidence, we are unable to quantify how many locations in scope currently have voluntary restrictions in place.
385. Table 24 shows the number of locations in scope of Option 3, if 25%, 50% and 75% of locations already have voluntary bans.

Table 24: Number of locations in scope with assumptions about voluntary bans

Option 3	0%	25%	50%	75%
Number of locations	5,800,000	4,400,000	2,900,000	1,500,000

386. If the locations in scope have voluntary bans this would reduce the costs and benefits expected because of this policy. However, we are only able to monetise costs in this IA.
387. Table 25 shows how the estimated total cost for Option 3 varies for scenarios where 0% (as in the central scenario), 25%, 50%, and 75% of the locations in scope under Option 3 have voluntary restrictions in place already.

Table 25: Sensitivity analysis for voluntary bans

Option 3	0% (central scenario)	25%	50%	75%
Familiarisation & Signage costs	£531,000,000	£398,000,000	£266,000,000	£133,000,000

Small and Micro Business Assessment (SaMBA)

388. For the Small and Micro Business Assessment (SaMBA), we have presented the costs to small and micro businesses for the preferred option only.

389. This policy will apply to all sized businesses, including small and micro sized businesses as it would not be possible to exempt small businesses while still achieving its objectives.
390. Without universal coverage people who visited or worked at large businesses would be provided health protections not offered to those in smaller businesses. We do not think this would be appropriate. An additional benefit of national legislation on this policy is also that there is a consistent approach across the country and we can inform the public of the new provisions so there is widespread recognition of where people can smoke or vape, rather than it being a case by case basis depending on the size of the local establishment which might confuse people and lead to enforcement issues.
391. The businesses we estimate that are small and micro, and in scope of our preferred option, fall into the below settings:
- Private GPs
 - Care homes
 - Independent schools
 - Private group-based childcare providers
 - Voluntary group-based providers
 - Childminders
 - Indoor workplaces and public places
 - Retailers
 - Wholesalers
 - Tobacco manufacturers
392. Whilst we have included retailers, wholesalers, and tobacco manufacturers in the above list, the only costs applicable to them are non-monetised impacts. As reported by NOMIS²⁶⁶ there are only five tobacco manufacturers in England, and they are all small or micro businesses. Whilst we assume they are not the main suppliers of cigarettes and heated tobacco in England we have included them here to not underestimate the potential impact on small or micro businesses. NOMIS data also reports 96% of wholesalers of food, beverages, and tobacco are small and micro businesses, however it should be noted that we do not know how many of these sell products in scope.
393. We have assumed no vape manufacturers are small or micro businesses.
394. We have assumed five specialist tobacconist retailers are not small or micro businesses, as they are reported by NOMIS²⁶⁷ to be medium-sized businesses as of 2024.
395. We have also assumed private hospitals are not small and micro businesses.
396. We assume all care homes in England are included as ‘business activities’ as to not underestimate the impact. We do not know how many care homes are businesses, however the Social Care Institute for Excellence (SCIE)²⁶⁸ report the majority of care

²⁶⁶ ONS Nomis. 2024. [UK Business Counts - enterprises by industry and employment size band - Nomis - Official Census and Labour Market Statistics](#)

²⁶⁷ ONS Nomis. 2024. [UK Business Counts - enterprises by industry and employment size band - Nomis - Official Census and Labour Market Statistics](#)

²⁶⁸ Social care institute for excellence. <https://www.scie.org.uk/housing/role-of-housing/promising-practice/models/care-home/> (Accessed August 2025)

home beds in the UK are either in business (82.6%) or voluntary (not for profit) (13.1%) care homes. As most beds in the UK are business establishments according to the Better Regulation Framework definition, we have decided to include all in 'costs to business' as to not underestimate the impact.

397. We have also assumed non-maintained special schools are medium sized businesses as their average number of staff is reported to be 75 as reported by the NFER²⁶⁹.
398. The monetised impacts considered for these businesses in the SaMBA are:
- Familiarisation costs
 - Signage costs

Number of small and micro businesses

Private general practices

399. We assume all private GPs are small and micro businesses. Assuming private GPs employ similar numbers of staff as NHS GPs, we estimate they would be small and micro businesses. As of May 2023, there were 143,977 full-time equivalent (FTE) staff working in General Practice, with a headcount of 192,292²⁷⁰. Dividing by the estimated number of GPs in England (8,500), this is equivalent to 17 FTE staff per practice, or 23 headcounts.
400. Whilst we are aware of General Practice chains that exist, we cannot quantify them. Therefore, to not underestimate the impact on business we have assumed all private GPs to be small or micro businesses.

Care homes

401. Due to limited data, we do not have care home establishments by employee size bands. However, Skills for Care publish residential organisations by size²⁷¹. This size is based on number of beds but in the absence of employee data this is used as a proxy. It should be noted that the following breakdowns are based on organisations, rather than care home establishments.

Table 26: Size of care home businesses

Size	Organisation count	Percentage of care homes
1 to 4	2,100	27%
5 to 9	750	10%
10 to 19	1,200	16%
20 to 49	1,900	25%
50 to 99	1,000	13%
100 to 249	450	6%
250+	250	3%

402. From Table 26, it can be estimated that 78% of care homes are small or micro businesses. Using our counts from CQC data, we estimate this to be around 11,300 care homes that are small or micro businesses.

Independent schools

403. Based on data for 2024/25 there are 2,456 independent schools in England.

²⁶⁹ NFER. Exploring the special schools workforce: What's the current picture? - Embargoed until 25.02.25 @ 00:01am | NFER

²⁷⁰ NHS Digital. 2023. General Practice Workforce. 31 May 2023 - NHS England Digital

²⁷¹ Skills for Care. 2025. Size and structure report

404. As stated in the Strengthening regulation of independent education institutions IA²⁷², DfE does not collect data on the size of independent schools measured by the number of employees. Based on pupil numbers and association school status, they assume the average independent school is a small business.
405. Therefore, as to not underestimate the costs for small and micro businesses, we assume all independent schools are small or micro businesses for the purpose of our analysis. However, the Explanatory Memorandum to The Education Regulation 2014²⁷³ reported around 75% of independent schools are small and micro businesses, suggesting some independent schools could be medium or large businesses.

Private group-based childcare providers

406. Based on data for 2024 there are 14,200 private group based childcare providers.
407. From the Childcare and early years provider survey, the mean number of staff per private group-based providers in 2024 was 14.7²⁷⁴.
408. Therefore, we assume all private group-based childcare providers are small or micro businesses for the purpose of our analysis.

Voluntary group-based childcare providers

409. Based on data for 2024 there are 5,900 voluntary group based childcare providers.
410. From the Childcare and early years provider survey, the mean number of staff per private group-based providers in 2024 was 9.2²⁷⁵.
411. Therefore, we assume all voluntary group-based childcare providers are small or micro businesses for the purpose of our analysis.

