Smoking, health and social justice

Protecting health, promoting equity

Royal College of Physicians

The Royal College of Physicians

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About this report

Led by the RCP special adviser on tobacco Professor Sanjay Agrawal, this report was developed with members of the RCP Tobacco Advisory Group and approved by RCP Council.

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Jennifer Quint has received honoraria for education events or consultancy from Chiesi and Boehringer Ingelheim and GSK. Her institution, Imperial College London, has received grant income from Insmed, Boehringer Ingelheim and AstraZeneca.

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RCP Tobacco Advisory Group

The Royal College of Physicians' (RCP) Tobacco Advisory Group (TAG) advises the RCP on tobacco control-related policy and activity. Several reports on tobacco and smoking have been produced since the group was established in 1997, providing much of the evidence base for successful campaigns to improve tobacco control in the UK. The most recent reports are:

- *Smoking, health and social justice: Protecting health, promoting equity* (2026)
- *E-cigarettes and harm reduction: An evidence review* (2024)
- *Smoking and health 2021: A coming of age for tobacco control?* (2021)
- *Hiding in plain sight: Treating tobacco dependency in the NHS* (2018)
- *Nicotine without smoke: Tobacco harm reduction* (2016)
- *Smoking and mental health* (2013)
- *Fifty years since smoking and health: Progress, lessons and priorities for a smoke-free UK* (2012)
- *Passive smoking and children* (2010)
- *Harm reduction in nicotine addiction: Helping people who can't quit* (2007)
- *Going smoke-free: The medical case for clean air in the home, at work and in public places* (2005)
- *Nicotine addiction in Britain* (2000)

The current membership of the RCP TAG is:

Sanjay Agrawal (chair)
Richard Ashcroft
Linda Bauld
John Britton
Jamie Brown
Hazel Cheeseman
Sharon Cox (co-opted for the 2026 report)
Matthew Callister (co-opted for the 2026 report)
Martin Dockrell
Matthew Evison (co-opted for the 2026 report)
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Foreword

Professor Mumtaz Patel
RCP president

After more than a century of widespread cigarette smoking in the UK, and more than 70 years since the link between smoking and lung cancer was first made public, smoking remains the largest avoidable cause of premature death and disability in the UK.

Smoking is now recognised to be the result of a strong, yet entirely preventable addiction, shaped in large part by long-standing tobacco industry influence. This could be reversed with evidence-based health policy and the systematic treatment of tobacco addiction, which the Royal College of Physicians (RCP) has advocated for since the publication of its groundbreaking 1962 report *Smoking and health*.

While we have made considerable progress in reducing overall smoking prevalence in the UK, progress has not been equal. Beneath the surface is a stark divide, with big disparities between richer and poorer communities, people in professional occupations compared to those in manual work, and inequities linked to education, housing, area of residence and other factors. As a result, the burden of harm from smoking falls heavily on the least advantaged in our society. This not only affects their health and life expectancy, but also attainment, employment and opportunity. Smoking is now therefore an issue of social justice.

This RCP report sets out the marked variation in smoking prevalence in UK population groups, including the hidden populations largely excluded from national statistics. It explores the effects of wider determinants of health such as where people are born, live, work and the products they access and consume. The report makes recommendations to address the major disparities identified, including cross-governmental actions to reduce the visibility and affordability of tobacco products and the negative influence of the tobacco industry; expanding the scope of opt-out treatment interventions across healthcare and community settings; and strengthening regional tobacco control and accountability. If implemented, these recommendations will contribute to a reduction in tobacco-related health inequality and provide a substantial ‘smoke-free dividend’ in both health and wealth for our society.

To provide the best possible health and futures for the people we look after in our communities, we can and must do everything in our power to address the persistent blight of tobacco-related inequality to restore social justice.

Glossary of key terms and abbreviations

AI	artificial intelligence
APS	annual population survey
ASH	Action on Smoking and Health
AUDIT	Alcohol Use Disorders Identification Test
BAT	British American Tobacco
BTS	British Thoracic Society
CBPF	Cost Benefit and Public Finance Model of Smoking
commercial determinants of health (CDH)	The strategies and approaches used by the private sector to promote products and choices that impact health, such as those from the tobacco, alcohol, food, gambling, housing and energy industries, which can exacerbate health inequalities
CI	confidence interval
CLeaR	Challenge, Leadership and Results model
CMHC	common mental health condition
Core20PLUS5	An NHS England initiative focusing on reducing healthcare inequalities by targeting the 20% most deprived populations, additional minority and inclusion health groups, and five clinical priority areas: maternity, severe mental illness, chronic respiratory disease, early cancer diagnosis, and cardiovascular disease
CO	carbon monoxide
COPD	chronic obstructive pulmonary disease
COSTED	Cessation of Smoking Trial in the Emergency Department
CPIT	Cessation in Pregnancy Incentives Trial
CPRD	Clinical Practice Research Datalink
CRUK	Cancer Research UK
CSDH	Commission on Social Determinants of Health
DAG	directed acrylic graph
Dahlgren and Whitehead Model (Rainbow Model)	A conceptual framework illustrating how individual health is influenced by layers of factors, from personal behaviour and social networks to broader social, economic and environmental conditions
DHSC	Department of Health and Social Care
DSR	directly standardised rate
EASR	European age standardised rate
ED	emergency department
ELSA	English Longitudinal Study of Ageing
FCTC	Framework Convention on Tobacco Control (WHO)
FPN	fixed penalty notice
HBSC	Health Behaviour in School-aged Children study

harm reduction	Strategies aimed at minimising the negative health impacts of behaviours such as smoking, often through less harmful alternatives (eg e-cigarettes), particularly for those who face barriers to quitting entirely
HCP	healthcare professional
health inequalities	Systematic differences in health outcomes between different population groups, often driven by social, economic and structural factors rather than individual choices
HEAT	Health Equity Assessment Tool
HMRC	His Majesty's Revenue and Customs
HSE	Health Survey for England
HTP	heated tobacco product
hidden populations	Groups within society who are difficult to identify, reach or engage. These populations may not be represented in official statistics and can include people experiencing homelessness and those who are not accessing services
GVA	gross value added
IARC	International Agency for Research on Cancer
ICB	integrated care board
IHS	integrated household survey
IMD	Index of Multiple Deprivation
intersectionality	A term describing how individuals may experience overlapping and interacting forms of disadvantage (such as poverty, ethnicity, gender, housing status), which together influence their health and access to support
JSNA	Joint Strategic Needs Assessment
Marmot Places	Cities and regions in the UK that commit to applying principles derived from Professor Sir Michael Marmot's research on social determinants of health, aiming to reduce health inequalities through integrated, place-based strategies across sectors
MMC	mass media campaign
MSO	Minimum Service Offer
MUP	Minimum Unit Price
NCD	non-communicable disease
NCSCT	National Centre for Smoking Cessation and Training
NGO	non-governmental organisation
NICE	National Institute for Health and Care Excellence
NHS	National Health Service
NRT	nicotine replacement therapy
NS-SEC	National Statistics Socio-economic Classification
ODPS	On-Demand Programme Service
OHID	Office for Health Improvement and Disparities
ONS	Office for National Statistics
OPN	Opinions and Lifestyle Survey
OR	odds ratio
proportionate universalism	An approach where interventions are applied universally, but with a scale and intensity proportionate to the level of disadvantage, ensuring that those most in need receive the most support

social determinants of health (SDH)	The conditions in which people are born, grow, live, work and age, including factors such as economic stability, education, healthcare access, neighbourhood environment and social context. These determinants are shaped by broader political, social and economic systems and have a major impact on health outcomes
social gradient	The concept that health outcomes worsen as individuals or groups become more socially and economically disadvantaged, creating a graded relationship between social position and health
social grades	NRS social grades are a system of demographic classification used in the UK based on occupation of the main income earner in a household. ABC1: higher managerial, administrative or professional C2DE: skilled manual, semi-skilled and unskilled manual workers, pensioners and others who depend on the welfare state for their income
SEG	socio-economic group
SES	socio-economic status
SHS	second-hand smoke
SMC	social marketing campaign
SMI	severe mental illness
structural barriers	Systemic obstacles, such as poverty, inadequate housing, or underfunded services, that limit an individual's ability to access health-promoting resources and opportunities
systemic policy change	Large-scale, coordinated changes in laws, regulations or organisational practices designed to address root causes of social and health inequalities, rather than focusing only on individual behaviour change
TDT	tobacco dependence treatment
tobacco control spending	Funds allocated by government and health organisations to initiatives aimed at reducing tobacco use and its associated harms
VBA	Very Brief Advice
VBA+	Very Brief Advice (plus tailored approaches)
WIMD	Welsh Index of Multiple Deprivation
WHO	World Health Organization

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Introduction

1.1 Background

For centuries, tobacco consumption was the privilege of the wealthy, signifying status and attainment. As global trading in tobacco expanded, tobacco products were increasingly marketed and made attractive to the working classes such that, by the mid-20th century in the UK, most men smoked, and smoking prevalence had grown rapidly among women.[1]

The detrimental health effects of tobacco started to become known in the 1950s, leading to the introduction of tobacco control measures in the UK.[2] As a consequence, smoking prevalence began to fall, and this downward trend has continued for over half a century. However, the benefit from tobacco control measures has not been equally spread across the population, with large disparities in smoking prevalence visible between deprivation quintile and gender (Fig 1.1) and social groups (Fig 1.2), exacerbating poverty, poor health, employment and attainment.

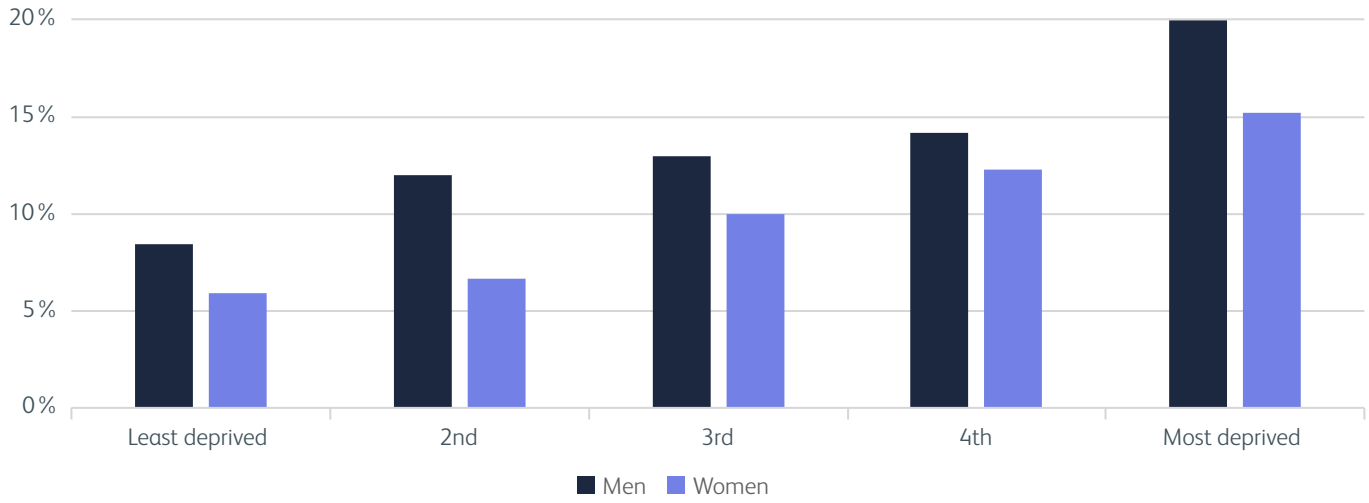

Fig 1.1. Proportion of adults (aged 16 and over) in England who smoke, by deprivation quintile and sex.[3]

Data source: Health Survey for England, 2024. NHS Digital, 2026.

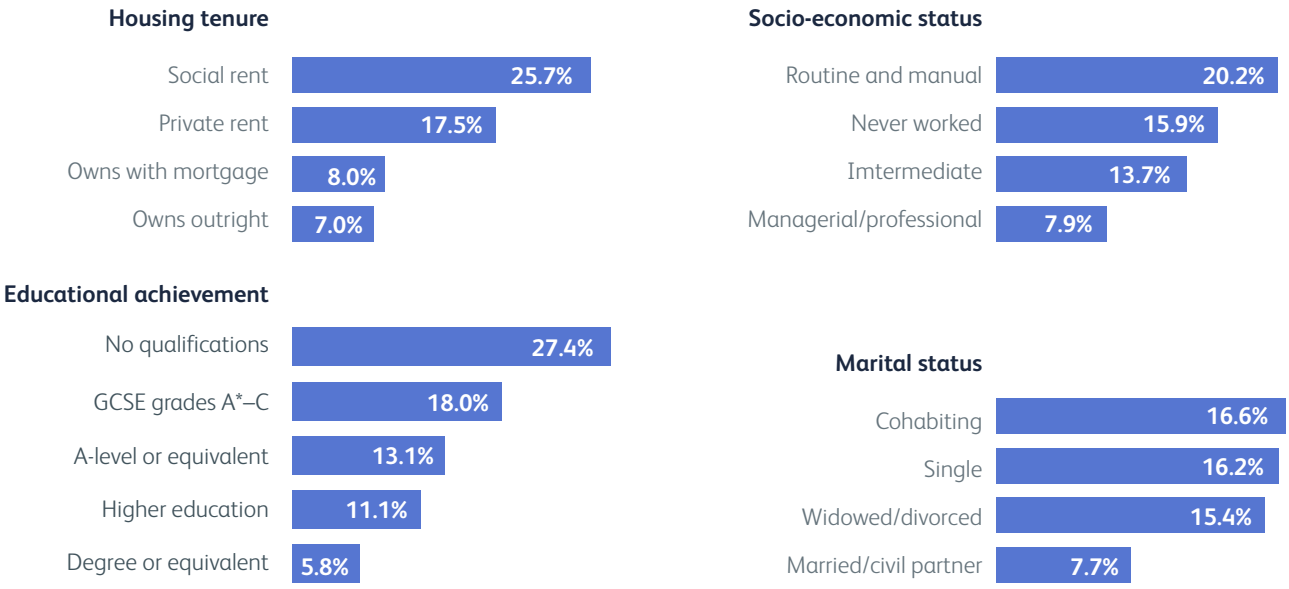

Fig 1.2. Characteristics of people who currently smoke cigarettes in the UK.[4]

Source: Statistics on smoking. House of Commons Library Research briefing 28 July 2025.

Smoking tobacco is the biggest cause of preventable illness and early death in the UK.[5] The Royal College of Physicians (RCP) has long advocated for measures to address this, as reflected in its vision to 'promote good health and lead the prevention of ill health across communities.'[6] In 1962, 56% of men and 42% of women smoked cigarettes, and smoking was already highly prevalent among the working classes. The RCP launched a ground-breaking report *Smoking and health*, which recommended the introduction of tobacco control policies to counteract the uptake and continued use of tobacco in the UK.[2] Subsequent reports such as *Passive smoking and children*[7] and *Smoking and mental health*[8] recommended further measures to support equity in these population groups. More recent RCP evidence reviews recommended opt-out models of care and harm reduction strategies that make tobacco dependency treatment more accessible to people who otherwise may not be provided with help.[9–11]

Although substantial progress has been made across the UK to reduce smoking prevalence across the population as a whole, a persistent disparity remains between the most and least advantaged quintiles of deprivation in all four nations of the UK (Fig 1.3).

The greater use of harmful products among less advantaged populations is not restricted to tobacco, with similar patterns observed with alcohol, gambling and unhealthy food consumption, suggesting entrenched conditions that perpetuate their use.[13–15] This unequal distribution of smoking and use of other harmful commodities among population groups has complex aetiology and may be explained in part by the distribution of opportunity, wealth and privilege across society. Often referred to as social justice, this distribution shapes the conditions in which people live and work and the behaviours and commodities to which they are exposed and consume.[16] Tobacco use and social justice are intertwined and it is likely that to reduce smoking-related disparity, tobacco control policies will need to influence institutions that include not only those responsible, but also those relating to other societal aspects such as social insurance, employment, housing and taxation.

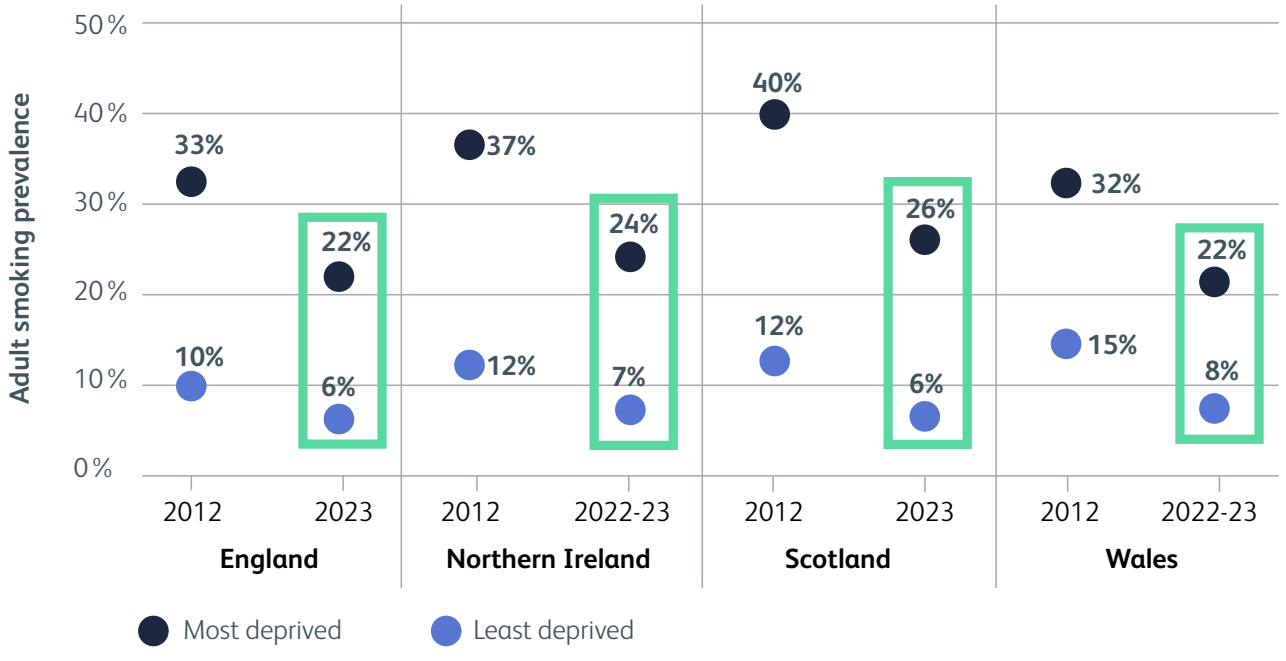

Fig 1.3. Trends in smoking prevalence in the UK by deprivation group.[12]

Adapted from Cancer Research UK. *Cancer in the UK 2025: Socioeconomic deprivation*. Published February 2025.

1.2 Objectives of this report

There is a pressing need to reduce the disparity in smoking-related health equity in our society. This report considers evidence-based interventions to accelerate the decline in smoking in the UK's least advantaged populations and communities. It reviews the interplay of the social and commercial determinants of health and considers how people live, work and consume to make policy recommendations for cross-governmental approaches to tobacco pricing, accessibility and appeal.

National datasets have been analysed to identify the people and populations that have the highest levels of smoking prevalence who would benefit the most from targeted cessation and harm reduction interventions, as well as models of service delivery that provide the greatest impact. This report considers the hidden population of people who smoke but are not captured in official statistics, exacerbating inequality. It suggests that survey data and treatment services can and should be improved. Additionally, the report highlights the poor data capture for users of waterpipe and smokeless tobacco, a population largely ignored by current policy measures. The financial benefit to society – the smoke-free dividend – that would be realised by eradicating smoking completely is also estimated.

With the national commitment to make smoking obsolete, the report makes recommendations for the additional steps required to achieve this ambition, by expanding opt-out treatment pathways across the NHS and community settings, maximising the use of harm reduction, and strengthening regional tobacco control, focusing our efforts on the people and populations with the greatest need.

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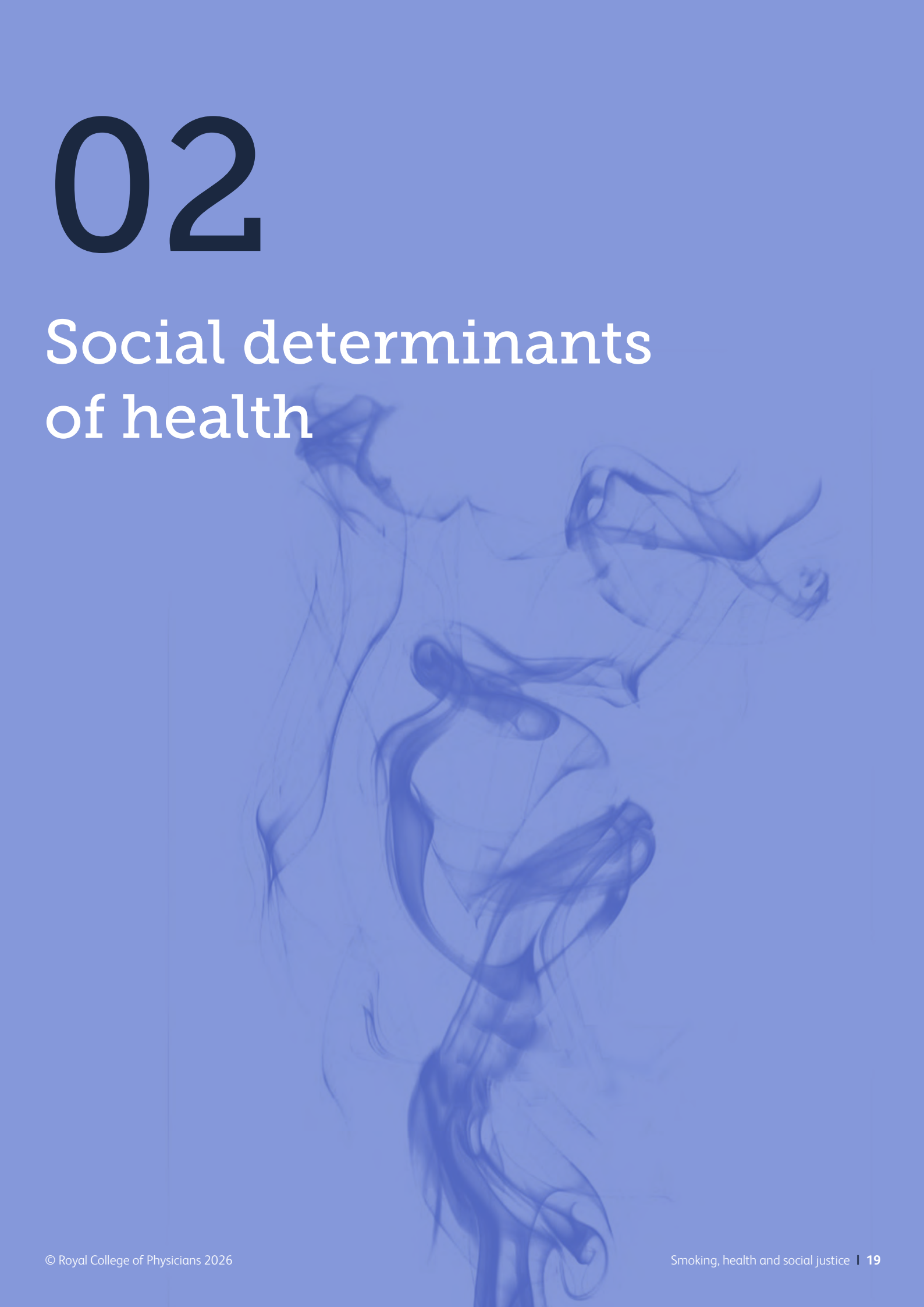
02

Social determinants of health



Smoking rates reach

40–80%

in vulnerable groups, compared with 10.6% in the general adult population

Smoking is shaped by social factors such as

poverty, housing and education

Smoking is a symptom of social and economic inequality – not an individual choice

Focusing only on individual behaviour will

not reduce

smoking inequalities

Smoking rates are often

highest

where disadvantage and stress accumulate

Key points

1 Smoking is strongly shaped by socio-economic disadvantage, life conditions and cumulative stressors.

2 When biological factors such as dependence combine with social factors such as income and shelter, managing tobacco addiction becomes challenging.

3 Health inequalities are rooted in structural and systemic forces, including poverty, inadequate housing, poor education and social exclusion; these are not factors of individual choice.

4 Poverty perpetuates and maintains stress; stress contributes to smoking behaviour, which in turn creates demand for smoking products. This is a vicious cycle, ensnaring those who may be least able to break free from it.

5 A stark social gradient exists in health outcomes, with smoking prevalence and health deterioration increasing with greater disadvantage – sometimes forming a 'cliff' rather than a slope.

6 Commercial determinants exacerbate the issue, with industries such as tobacco, housing, gambling, alcohol and food contributing to poverty and poor health, particularly among already disadvantaged groups.

7 Interventions that only target the behaviour of individuals have proven insufficient. Structural, social, commercial and environmental factors must be addressed to enable lasting change.

8 Frameworks such as the NHS Core20PLUS5 offer promise, focusing interventions towards the most disadvantaged groups and embedding equity into healthcare delivery.

9 Policy goals will not be met equitably unless the major determinants of smoking, such as social, economic and commercial influences, are tackled with coordinated, systemic action.

Recommendations

> Policymakers should take a cross-governmental approach to tobacco control, taking account of the wider determinants of health to prioritise policy changes targeting the underlying factors – poverty, housing, education and employment – that drive smoking behaviour.

> The government should prioritise sustainable funding for national and local tobacco control programmes, using the principles of proportionate universalism, ensuring access to high-quality treatment is provided for those with the greatest need.

> Tobacco harm reduction approaches should be adopted as an essential part of tobacco dependence treatment strategies, especially for populations facing multiple barriers to quitting.

2.1 Introduction

Smoking is a socially and structurally patterned behaviour, heavily influenced by poverty, stress, housing, education and systemic inequities, and exacerbated by physiological addiction. Modelling suggests that without targeted action, the least advantaged communities in the UK will continue to have a smoking prevalence of greater than 5% for at least the next quarter of a century. In contrast, national smoke-free targets across the UK aim for smoking prevalence under 5% within the next decade.[1]

This chapter explores the role of social determinants of health (SDH) on smoking behaviours and health inequalities. It argues that policies and commissioning must integrate all our knowledge about SDH, acknowledging that reducing smoking is critical not only to individual health but also to tackling broader health inequalities. It also highlights why a social justice lens is essential to consider this issue with regard to the distribution of power, resources and opportunities across different social groups.

2.2 Social determinants of health

SDH are the conditions in which people are born, grow, live, work and age[2] that influence health outcomes. There is now overwhelming evidence that poor health outcomes and illness are causally related to socio-economic conditions.[3–5] These determinants are commonly grouped into five domains: economic stability; education access and quality; healthcare access and quality; neighbourhood and the built and physical environment; and social and community context and culture, all of which are shaped by political systems. The 'causes of the causes', as they are known in the public health literature,[6] refer to the structural and systemic forces such as poverty, education inequality and labour market exclusion that give rise to the more immediate risk factors for poor health.

The World Health Organization (WHO) established a Commission on Social Determinants of Health (CSDH) in 2005[2,7] (Fig 2.1), explicitly recognising that health inequalities stem from broader systems and policies rather than being the result of individual choice. The CSDH framework maps out where change is most needed and, unlike other models, is a framework for action, which highlights where power inequalities lie and who could be responsible for change.

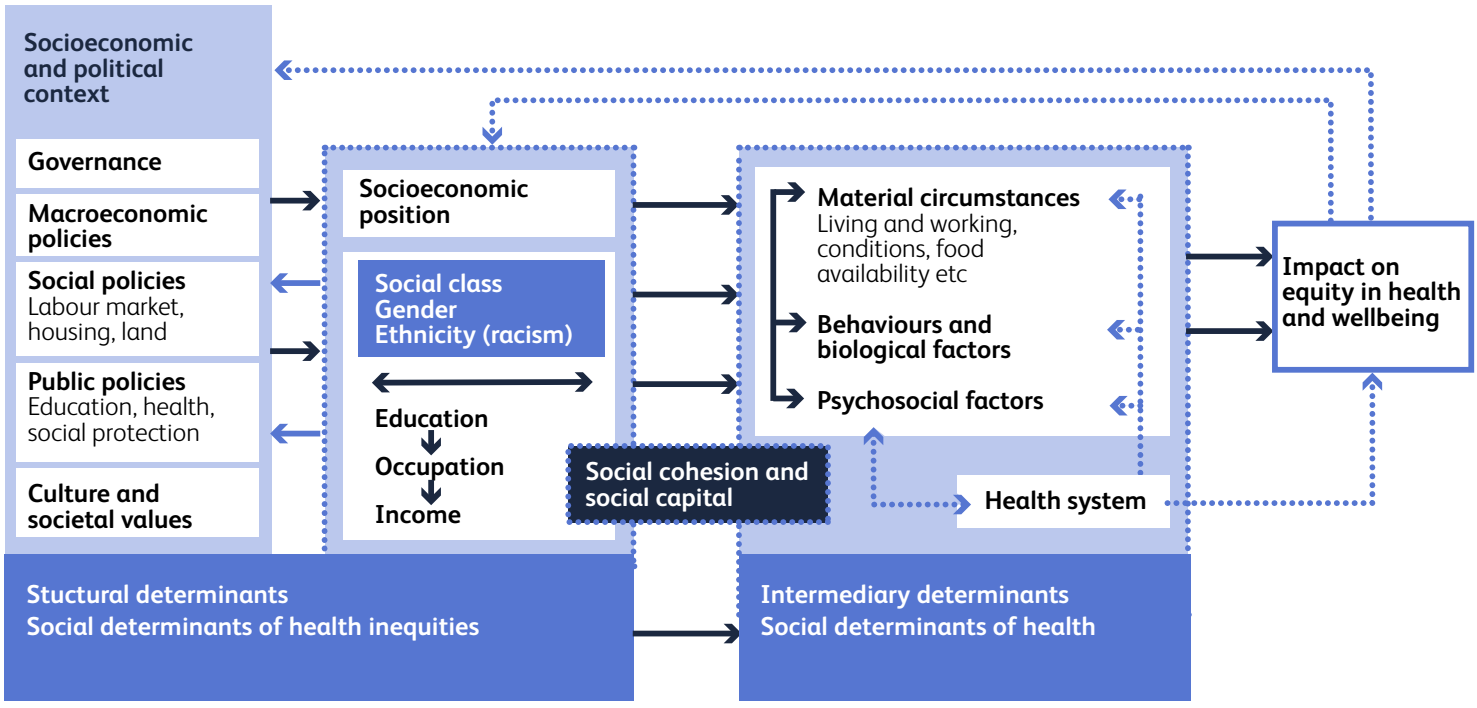


Fig 2.1. WHO Commission on Social Determinants of Health framework.

Adapted from WHO (2010)[2] under the CC BY 3.0 IGO licence.

Socio-economic status, both at birth and throughout life, remains the most powerful predictor of life expectancy and quality of life, and being born into advantage continues to be a predictor of a longer, healthier life.[5,7] The pathway to improved health is not equally accessible to all.[8,9] Social conditions such as family life, income, education and status influence health outcomes through exposure to differing social and health norms. For example, even as smoking becomes less common in society, being exposed to others who smoke, such as parents or peers, plays an important role in whether young people take up smoking.[10]

Smoking is to a large extent a socially-determined behaviour, often happening in a specific culture or context.[11–15] This has become even more evident in recent years as overall population smoking rates have declined, while remaining disproportionately high among groups marked by disadvantage.[12] While biological and commercial factors play a part as well, they cannot fully account for the stark social and cultural clustering seen in smoking prevalence. When biological factors such as dependence combine with social factors such as income and shelter, managing tobacco addiction becomes challenging. Many social determinants cause stress, which triggers cravings.[16]

Smoking can be considered a visual display of norms shaped by lived experiences and social position.[17,18] For many people in disadvantaged communities, smoking is interwoven with identity, a means of coping with stress, and can be an activity of social belonging.[19] Despite being entrenched in identity and community, smoking is a modifiable behaviour, and quitting can improve health, help people access employment and reduce poverty. It is important to emphasise that motivation to stop smoking is also high among people facing various types of disadvantage, but the likelihood of quitting is lower.[20] A lifecourse approach[21] further highlights how exposure to disadvantage during sensitive periods, such as early childhood or adolescence, can shape trajectories of smoking uptake and dependence. These cumulative exposures can entrench behaviours well before adult-level interventions begin; underscoring the need for preventative measures targeted at smoking initiation among young people[22] and sustained funding of tobacco control interventions in areas where people are poorer, as demonstrated by the north east regional tobacco control programme (see Chapter 4, section 4.4.1).

For many people, life conditions are precarious, and sudden changes in circumstances (eg loss of work, declining health, changes to housing or living conditions) can take people from an advantaged position into one of less advantage, leading to increased levels of stress and providing the conditions for relapsing into smoking.[23]

2.3 Conceptualising the social determinants of health: the Dahlgren and Whitehead model

While many models of social determinants of health exist,[17] the Dahlgren and Whitehead model (Fig 2.2) – often referred to as the 'Rainbow model' – has become the most widely-used conceptual framework for understanding the impact of health inequalities.[18,24] It serves as a visual tool to bridge complex academic insights and practical policymaking, facilitating communication between researchers and research users.[24]

The model's layered depiction of individual factors embedded within social, community and structural environments mirrors the reality of how poor health outcomes, including smoking, are socially patterned and maintained. It can also be used to illustrate the multiple entry points for intervention – from the importance of social capital and direct support within a community, through to systemic change. The model has been somewhat underutilised for smoking research in high-income countries, despite smoking behaviour being heavily influenced by the SDH.[24]

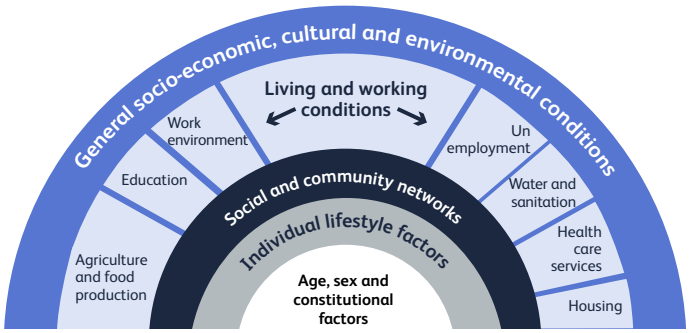


Fig 2.2. The Dahlgren and Whitehead Model of the social determinants of health.

Adapted from Dahlgren and Whitehead (2021)[18]

Though not originally featured in the Rainbow model, it is now widely recognised that commercial factors permeate and influence the multiple layers. In a smoking context, this would include the impact of the tobacco industry playbook, such as its marketing and pricing tactics.[25] The SDH interact heavily with these commercial determinants[24] but are also the result of social and environmental structures, and of political decisions. In essence, both social and commercial determinants of health (see Chapter 3) are the result of other people's behaviour and choices, which limit the ability of individuals to manage their own health and live healthier lives.[2]

There is a growing literature in low- and middle-income countries on how the SDH create and perpetuate smoking.[26] To a large extent it seems likely that supply follows demand, and that the SDH foster demand for products, which commercial interests exploit. These pathways are complex but it is likely that poverty perpetuates and maintains stress, while stress contributes to smoking behaviour, which in turn creates demand for smoking products that are believed to alleviate that stress. This is a vicious cycle, ensnaring those who are least able to break free from it.

When considering social justice, it is important to recognise the commercial determinants that keep people in a position of poverty are not only those from the tobacco industry, but also energy, housing, gambling, and the food and alcohol industries among others (Fig 2.3) (see also Chapter 3).[27] This diagram illustrates how poverty and culture directly shape demand, while commercial interests introduce bias by influencing both social conditions and people's preferences. It also highlights that SDH, such as how and where people live, can create the necessary conditions for poverty, and in turn stress that drives people to smoke, affecting demand for tobacco.