Childminders

412. Based on data for 2024 there are 23,800 childminders. We assume all are small or micro businesses.

Indoor workplaces and public places

413. Based on data for 2025 we estimate the number of indoor workplaces and public places to be around 4.9 million with 5.7 million sites.
414. The 2025 Business Population Estimates for the UK²⁷⁶ are used as a proxy to estimate the number of indoor workplaces and public places that are small or micro businesses. Table 27 shows the estimated breakdown for businesses in the private sector in England.

²⁷² DfE. 2025. [Strengthening regulation of independent education institutions](#)

²⁷³ Legislation.gov.uk. 2014. [The Education \(Independent School Standards\) Regulations 2014 - Explanatory Memorandum](#)

²⁷⁴ GOV.UK. 2024. [Step 6: Explore data - Create your own tables on childcare and early years provider survey](#)

²⁷⁵ GOV.UK. 2024. [Step 6: Explore data - Create your own tables on childcare and early years provider survey](#)

²⁷⁶ DBT. 2024. [Business population estimates for the UK and regions 2024: statistical release - GOV.UK](#)

Table 27: Number of businesses in the private sector by number of employees in the UK, 2025

Size	Business number
Zero or 1 employee	4,420,045
2 to 4	795,555
5 to 9	280,440
10 to 19	152,135
20 to 49	83,630
50 to 99	28,960
100 to 199	12,025
200 to 249	2,765
250 to 499	5,475
500 to 999	2,890
1000 or more	3,025

- 415. Therefore, we can assume 99% of businesses in England are small or micro businesses.
- 416. It should be noted that despite making up 99% of the number of businesses, small and micro businesses only represent 38% of employment and 32% of turnover. Therefore, any costs of small or micro businesses could disproportionately impact those in scope of this policy.
- 417. If we assume there are around 5.7 million sites of indoor workplaces and public places are in scope of this policy, we can estimate just under 5.7 million are small or micro businesses (99%).

Retailers

- 418. As detailed in paragraph 339, we estimate there to be 63,700 retailers in England that sell tobacco and/or vapes.
- 419. We estimate 71% of convenience stores to be small or micro businesses. To estimate the total number of convenience stores in the UK that are small or micro businesses we use information from the Association of Convenience Stores (ACS) Local Shop Report 2025²⁷⁷. The report estimates that 71% of the convenience stores are independent retailers. Independent retailers include unaffiliated and symbol groups. We assume that multi-operated stores are not small and microbusinesses and assume that all independent convenience stores are small or micro businesses.
- 420. We have assumed most specialist stores are small and micro businesses, apart from five tobacconists that we know are medium sized businesses form NOMIS data²⁷⁸.
- 421. To estimate the number of pharmacies that are small and micro businesses we have used estimates from the impact assessment on the extension of hub and spoke dispensing²⁷⁹. This impact assessment estimated that 95% of the pharmacies in the impact assessment were small and micro businesses.
- 422. In total, we estimate 45,500 retailers are small or micro businesses.

Wholesalers

²⁷⁷ ACS. 2025. The Local Shop Report | ACS

²⁷⁸ ONS Nomis. 2024. UK Business Counts - enterprises by industry and employment size band - Nomis - Official Census and Labour Market Statistics

²⁷⁹ DHSC. 2025. Extension of hub and spoke dispensing to different legal entities.

423. As detailed in paragraph 339 we estimate there to be 13,995 wholesalers in England that could sell tobacco or vapes.
424. We estimate 96% of wholesalers to be small or micro businesses as NOMIS data²⁸⁰ reports there to be 13,490 small and micro wholesalers of food, beverages, and tobacco in England as of 2024.
425. In reality not all of these wholesalers may sell tobacco and vapes as the count captures a wider variety of products including food and beverages. We have included this wider group as not to underestimate wholesalers that may sell products in scope.

Tobacco manufacturers

426. Tobacco manufacturers are not expected to be directly affected by this legislation as they will likely only be impacted if consumption of products fall. We assume that many of the tobacco manufacturers that would be affected by this legislation are predominantly transnational companies, not based in the UK. However, ONS Nomis data outlines there were 5 businesses in the UK in 2024 that are involved in the manufacture of tobacco products, and all of these are micro businesses with 0 to 9 employees.

Costs to small and micro businesses

427. Based on these estimates, we are able to estimate the monetised costs that fall to small and micro businesses.

Familiarisation costs

428. The estimated costs per business for familiarisation would be the same as each business would be subject to the same regulations. However, this may represent a larger burden on small and micro businesses that will have fewer staff available to undertake this familiarisation.
429. Following the same assumptions as outlined in the *Monetised cost* section, we estimate the following familiarisation costs for small and micro businesses.
430. Table 28 shows the estimated familiarisation costs for small and micro businesses.

Table 28: Familiarisation costs for small and micro businesses

Setting	Number of sites	Familiarisation cost²⁸¹
Health and care settings	11,800	£800,000
Education settings	46,400	£3,000,000
Indoor workplaces & public places	5,628,500	£268,200,000
Total	5,686,700	£272,000,000

²⁸⁰ ONS Nomis. 2024. [UK Business Counts - enterprises by industry and employment size band - Nomis - Official Census and Labour Market Statistics](#)

²⁸¹ The SaMBA cost appears similar to total costs and costs to business as most of the number of locations in scope are businesses, of which most are small and micro businesses.

Signage costs

431. We have assumed the estimated costs per business for signage would be the same as each business would be subject to the same signage requirement. However, this may represent a larger burden on small and micro businesses that will have fewer staff available to undertake the activity of taking down old signs, or putting up new ones, and may have smaller revenues to purchase the signs.
432. Additionally, this cost may differ between businesses if they decide to design their own sign which would create an additional cost to business. Equally if businesses already have voluntary restrictions this cost may be less if they do not need to replace their existing sign, they may not need to replace their sign part-way through due to wear and tear, or they may have already accounted for replacements in BAU costs.
433. Following the same assumptions as outlined in the *Monetised cost* sections, we estimate the following signage costs for small and micro businesses.

Removal of old signs

434. Table 29 shows the estimated costs to small and micro businesses to remove old signs.

Table 29: Removal of old signs costs for small and micro businesses

Sites	Number of buildings	Cost
Number of indoor sites	5,629,000	£44,000,000

Purchasing and putting up new signs

435. Table 30 shows the estimated costs to small and micro businesses to purchase and put up new signs.

Table 30: Purchasing and putting up new signs costs for small and micro businesses

Setting	Number of buildings	Cost
Health and care settings	12,000	£3,100,000
Education settings	46,000	£12,200,000
Indoor settings	5,629,000	£164,600,000
Total	5,687,000	£180,000,000

Total impact on small and micro businesses

436. Table 31 shows the estimated costs for small and micro businesses for Option 3.

Table 31: Total monetised costs for small and micro businesses by setting type

Setting	Impact	Cost
Health and care settings	Familiarisation cost	£800,000
Health and care settings	Signage costs	£3,100,000
Education settings	Familiarisation cost	£3,000,000
Education settings	Signage costs	£12,200,000
Indoor settings	Familiarisation cost	£268,200,000
Indoor settings	Signage costs	£208,900,000
Total		£496,300,000

Potential disproportionate impacts

437. Small and micro retailers may also incur lost income from reduced footfall-related sales if prevalence and consumption of products falls as a result of this policy. These are sales of goods bought in addition to cigarettes, heated tobacco products, and vapes. If the products in scope of this policy are the primary reason for customers entering retailers, there could be reduced profit if the secondary items are also not purchased. It could be logical to assume this is more likely to impact small and micro retailers, if a smaller number of items are typically purchased in small and micro retailers compared to supermarkets. The ACS estimate that the average number of items purchased in convenience stores is 2.7, with an average sales amount of £7.81²⁸². If the items in scope of this policy are the intended purchase item, and an additional 1.7 items are bought spontaneously whilst in store this could result in additional lost profits. However, there is not sufficient evidence on whether the products in scope of this policy, are the main products that draw people to these retailers. As a result, we cannot conclude that this policy would also lead to reduced footfall for small and micro retailers.
438. Additionally, using tobacco as a proxy, a 2016 report by ASH²⁸³ reviewed data from 1,400 small retailers across the UK using an electronic point of sale system and compared tobacco and non-tobacco transaction rates. The majority of transactions did not include any tobacco (79%), 13% of transactions included both tobacco and non-tobacco products, and 8% were for tobacco products only. The analysis compared the average values of the different types of transactions and concluded that there was no relationship between the sales of tobacco products and non-tobacco products, and that “*smokers approach the till with a similar basket of everyday items to those who come into the shop with no desire to buy tobacco.*” Although not specifically in relation to heated tobacco products or vapes this is evidence that there is not a single item that is the primary reason customers enter small retailers. This suggests that impact of lost income from reduced footfall-related sales for small and micro retailers as a result of this policy may be limited.
439. Other non-monetised costs that small and micro businesses could face include:
- **Signage design costs:** This cost will be incurred if businesses or organisations decide to design their own sign if not using Government templates. We do not currently have estimates as to what these costs will be, however we will continue to explore this for the final stage IA.
 - **Profit loss:** The evidence on the impact of smoke-free indoor bans on prevalence is mixed, therefore it is difficult to know whether prevalence will be impacted from further extension of smoke-free bans to outdoor locations and heated tobacco products and vapes. We have explored an impact on profits in a scenario where prevalence is impacted. If prevalence or consumption of products fall, this would lead to reduced sales, and therefore reduced profits for retailers, wholesalers, and manufacturers. There could also be profit loss to locations from reduced footfall if current users reduce their consumption more than non-users increase their consumptions at locations.
440. Other non-monetised benefits that small and micro businesses could face include:
- **Litter benefits:** If prevalence falls, there would be reduced litter which would be a cost savings to both businesses and LAs depending on the location.

Potential mitigations for small and micro businesses

²⁸² ACS. 2025. [The Local Shop Report | ACS](#)

²⁸³ ASH 2016. [Counter Arguments – How important is tobacco to small retailers?](#)

441. We considered the impact of the policy on micro, small and medium sized businesses and assessed whether their inclusion was required. It is important that these businesses are included in the scope of the policy as otherwise the policy would not achieve the desired health outcomes for the population. It is important that those working in and visiting these businesses are also protected from the harms of second-hand smoke, second-hand emissions from heated tobacco and second-hand vapours from vaping. We have opted to continue with the current exemption in place for specialist tobacconists that allows for the sampling of cigars or pipe tobacco indoors. This exemption was originally put in place because of the specialist nature of their trade and because these businesses make up a small percentage of the market in the UK. These businesses are likely to be small or micro businesses.
442. We are aware of a number of costs that will be incurred by these businesses including the familiarisation costs and the costs of removing and replacing signs.
443. We have attempted to mitigate these costs where possible. For example, we intend on producing pdf templates for the required signs for the different sites and these will be freely available online for the managers of the sites to print themselves. Therefore, each individual business will not have to dedicate time to designing their own signs if they do not want to. Additionally, we will ensure that there is an appropriate lead-in time for the new signs so that businesses are able to adapt.
444. The exact policy and secondary legislation, including on appropriate implementation timelines, will be informed by public consultation and we expect feedback from small and micro sized businesses to help inform the outcome of the consultation.

Distributional and wider impacts

Distributional impacts

Consumers

445. There are potential distributional impacts that need to be considered when assessing this policy. The two main considerations are the known variation in smoking prevalence by certain demographics, and potential access differences at locations in scope of the proposed restrictions.
446. For vapes and heated tobacco we do not have the data to be able to assess the distributional impacts at this stage.

Smoking prevalence

447. Smoking prevalence is higher in more deprived areas²⁸⁴, and so these communities may see a bigger positive impact and reduction of health inequalities caused by second-hand tobacco use.
- Smoking prevalence is also higher amongst some socioeconomic groups such as routine and manual labour workers, and individuals who have never worked and long-term unemployed²⁸⁵.
 - Smoking prevalence also varies by house tenure, with those who rent from LA or housing association facing increased prevalence compared with those who own their house outright²⁸⁶.
 - Smoking prevalence can also vary by age, with prevalence in older ages reducing compared to the working age population²⁸⁷. Smoking prevalence also

²⁸⁴ NHS Digital. 2024. [Adults' health-related behaviours - NHS England Digital](#)

²⁸⁵ Fingertips. [Smoking Profile - Data | Fingertips | Department of Health and Social Care](#)

²⁸⁶ Fingertips. [Smoking Profile - Data | Fingertips | Department of Health and Social Care](#)

²⁸⁷ ONS. 2024. [Adult smoking habits in the UK - Office for National Statistics](#)

varies with gender, with men having a higher prevalence rate in England than women²⁸⁸.

- Children of parents who smoke are more likely to take up smoking²⁸⁹.

Access to locations

448. Access and barriers to healthcare can vary with socioeconomic status. There is a risk that restricting smoking outside healthcare settings (where prevalence is higher amongst lower socioeconomic groups) could further deter people from accessing healthcare that already face barriers. As reported by the Kings Fund²⁹⁰, the cost of travel to healthcare facilities, waiting on the phone for appointments, and access to online services can be barriers to people living in poverty. Provision of healthcare also varies between areas with fewer GPs²⁹¹ in more deprived areas. Restricting heated tobacco and vaping use could also have a similar risk however there is not currently sufficient evidence on prevalence by socioeconomic status.
449. Access to playgrounds varies with ethnicity and evidence suggests vaping prevalence is higher at children's playgrounds in more deprived areas. There is a risk that restricting smoking, heated tobacco use, or vaping at playgrounds could deter some adults from taking their children to outdoor play areas, limiting outdoor play for children, especially for those who also do not have access to a garden. When surveying whether children can easily walk to a playground/park/playing field from their home, access was lower amongst ethnic minority groups and for children with a disability²⁹². Also, a 2020 study²⁹³ of 11 European countries suggests that nicotine presence is higher at children's playgrounds in more deprived areas. However, a US study²⁹⁴ found that having disparities in smoke-free outdoor space policies could exacerbate health inequalities, suggesting a national policy is crucial to reduce these inequalities.