2.4 The social gradient and the 'cliff' in health outcomes

There is a social gradient in health outcomes, where outcomes worsen as people become more disadvantaged.[28] The relationship between increased disadvantage and poorer health is often described as a downward slope or curve. But for some groups, the disparity is more severe, resembling a cliff rather than a slope. For instance, differences in health outcomes between people experiencing homelessness and those with stable housing are particularly pronounced.[29]

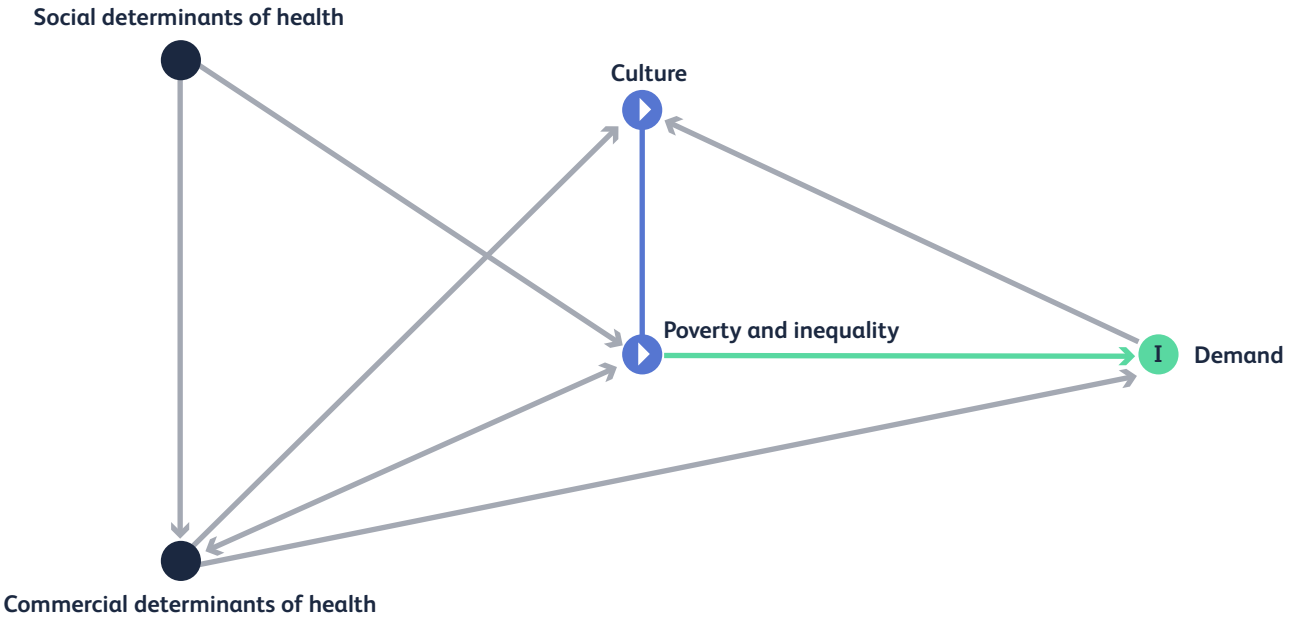


Fig 2.3. Inter-relationships between the social and commercial determinants of health, poverty and demand.

This directed acyclic graph (DAG) models the inter-relationships between the social and commercial determinants of health, poverty and demand. The green node represents the primary outcome (demand), the dark blue nodes represent the intermediate outcomes dependent on exposures (social determinants of health and commercial determinants of health), and the purple nodes with arrows denote the main exposures (culture, poverty and inequality). Green lines indicate causal pathways, while grey lines represent biasing pathways. The figure highlights one key causal pathway: a direct effect of poverty and inequality on demand. At the same time, the commercial determinants of health act as confounders, creating bias through multiple grey pathways by simultaneously influencing the exposures (culture, poverty and inequality) and the outcome (demand).

It is essential to consider other long-term health conditions, accumulating disadvantage and intersectionality as people occupy multiple social positions and may experience privilege in some areas (eg race, social class) while facing significant disadvantage in others (eg housing status, income, age). Individuals rarely experience a single aspect of disadvantage, such as only experiencing homelessness or having a mental illness; more commonly they face overlapping challenges, such as homelessness and mental illness, and will have additional gender, sexuality, race or ethnicity characteristics that may impede or prevent access to the support required.

It is increasingly difficult for some people to get the support they need and there are growing concerns that adult health and social care is not fit for the future.[30] In the UK, austerity and reduced health and social care funding, plus poor housing conditions, are repeatedly highlighted as fundamentally limiting people's ability to lead healthy lives, and disproportionately affecting the most disadvantaged.[30,31] While social mobility is possible, structural barriers mean that mobility remains an exceptional rather than expected outcome.[8,9] Economic conditions have deteriorated more recently, stalling people's ability to change their lives. The COVID pandemic and subsequent cost-of-living crisis have pushed those already struggling deeper into poverty. In-work poverty is a phenomenon of our time; more children are being born into deprivation, and food banks have become a necessary means of surviving economic insecurity for many.[31,32]

2.5 How can we take a social determinants-driven approach to tackling smoking?

If the UK and other nations such as New Zealand, Australia, Canada are to achieve their stated smoke-free ambitions equitably across all population groups,[36–39] they must go beyond addressing simple socio-economic indicators and consider the full range of intersecting disadvantages. An increasing number of observational studies are exploring multiple markers of disadvantage (see Chapter 4), while others are using alternative datasets to estimate smoking prevalence in populations often missed by traditional surveys (see section 4.2). Similarly, intervention studies are focusing on tailored support for disadvantaged groups (see section 4.7).

These are promising developments, but they are insufficient without systemic policy change with matched funding commitments that supports people to live healthier, smoke-free lives. Without a shift in approach, smoking is likely to become an even starker behavioural marker of inequality and poverty. A wider appreciation is needed from policymakers and commissioners that smoking is not always a reflective choice; automatic habits and behaviours dominate in high-stress environments. Interventions at individual level which rely on rational decision-making alone, that do not consider the broader stressors of people's lives (eg living in food poverty, living as a single parent, coping with benefit changes) will likely fail unless they address these unconscious drivers and offer tools to interrupt habitual patterns within high-stress environments.

There are several calls to action across government and health organisation literature,[31,40] each of which clearly states that reducing health inequalities is a public health priority, and in order to do this it is vital to make every professional contact count.[40] Some go further and highlight that smoking, at least *for some*, is causally related to health disparities because it takes money from people and their communities, and make direct calls to reduce smoking as a means of improving health equity.[41]

Core20PLUS5[42] (Fig 2.4) is an NHS England approach designed to reduce healthcare inequalities at both national and system levels by targeting the most disadvantaged and 'easy-to-ignore groups'[43] within the population, including minority and inclusion health groups, and by driving improvement across five priority clinical areas; maternity, severe mental illness, chronic respiratory disease, early cancer diagnosis and cardiovascular disease. The approach highlights the consistent influence of poverty – measured through the Indices of Multiple Deprivation – on outcomes in these clinical domains. In addition, smoking cessation is identified as a cross-cutting theme because of its positive impact across all five areas. Core20PLUS5 is a welcome initiative, primarily concentrating on improving access to and outcomes from healthcare services. However, it places less emphasis on upstream prevention strategies, which remain critical for addressing the root causes of health inequalities and the drivers of why people may smoke in the first place.

Another approach used in the UK is the Marmot Places initiative,[33] where cities and regions across the UK commit to embedding eight principles developed from Professor Sir Michael Marmot's research – such as addressing the key domains of SDH – into all local policies and governance strategies. These places aim to reduce health inequalities through integrated action across sectors such as housing, education, transport and employment, recognising that systemic, place-based interventions are crucial to addressing the root causes of ill health. Smoking is a particular focus within these strategies, with many prioritising cessation programmes. By strengthening community support, services can extend beyond traditional healthcare settings and incorporate cultural and social contexts where people who smoke are already engaged. For example, recent evidence indicates that offering cessation support within homeless services or emergency departments achieves high uptake.[34,35]

Interventions are necessary to tackle deep and long-standing health disparities. We cannot quickly or easily alter the socio-economic conditions of individuals on a large scale. However, we should consider how smoking cessation programmes are delivered to better meet the needs of those most affected and take an approach that is embedded across all the layers of the Dahlgren and Whitehead model (Fig 2.2). At a population level, people are choosing their own ways to quit smoking. E-cigarettes (vapes), other non-combustible products and medications are popular and being used by people across the social gradient. There is some evidence that these products are more effective for more disadvantaged groups.[44] For some groups, such as people experiencing homelessness, there is evidence of a rejection of traditional stop smoking support – or, in their words, 'medicalised' models.[45–47]

Certain groups of people are often labelled as 'hard to reach' or unmotivated, but evidence, including that presented in this report (see Chapter 4, section 4.3), challenges that assumption. If truly committed to a social determinants approach, national policies and targets must prioritise the most disadvantaged communities and be backed by funding for structural reform and community-based solutions across the healthcare sector. Addressing social determinants should not be seen as optional: it is essential for achieving equitable and lasting improvements in public health.

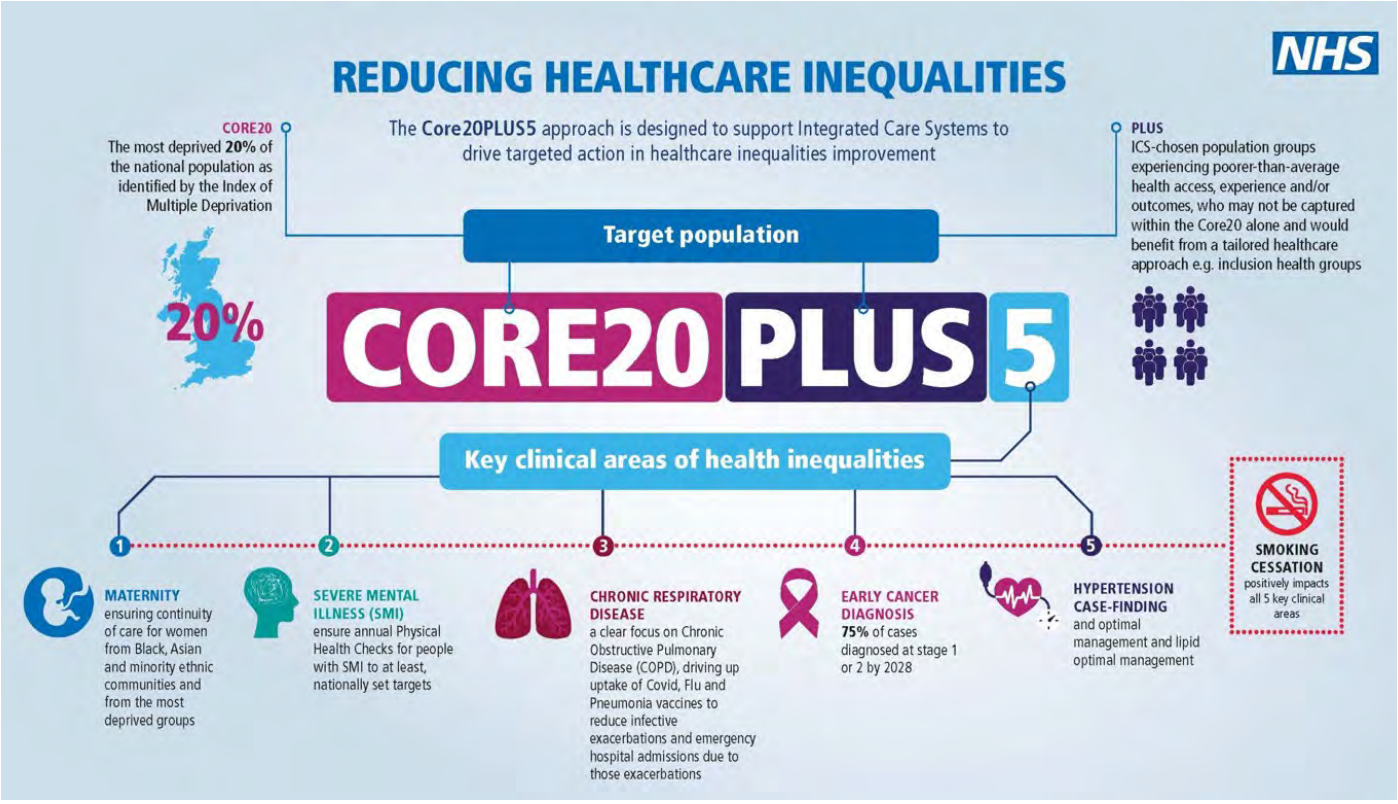


Fig 2.4. The NHS Core20PLUS5 approach to reducing health inequalities.[42]

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03

Commercial determinants of health

Tobacco industry pricing strategies

make tobacco less expensive for lower-income groups,

helping to maintain addiction

Analysis found that

84%

of tobacco-related posts on Instagram promoted sales and **47% were industry-sponsored**

Commercial forces shape tobacco exposure and drive inequalities

Marginalised communities

have been repeatedly targeted by the tobacco industry to sustain demand

A higher density of tobacco retailers is associated with a

20%

increase in the likelihood of young people ever smoking

Key points

1 The ways in which commercial sector actors, their products and practices impact on health and equity are known as the commercial determinants of health (CDH).

2 The commercial sector exerts a significant influence on the social determinants of health, such as where we live, the products we can access, the food we eat, and our working environments, including health, safety, stress at work and our earnings.

3 There is overwhelming evidence that some parts of the commercial sector have increasingly negative impacts on health and equity. It is estimated that at least a third of global deaths and 40% of deaths from non-communicable diseases (NCDs) are attributable to just four commercial products – tobacco, fossil fuels, ultra-processed food and alcohol.

4 Major corporations within particular industry sectors consistently use the same political, scientific and reputation management practices to create confusion over the harm associated with their products and oppose effective public health policies; tactics sometimes referred to as the 'industry playbook'.

5 The tobacco industry employs pricing strategies to both attract new customers and retain existing ones. The industry responds to price sensitivity in customers by offering tobacco at various price points, offering less expensive tobacco products to lower income consumers.

6 Pricing strategies, including segmentation, means that more affordable tobacco is most popular in more deprived areas, which likely contributes to continued smoking among low-income groups.

7 Tobacco availability follows a social gradient in the UK with more retailers in more disadvantaged communities. This pattern in tobacco retailing likely contributes to inequalities in smoking outcomes, behaviours and cessation.

8 Tobacco continues to be used in popular media (including social media) and promoted through TV programmes and movies on both terrestrial and streaming platforms. Certain subgroups of the population may be influenced more by such media.

9 Despite the increasing recognition of strategic similarities and links across health-harming industries, their comparable impacts on health, health inequalities and society, and commonalities across both drivers of consumption and effective policy interventions, efforts to develop coordinated approaches to tackling the commercial determinants of health have been limited.

Recommendations

- Policymakers should apply tax and wider regulatory measures to counteract industry pricing strategies. These might include a minimum excise tax and a minimum unit price (MUP) or industry levy for tobacco which will make it more difficult for the industry to supress the price of economy brands.
- Price-based interventions should be coupled with support to stop smoking, particularly among low-income groups, which requires sustained national and local funding for smoking cessation programmes.
- To reduce inequalities in smoking, place-based approaches to tobacco and commercial determinants of health should include limiting the availability of tobacco products by introducing licensing schemes to control the density and location of tobacco outlets.
- Interventions that aim to reduce the overall availability of tobacco should avoid inadvertently increasing the inequalities in availability that already exist by ensuring that measures are proportionate across communities.
- Policymakers should regulate tobacco imagery in online, social media and streaming services to match broadcast TV standards, particularly in content widely seen by children and young people.
- With media consumption habits shifting rapidly, it is increasingly important to research whether exposure to tobacco imagery on TV, streaming platforms and social media contributes to health inequalities.
- A coherent cross-government policy approach is needed to address cross-risk factors from high-risk consumption of tobacco, alcohol and unhealthy foods. Such an approach should manage interactions with commercial sector actors and address health inequalities through targeting the availability, accessibility and appeal of health-harming products, including managing conflicts of interest to mitigate undue influence.

3.1 Introduction

The conditions in which people are born, grow, live, work and age, including their income, education and status significantly influence their health outcomes.[1,2] These social determinants of health (SDH) have been shown to have a greater bearing on health than, for example, health services and genetic factors (see Chapter 2).[3] Recently, it has become clear that the commercial sector exerts a significant influence on SDH.[1,4] For example, commercial factors influence where we live – our housing, our high streets, and the products we can access, including the food we eat. They also influence where we work, affecting health, safety and stress at work and our earnings. These influences can, of course, be positive – some companies produce goods and services that improve health, create positive employment conditions and support local communities.[4] Unfortunately, however, some parts of the commercial sector, particularly the largest multi- and transnational corporations, are having increasingly negative impacts on health and equity.[4] At least a third of global deaths and 40% of deaths from non-communicable diseases (NCDs) are attributable to just four commercial products – tobacco, fossil fuels, ultra-processed food and alcohol.[4] The policies needed to reduce this disease burden are well known,[5] but are not being implemented[4,6] due to the power and political influence of the corporations selling those products, and the failure of successive governments to hold them to account.[4,7] This has contributed to major, interlinked crises – including the climate crisis, obesity and NCD epidemics, vulnerable health systems unable to meet population needs, insecurity, and rising inequity.[4]

Health inequities linked to the consumption of unhealthy commodities are reflected in subsequent health harms. As highlighted in all chapters in this report, tobacco use is a leading cause of health inequalities in the UK and responsible for about half the inequalities in life expectancy. Alcohol and ultra-processed food consumption may contribute further to these entrenched health inequalities.[8,9] Policy has however, for some time, focused on addressing individual behaviour , relying on people to respond to public health messages.[10] This approach does little to acknowledge the broader social and environmental drivers of behaviour, despite the fact that 'it is unlikely that the growing inequality in health behaviours can be addressed without tackling these social factors'.[11]

This chapter examines how the tobacco industry shapes and influences public health outcomes and related policy. It uses a commercial determinants of health perspective to focus on price, taxation and the places where people purchase, consume tobacco or are otherwise directly exposed to tobacco products, or in emerging virtual spaces through the medium of marketing. It then considers coordinated approaches to tackle the practices of the health-harming industries as a whole, recognising the need to act beyond product silos.

3.2 What are the commercial determinants of health?

The ways in which commercial sector actors, their products and practices impact on health and equity are known as the commercial determinants of health (CDH), defined recently in a *Lancet* series as 'The systems, practices and pathways through which commercial actors drive health and equity'.[4] Growing research and policy attention is now focused on health-harming industries, including tobacco, fossil fuel, unhealthy food and alcohol. There is increasing evidence that corporations in these industries engage in practices that are damaging to health.[4,7,12,13]

Major corporations within these four sectors consistently use the same political, scientific and reputation management practices[7,12,13] to create confusion over the harm associated with their products and oppose effective public health policies; tactics sometimes referred to as the 'industry playbook'.[8] Such efforts include using diversified product portfolios (low- or no-alcohol for the alcohol industry and e-cigarettes and nicotine products for the tobacco industry) as part of attempts to claim that they can be the solution to the problems they have created.[7]

A visual model of the commercial determinants of health and their contribution to health inequities is shown in Fig 3.1.[4] The model demonstrates how the commercial sector (top left) interacts with the determinants of the multi-layered health subsystem (bottom right). As with Dahlgren and Whitehead's work (see Chapter 2), the model suggests that an individual's health is influenced by structural factors beyond their control and ultimately leads to equity effects (level 6).