Businesses

450. As outlined above, many businesses will be in scope of this policy. There could be distributional impacts where only select businesses in some sectors are included in outdoor regulations, but not all.
451. The impact could vary based on size, structure, and layout of businesses or organisation.
452. It is reported²⁹⁵ that the majority (71%) of private schools are based in southern regions of England, with the London and the Southeast at 36%, compared to the North of England with 12%.
453. The highest proportion of care paid and provided privately is in London and the Southeast²⁹⁶.

Retailers

454. A report by Health Equity North²⁹⁷, identified some of the regional differences in vape shops. They found that there are over three times more vape shops in the most deprived areas of England compared to the least deprived areas. In addition, in 2024, the report found that there are double the number of vape shops in Northern

²⁸⁸ ONS. 2024. [Adult smoking habits in the UK - Office for National Statistics](#)

²⁸⁹ Royal College of Physicians. 1992. Accessed via [Young people and smoking - ASH](#)

²⁹⁰ The Kings Fund. 2024. [Trends in patient-to-staff numbers at GP practices in England - Office for National Statistics](#)

²⁹¹ RCGP. 2024. [GPs in deprived areas responsible for almost 2,500 patients per head](#)

²⁹² Natural England. 2024. [The Children's People and Nature Survey for England: 2024 update - GOV.UK](#)

²⁹³ Henderson and others. 2020. [Secondhand smoke exposure in outdoor children's playgrounds in 11 European countries - ScienceDirect](#)

²⁹⁴ Lowrie and others. 2018. [Inequities in coverage of smokefree outdoor space policies within the United States: school grounds and playgrounds | BMC Public Health | Full Text](#)

²⁹⁵ Civitas. 2023. [Civitas: Institute for the Study of Civil Society Private schooling in Britain: a snapshot](#)

²⁹⁶ Nuffield Trust. 2023. [How much planned care in England is delivered and funded privately? | Nuffield Trust](#)

²⁹⁷ Health Equity North. 2025. [Ghost Towns. The Decline of the High Street and Health Inequalities.](#)

England (0.6 per 10,000 people) when compared to the Southern England (0.3 per 10,000 people). This could indicate that the policies may have a disproportionate effect on areas such as in the north where there are more vape stores, and hence a larger proportion of the costs to businesses could apply in those areas.

455. In addition, a Centre for Economics and Business Research (Cebr) report²⁹⁸ shows the regional breakdown of direct turnover of the UK vaping industry in 2020. Although it is likely that the market has changed since 2020, this could give an indication of regional differences. The report identified that the largest contributor in 2020 to direct turnover was the South East (16.3%), whilst the smallest contributor was Northern Ireland (2.9%).

Wholesalers

456. UK Business Counts²⁹⁹ provides data on the number of wholesalers of food, beverages and tobacco, which we assume also sell vaping products and nicotine products. Based on this data, there are 28% based in London, 12% based in the South East, and 10% based in the North West. Wholesaler industries in these regions may face a higher proportion of the costs, relative to other areas that have a lower proportion of businesses

Wider impacts

Consumers

Household income

457. Should prevalence and consumption of products be reduced, it is also possible that disposable income may increase if individuals are spending a reduced amount on tobacco, heated tobacco or vapes. However, at a societal level this could be seen as an economic transfer as whilst individual households may have more income, businesses would have reduced income, and we could assume households would substitute this 'saving' with the purchase of other items.
458. Whilst it is not possible to estimate reduced spending per household from this policy, to illustrate potential gains we can use estimates provided by ASH. ASH³⁰⁰ estimate the national average spend on tobacco is around £2,388 per smoker, and an estimated £12.1bn is spent by consumers on purchasing tobacco (legal and illicit) annually in England.

Utility of individuals who do not smoke, use heated tobacco products or vape

459. Where people can go without being exposed to second hand impacts of smoking, heated tobacco products, or vaping may contribute to the pleasure (referred to as 'utility') associated with attending the locations in scope. Restricting the locations where people can smoke, use heated tobacco, or vape could be a gain to non-users' utility if they prefer attending locations without being exposed to second-hand smoke and aerosols.

Displacement of smokers, heated tobacco users, and vapers

460. Risk of displacing smoking, heated tobacco and vaping to other locations not in scope (e.g. private homes) which could offset the potential health gains from reduced second-hand smoking and de-normalisation at locations in scope. For example, if smoking outdoors is displaced into smoking inside at home this could have worse second-hand smoke impacts for medically vulnerable people or children who live with a smoker. However, the smoke-free places policy only applies to

²⁹⁸ Cebr. 2022. [Economic impact assessment of the vaping industry](#).

²⁹⁹ ONS Nomis. 2024. [Nomis - Query Tool - UK Business Counts - enterprises by industry and employment size band](#)

³⁰⁰ ASH. 2025. [ASH Ready Reckoner - ASH](#)

specific locations outdoors so we expect this impact to be limited. Smoking rates also vary by socioeconomic groups, therefore if smokers are displaced into private homes this could potentially worsen health inequalities.

Switching to other harmful products

- 461. Consumers could potentially switch to other harmful products, which would reduce or worsen health gains and/or household income.

Challenges for smoking cessation

- 462. Limiting locations where it is possible to vape could create potential barriers to using vapes as a smoking cessation tool. We have tried to mitigate against this by ensuring there is differentiation between the smoke-free and vape-free policies and providing for specific exemptions to the vape-free policy that allow them to be used in a medical context as a smoking cessation tool.
- 463. If smoking cessation increases, there could be increased pressure on smoking cessation services. However, the Government has committed additional funding for LA commissioned stop smoking services with the aim of boosting capacity to support more smokers to quit with evidence-based interventions so this should be an appropriate mitigation.

Business environment

Attractiveness of business environment

- 464. We do not think this policy should have an impact on the attractiveness of doing business in the UK.
- 465. However, if users are displaced or deterred from visiting a business location, then there could be a reduction in footfall at locations which could reduce profits. This could however be offset by increased footfall from non-users, and evidence suggests that indoor smoking bans have not generally had a significant economic impact on the overall hospitality sector.
- 466. There is also potential for employees at businesses to be unhappy if they are smokers, heated tobacco users or vapers and either have to leave the building or site to use their products. Conversely, employees who do not smoke, use heated tobacco or vape may benefit from reduced second-hand exposure at work. However, if anything, this will ensure that people have a safer working environment which should be a benefit to employees and employers.

Market concentration and competition

- 467. The policy also does not directly limit the number or range of suppliers, or the ability for suppliers to compete.
- 468. Potential increased barriers to entry: i.e. increased red-tape and informal enforcing, increased restrictions, potential anti-social behaviour.

Foreign investment

- 469. The attractiveness of selling products in scope in England may decline. This could in turn reduce investment into manufacturing/selling in this country.

Indirect impact on other industries/products

- 470. Potential knock-on impacts if consumption falls, for example if additional purchases that are made when buying tobacco, heated tobacco or vapes are no longer purchased.
- 471. Potential indirect impact on businesses linked to the tobacco and vape industry, for example battery manufactures.

472. There could be an impact on secondary markets i.e. companies that supply raw materials, or any other materials to products in scope.

International trade considerations

473. We do not anticipate that these policies will have an impact internationally. As outlined above, many countries already have outdoor smoke-free restrictions as well as restrictions on where people are able to vape. This is a policy that does not impact trade or international obligations.

Natural capital and decarbonisation

474. Strengthening the existing ban on smoking in public places is intended to reduce tobacco use. Tobacco has a negative impact on the environment during its lifecycle including the growth of the tobacco plant, tobacco curing, the manufacturing of tobacco products, the distribution, the use and disposal. Additionally, the three major greenhouse gases (CO₂, methane and nitrous oxides) alongside other air pollutants are all present in tobacco smoke.
475. Measures such as introducing a ban on heated tobacco usage in certain public outdoor places and indoor places are intended to reduce heated tobacco usage. Heated tobacco is often made from non-biodegradable and non-recyclable materials.
476. Measures such as introducing a ban on vaping in certain public outdoor places and indoor places are intended to reduce vaping use. Evidence is currently limited; however, it has been observed that the lifecycle of vapes is harmful to the environment.
477. Overall, it is expected that there will be a net reduction in greenhouse gas emissions due to the reduction in smoking, heated tobacco use, and vaping.

Monitoring and Evaluation of preferred option

Background

478. This section sets out our provisional plans for monitoring and evaluation; informed by HM Treasury's Green Book³⁰¹, Magenta Book³⁰² and the Department for Business and Trade Better Regulations guidance on post implementation reviews (PIRs)³⁰³.

Post implementation review

479. As set out in the Small Business Enterprise and Employment Act 2015, we must carry out a post implementation review (PIR) within five years of commencement of secondary legislation that has a significant impact on businesses. For example, if we assume that the policy is implemented in 2028, a PIR would be required by 2033. This allows sufficient time for implementation and for the Department to have time for any additional research needed, for example to better understand any emerging issues or policy changes needed to inform the PIR.
480. Based on previous experience, we expect that the research is likely to take one year to commission and an additional two-three years to be conducted. Taking the maximum time available to evaluate will ensure that the full implementation can be evaluated and impacts and unintended consequences that may develop over time can also be captured.

³⁰¹ HMT. 2022. [The Green Book \(2022\)](#)

³⁰² HMT. 2020. [Magenta Book. Central Government Guidance on Evaluation.](#)

³⁰³ Department for Business & Trade. 2024. [Producing post-implementation reviews: principles of best practice.](#)

481. The aim of the PIR would be to establish whether the regulations:
- Have achieved their objectives
 - Have objectives that remain appropriate
 - Are still required and remain the best option for achieving objectives, and consider whether objectives be achieved in another way which involves less onerous regulatory provision to reduce the burden on business and/ or increase overall societal welfare
482. An example PIR is the PIR Report of Tobacco Legislation Coming in to Force Between 2010 - 2015³⁰⁴. The PIR included the following key questions:
- To what extent have the policy objectives been achieved? The extent to which expected / additional benefits were achieved. The extent to which expected / additional costs were incurred.
 - Were there any unintended consequences?
 - Could these objectives be achieved in another way which involves less onerous regulatory provision to reduce the burden on business?
483. The PIR included:
- Commissioned independent research studies
 - Peer-reviewed evidence on findings of studies undertaken in England (and Wales where applicable) following the implementation of various sets of regulations;
 - Reviewing publicly available health metrics that were relevant to the regulations;
 - Running a public consultation to gather views from a range of stakeholders; and
 - Assessing the economic impacts in terms of cost to businesses and anticipated health benefits.

Monitoring and evaluation

484. The monitoring and evaluation section covers the plans for a PIR and how this would be conducted, followed by the further monitoring and evaluation the Department would be doing. The monitoring and evaluation plan covers how we would assess the measure against the objectives, the specific data required for monitoring the impacts across a range of stakeholders and then explores the types of research questions required for a robust evaluation.
485. We will be required to evaluate the secondary legislation associated with these measures. As appropriate, we will form a more detailed evaluation plan, including assessing whether these regulations would benefit from being evaluated alongside other regulations. Final details including scale and timing of evaluation will continue to be refined for final stage IA as policy development continues.
486. For example, some regulations have common research approaches so we could gather data from key respondent groups (e.g. smokers, vapers, public, small business owners) to collect data for multiple regulations at the same time. In practice some of the regulation timelines and implementation periods may differ so it may not always be possible to evaluate them together.

³⁰⁴ DHSC. 2021. Tobacco legislation coming into force between 2010 and 2015: post implementation review - GOV.UK

487. Any independent evaluations commissioned for this policy will likely include all aspects of the magenta book methodologies, including process evaluation, outcome/impact evaluation, and economic evaluation. Additional information on how this work could be commissioned is outlined in paragraph 507. This will aim to assess:
- How well did the intervention meet its objectives?
 - Were there unexpected outputs, outcomes or unintended effects?
 - Were costs, benefits and delivery times as predicted?
 - Was delivery achieved as expected and were any changes needed?
 - What can be learnt for future interventions?
488. The evaluation is likely to use a mixed approach influenced by issues such as timelines and data availability. It is also likely that the evaluation will be a multi-phased study or studies given that it is likely to look at multiple regulations implemented across different time periods. In addition, it may be challenging to isolate the policy impacts from other related policies, some impacts could be considered across a range of policies.

Policy objectives

489. As part of the monitoring and evaluation for this policy we will need to assess whether the policy has met the objectives that were set out in the *Policy objectives* section of this IA. The main objectives include:
- **Objective one:** To reduce exposure that children and medically vulnerable people have to the well-established harms of second-hand smoke, and potential risks of second-hand emissions from heated tobacco, therefore reducing the health impacts and costs to the NHS and society as a whole.
 - **Objective two:** To reduce exposure that the public, especially children, have to second hand vaping, reducing the potential risks and unknown long-term health impacts.
 - **Objective three:** To reduce smoking and vaping prevalence, particularly around children and young people, but also non-smoking adults with the aim of reducing attractiveness and uptake whilst being mindful of their the role vapes can play as an effective quit aid for adult smokers.
490. The expected impacts, including unintended impacts, outlined in logic models in Figure 2, Figure 3, and Figure 4, where possible, should be monitored and evaluated.
491. We consider the main external factors that may affect the success of the policy to include compliance by retailers and enforcement of the policy.
492. Due to the long-term nature of some of the impacts of the policy, there is likely to be a time-lag between when the policy is implemented and when some of the impacts occur. For example, there are unlikely to be any health impacts within five years, therefore the evaluation is likely to focus on short- and medium-term impacts. As such, it will also be important to use a range of research methods and approaches to ensure that long-term outcomes are being captured alongside short-term outcomes.