Commercial practices play a significant role in exacerbating inequality, both in behaviour and in income and wealth, highlighting the need to examine and address the ways in which business operations can perpetuate disparities. For example, average workers have seen pay stagnate and working conditions deteriorate, including through the growth in precarious working contracts, while executive pay has grown exponentially, increasing inequalities.[4,14] Tax avoidance by corporations and the very wealthy also play a key role in driving the growing inequalities in wealth. British American Tobacco and Imperial Brands, for example, paid almost no corporation tax over a 10-year period in the UK where they are headquartered.[3] The *Lancet* series drew attention to this system that underpins the CDH: that as corporations harm health, they do not meet the costs of that harm. Instead, they shift those costs to governments and to the public, thus reducing the resources available to address those harms. This then compounds the damage because governments have fewer resources with which to tackle the harms created.[4]

Practices of the industry that influence behaviour and in turn health harms operate across these different axes of inequality, including gender, income, age and ethnicity. Historical examples include the targeted marketing of tobacco to women,[15] LGBTQ+ communities[16,17] and Black communities.[18] In 1929, cigarettes were marketed as 'torches of freedom' in the New York Easter Sunday parade as a protest against women's inequality.[15]

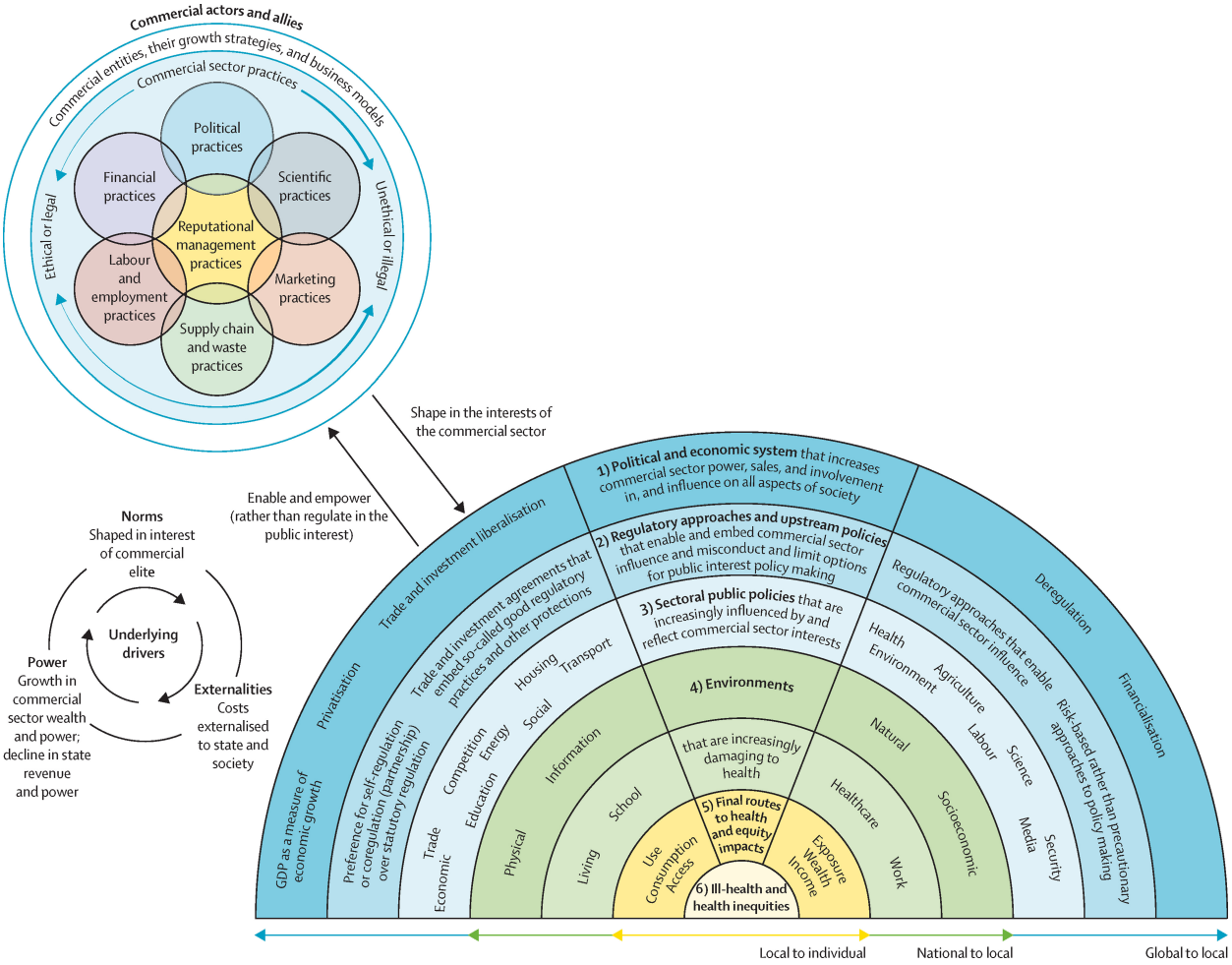

Fig 3.1. Model of the commercial determinants of health.

The black arrows signal the complex interactive nature of the system: the straight arrows show how commercial actors shape political and economic systems and are, in turn, shaped by them; the circular arrows represent the escalating harms to health that can occur if norms, power and externalities are left unchecked.

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Such targeting continues, for example, the use of Black Lives Matters and racial equity messaging by tobacco companies[19] and the exploitation of Pride Month in industry advertisement resulting in accusations of 'rainbow washing' in both the UK and Ireland.[20] British American Tobacco (BAT), through Nicoventures, launched a marketing campaign for VELO Unlimited Love nicotine pouches, explicitly linking the product to Pride celebrations. The adverts featured Pride flags and touted the limited edition VELO pouch as 'a celebration of the LGBTQIA+ community' sparking criticism that the company were targeting the community for commercial gain.[20] The marketing of both tobacco and novel nicotine products to specific communities today echoes the ways in which inequality itself has historically been used as a tool by the tobacco industry.

Such tactics are not confined to high-income countries, and the tobacco industry is also implicated in global health inequities through their increasing presence in low-income countries where the market is rapidly expanding.[21] This shift is not only altering the global disease burden but also deepening the health inequities between the Global North and South. The industry's strategies, such as aggressive point-of-sale promotions and advertising, deliberately target young people in these regions, aiming to recruit a new generation of tobacco users.[22] Further tactics include litigation, supporting misleading economic arguments, and the promotion of novel tobacco and nicotine products. Such approaches often exploit regulatory gaps and weaknesses in certain countries and underscore the industry's willingness to capitalise on loopholes and inadequate policies, further entrenching health inequalities worldwide.[21,23]

3.3 Tobacco prices and taxation

Price is a well-established factor influencing smoking behaviour, with most people who smoke – especially those on lower incomes – being highly sensitive to cost. In high-income countries, a 10% tax increase typically leads to a 4% drop in tobacco use.[24] The tobacco industry employs pricing strategies to both attract new customers and retain existing ones. These strategies include offering a variety of products at different price points. Additionally, they amplify the perceived significance in illicit tobacco in response to price increases to convince governments to limit tax increases.

The industry responds to price sensitivity in customers by offering tobacco at various price points in order to offer less expensive tobacco for the most price sensitive (eg the young or those in the least advantaged groups have been found to respond more strongly to price increases relative to the overall population) alongside more expensive 'premium' products that offer greater profit margins.[25–27] For instance, as of August 2025, the largest supermarket chain in the UK was selling 20 factory-made cigarettes for £12.40 for an economy brand (Richmond) rising to £18.80 for a premium brand (Silk Cut). Similarly, 30 g of fine cut tobacco for roll-your-own cigarettes (the smallest weight allowed to be sold) could be purchased for £21.50 for an economy brand (Riverstone) rising to £27.30 for a premium brand (American Spirit) (Source: Tesco website, accessed 13 August 2025).

Such price differentials are a response to increasing tobacco taxation. Tobacco taxation is widely regarded as being one of the most effective tobacco control measures available, as it raises costs to the tobacco industry, which are then passed on to consumers in the form of higher retail prices.[28] However, to undermine the impact of such tax increases, the industry has been found to use six key strategies, namely:

- shifting taxes between brands/products
- launching new brands/products as pathways for downtrading
- price discrimination and promotions (ie selling the same product at different prices)
- price smoothing to avoid sudden price jumps
- reducing the number of cigarettes per pack
- changing product attributes such as length/size of cigarettes or production processes to gain favourable tax treatment.[29]

The efficacy of government tax increases depends on how industry responds. Several UK studies have found varied levels of tax pass through, including under- and over-shifting of tax increases with tobacco companies absorbing the increase on less expensive brands and adding extra margins to more expensive brands to maintain or increase margins.[30] Tax increases can also create tax-induced substitution between products. For example, the UK has lower levels of taxation on fine cut tobacco for hand rolling cigarettes relative to those on factory-made cigarettes, which has encouraged a market shift towards the former as a less expensive product per cigarette smoked. A study that examined the trends

in sales of hand rolling tobacco found that users were typically younger, male, more addicted, deprived, spent less on smoking, and were less inclined to quit, than those who used factory-made cigarettes.[31] This is concerning, as tax-induced down-trading to an equally harmful product represents a missed opportunity to send a strong price-based signal to quit all combustion tobacco products.

Tax and wider regulatory measures can be created to address industry pricing strategies. For example, a minimum excise tax imposed where there is mixed tobacco duty would make it more difficult for the industry to supress the price of economy brands. A minimum unit price (MUP) for tobacco (mirroring that on alcohol in many countries) would prevent the industry from keeping the economy brands relatively affordable. Modelling the impact of a MUP of £0.60 per cigarette stick for tobacco in Scotland estimates that it would result in 16,327 fewer people who smoke, 285 fewer deaths, and 1,467 fewer hospital admissions while adding 6,792 life years by 2034.[32] Importantly, the health gains would be greatest in the most deprived areas. However, spending on tobacco among those who continue to smoke would also increase most in these areas because more people smoke and consume lower cost brands in deprived neighbourhoods.[32] Such a policy should therefore be connected with greater support, particularly in low-income populations, to help people quit and avoid the financial burden of these additional costs.

An alternative route to regulate the tobacco industry's ability to manipulate prices, is a 'polluter pays' levy scheme, that would constrain manufacturers' capacity to offset tax increases, by introducing a statutory cap on wholesale prices and applying an upstream levy to extract excessive profits. Modelling of such a price-cap levy for the UK suggests it could raise around £5bn over 5 years.[33]

While evidence suggests that price and tax interventions are effective, in attempts to influence tobacco pricing policy the tobacco industry regularly makes unsubstantiated claims that such tobacco control policies will lead to an increase in the illicit tobacco trade.[34] Such claims have been made regarding standardised packaging,[35] and most recently, in relation to the forthcoming Tobacco and Vapes Bill to introduce a generational tobacco ban.[36]

It is understandable why policymakers would be concerned about potential increases in the illicit tobacco trade. The practice exacerbates health inequalities, with the often-lower prices of illicit products (illicit tobacco is often 30% to 50% cheaper than legal tobacco but can be as much as 90% cheaper)[37] making them appealing to people on lower incomes and young people. Illicit tobacco contributes to inequalities both through a circulation of lower priced tobacco and from the government revenue lost from the practice.[38] This loss of revenue means there are less funds available to support public spending measures, which are most likely to benefit low-income groups.[39,40] Illicit tobacco trade can also fuel organised crime, which presents a host of additional challenges for society.[41]

However, industry claims that tobacco control policies will result in increased illicit tobacco trade are largely unsubstantiated. Taking tax increases as an example, the argument that they will lead to increased illicit tobacco trade does not align with numerous empirical analyses covering multiple countries (see Chapter 4, section 4.5.7). Countries with higher levels of tobacco taxation tend to have lower levels of illicit trade than countries with lower tobacco tax rates.[42] The UK is such an example, with HM Revenue and Customs data showing that, despite regular tobacco taxation increases throughout the time period, the consumption of illicit cigarettes decreased by almost 90% between 2000–01 and 2023–24.[43]

Despite this, the industry funds reports that tend to overestimate the illicit tobacco trade, as part of its efforts to attribute the problem to tobacco control policy.[44] Such reports are then disseminated via the media as part of industry dissemination efforts.[45]

Tobacco companies try to shape perceptions of the illicit tobacco market as part of a strategy to present themselves as the solution, even though multiple investigations and lawsuits have shown their involvement in facilitating the illicit trade.[46,47] Causes and drivers of the illicit tobacco trade are far more complex than the industry acknowledges. These include weaknesses in governance and regulatory frameworks, levels of corruption, enforcement capacity, geography/borders, informal distribution routes, and organised crime.[42]

Many governments around the world have had varying levels of engagement with the industry as part of efforts to address the illicit tobacco trade. Memorandums of understanding, for example, are commonly agreed between tobacco companies and governments, despite there being no evidence that any of the more than 100 such agreements identified in the last 20 years or so have reduced levels of illicit trade.[48]

Ultimately governments must follow best practice when it comes to setting and increasing tobacco taxes over time to encourage quitting and prevent tobacco use uptake. These best practices are outlined in the WHO Technical Manual on Tobacco Tax Policy and Administration and include:

a. packaging tax increases within a wider, comprehensive strategy to reduce tobacco use
b. involving competent authorities early when considering revisions to tax policy
c. promoting policy coherence across health sectors, and more.[49]

Taxation is only effective if users of tobacco products experience higher retail prices for their chosen products. A hugely profitable industry like tobacco manufacturing is able to use its resources to maintain the status quo.[50] Therefore, new policies around tobacco pricing are needed to enhance the effectiveness of tobacco taxation.

3.4 Place-based approaches to the commercial determinants of health: price, availability and new opportunities, including tobacco licensing

Alongside practices such as pricing, our physical and digital environments can shape, support or constrain individual behaviours, including tobacco consumption. Pricing, marketing and other practices also play out in place, making our environments a crucial determinant of behaviours and health. Recent policy approaches to reducing tobacco harms through a CDH framework have included addressing the place-based drivers of tobacco consumption. In many jurisdictions, progress has been made in key tobacco policy areas, including interventions restricting the marketing of tobacco products (eg the display of tobacco products in retailers) and in limiting where people can smoke (eg smoking bans in public places). Other place-based factors have, however, received limited policy attention, particularly those addressing the availability of tobacco products and the rapidly increasing prominence of the digital environment for marketing and 'influencing'. This section outlines how the price paid for tobacco is related to place and why the availability of tobacco in place is important. It also considers policy options to address the role of place in tobacco control.

3.4.1 Price and place

Tobacco pricing, shaped by national fiscal policies and taxation, has a disproportionately uneven impact on communities, exacerbating existing social and economic inequalities. The tobacco industry uses price segmentation, where products are sold at different price points, to keep cigarettes affordable for those on lower incomes.[51] A study analysing transaction data from small retailers in the UK between 2016 and 2021 found that the average purchase price of cigarettes across the price segments differed by £3.55, with the mean price in the lowest price segment (sub-value) being £9.73 compared with £13.28 in the premium category (Fig 3.2).[51] The importance of price segmentation is emphasised by comparing sales across areas of deprivation (Fig 3.3). The large price difference means that those in more deprived areas, often on lower incomes, are more likely to purchase tobacco from the sub value segments with the mean price paid for 20 sticks of cigarettes in the most deprived neighbourhoods £0.54 lower than in the least deprived (Fig 3.3).

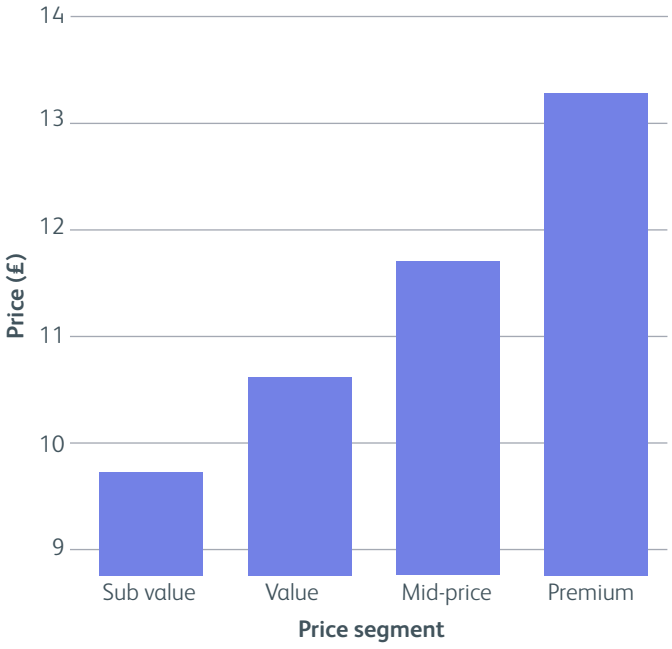

Fig 3.2. Average price paid for factory-made cigarettes across price segments in Great Britain 2016–21.

Figure generated using data from The Retail Data Partnership from Tunstall *et al*[51] under the CC BY 4.0 licence.

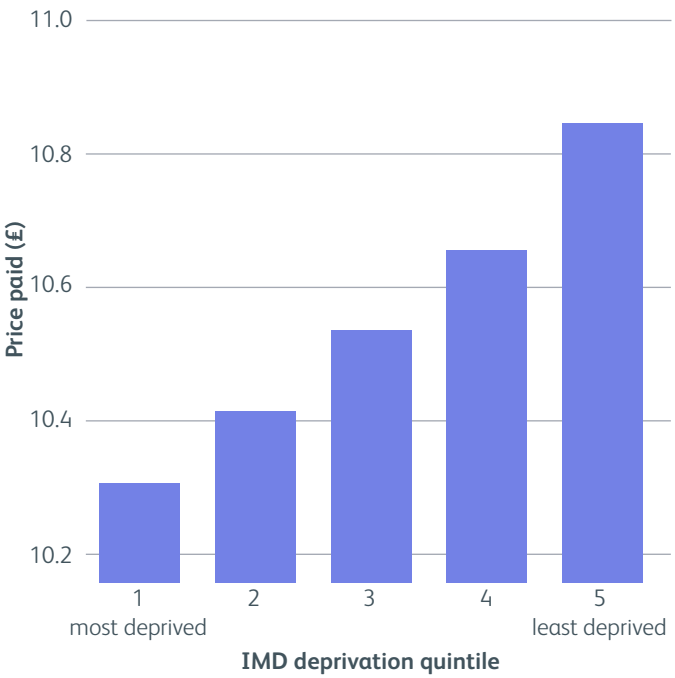

Fig 3.3. Average price paid for factory-made cigarettes across deprivation quintiles in Great Britain (2016–21).

Figure generated using data from The Retail Data Partnership from Tunstall *et al*[51] under the CC BY 4.0 licence.

These price-based inequalities underscore the critical role of pricing strategies used by the tobacco industry and how product segmentation can exacerbate health inequalities. The variation in price paid for tobacco across areas of deprivation is primarily explained by a greater proportion of purchases occurring within lower-priced segments in more deprived communities. The tobacco industry's practice of over-shifting tax increases onto premium products allows lower-priced segments to remain comparatively affordable, thereby sustaining tobacco consumption among those on low-incomes.[29] The study[51] also highlighted the increasing sales of hand rolling tobacco across all neighbourhood types and, given this shift, policy on price should consider the likelihood that people who smoke may shift to RYO products in response.

3.4.2 Availability and place

The physical availability of tobacco matters, as a higher density of tobacco retailers eases access to tobacco products, normalising smoking practices and potentially creating a competitive local market ensuring lower prices (or greater availability of lower segment products). While price paid differs by neighbourhood through purchasing patterns (as evidenced in section 3.4.1), tobacco availability also follows a social gradient in the UK with many more outlets in the most disadvantaged communities compared to the most affluent.[52,53] This social gradient in tobacco retailing likely contributes to inequalities in smoking outcomes, behaviours and cessation. What is less clear is the supply/demand effect in the relationship between availability and smoking prevalence (do retailers locate in areas with more people who smoke or does tobacco availability prompt smoking behaviour) with recent research finding evidence in support of both processes.[54]

A recent systematic review and meta-analysis, including 62 studies, found that higher tobacco retail density is consistently associated with smoking behaviour with a 20% increased likelihood of youth ever smoking, a 23% increased likelihood of current youth smoking and 11% increased likelihood of adult smoking.[55] To date there has been a reluctance among policymakers to tackle the supply of tobacco despite the plethora of evidence connecting availability with harm. Evidence of the supply/demand relationship supports supply side interventions but recognises a demand pathway, suggesting that such interventions should be coupled with those that address consumer demand (eg those related to price).[54]

Some jurisdictions have begun to address the retail supply of tobacco through measures including licensing, caps on retailer numbers, distance thresholds between retailers, buffer zones around child spaces, and restricting sales to specific types of outlets. In a global scan of retailing regulations, Canty *et al* (2025) concluded that although some jurisdictions have effective tobacco control plans, retail policy that addresses availability is underutilised.[56] Those with density reduction policies include caps on the number of tobacco retailers in areas (San Franciso, New York, Hungary), no retailers within a set distance of schools (San Franciso, Philadelphia, India), minimum distance between retailers (Italy, Spain, San Franciso), tobacco licensing systems (eg Finland) and the prohibition of sales in certain types of outlets (eg pharmacies in Canada). Few studies have explored the equity implications of these policies, but evidence shows that New York's cap on density in 2018 led to a reduction in the social and racial disparities in tobacco availability.[57] In Scotland, scenario modelling of stakeholder-selected tobacco retail reduction approaches showed that measures restricting tobacco sales to specific outlet types would have the greatest potential for retail reduction, but the reductions were often greater in more affluent areas, leading to greater socio-economic inequalities in availability.[58] Unsurprisingly, the one potential scenario that was designed with equity in mind would see the greatest reduction in availability inequalities, highlighting the need to consider the equity implications of these measures.

One promising policy option is a tobacco licence system that is used to enhance enforcement and compliance with regulations. Conditions attached to tobacco licences can also spatially restrict the sale of tobacco, for example not granting licences to retail outlets near schools. The proposed Tobacco and Vapes Bill includes provisions for a licensing regime in England, Wales and Northern Ireland and an extension of the current register in Scotland .[59] Introducing a licensing regime was advocated in the Khan review, with recommendations for conditions to be included such as prohibiting sales near schools, displaying stop smoking advice and implementing a tobacco licence fee.[60] Recent work in Scotland demonstrates that the impact of licensing fees on retail density will be subject to the type of scheme implemented, the fee level and the retailer's location.[61] Work outside the UK suggests that there may be a 'tipping point' with increasing licence fees encouraging retailers to end tobacco sales. Between 2015 and 2018, the tobacco licence fee in Tasmania more than tripled from $A360/year to $A1132/year per premise, with some retailers highlighting the licence fee as a driver of their decision to stop tobacco sales.[62]

Industry actors have – often successfully – sought to resist efforts to regulate availability. In December 2022, New Zealand was the first country to legislate to substantially reduce tobacco retail availability (from around 6,000 to 600 retailers). This bold move was held up as an example of public health leadership and showed that 'a courageous government can set public health policy on the premise that the tobacco industry will not be ever-present'.[63] However, these measures were repealed in February 2024 by the incoming government. This policy reversal raised concerns about the close involvement of the industry with legislative change.[64] It was found that arguments used by government ministers to justify repealing the policies in New Zealand were similar to unsubstantiated narratives prepared by tobacco industry actors, including that the introduction of the legislation would lead to the mass closures of small retailers.[65]

3.5 Media and online environments

As detailed in previous reports,[1] tobacco advertising continues to be a sophisticated and strategic activity using print, film, TV and online media environments. Tobacco promotion aims to promote smoking among new users (including young people), sustain smoking among those who currently smoke, and promote relapse to those who are trying to quit.[66]

Historically, regulations have been developed to prevent tobacco promotion in the media. These have included the 1964 Television Act, which prohibited cigarette advertising on television,[67] the 1990 Broadcasting Act,[68] which prohibited tobacco advertising on radio from 1991, and the 2002 Tobacco Advertising and Promotion Act,[69] which, over a period of 4 years, prohibited all forms of tobacco advertising other than at the point of sale.

Despite regulations, tobacco content remains visible in contemporary media. In films, there is a long tradition of the tobacco industry promoting smoking and its products through the inclusion of brands or smoking scenes.[67] Exposure to high levels of smoking imagery in films is associated with an increased likelihood of having ever smoked and of smoking uptake.[70] Previous reports have indicated how TV programmes can be similarly used by the tobacco industry to promote smoking by linking smoking and tobacco products to influential programmes.[67,71,72] We continue to see tobacco content in TV programmes, such as reality TV and soap operas. While the amount of tobacco content does appear to be reducing over time it remains visible, and likely still influences viewers.[71,73,74] Inequalities exist in exposure to tobacco content on TV – in a 2022 study of US adults, non-Hispanic Black or African American respondents, Hispanic respondents, those with lower educational attainment, those on lower incomes and those who already smoked were more likely to be exposed to tobacco content on television.[75]

Under the independent regulator, Ofcom, guidelines recommend that tobacco content should not be glamourised but may be included in a programme on the grounds of 'editorial justification'.[76] As streaming services become more popular, evidence suggests that the amount of tobacco content shown on these services may be higher than on linear TV,[77,78] despite self-regulated pledges to show less content.[2] As with television, differences exist in who is more likely to be exposed to tobacco content through streaming services.[75] A review in Germany found that all streaming services included smoking in programme episodes rated for youth, and that none of the services reviewed met the recommendations of the WHO Framework Convention on Tobacco Control (FCTC).[79]

Streaming services by their very nature are global and the regulation of such services is made complex with specific regulatory requirements within and between countries. Services have historically been regulated by the country in which their headquarters are based. For example, Netflix's European headquarters were based

in Amsterdam so it was regulated by the European Audiovisual Media Services Directive, which differs from UK-regulated services such as Amazon Prime. Such jurisdictional differences lead to issues around regulation,[77] which could result in differences in the amount of content being shown and the amount people are exposed to. In 2022, Ofcom introduced regulation for on-demand programme services (ODPS). Rule 13 states that: 'An ODPS or a programme included in an on-demand programme service must not be sponsored for the purpose of promoting cigarettes or other tobacco products; or by an undertaking whose principal activity is the manufacture or sale of cigarettes or other tobacco products'. Rule 14 indicates that product placement is prohibited in ODPS if it is of cigarettes or other tobacco products, or it is by or on behalf of an undertaking whose principal activity is the manufacture or sale of cigarettes or other tobacco products.[80]

However, as has been previously noted in relation to alcohol,[3] these rules on tobacco content in on-demand programme services are different from those for broadcast TV footage. The Ofcom Broadcasting Code states that smoking must not be featured in programmes made primarily for children unless there is strong editorial justification; must generally be avoided and in any case must not be condoned, encouraged or glamourised in other programmes broadcast before the watershed or when content is likely to be accessed by children unless there is editorial justification and must not be condoned, encouraged or glamourised in other programmes likely to be widely seen, heard or accessed by under-eighteens unless there is editorial justification. The guidance for on-demand programme services states that service providers must take appropriate measures to ensure that any specially restricted material is made available by the service in a manner which secures that persons under the age of 18 will not normally see or hear it.[81] However, tobacco depictions are not specifically mentioned, potentially leading to greater regulation of tobacco content on UK broadcast TV than on-demand programme services such as Netflix, Disney+ and Amazon Prime. Some recent programmes on streaming platforms show tobacco as consistently as programmes from the 1990s; for example 'And Just Like That', the follow up to 'Sex and the City', which was known for linking smoking to sexuality and female empowerment, still regularly shows tobacco content, despite the 18-year gap between the two series and the declining smoking rates in that time.[82]

Media consumption habits are changing, and young people are consuming more internet and social media content. Exposure to tobacco-related content online appears to have a similar effect to traditional media, with increased smoking and attitudes around smoking following exposure to content on social media, including industry-related branded content and viewing peers smoking online.[83] In this study, exposure was high on social media with 83.2% reported witnessing individuals smoking, 61.6% observing identifiable logos or explicit advertisements, and 77.6% encountering indirect product placement on social media.[83]

Furthermore, in a prospective study, young people with no prior tobacco use but whose families used social media were 67% more likely to start using tobacco within a year later compared to baseline rates. Those who followed tobacco-branded content on social media also had higher risks of using multiple tobacco products at a 1-year follow up .[84] This suggests that young people may be exposed to branded and influencer-based tobacco content through social media and this likely has an effect on tobacco initiation. It is becoming increasingly apparent that social media are a platform that tobacco companies can use to promote their products. A content analysis of 217 nicotine or tobacco-related branded posts on Instagram between July 2022 and March 2023 found that 84% promoted the sale of tobacco products, and almost half (47%) were sponsored by tobacco industry accounts, despite Meta having a self-regulatory policy of prohibiting tobacco product promotion.[85] Similarly, the industry may use social media accounts to promote new tobacco products, for example, Philip Morris' IQOS was heavily promoted through country-specific social media accounts.[86]

The tobacco industry is aware of these changes in viewing habits and there is evidence that influencers are being paid to promote tobacco products online.[87] The UK's new Online Safety Act empowers the independent regulator Ofcom to regulate illegal content online.[88] However, this only focuses on illegal content, and the regulatory codes do not cover tobacco promotion or content. Instead, internet-based and social media sites rely on self-regulatory procedures, which differ in their approach. While most prohibit paid advertising for tobacco products, the majority do not cover sponsored content or influencer marketing.[89] The internet and social media will likely continue to be used by the tobacco industry to promote tobacco products, and young people will continue to be exposed to tobacco promotion content in online spaces. Social media can also be used to disseminate misinformation about tobacco products. Due its algorithmic nature, social media can create disparities in content exposure. Research on social

media algorithms suggests that inequalities in targeted advertising may exist along gender and racial lines.[90] Some evidence exists toward sexual orientation health inequalities, with the LGBTQ+ community being more likely to be exposed to, and interact with tobacco-related messaging on new and social media platforms.[4] Evidence from the USA has reported that non-Hispanic Black and non-Hispanic Asian young people were more likely to report exposure to e-cigarette advertisements through television and online/social media channels compared with non-Hispanic White young people.[91] Smoking imagery among celebrities on social media has been found to particularly target young women with themes related to glamour and high fashion.[92] More research is needed to determine the extent of these inequalities in tobacco advertisements, and a gap exists in our knowledge of any socio-economic inequalities in this area.[5]

Across different forms of media, there are differences in exposure to pro- and anti-tobacco messaging. Evidence suggests that young men who currently smoke are more likely to be exposed to pro-tobacco content,[6,93] while people from ethnic minority backgrounds and those who are least advantaged are more likely to recall exposure to tobacco marketing across a range of media.[7] The current regulatory challenges in the UK across media forms mean that we will continue to see tobacco content, with disparities in exposure to such content expected to continue.

3.6 Towards coherent strategies to tackle commercial determinants of health?

Despite the increasing recognition of strategic similarities and links across health-harming industries, their comparable impacts on health, health inequalities and society, and commonalities across both drivers of consumption and effective policy interventions, efforts to develop coordinated approaches to tackling the commercial determinants of health have been limited. Successive UK governments have long adopted strikingly incoherent and even contradictory approaches to regulating the impacts of health-harming industries,[94,95] in spite of the similar pattern of impacts on health inequalities, for example, in the context of alcohol and smoking-related death rates.[96] Efforts to reduce tobacco consumption, buttressed by commitments under the WHO Framework Convention on Tobacco Control (FCTC),[97] have been broadly characterised by ambitious legislative measures such as comprehensive bans on advertising and promotion, point of sale restrictions, smoke-free public places and a rejection of voluntary regulation and corporate social responsibility initiatives as ineffective and illegitimate.

In contrast, national and international efforts to mitigate harms caused by other industries have largely operated within the confines of commitments to partnership and multistakeholder collaboration,[98] with interventions often limited to those voluntarily agreed by alcohol and ultra-processed food companies. Such approaches are epitomised by the Public Health Responsibility Deal,[99,100] the failure of which has not deterred successive governments from continuing reliance on voluntarism and corporate social responsibility. Rather than curbing the producers of health-harming commodities as drivers of industrial epidemics and health inequalities, governments have (with the notable exception of tobacco) instead often circumscribed public health interventions within broader commitments to promoting their interests. The overseas expansion of the alcohol industry has long been actively promoted in trade,[101] including in the new trade agreement with India.[102,103] In the government's 10 Year Health Plan for England, modest action on labelling is introduced alongside a wish 'to support innovation in new product categories and support businesses that sell them to thrive'.[104] UK governments have also consistently promoted the interests of the gambling industry via the establishment and maintenance of an exceptionally liberal commercial and regulatory environment that privileges economic growth over action to tackle inequalities,[105] with Labour's election manifesto committing to 'continue to work with the industry on how to ensure responsible gambling'.[106]

Alongside major research initiatives intended to address health inequalities via a focus on commercial determinants of health, including the UK Prevention Research Partnership SPECTRUM[107] and the Population Health Improvement UK's Local Health Global Profits consortia,[108] civil society organisations have been leading the way in developing collaborative approaches to enhancing prevention across industries and risk factors. Leading non-governmental organisations (NGOs) are increasingly calling for the adoption of a coherent policy approach to tackle the inequitable impacts of alcohol, tobacco and food industries, enabling a cross-government approach to prevention that could both generate substantial revenue and target the availability, accessibility, and appeal of health-harming products.[109,110]

Such calls centre on the application of lessons from tobacco control and are underpinned by a core focus on the prevention and management of conflict of interest

with health-harming industries and the rejection of collaborative, voluntary or partnership approaches to public health policy.[109,110] Analytically, this indicates the centrality of managing conflict of interest as underpinning efforts to strengthen the governance of commercial determinants of health across political, financial, reputational management and scientific domains.[111] Experientially and empirically, this reflects the established importance of efforts to minimise tobacco industry influence over public policy, and particularly the significance attached to the commitment in Article 5.3 of the WHO FCTC and its implementation guidelines to protect the making of health policy from tobacco industry interference.[112] Notwithstanding challenges in promoting their effective implementation,[113] calls for the adoption of comparable measures to strengthen health governance have become central to the demands of advocates seeking to counter the impacts of alcohol, unhealthy food and infant formula industries.[112] At international level civil society actors have similarly called for lessons from the FCTC to be applied to circumscribe the ability of fossil fuel and petrochemical industries to thwart progress on climate change and plastics treaty negotiations.[114,115]

Importantly, in the context of action to tackle the CDH, the broader adoption of tobacco control principles and practices around managing conflict of interest has become a key enabler of new forms of collaboration and coordination across NCD risk factors. In Scotland, the adoption of a conflict-of-interest policy extending Article 5.3 principles across health-harming industries was central to the establishment of a cross-party group on Improving Scotland's Health in the Scottish parliament to promote coherent action on population health capable of tacking inequalities. This collaboration across leading health charities has subsequently been extended via the establishment of NCD Alliance Scotland, whose efforts to increase collective impact on policy debates have included the innovative adoption of a joint manifesto ahead of elections calling for coordinated action to tackle inequitable burdens of tobacco, alcohol and obesity, agreed policy recommendations,[95] and the adoption of a shared 10-year strategy for tackling the commercial determinants of health, in which efforts to strengthen governance by tackling conflict of interest are foundational across all actions.[109] Considering the structural power of such commercial actors in such contexts, that often facilitates access and influence across diverse government departments focused on business, sport, arts or culture, tools to mitigate such influence are necessary to counter power asymmetries and support communities they disproportionately impact upon.