Monitoring

493. We have identified data needs and areas to monitor to understand if the policy objectives have been achieved. These can be split into consumer, businesses and enforcement.

Consumers

- **Youth and adult smoking prevalence and consumption:** We plan to monitor this to understand if the restrictions have led to reduced uptake of smoking and whether average consumption has reduced. We will also monitor this to understand whether individuals are switching to this product because of the restrictions on heated tobacco usage and vaping.
- **Smoking cessation rates:** We intend to monitor this to understand whether the restrictions have had an impact on the number of people quitting smoking.
- **Attitudes and perceptions to tobacco:** We will monitor this to understand whether the regulations have had an impact on public perception on tobacco, for example are they less likely to take up tobacco and do they perceive it as more or less harmful. This will be tested with both users and non-users to test consumer impact on passive smokers/heated tobacco users.
- **Youth and adult heated tobacco prevalence:** We plan to monitor this to understand if the restrictions have led to reduced uptake of heated tobacco.
- **Heated tobacco cessation rates:** We intend to monitor this to understand whether the regulations have had an impact on the number of people wanting to quit heated tobacco.
- **Youth and adult vaping prevalence:** We intend to monitor changes in youth vaping prevalence to understand whether the regulations have had an impact on the number of people vaping.
- **Vaping cessation rates:** We intend to monitor this to understand whether the regulations have had an impact on the number of people wanting to quit vaping.
- **Number of vaping quits:** We intend to monitor this to understand if the restrictions have led to people quitting vaping.
- **Proportion of people using vapes to quit smoking:** We intend to monitor this to understand whether the restrictions has deterred people from using vapes to quit.
- **Attitudes and perceptions to vaping:** We will monitor this to understand whether the regulations have had an impact on public perception on vaping, for example are they less likely to take up vaping and do they perceive it as more or less harmful. This will be tested with both users and non-users to test consumer impact on passive vapers.
- **Exposure to second-hand smoking, heated tobacco and vaping at key locations** (schools, hospitals, playgrounds, vehicles, workplaces): We will look to monitor this to understand exposure levels at locations, and whether the regulations have had an impact on this.

Businesses

- **The costs incurred by sites:** We will look to understand whether the costs to business have been significant.

- **The costs incurred by retailers, wholesalers and manufacturers:** We will look to understand whether the costs to business have been significant.
- **Number of businesses:** We will look to understand whether the number of businesses has changed, for example the number of vape shops or the number of vape manufacturers.

Enforcement

- Enforcement / Environmental Health/ Police cases on non-compliant sites where relevant and individuals: We will monitor this to understand if people are complying with regulations.
494. We have identified some existing data that can be used to monitor these areas. More robust surveys, such as those with a larger sample size and more frequent, are likely to support more robust monitoring and evaluation over time.
495. This monitoring can be done both internally by using the publicly available sources identified, to look at trends and changes or alternatively can be commissioned as part of the evaluation and additional data, not currently available, can be collected to fill any gaps.

Youth and Adult Vaping Prevalence

- Smoking Drinking and Drug use among Young People Survey (SDD)³⁰⁵ shows smoking and vaping prevalence for 11- to 15-year-olds. This survey is currently conducted every two years.
- The Adolescent Health Study³⁰⁶ will track young people over 10 years to collect behaviour data on health and wellbeing, including the impact of smoking and vaping. The two-year pilot phase is expected to commence in 2026, which could mean data is available for the monitoring and evaluation of vaping regulatory measures.
- ONS Adult Smoking Habits in the UK provides smoking prevalence data for adults aged 18 and over, split by age, gender, location, socio-economic status and other demographics. This could be used to monitor the impact of increased regulations on vaping, to understand if there is either an increase in adults smoking or vaping.
- ASH annual survey on youth vaping³⁰⁷ contains data on vaping prevalence among 11- to 17-year-olds and information on sources of vapes, awareness of vapes and reasons for vaping. This is an annual survey, which could be used to provide monitoring of vaping policies.
- Health Survey England³⁰⁸ is a survey that collects data on cigarette smoking and vape use. However, should be noted that this survey is undergoing a transition and there will be future data collection plans from 2027 onwards³⁰⁹.

Heated tobacco products

- The Smoking Toolkit Study (STS)³¹⁰ is a survey in England that collects data on smoking behaviour and smoking cessation. This could monitor vapes being using as smoking cessation tools, and vaping, smoking, and heated tobacco

³⁰⁵ NHS Digital. 2024. [Smoking Drinking and Drug Use among Young People in England.](#)

³⁰⁶ UKRI. 2025. [Adolescent Health Study.](#)

³⁰⁷ ASH. 2024. [Use of vapes \(e-cigarettes\) among young people in Great Britain.](#)

³⁰⁸ NHS Digital. 2024. [Health Survey for England.](#)

³⁰⁹ NHS Digital. 2025. [Health Survey for England- Health, social care and lifestyles.](#)

³¹⁰ University College London. [Smoking Toolkit Study.](#)

prevalence. The STS collects monthly data but also monitors the same cohort of people over time.

- ASH Smokefree Adult Survey³¹¹ is a survey in Great Britain on smoking behaviour. This is an annual survey which has previously reported on awareness of heated tobacco.
- ASH Smokefree Youth Survey³¹² is a survey in Great Britain on smoking behaviour. This is an annual survey that has previously reported on prevalence and awareness of heated tobacco.

Youth and adult smoking prevalence

- ONS Adult Smoking Habits in the UK provides smoking prevalence data for adults aged 18 and over, split by age, gender, location, socio-economic status and other demographics. This could be used to monitor the impact of increased regulations on smoking and vaping, to understand if there is either an increase in adults smoking or vaping.
- Smoking Drinking and Drug use among Young People Survey (SDD)³¹³ shows smoking and vaping prevalence for 11- to 15-year-olds. This survey is currently conducted every two years.
- The Smoking Toolkit Study (STS) is a survey in England that collects data on smoking behaviour and smoking cessation. Recently, this survey has included additional questions on the use of different smoked tobacco products. If these questions remain in the survey, this could be used to monitor prevalence of non-cigarette tobacco product.
- The International Tobacco Control (ITC) Policy Evaluation Project³¹⁴ is an international cohort study of tobacco. This survey prevalence on the use of non-cigarette tobacco use among current or former smokers in England. The survey is conducted every 2-years so could be used to monitor non-cigarette tobacco use among current and former smokers.

Smoking cessation and people using vapes to quit

- ONS Adult Smoking Habits in the UK also provides data on the number of people quitting smoking.
- NHS Statistics on Local Stop Smoking Services in England³¹⁵ is a quarterly report which includes information on quit rates including the type of aids used to quit. This is broken down by age, ethnic group, socioeconomic classification and LA level.

Attitudes and perceptions on smoking, heated tobacco and vaping

- ASH Smokefree GB Youth Survey³¹⁶ tracks the perceptions of harm of vapes compared to cigarettes over time for young people (age 11-17). The survey also asks about young people's intention to try vapes or cigarettes. The survey has also previously tracked awareness of heated tobacco.