Action on Smoking and Health, the Obesity Health Alliance and Alcohol Health Alliance have pursued a similar collaboration, publishing a joint report in 2023 on the policy incoherence across harmful commodities and the opportunities for health and the economy of taking a more coherent approach.[110] This work has since been enhanced through further joint projects including a series highlighting the shared 'killer tactics' of these industries and calling on government to limit their influence over policy.[116,117]

The strategic significance of minimising industry influence is similarly driving innovative action to tackle CDH across diverse policy and scientific contexts. The Association of Directors of Public Health, for example, has produced a 'Good governance toolkit' intended to support local authorities in managing their interactions with commercial sector actors and minimise risks to public health, producing materials centred on the development of consistent and transparent practices that protect organisations from conflict of interest and undue industry influence.[118] The Faculty of Public Health has similarly adopted a policy framework to ensure that interactions with commercial actors are evidence based and aligned with public health values. This framework seeks to more broadly apply lessons from Article 5.3 implementation.[119] Community advocates in Ireland have led the development of the i-Mark toolkit to empower communities and build organisations free from the influence of the alcohol industry, extended campaigning beyond their core focus on alcohol to remove gambling-industry funded education material from schools, and launched an i-Mark declaration for academics and researchers to support scientific freedom from alcohol industry influence.[120] And in seeking to strengthen health governance for an incoming UK government, the Institute of Alcohol Studies undertook a consultation exercise to develop guidance for identifying, managing and protecting against conflicts of interest arising from alcohol industry involvement in the making of public health policy.[121]

The ongoing reluctance of governments and policymakers to challenge the dominance of partnership approaches to collaboration with health-harming industries beyond tobacco is not only inconsistent with the extensive evidence regarding their ineffectiveness[99,122] but also suggests a political timidity that is hard to reconcile with evidence of public support for approaches to health governance capable of tackling commercial determinants. Amid broad public backing for ambitious actions to curb the impacts of alcohol, tobacco and unhealthy foods, the Action on Smoking and Health

(ASH) Smokefree GB Survey 2023 identified particularly strong backing for measures that would protect health policy from industry influence; 75% supported such protection from tobacco industry interference, with similar support in relation to alcohol (70%) and for manufacturers of unhealthy food and drinks (68%).[110]

Public recognition of the appropriateness of an approach to health governance that recognises conflict of interest is also consistent with evidence from participatory research conducted via a citizen's jury in Glasgow in 2024 to explore perspectives on what government should do to tackle harms associated with these industries.[123] Across the process there was a notable decline in the proportion of jury members agreeing that government should partner with these industries to develop collaborative approaches to reducing health and social impacts. At the start of the first workshop, a majority of respondents strongly agreed or agreed that government should partner with each of the alcohol, tobacco and unhealthy food industries (70%, 68% and 70% respectively). At the end of workshop two, the proportion that strongly agreed or agreed with this position had fallen across all three (to 38%, 34% and 44%). Conversely there were strikingly high levels of support for the contrasting claim that all government health policy should be protected from industry influence. By the end of a second workshop, the proportion of jurors strongly agreeing or agreeing with such protections reached near unanimity, with 91% agreeing for tobacco, 85% for alcohol and 75% for unhealthy foods (with no strong disagreement for any of the three industries: no disagreement for tobacco, and only 3% disagreeing for alcohol and unhealthy foods).[123]

3.7 Conclusion

This chapter has used the commercial determinants of health framework to consider how various industry practices are related to smoking behaviours, harms and inequalities. While many of these practices operate at a global or international scale, they have implications for the health and wellbeing of populations in our communities and neighbourhoods. The CDH and the SDH are closely intertwined; however, the CDH are often missing from policy efforts to address the wider determinants of health and health inequalities. This omission is deeply problematic as it serves to 'obscure commercial sector responsibility for, and contributions to, health inequalities and population harms, and unhelpfully deflect attention to other social determinants'.[124]

This chapter seeks to connect the CDH and health inequalities and in so doing has considered industry practices related to price, place and digital spaces. Other practices, including reputational management and labour market practices, also contribute towards the inequalities in current smoking. Some of these corporate practices, including those discussed in this chapter, drive inequalities by creating the conditions underpinning the social distribution of smoking behaviours. Increasingly, these inequalities are becoming more apparent between high- and low- to middle-income countries. Economic growth and underlying profit motives are often prioritised over public health. A CDH framework can help us to reframe our focus and attention and to shift public consciousness on the underlying drivers of societal inequality.

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04

Trends

People experiencing homelessness are

4–7 times

more likely to smoke

Smoking rates vary by place –

20% in Blackpool

and just

4% in Woking

People with substance use disorders or who drink harmful levels of alcohol have among the

highest rates of tobacco smoking

Smoking rates have fallen but persistent gaps remain between the least and most advantaged groups

Smoking prevalence in prisons remains around

70–80%

Over

1 million

people who smoke are missing from official data

Key points

1 Inequalities often result from structural factors beyond the control of affected communities. For marginalised groups, systemic issues such as poverty, unstable housing, limited access to education and employment, and entrenched discrimination create significant barriers to health, leading to disproportionately high burdens of illness, including elevated tobacco use.

2 The UK benefits from a wide range of datasets, including population surveys, administrative and clinical records, and market data. However, each of these sources covers different geographies, smoking behaviours and inequality indicators. This fragmentation makes it difficult to build a consistent, equity-focused picture.

3 National averages obscure profound disparities in smoking prevalence, consumption, quitting and harm. Groups experiencing the highest burden, such as those with mental illness, people in prison, those experiencing homelessness and certain ethnic minorities, are often absent from or underrepresented in national data.

4 When prevalence data are disaggregated by age, gender, ethnicity, socio-economic status, health status and other characteristics, they become a powerful tool for planning how best to reduce health inequalities. Such granularity enables interventions to be targeted to the most disadvantaged groups and ensures that tobacco control strategies address inequity as well as overall prevalence.

5 There is an estimated 'hidden population' of 1.9 million adults in England who have a smoking prevalence between 58% and 66%, representing over 1 million additional people who smoke, skewing official UK prevalence estimates. People in this hidden population do not live in conventional private households and are therefore systematically excluded or severely underrepresented by standard household surveys because they lack a stable, trackable address within the sampling frame.

6 To achieve progress in reducing smoking-related health inequalities, monitoring systems must evolve. Embedding intersectionality, oversampling disadvantaged groups, linking administrative datasets, and adopting innovations in data collection and communication will ensure that tobacco control is guided by evidence that reflects the true distribution of harm.

7 National and regional differences in smoking prevalence across the UK have narrowed significantly over the past decade, but the gaps in smoking prevalence between the most and least advantaged areas remain, and result in higher rates of smoking-related ill health and mortality in the most deprived areas of the UK.

8 Economic inactivity due to long-term ill health or disability affects one in nine working-age adults in England who smoke. The increase in economically inactive people who smoke has occurred despite declining smoking prevalence. Reversing this trend would likely improve individual wellbeing, labour market inclusion and national productivity.

9 Smoking prevalence varies by protected characteristics. People who smoke cigarettes are more likely to be younger adults, single or divorced, male or non-binary, bisexual or LGBTQ+, mixed ethnicity, White or from Gypsy/Traveller communities, or have physical disabilities or mental health conditions. Other features associated with higher smoking prevalence include living in social housing, working in routine or manual occupations, and lower educational attainment.

10 Smoking prevalence is 4–7 times higher in people experiencing homelessness, especially among younger people. Many face overlapping challenges, including mental illness, substance use, and involvement with the criminal justice system, yet often express an interest in reducing or quitting smoking. Logistical barriers to attending cessation programmes, the cost of nicotine replacement therapy or e-cigarettes and being surrounded by others who smoke, including staff, often makes quitting even more difficult.

11 People in prison are disproportionately drawn from one or more overlapping disadvantaged groups in society, and as a result, smoking prevalence in this population is around 70–80% across the UK. Between 2015–18, complete smoke-free prison policies were introduced across all prisons in Wales and Scotland and the vast majority of prisons in England. Open prisons in England still permit tobacco smoking under a partial smoke-free policy, and the vast majority of people who previously smoked return to tobacco on the move from closed (completely smoke-free) to open (partially smoke-free) prisons.

12 Specific, comprehensive UK-wide data on smoking prevalence among asylum seekers are scarce, though proxy data on broader migrant populations from the Migration Observatory suggest that smoking prevalence in men born outside the UK is 50% greater than in those born in the UK. This figure is likely to be an underestimate.

13 Limited data on waterpipe and smokeless tobacco (two of the most common forms of non-cigarette tobacco use) and a neglect in policy and practice in the UK have led to widening inequalities between specific minority ethnic groups and the general population in the UK, particularly impacting younger age groups and women.

14 People who misuse drugs or alcohol have among the highest rates of tobacco smoking in the population, with the negative health impact of co-use being multiplicative rather than additive. Due to the immediate harms of drug or alcohol misuse being more acute, tobacco use is frequently not addressed, despite both causing a similar number of premature deaths as in people who use heroin. Co-use of drugs and alcohol creates additional barriers to smoking cessation due to substance co-dependency, and insufficient training and confidence among smoking cessation advisers.

15 The illicit tobacco market continues to be a significant barrier to reducing tobacco use, particularly in groups with low socio-economic status. Comprehensive regional data are vital to inform national and regional approaches to reducing the supply of and demand for illicit tobacco (smoked and smokeless) as part of wider strategies to reduce smoking-related health inequalities.

16 Since 2021, new NHS opt-out tobacco dependency treatment pathways for inpatients and maternity have provided treatment on an equitable basis for patients across IMD quintiles, with the greatest number of people quitting coming from the least advantaged quintiles of deprivation. Although people experiencing socio-economic disadvantage often try to quit smoking, higher levels of cigarette dependency and greater social stressors reduce their chances of success.

17 Cessation trials often exclude disadvantaged populations, including those with severe health and social needs and those from minority ethnic backgrounds, limiting evidence on intervention effectiveness across different groups.

18 Currently, there is no clear evidence that different individual-level smoking cessation interventions work better for different groups, except for cultural tailoring, which may be more effective for populations who do not fully identify with majority cultural norms. Therefore, expanding the reach of tobacco dependency treatment services through opt-out models and other opportunistic pathways should be prioritised, to help reduce tobacco-related health inequalities.

Recommendations

- Promote inclusive data collection and research that accounts for hidden or underserved populations and explores innovative methods to reach those missed by traditional surveys.
- Where feasible, data systems must be intentionally designed to prioritise intersectionality through oversampling of at-risk populations, harmonised measurement of inequalities, and routine linkage between health and social datasets.
- To focus resource allocation and improve health equity, data on tobacco use should be systematically collected and reported to the organisations responsible, to support local planning of services for at-risk population groups, specifically:
  - 'hidden populations' that include people living in temporary housing, communal dwellings, immigration detention centres, bed and breakfasts and unsupported temporary accommodation 'sofa surfers', people sleeping rough, Gypsy, Roma and Traveller populations
  - asylum seekers accessing third-sector organisations and community groups that have already established trust within these communities
  - users of non-cigarette tobacco products like waterpipe and smokeless tobacco. This would require oversampling the minority ethnic groups among which these products are more commonly used. In addition, use of the more inclusive term of 'tobacco' rather than 'smoking' (unless meaning smoking only) in surveys, policy documents, research papers, service descriptions and nomenclature would better capture use of such products
  - illicit tobacco use in disadvantaged groups beyond low-income groups, such as people with a mental health condition.
- Raise awareness of coverage error in national data collection to stimulate further research into accurately identifying and quantifying the 'hidden population' of people who smoke. Future considerations could include alternative data sources such as cigarette sales data, discarded cigarette pack analysis and wastewater analysis to complement traditional surveys. Routine data collection on smoking status from secondary care services and the third sector will require appropriate funding and data-sharing mechanisms.
- Research funders should support methodological studies on data integration and comprehensive evaluations of policy changes on equity impacts, and discourage exclusion of disadvantaged groups from cessation trials.
- Prioritise smoking cessation in public health and employment strategies, especially for working-age adults in disadvantaged areas with high rates of economic inactivity.
- Integrate cessation support into back-to-work and disability benefit programmes, ensuring that people who smoke and are economically inactive receive tailored, long-term help to quit and improve health.
- Regionally tailored tobacco control programmes based on successful models such as 'Fresh' in the north east should be sustained and expanded, especially in areas with higher smoking prevalence and with people who smoke heavily, to reduce geographic disparities in smoking prevalence and concomitant negative impact on health and social care.
- Smoke-free policies should be introduced to the Northern Ireland prison estate as they have been in the other nations of the UK. Similar to Scotland, the smoke-free estate in England should be extended to open prisons to address their high smoking prevalence. The provision of a 'smoker's pack' (loose tobacco, lighter and rolling paper) on arrival at open prisons in England should cease.

- **Future cessation studies should collect, analyse and report quit rates by multiple measures of deprivation (particularly relating to cessation aids) and include other dimensions of marginalisation. Where feasible, trials of quitting interventions should stratify randomisation by socio-economic status.**
- **Although quit rates tend to be lower among people experiencing disadvantage, greater reach of services, including use of opt-out models, in less advantaged populations should be adopted offset this disparity.**
- **People who co-use tobacco and other substances such as drugs and alcohol should be encouraged to quit, with tailored support and specialist training for cessation advisers.**
- **Culturally appropriate tobacco dependency treatment services should be offered, particularly in areas where minority ethnic groups reside in relatively high numbers.**
- **Culturally competent, multilingual tobacco dependency treatment programmes should be developed for asylum-seeker populations and integrated into services that asylum seekers frequently access, such as immigration support, legal aid and mental health services.**

4.1 Introduction

Accurately measuring smoking prevalence is fundamental to public health at local, national and international levels. Smoking data underpin planning and commissioning decisions, guide the allocation of resources, inform the evaluation of interventions and policies, and shape economic projections, including healthcare cost estimates. They also enable international benchmarking, allowing the UK to assess its progress relative to other countries.

Reporting on individual or group characteristics of people who smoke has expanded over the past 20 years to include markers of health inequalities such as index of multiple deprivation, occupational grade and protected characteristics. When prevalence data are disaggregated by age, gender, ethnicity, socio-economic status, health status and other characteristics, they become a powerful tool for reducing health inequalities. Such granularity enables policy and interventions to be targeted to the most vulnerable groups and ensures that tobacco control strategies address inequity as well as overall prevalence.

However, prevalence data alone do not provide a complete picture. Several complementary measures are critical for effective tobacco control monitoring:

- **Tobacco consumption** – not only whether individuals smoke, but how much. This provides insight into intensity of use, potential health risks and the impact of harm reduction strategies.
- **Quit attempts and smoking cessation service utilisation** – allowing assessment of population motivation to quit and the effectiveness of cessation services.
- **Exposure to secondhand smoke** – an indicator of how effectively smoke-free policies are being implemented and adhered to.
- **Smoking-related morbidity and mortality** – vital for health service planning, resource prioritisation, and estimating the economic burden of tobacco.

This chapter summarises current UK data sources on tobacco-related health inequalities, describes information on 'hidden populations', reviews data on specific groups that include geographic and protected characteristics, people who are homeless, in prison, economically inactive and those who are accessing healthcare services. It also examines individual and population smoking interventions as they relate to markers of health equity that may provide insight to more effective policy approaches.

4.2 Sources of data

The UK benefits from a broad set of data sources that together provide a strong foundation for monitoring smoking and related inequalities. These include large-scale household surveys, longitudinal studies, continuous monitoring exercises, administrative or clinical data systems, and taxation and market data. Each contributes something distinctive: some offer detailed measures of smoking behaviour alongside social and health determinants; others provide large enough samples to support robust local authority estimates; and some deliver high-frequency tracking that can respond quickly to policy change. School-based surveys add a further dimension by capturing youth smoking and vaping, helping to identify patterns of initiation, access and frequency among young people. These surveys, such as the smoking, drinking and drug use survey among young people in England, are especially valuable for examining inequalities by deprivation, ethnicity and other factors at the start of the lifecourse.

4.2.1 The role of household surveys in measuring smoking prevalence

Household surveys are a cornerstone of public health research, providing invaluable insights into the prevalence and patterns of health behaviours, including smoking, within a population. In the UK, the Annual Population Survey (APS) by the Office for National Statistics (ONS) serves as the primary instrument for monitoring smoking prevalence.[1,2] This survey gathers data by sampling individuals residing in private households, offering a snapshot of habits and trends across the general population.

The ONS APS is not the only household survey used to measure smoking. Prior to the APS becoming the primary source, the Integrated Household Survey (IHS) was used to collect data on smoking rates.[3] The Opinions and Lifestyle Survey (OPN), also conducted by the ONS, sometimes collects data on smoking habits and related attitudes, complementing the APS by providing additional insights into public opinion and lifestyle choices relevant to tobacco control.[4] Meanwhile, Health Surveys for England, Scotland, Wales, and Northern Ireland provide country-specific health data, including smoking prevalence.[5] Finally, the Smoking Toolkit Study (STS) was specifically designed to track smoking patterns and cessation-related behaviours on a monthly rather than annual basis.[6]

For decades, data derived from such surveys have been instrumental in informing public health policy, tracking progress in tobacco control, and evaluating the effectiveness of interventions.[7–11] These surveys provide the foundational evidence base for national strategies aimed at reducing smoking-related illness and death. For example, the consistent time series data from the APS allow policymakers to monitor national smoking prevalence targets, such as the UK government's ambition for a smoke-free England by 2030.[12] The detailed demographic breakdowns provided by these surveys also enable the identification of specific characteristics, and geographical areas (Table 4.1) where smoking prevalence and disparities exist, for example higher smoking prevalence in working-age men (Fig 4.1), people who do not own their homes, routine and manual workers, people who have no educational qualifications and those who are not married (Fig 4.2).[7,13,14]

Further, by collecting data on attitudes towards tobacco control measures and patterns of quit attempts, surveys like the STS offer crucial insights into the public's response to policies and the effectiveness of cessation support services.[15] Table 4.1 shows some of the most important data sources (the Department of Health and Social Care Fingertips resource brings a number of these key indicators together in one dashboard).[16]

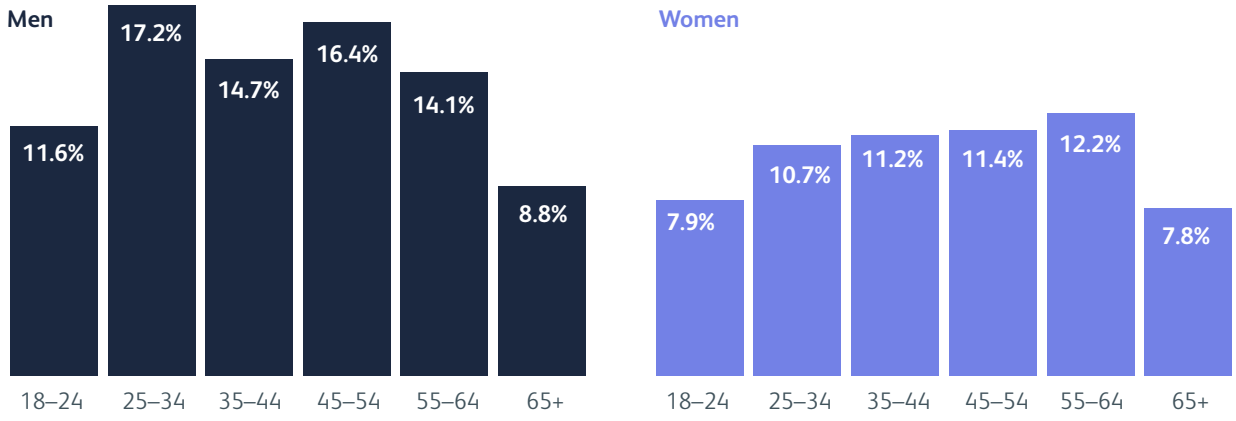

Fig 4.1. Smoking prevalence in 2023 by age and gender in adults in the UK.