³¹¹ ASH. 2025. [Use of vapes \(e-cigarettes\) among adults in Great Britain - ASH](#)

³¹² ASH. 2025. [Use of vapes \(e-cigarettes\) among young people in Great Britain - ASH](#)

³¹³ NHS Digital. 2024. [Smoking Drinking and Drug Use among Young People in England.](#)

³¹⁴ ITC Project. [Objectives - ITC Project](#)

³¹⁵ NHS England. 2025. [Statistics on Local Stop Smoking Services in England.](#)

³¹⁶ ASH. 2025. [Use of vapes among young people in Great Britain.](#)

- ASH Smokefree GB Adult Survey³¹⁷ tracks the perceptions of harm of vapes compared to cigarettes over time for adults. The survey also asks about reasons for use and satisfaction and barriers.

496. It should be noted that some datasets and surveys identified may evolve over time, with the potential for questions to change. Sources of data will be kept under review as plans for monitoring and evaluation are developed.

Additional data to consider

497. Some gaps in data remain and there may be additional sources of data that we can use in the future to monitor the impact of the policy. We therefore consider additional sources to fill these gaps. For example:

- **Non-cigarette tobacco consumption:** There is currently limited data on consumption of non-cigarette tobacco per user. Whilst this can be inferred from other data sources, there is not specific data available on this.
- **Non-cigarette tobacco cessation:** There is limited evidence on the cessation rates specifically for non-cigarette tobacco. We should seek to fill this gap or identify other sources.
- **Attitudes and perceptions of harms of non-cigarette tobacco:** While there is evidence from journal articles of the perception of harm of non-cigarette tobacco compared to other products, there is limited regularly collected data that would allow us to monitor changes in perception of harm over time.
- **Vaping Cessation:** There is currently limited data on vaping cessation. Whilst this can be inferred from changes prevalence data, there is not specific data on the number of vaping quitters and quit attempts. We should seek to fill this gap or further identify sources.
- **Exposure to second-hand smoking, heated tobacco or vaping:** There is currently limited data on exposure to second-hand, heated tobacco or vaping. Whilst prevalence data could indicate what second-hand rates could be at a societal level, there is not specific data on exposure at locations in scope. We should seek to fill this gap or further identify sources.
- **Impact on businesses:** To monitor the impact on business we could conduct similar research to that conducted as part of the previous smoke-free places legislation. Additionally we could work with relevant academics to develop the best way to measure the impact on businesses.
- **Enforcement:** To monitor the enforcement of the policy we would work with LAs/Environmental Health Officers and the police, to identify the level of compliance with the regulations. This could be either quantitative or qualitative data.

498. We could also undertake periodic evidence reviews to assess any additional data being published elsewhere, covering any of the identified areas or other emerging areas.

Evaluation

499. Following on from the monitoring, we would seek to answer research questions on the regulations. These have been designed to cover objectives, understanding the impacts and understanding any unintended consequences of the policy:

³¹⁷ ASH. 2025. [Use of vapes \(e-cigarettes\) among adults in Great Britain - ASH](#)

- Has the policy achieved its objectives? Do the objectives remain appropriate?
- Does the policy remain the best way to achieve the objectives?

500. To further breakdown whether the objectives have been achieved we would want to explore the following questions:

Tobacco (Smoking and heated tobacco products)

- Has second-hand smoking and heated tobacco product exposure for young and medically vulnerable people declined as a result of the regulations?
- Has youth and adult smoking and heated tobacco use declined as a result of the regulations?
- Have there been fewer smoking quits as a result of the regulations on vapes?

Vaping

- Has second-hand vaping exposure for the public but particularly young people declined as a result of the regulations?
- Has youth vaping declined as a result of the regulations?
- Has there been any substitution effect between products as a result of the regulations?
- Are fewer adults using vapes as smoking cessation tools?

Unintended consequences

- Have there been any unintended consequences as a result of the policies?

501. Unintended consequences that could arise as a result of the regulations refer to outcomes that are not foreseen or intended by a particular action or policy. The evaluation will seek to explore whether any unintended consequences have occurred. Potential unintended consequences include the market adapting and finding new innovative ways to attract young people to smoking, heated tobacco or vaping, or locations in scope finding places or loopholes to allow smoking, heated tobacco use and vaping.

502. Another unintended consequence of the policy could be consumers, in particular young people, being deterred from smoking, heated tobacco use or vaping but instead switching to other addictive or harmful products such as other tobacco or nicotine products or drugs or taking part in other harmful activities in place of the use of nicotine.

503. Adults could be deterred from using vapes as a smoking cessation, therefore there is potential for there to be fewer quits and an increase in smoking rate.

504. It could also be considered that there could be an increase in illicit activity as a result of the regulations.

External factors

- Are there any external factors that have influenced the impact of the policy?

505. There are also external factors that could influence the impact of the regulations. For example, compliance. The success of the policy is reliant on compliance amongst individuals and locations. If people still smoke, use heated tobacco or vape products at locations, its likely young and medically vulnerable people will still be exposed to

these products which may expose them to negative second-hand health impacts, and influence their decision to smoke, use heated tobacco or vape.

506. Other external factors could include market trends, consumer trends and behaviours and interactions with future government policies. For instance, there could be other regulations that directly or indirectly impact these regulations and the vape and tobacco market. These regulations could accelerate or delay the realisation of the benefits of smoke-free, heated tobacco-free or vape-free regulations.

Economic and other impacts

- What were the economic impacts of the policy? (this could cover both labour market impacts as well as household impacts such as expenditure on tobacco and vapes).
 - What has been the cost to business of implementing the policy?
 - Has there been any environmental impacts of the policy?
507. The evaluation will likely involve a mix of internal / DHSC resources, commissioned teams via the NIHR, and locally commissioned work. These different sources allow for work to be undertaken flexibly at different times and at appropriate scales.
508. With worked commissioned through NIHR, the tendering process will require a proposal that will set out the methods and data required to answer the research questions. If all questions are not addressed in proposals, we could explore putting out an additional call for research or conduct smaller targeted projects through the NIHR policy research units.

How DHSC will respond to adverse effects and unintended consequences

509. DHSC will engage with industry association bodies, local authorities and public health stakeholders to ensure we mitigate unintended consequences with effective communication and respond to any issues efficiently. DHSC will work closely with local authorities and the regional network to ensure effects are closely monitored in regions.