Source: Statistics on smoking. House of Commons Library Research briefing 28 July 2025.[14]

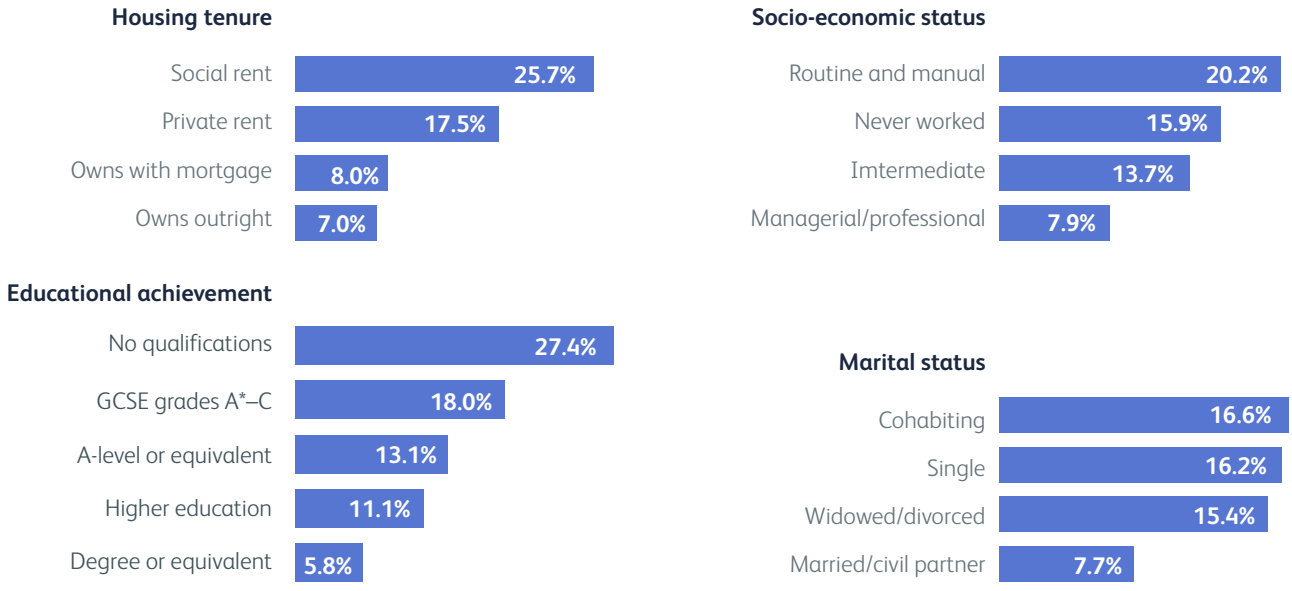

Fig 4.2. Characteristics of people who currently smoke cigarettes in the UK, 2023.

Source: Statistics on smoking. House of Commons Library Research briefing 28 July 2025.[14]

Table 4.1. Summary of the data collected in the main national surveys

Survey name	Country	Years covered	Smoking data collected	Age	Health inequalities dimensions covered	Survey frequency	Sample size	Geographical coverage
Annual Population Survey (APS) Health module17	UK	2004– (smoking questions included consistently from a later year)	Current smoking status Frequency	16+	Occupation (NS-SEC classification) Educational attainment Age Sex Disability Employment status Housing tenure Marital status Ethnicity	Continuous (12 months of survey)	100,000–150,000	Region (eg North East, London etc) Local authority area Urban vs rural classification
Opinions and Lifestyle Survey (OLS)18	Great Britain	2012–	Current smoking status Consumption Quit attempts	16+	Occupation (NS-SEC classification) Educational attainment Age Sex Disability Employment status Housing tenure Marital status Ethnicity Long-term health conditions	Monthly omnibus survey	12,000–24,000 (a year)	Country Government office region
Health Survey for England19	England	1993–	Current smoking status Consumption Smoking history Quit attempts SHS exposure Cotinine levels CO verification	16+ (8–15 y/o report using self-completion booklet)	Occupation (NS-SEC classification) Educational attainment Age Sex Disability Employment status Housing tenure Marital status Ethnicity Long-term health conditions Income	Annual	8,000–10,000	Region Local authority Urban vs rural

Survey name	Country	Years covered	Smoking data collected	Age	Health inequalities dimensions covered	Survey frequency	Sample size	Geographical coverage
GP Patient Survey[20]	England	2007-	Current smoking status	18+	Deprivation (IMD) Ethnicity Age Sex Health status	Annual	650,000–700,000	Region Small local areas (ie suitable for spatial analysis)
Smoking Toolkit Study[21]	England Wales Scotland	2006–present	Current smoking status (including separate estimates for non-cigarette tobacco and non-daily) Consumption Type of tobacco products used Quit attempts (past 12 months) Quit methods used (NRT, prescription medication, e-cigarettes, behavioural support)	16+	Occupation Employment Education Age Gender Ethnicity	Monthly	>200,000 (20,000–24,000 per year)	Country Region
Quality and Outcomes Framework: smoking records	England	2013/14–	Current smoking prevalence	Aged 15 and over	Health conditions IMD Age	Annual	7.5–9m	GP-level through to region (including all intermediate distinctions)

Survey name	Country	Years covered	Smoking data collected	Age	Health inequalities dimensions covered	Survey frequency	Sample size	Geographical coverage
Understanding Society[22]	UK	2009 (builds on British Household Panel Survey that started in 1991)	Current smoking status (currently smokes, previously smoked, never smoked) Smoking intensity (eg cigarettes per day) Smoking history and cessation attempts Main reason for wanting to give up Use of e-cigarettes and other nicotine products (in recent waves)	All ages	Occupation Employment status Education Income Age Sex Ethnicity (detailed) Long-term health conditions	Annual	~40,000 households (~100,000 individuals)	Country Region Rural vs urban
Smoking, Drinking and Drug Use (SDDU)[23]	England	1982–	Ever smoking Current smoking Frequency of smoking Consumption Age of initiation Access and purchase	11–15	Free school meal eligibility (proxy for deprivation) Parental employment status Area-level deprivation indices (eg IMD using postcode) Age Sex Ethnicity	Biennial	20,000–25,000	Region Urban vs rural

Survey name	Country	Years covered	Smoking data collected	Age	Health inequalities dimensions covered	Survey frequency	Sample size	Geographical coverage
Statistics on Local Stop Smoking Services24	England		Quit attempts made and quit dates set Success rates at 4 weeks (self-reported and CO-verified) Use of quit aids (eg nicotine replacement therapy, vaping, medications) Types of support used	12+	Age Sex Occupation categories Employment status Long-term illness/disability Ethnicity	Quarterly/ annual	~200,000	Region Local authority
Action on Smoking and Health Survey (ASH Survey)	Great Britain	2007	Current smoking status Consumption Type of tobacco products used	18+	Age Sex Ethnicity Occupation Education	Annually	~12,000	Region
The ASH Smokefree GB Youth Survey		2013	Quit attempts (past 12 months) Quit methods used (NRT, prescription medication, e-cigarettes, behavioural support)	11–18	Income Mental health condition Physical health condition Housing tenure Children in household Sexuality Region Employment		2,500	

Survey name	Country	Years covered	Smoking data collected	Age	Health inequalities dimensions covered	Survey frequency	Sample size	Geographical coverage
National Survey for Wales	Wales	2012–13 onwards (as Welsh Health Survey until 2015–16)	Current smoking status (smoke, used to smoke, never smoked) Smoking defined as 'daily or occasionally' e-cigarette use (daily, any, tried)	16+	Age Sex Sexual orientation Educational qualifications Area deprivation Material deprivation Employment and economic activity Ethnicity	Usually annual, but not carried out in 2023–24	6,000	Previously reported by Health Board, geographic breakdown not confirmed for 2024–25 (initial results published Sept 2025)
School Health Research Network Student Health and Wellbeing Survey	Wales	2017 onwards	Smoking (daily, weekly, ever tried) Age of first cigarette e-cigarette use (daily, weekly, ever tried)	Years 7–11	Age/school year Gender (incl gender identity) Family affluence	Biannual	Census of all maintained, mainstream, secondary and middle-schools in Wales 120,000 students from 202 schools in 2021–22	Health Board Local authority
ASH Wales annual survey (adult)	Wales	2014 onwards	Smoking status (current, former, never) Vaping status (current, former never) Vape type	18+	Age Sex Social grade Housing status	Annual	1,112	

Survey name	Country	Years covered	Smoking data collected	Age	Health inequalities dimensions covered	Survey frequency	Sample size	Geographical coverage
Scottish Health Survey	Scotland	1995– (annual figures from 2011)	Smoking status Frequency Non-smoking adult second hand smoke exposure Children second hand smoke exposure Cotinine levels Vaping status (from 2014)	16+	Deprivation (measured using SIMD) Age Sex	Annual	~5,000 adults ~2,000 children	Representative sample of Scotland
Health Behaviour in School-aged Children (HSBC) study	Scotland	1985 (every 4 years)	Lifetime smoking Current smoking Lifetime vaping Current vaping	11-, 13- and 15-year-olds	Age Sex	Every 4 years	~4,400	Representative sample of Scottish children
English Longitudinal Study of Ageing	England	2002	Current smoking status	16+	Age Sex Ethnicity Education Income Housing tenure Employment	Biennially	~11,000	Country
Millennium Cohort Study	UK	2000	Current smoking status	All ages	Age Sex Ethnicity Education Income Housing tenure Employment	Triennially	~19,000	Country Nation in GB

4.2.2 Limitations of current data

Taken together, this diversity of sources provides a relatively rich picture of smoking in the UK. APS data are used as the primary means of monitoring smoking prevalence, allocating resource and judging progress against targets. However, APS has underestimated non-daily smoking in England since 2016.[25] For example, the APS estimate of smoking prevalence in 2023 was 11.6%. In comparison, the STS 2023 estimate of daily smoking prevalence was 11.0%, with an additional 3.6% of adults who smoked non-daily. The STS also monitors non-cigarette smoking, such as cigars, cigarillos and waterpipes. It estimated that all tobacco smoking (including non-daily and non-cigarette) was 16.5% in 2023. In this context, it is critical that government takes a more comprehensive approach to monitoring other data sources and does not focus only on meeting APS-derived targets.

Additionally, the system is fragmented, with gaps that limit its ability to drive equity-focused action. Smaller surveys often lack the power to examine inequalities in depth, administrative data can be incomplete or inconsistent, and certain groups at highest risk remain under-represented or hidden (see section 4.3).

Current data sources share important limitations:

- **Self-report bias** – most surveys depend on self-reported smoking status, which risks under-reporting. Biochemical validation for reported smoking status is rare.
- **Sample size constraints** – many surveys lack sufficient numbers for robust analysis of minority and disadvantaged groups.
- **Cross-sectional design** – most national surveys are repeated cross-sectional rather than longitudinal surveys, preventing prospective analysis of quitting, relapse or individual trajectories.
- **Inconsistent definitions** – smoking is measured differently across surveys (eg how many times a person has smoked in the past 30 days vs has the person ever smoked more than 100 cigarettes), limiting comparability.
- **Exclusion of high-prevalence groups** – people experiencing homelessness or using temporary accommodation (see section 4.3), Travellers, people in prison, asylum seekers and those with severe mental illness are not routinely included.
- **Fragmentation** – different surveys cover different aspects of smoking behaviour, operate on unlinked time cycles, and some have been discontinued, undermining longitudinal data capture.

A significant gap in UK smoking surveillance is the limited focus on intersectionality. Disadvantage is rarely experienced in isolation, but through overlapping social and health inequalities. Smoking prevalence and associated harms are driven by the overlapping effects of class, gender, ethnicity, disability and place. For example, Bangladeshi men in deprived urban communities have some of the highest smoking rates in the UK;[26] and disabled people living in social housing are more likely to smoke and less likely to quit successfully than disabled people in more affluent households.[27] Yet current monitoring systems rarely capture these intersections. Most national surveys are designed to report on single dimensions of inequality such as gender, ethnicity or socio-economic status, but sample sizes are often too small to explore combinations with statistical confidence. Minority ethnic groups in particular are under-sampled and, when data are collected, categories are broad and inconsistent across surveys, making it impossible to examine more nuanced intersections such as Bangladeshi men in deprived areas. Survey and routinely collected data and clinical datasets have the advantage of larger coverage, but frequently lack detailed sociodemographic information or rely on incomplete recording, particularly for ethnicity and disability, limiting the potential for linkage across systems. As a result, people experiencing multiple disadvantages are effectively invisible in routine monitoring. Failing to capture intersections risks the design of tobacco control interventions that overlook those most in need. To address this, data systems must be intentionally designed to prioritise intersectionality through oversampling of at-risk populations,[28] harmonised measurement of inequalities, and routine linkage between health and social datasets.

4.2.3 Opportunities to improve data collection

The UK is widely recognised for the strength of its tobacco monitoring systems, particularly the consistency and reliability of national prevalence estimates. This infrastructure has enabled robust surveillance of smoking trends over time and has supported policy development at national and local levels. However, monitoring of tobacco use in the UK can be further strengthened by a comprehensive, equity-centred approach in which data collection is explicitly connected to policy priorities, clinical practice and accountability for reducing inequalities, specifically:

- **Improve geographic resolution.** Data systems should be capable of producing reliable estimates at local authority and small-area levels, not just regional or national. This will require larger or better-designed samples, but also smarter use of linked datasets

(eg primary care, hospital admissions, mortality) to generate timely local indicators of smoking prevalence and outcomes.

- **Include excluded and disadvantaged populations.** People experiencing homelessness, people in prison and those with severe mental illness or learning disabilities face the highest smoking prevalence, yet remain invisible in most household surveys. Dedicated research, linkage with service datasets or specially designed studies should be commissioned to ensure that these groups are systematically monitored.
- **Expand longitudinal tracking.** Cohort studies such as Understanding Society and the new Early Life Cohort UK should be adapted to capture smoking trajectories in disadvantaged groups. Embedding questions on quit attempts, relapse and use of cessation services would allow long-term monitoring of treatment access and outcomes across different population groups.
- **Continue to fund existing surveys with long time-series.** Future funding for the Health Survey for England is currently under threat. Some may see the diversity of tracking as duplicating efforts when budgets are limited. It is essential that a variety of surveys, especially those with long-established time series, continue to be funded to enable long-term evaluation and triangulation.
- **Ensure consistency, transparency and open data.** Indicators should be harmonised across ONS, NHS Digital and the devolved administrations, with routine publication of breakdowns by key inequality dimensions. At present, access to some surveys is restricted to secure-lab environments, which can be resource-intensive and limit wider use. Expanding safe but accessible routes to microdata would support more independent research and allow deeper analyses of equity impacts.
- **Embed accountability**. Improvements in data collection and linkage should be embedded in performance frameworks for the ONS, local authorities, NHS trusts and national bodies. Clear reporting requirements and equity indicators are needed to ensure that monitoring translates into tangible reductions in smoking-related inequalities.

4.3 'Hidden populations' not captured in national datasets

The measurement of smoking prevalence outlined in household surveys discussed above usually involves direct self-reporting from participants on their current smoking status, often using standardised questions. This method offers a consistent and comparable way to monitor trends over time, which is crucial for policy formulation and the evaluation of public health interventions.[29] However, concerns have increasingly been raised regarding the representativeness of these household surveys for the entire population.[30,31] While weighting adjustments are employed to account for non-response among some hard-to-reach groups who are still within the sampling frame, ensuring that participants reflect similar socio-demographic characteristics as non-respondents, a significant limitation persists.[32] This limitation arises from the exclusion of what is termed the 'hidden population',[33] individuals who are entirely absent from the sampling frames used by household surveys.[34] This is because they don't have stable addresses or are highly mobile.

A sampling frame is the actual list or source from which a sample is drawn. It is essentially a comprehensive list of all the individuals or units in the target population that have a chance of being selected for the survey.[35] For a household survey, the sampling frame might be a list of all residential addresses in a particular geographic area, or a list of all registered voters. The quality and accuracy of the sampling frame are critical to the representativeness of the sample. If the sampling frame is incomplete, outdated or contains inaccuracies, it can lead to coverage error, where certain segments of the target population are either excluded or under-represented in the sample.[36,37]

The practical implication of such errors can be significant, leading to an underestimation or overestimation of smoking prevalence within specific groups or the entire population, and potentially misguiding the allocation of public health resources. For instance, if national prevalence figures are artificially low, policymakers might mistakenly assume that broad, population-level tobacco control campaigns are sufficient, diverting resources away from the intensive, tailored interventions needed by high-prevalence 'hidden populations'.

4.3.1 Defining and estimating the 'hidden population'

Individuals collectively termed the 'hidden population' do not reside in conventional private households, and are therefore systematically excluded or severely underrepresented by standard household surveys because they lack a stable, trackable address within the sampling frame. Several distinct categories constitute this 'hidden population':[34,38,39]

- **Communal establishments:** This broad category encompasses a wide range of settings where individuals live collectively, sharing facilities and services outside private households. These include, but are not limited to, care and residential homes for older people and those with disabilities, long-stay hospitals (including mental health wards), student halls of residence, prisons, and various hostels for people experiencing homelessness. Each of these subgroups presents unique challenges in data collection and is known to exhibit varying smoking prevalences.
- **Immigration detention centres:** These facilities house individuals awaiting immigration decisions or facing deportation. The transient nature of their populations and the differing recording practices across centres make robust data collection particularly complex.
- **Gypsy, Roma and Traveller communities:** These ethnic groups often maintain nomadic or semi-nomadic lifestyles, residing in caravans or other temporary dwellings. Capturing accurate data for these communities is inherently difficult, as many live in non-permanent or unauthorised locations, and official data collection frequently overlooks those not living on registered caravan sites.
- **Bed and breakfasts and unsupported temporary accommodation:** These provide short-term housing, primarily for individuals experiencing homelessness. The fluctuating nature of these living situations, coupled with regional differences in definitions and provision, significantly complicates consistent data collection.
- **People sleeping rough:** This group comprises individuals without access to safe and secure housing, who sleep in outdoor locations or other places not designed for habitation. This highly transient and often invisible population presents a profound challenge for consistent and accurate enumeration.
- **'Sofa surfers':** These individuals temporarily stay with friends, family or acquaintances due to a lack of stable and permanent housing. A substantial portion of sofa surfers often go unrecorded in formal homelessness statistics, indicating a large, underrepresented group that is easily missed by conventional surveys.

A recent study estimated the UK adult 'hidden population' to be approximately 1.9 million individuals, representing about 3.5% of the total UK population.[33] This figure was derived using a 'workbook method', which compiles data from various official sources including government publications, academic studies and administrative reports. While this method is practical due to readily available data, it is acknowledged that estimates may under- or over-represent the true prevalence due to inherent biases in data collection. Furthermore, a subtle risk of overlap or double-counting may exist, particularly for individuals who transition frequently between different 'hidden' categories (eg from rough sleeping to temporary accommodation) or who may intermittently access conventional household settings. Despite efforts to mitigate this, such as careful cross-referencing of administrative data and expert consultations, accurately capturing individuals with highly transient lifestyles remains an intrinsic challenge of this estimation method.