Annex A – Sub-settings in scope in Option 3 (preferred option):

Health and care sub-settings:

Outside primary care sub-settings:

- GP surgeries
- Health centres and clinics (GP practice combined with other health services including neighbourhood health centres where relevant)
- Mental health and learning disabilities clinics

Outside secondary and specialist care sub-settings:

- Community Hospitals
- Community Rehabilitation Centres
- Children's Centres
- Community Mental Health Centres
- Community Midwifery Units
- Community diagnostic centres (CDCs)
- Acute hospitals
- Specialist hospitals
- Mental health hospitals including high-secure mental health hospitals, medium secure mental health hospitals and other mental health facilities.
- Elective care centres
- Outpatient clinics (often in hospitals or as satellite units)
- Walk-in Centres / Urgent Treatment Centres
- Major Teaching Hospitals
- Specialist Tertiary Centres and hospitals
- Children's hospitals
- Intermediate care units
- Rehabilitation Centres
- Palliative care and hospice centres
- Care homes with nursing (Nursing homes)
- Residential care homes
- Assisted living homes
- Day centres for old people or people with disabilities
- Accident & Emergency (A&E)
- Minor injuries units

Outside education sub-settings:

- Primary schools
- Secondary schools
- Sixth-form colleges
- Nurseries
- Childminding locations

Playground sub-settings:

- Public playgrounds with LA involvement

Annex B: Locations data used in analysis

1. To provide monetised estimates we have sourced relevant data sources to estimate the number of locations in scope of each setting, for each policy option.
2. Due to data limitations, it was not always possible to match the list of locations in scope in Annex A with datasets available and we have had to combine multiple datasets within and across settings. Because of this, the counts used for analytical purposes may not reflect the exact number of locations in scope.
3. Some risks of the counts of locations in the analytical sections include:
 - Potential inclusion of health and care locations that the policy will not be applied to.
 - Potential double counting of locations within and across datasets. For example, some private secondary care is provided within NHS hospitals or nursery care is provided within schools.
 - Potential for data to be outdated with locations leaving and joining the setting.
 - Potential for locations to not be represented in the data selected.
 - Potential that the number of indoor workplaces and public places does not reflect number of locations and/or buildings.
 - Potential that the number of indoor workplaces and public places is an underestimate as proxied based on DBT reported businesses, local and central Government organisations, and non-profit organisations.

Health and care

Sub-setting	Categories	Source
NHS Secondary care	<ul style="list-style-type: none"> • Community hospital (with inpatient bed) • General acute hospital • Learning disabilities • Mental Health (including specialist services) • Mental Health and Learning Disabilities • Mixed service hospital • Non-inpatient • Other inpatient • Specialist hospital (acute only) <p><i>Excluded Support facilities, unoccupied, and other reportable sites</i></p>	NHS Digital, Estates Returns Information Collection, ERIC 2023/24 ³¹⁸
Private Secondary care	<ul style="list-style-type: none"> • Care Quality Commission (CQC) listed private hospitals 	Equity Health, 2024. ³¹⁹
NHS General Practice	<ul style="list-style-type: none"> • GP Practices 	UK Parliament, 2023 ³²⁰
Private General Practice	<ul style="list-style-type: none"> • CQC registered and located in private 'clinics' 	LaiungBuisson, 2024 ³²¹

³¹⁸ NHS Digital. 2024. [Estates Returns Information Collection, Summary page and dataset for ERIC 2023/24 - NHS England Digital](#)

³¹⁹ Equity Health. 2024. [Are There Private Hospitals In The UK? - Equity Health](#)

³²⁰ UK Parliament. 2023. [Written questions and answers - Written questions, answers and statements - UK Parliament](#)

³²¹ LangBuisson. 2024. [LaiungBuisson report shows private pay GP market is booming and valued at £1.6 bn - LaiungBuisson](#)

	<ul style="list-style-type: none"> • CQC registered and in independent hospitals 	
Dental practices	<ul style="list-style-type: none"> • Dental practice sites operated 	ONS, Dental practices by size and location, 2024 ³²²
Pharmacies		NHS Business Services Authority, Pharmacy Openings and Closures, 2024 ³²³
Opticians		NHS Digital, Optical Sites, 2025 ³²⁴
Care Homes		CQC, June 2025 ³²⁵

Education

Sub- Settings	Source
Independent school	GOV.UK, Explore Education Statistics, Schools, Pupils and their characteristics 2025 ³²⁶
Non-maintained special school	
State-funded Alternative Provision (AP) school	
State-funded nursery	
State-funded primary	
State-funded secondary	
State-funded special school	
Sixth-forms colleges in mainstream state schools	GOV.UK, Explore Education Statistics, Sixth form capacity – national, regional, LA, 2025 ³²⁷
Sixth-form colleges	Department for Education (DfE) internal
School based provider: Nursery class childcare settings	GOV.UK, Explore Education Statistics, Childcare and early years provider survey, 2024 ³²⁸
School based provider: Maintained nurse schools	
Group-based provider: Private group based providers	
Group-based provider: Voluntary group-based provider	
Group-based provider: School, college, LA and 'other unclassified' groups	
Childminders	Association of Colleges ³²⁹
Further Education colleges	

Indoor workplaces and public places

- To estimate the number of indoor workplaces and public places that the current indoor smoking ban is applied to is challenging.
- We have therefore proxied the number using data from the DBT business population estimates for the UK and regions 2025³³⁰. The 2025 publication remains as official statistics in development³³¹. The estimates used as a proxy are the number of businesses and other organisations in the whole economy in the UK and scaled down for England using ONS population estimates³³².

³²² ONS. 2024. [Dental practices by size and location](#) - Office for National Statistics (Accessed August 2025)

³²³ NHS Business Service Authority. <https://opendata.nhsbsa.net/dataset/pharmacy-openings-and-closures> (Accessed August 2025)

³²⁴ NHS Digital. [Miscellaneous - NHS England Digital](#) (Accessed August 2025)

³²⁵ CQC. 2025. [Using CQC data](#) - Care Quality Commission

³²⁶ DfE. 2025. [Schools, pupils and their characteristics, Academic year 2024/25](#) - Explore education statistics - GOV.UK

³²⁷ [Sixth form capacity - national, regional, local authority](#). Data set from [School capacity](#) - Explore education statistics - GOV.UK

³²⁸ DfE. 2025. [Create your own tables](#) - Explore education statistics - GOV.UK

³²⁹ AOC. [General further education colleges](#) | Association of Colleges

³³⁰ DBT. 2025. [Business population estimates 2025](#) - GOV.UK

³³¹ [Official Statistics in Development](#) – Office for Statistics Regulation

³³² ONS. 2025. [Population estimates](#) - Office for National Statistics

6. This publication takes the Government's Inter-Departmental Business Register (IDBR) and estimates the number of sole traders and partnerships unregistered for VAT and/or Pay As You Earn (PAYE).
7. They define businesses as those that may be VAT and/or PAYE registered and appear on the IDBR or may exist without such registration. Unregistered businesses are those business run by self-employed people that are not large enough to be VAT and/or PAYE registered and will not appear in the IDBR. This publication includes information on registered and unregistered UK businesses.
8. This dataset covers private sector businesses, including those that sell their products exclusively to the Government. The private sector includes a small number of public corporations and nationalised bodies.
9. It outlines the local and central Government sector comprises all enterprises classed by ONS as having an institutional classification of either local or central Government, and private sector enterprises with SIC 2007 classification codes 841 (administration of the state and the economic and social policy of the community), 842 (provision of services to the community as a whole), and 843 (compulsory social security activities).
10. They also include non-profit organisations.
11. Private households and extra-territorial bodies are not included.