The lowest risk of bias was found in estimates for communal establishments, where administrative records are generally more consistent and centrally held, such as official registers for care homes or prison inmate counts. Conversely, the highest bias was associated with estimates for people sleeping rough and Gypsy, Roma and Traveller communities.[40–42] For people sleeping rough, the transient nature of their lives, the lack of fixed addresses and the inherent difficulty in enumerating individuals who actively avoid official contact make consistent and accurate data collection exceptionally challenging.

As illustrated in Fig 4.3, a significant proportion of this hidden population comprises individuals from groups with typically lower socio-economic status. For instance, people experiencing homelessness, including people sleeping rough, sofa surfers and those in temporary accommodation, often face profound economic insecurity, unemployment and lack of affordable housing. Notably, sofa surfers constitute a substantial portion of this hidden population, accounting for approximately 29.6% of individuals aged 18 and over in this demographic, underscoring the significant impact of concealed homelessness, which is often linked to underlying socio-economic vulnerabilities.[40,43]

This over-representation of lower socio-economic status within the hidden population is critical because these groups often face disproportionate health challenges and health inequalities.[44] Moreover, the size of this population is likely to grow due to compounding societal challenges. The ongoing cost-of-living crisis and severe housing crisis in the UK are significant drivers, leading to increasing levels of housing insecurity and homelessness.[45] For example, the number of households in temporary accommodation in England has reached record highs.[46,47] Factors such as rising rents, stagnant wages and limited availability of affordable housing disproportionately impact low-income households, pushing more individuals into precarious living situations.[48]

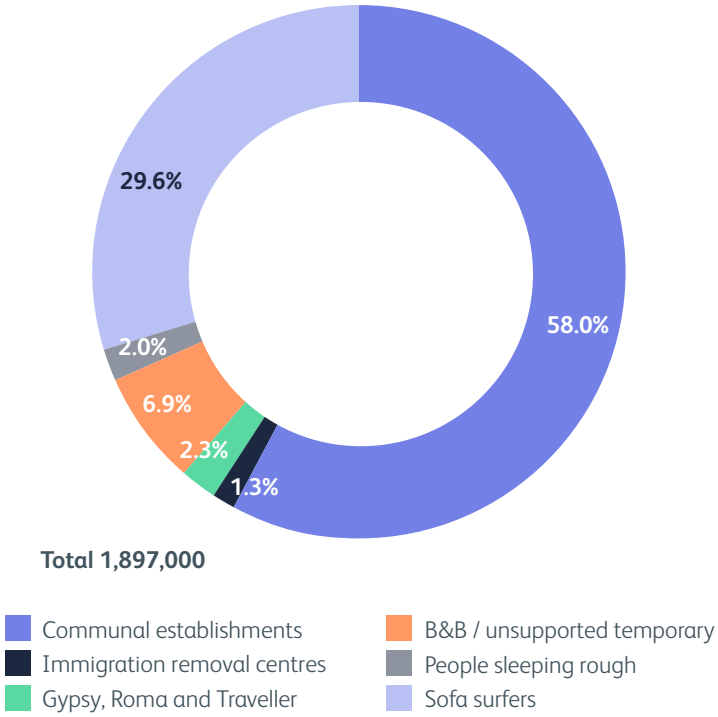

Fig 4.3. Breaking down the 'hidden population' (n ≈ 1,897,000) in the UK.

Adapted from Beard *et al* (2025) under the CC BY 4.0 licence.[33]

4.3.2 Smoking prevalence within the 'hidden population' and underestimation of national smoking rates

The smoking prevalence within the UK 'hidden population' is strikingly high, ranging on average between 58% and 66%, which contrasts sharply with smoking prevalence in the general population.[33] Among disabled individuals in care and residential homes, smoking prevalence is between 20% and 30%, rising to approximately 70% for young people in residential care homes.[49] In long-stay hospitals, particularly mental health wards where smoking bans are not universally enforced, smoking prevalence is around 50%.[50] Prisons, despite indoor smoking bans, report an estimated smoking prevalence of approximately 80%.[51] Hostels for people experiencing homelessness exhibit similarly high rates, ranging from 70–80%.[52]

The APS in 2022 estimated that 12.9% of people aged 18 and over living in households in the UK smoked cigarettes, equating to approximately 7 million individuals. When the estimated size and smoking rates of the 'hidden population' are factored in, the adjusted smoking prevalence for the UK rises to an estimated 14.5–14.8%.[33] This represents an absolute percentage increase of between 1.6% and 1.9% in 2022, highlighting a significant coverage bias. This discrepancy amounts to a difference of over 1 million people who smoke, revealing the substantial impact of excluding these segments from survey data.

4.3.3 Policy implications and future directions

The underestimation of smoking rates has significant policy implications; for example, the UK government's ambition for a smoke-free England by 2030 (defined as smoking prevalence <5%) could be delayed by over a decade if these true prevalence rates are considered.[33] This gap in understanding not only undermines national health targets, but also exacerbates existing health inequalities.

These inequalities often result from structural factors beyond the control of affected communities.[38] For marginalised groups, systemic issues such as poverty, unstable housing, limited access to education and employment, and historical discrimination create significant barriers to health, leading to disproportionately high burden of illness, including elevated smoking rates. Improved research methods can help rectify these injustices by accurately documenting the needs of these populations. Understanding the true prevalence of health issues and the unique challenges faced by the 'hidden population', policymakers and healthcare systems can tailor interventions and services more effectively.[44] This enables informed policy decisions, guides the equitable allocation of resources, and promotes greater social inclusion and integration for groups who might otherwise be overlooked or underserved.

To truly address these challenges and ensure equitable public health outcomes, we need to take proactive steps. This includes raising awareness about coverage error and stimulating further research into accurately identifying and quantifying the 'hidden population'

who smoke. Ongoing research by the ONS and other organisations to address data gaps is a positive step.[53] Future considerations could include alternative data sources such as cigarette sales data, discarded cigarette pack analysis and wastewater analysis to complement traditional surveys. Routine data collection on smoking status from secondary care services and third-sector (non-government charity) services is also necessary, requiring appropriate funding and data-sharing mechanisms. However, it is vital that such data collection is implemented with robust ethical oversight, ensuring data privacy, informed consent and safeguarding against the potential for stigmatisation or discrimination against vulnerable individuals whose health information is being collected. Transparency about how these data will be used to improve services, rather than for punitive measures, will be crucial to building trust and encouraging participation.

4.4 National and regional trends in the prevalence and patterns of smoking in relation to markers of deprivation

The Index of Multiple Deprivation (IMD) is an area-based measure designed to identify concentrations of multiple indicators of deprivation within small geographic areas of nations in the UK.[54–56] In each nation, these small geographic areas are ranked based on a composite deprivation score (combining indicators related to employment, education, income, health, housing and other factors such as crime, physical environment and access to services) and grouped into equal percentiles, usually from the most deprived 10% to the least deprived 10%. Using IMD deciles allows researchers and policymakers to understand the overall and area-based distribution of smoking within nations in the UK and inform resource allocation to reduce smoking-related health inequality.

While declines in smoking in recent years have occurred across all measures of socio-economic position in the UK, considerable inequality remains.

4.4.1 England

In 2021, approximately one-third of all people who smoked lived in the two most deprived deciles (a 3.6 percentage point rise from 2017), compared with one in ten living in the two least deprived deciles (Fig 4.4).

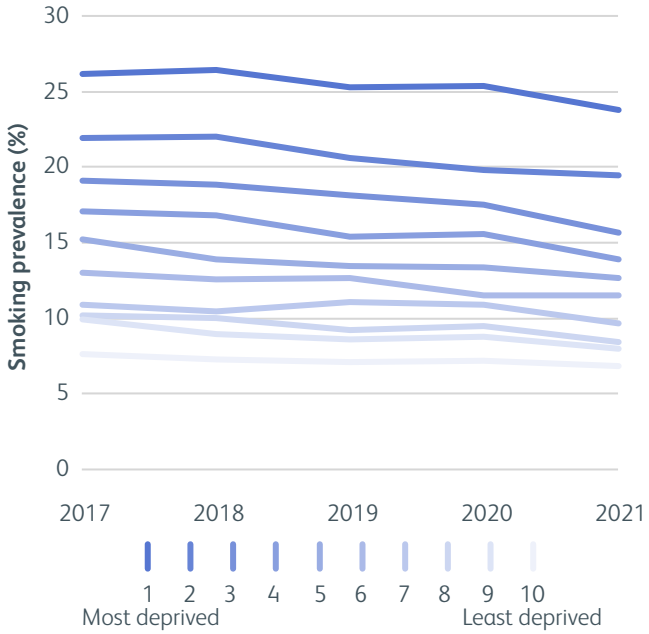

Fig 4.4. Smoking prevalence in England 2017–2021 by IMD decile.

Source: Census 2021 geographies from the Office for National Statistics (APS smoking prevalence data by IMD not available before 2017).[54]

A pronounced north/south divide is evident in England across a wide range of health markers, with the best health outcomes typically observed in the south, the poorest in the north, and the Midlands generally aligning with national averages.[13,57,58] These health differences closely mirror, and are driven by, longstanding and structural socio-economic disparities between regions.

Historically, smoking prevalence has followed this same geographic pattern.[2] For example, Blackpool is currently estimated to have one of the highest rates of smoking at almost 20%, while Woking has just 4%.[58a] However, in recent decades, regional disparities in smoking prevalence have narrowed considerably. Smoking prevalence has declined steadily,[2] but the pace of change has varied across regions. Data from the STS show that between 2006 and 2024, adult smoking prevalence in England fell most sharply in the north (from 28.8% to 15.8%; –12.9 percentage points (ppts)), followed by the Midlands (25.2% to 16.0%; –9.2 ppts), and least in the south (22.7% to 17.3%; –5.3 ppts), effectively closing the historical gap in smoking prevalence by 2024. This broadly mirrors recent estimates by region in England reported by the APS up to 2023 (Table 4.2).[2,14]

Table 4.2 Smoking prevalence in adults by region of England.

	2011		2023		
	%	Rank	%	Rank	Percentage point change
Yorkshire and the Humber	21.9%	1	12.7%	1	–9.2%
East Midlands	20.2%	4	12.5%	2	–7.7%
West Midlands	19.2%	6	12.0%	3	–7.2%
North west	21.9%	1	11.8%	4	–10.1%
London	19.2%	6	11.7%	5	–7.5%
East of England	19.3%	5	11.5%	6	–7.8%
South west	18.8%	8	11.2%	7	–7.6%
North east	21.3%	3	11.0%	8	–10.3%
South east	18.2%	9	10.6%	9	–7.6%

Source: Statistics on smoking. House of Commons Library Research briefing 28 July 2025.[14]

During this period, socio-economic inequalities in England widened,[44,59] which might have been expected to worsen inequalities in smoking. Yet, the opposite occurred: the largest reductions were seen among less advantaged groups, particularly in the north. Between 2006 and 2024, smoking prevalence in these groups fell by 16.9 ppts in the north, compared with 12.3 in the Midlands and 7.0 in the south.[7] Consequently, the absolute disparity in smoking prevalence between more and less advantaged groups narrowed most in the north (from 16.0 to 7.4 ppts) and least in the south (from 12.4 to 9.9 ppts).[7]

A key driver of this progress appears to be sustained, regionally coordinated tobacco control efforts. Regions with dedicated programmes saw greater reductions in smoking prevalence than those without.[7] The north east has had a comprehensive, coordinated programme in place since 2005,[60] while similar efforts have been developed at sub-regional levels elsewhere in the north, including Greater Manchester and, more recently, Humber and North Yorkshire. In contrast, regions such as the Midlands, London and the south east have had limited regional programmes, and the south west discontinued its efforts in 2016 due to funding cuts. London, despite some coordinated funding since 2014, saw the smallest decline in smoking prevalence (from 20.5% in 2006 to 17.3% in 2024; –3.4 ppts).[7] An evaluation of the city's 2017 Smoking Cessation Transformation Programme found evidence of increased quit attempts, but effects on quit success were inconclusive.[61] The relatively modest decline in smoking in London may reflect higher relapse or uptake rates, or demographic changes such as younger age profiles or inward migration from countries with higher smoking prevalence.

Despite overall declines in prevalence, regional and national inequalities in smoking intensity persist. People who smoke and are based in more disadvantaged areas and in regions with historically higher prevalence tend to smoke more cigarettes per day, contributing to regional inequalities in smoking-related harm. STS data from Scotland, Wales and the nine regions of England show that between 2022 and 2024 smoking prevalence had become relatively consistent across nations and regions, ranging from 13.3% in Scotland to 15.0% in the south west of England, with overlapping confidence intervals suggesting no statistically significant differences.[62] However, average daily cigarette consumption was highest in the north east of England and Scotland (11.7 cigarettes per person who smokes), compared to 8.4 in London and 9.5 in the south west. Heavy smoking (over 20 cigarettes per day) was also more common in the north east (7.3% of people who smoke) and Scotland (7.2%) than in London and the south west (both 3.8%).[62] These patterns suggest that while fewer people are smoking, those who continue to smoke in certain regions do so more heavily.

4.4.2 Scotland

The Scottish Health Survey collects data on smoking prevalence and socio-economic status in Scotland.[63] Smoking prevalence has gradually fallen; the most recent data indicate that one in seven (14%) adults currently smoke.[64] Smoking prevalence is highest among adults

living in the most deprived areas of the country (26%), and lowest among those living in the most affluent areas (6%) (Fig 4.5).[64]

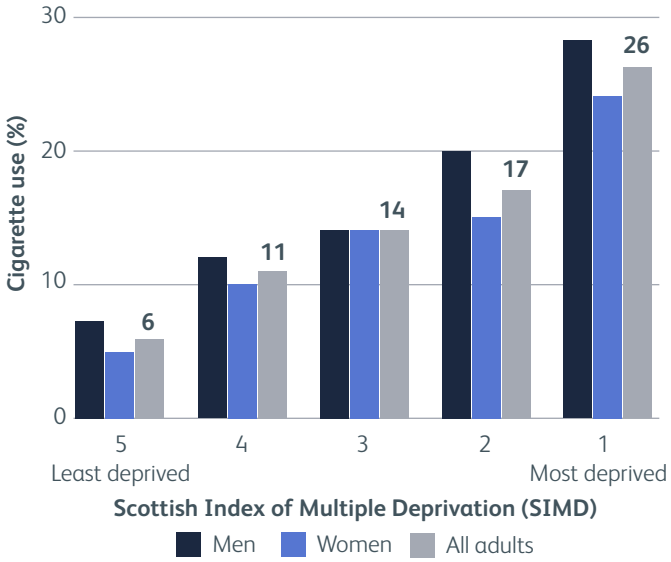

Fig 4.5. Current cigarette use (age standardised) 2023, by area deprivation and sex.

Source: The Scottish Health Survey – 2023 edition | Main Report, licensed under the terms of the Open Government Licence v3.0.[64]

Trends in smoking prevalence in Scotland by IMD demonstrate a gap that has largely persisted between people living in the most deprived areas and those living in the least deprived, similar to that seen in other nations of the UK (Fig 4.6).

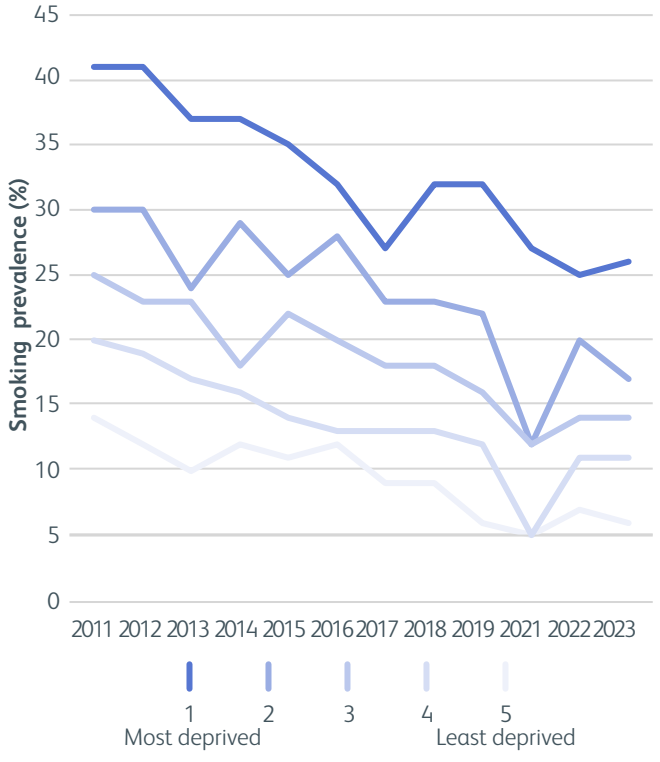

Fig 4.6. Change in smoking prevalence in Scotland, 2011–23.

Source: Scottish Government. Scottish Index of Multiple Deprivation 2020, licensed under the terms of the Open Government Licence v3.0.[5]

Smoking remains the leading preventable cause of death in Scotland.[65] In 2022, smoking accounted for an estimated 8,942 deaths (271 deaths per 100,000 population) in those aged 35 and over. In 2022, the death rate due to smoking for men (362 deaths per 100,000 population) was 1.8 times higher than the rate for women (200 deaths per 100,000 population). In 2022, rates for smoking-attributable deaths in the most deprived areas were over four times higher than in the least deprived areas (Fig 4.7).[65]

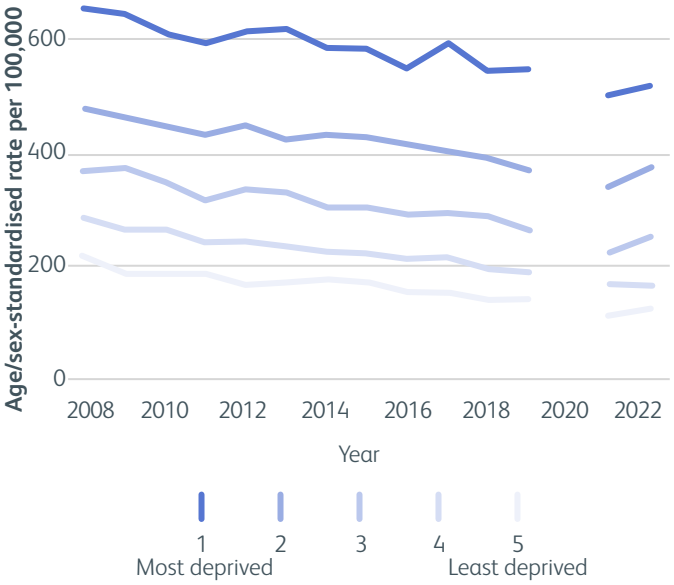

Fig 4.7. Smoking-attributable deaths in Scotland by deprivation quintile.

Source: The Scottish Public Health Observatory. Public Health Scotland, licensed under the terms of the Open Government Licence v3.0.[65]

4.4.3 Wales

12.8% of adults in Wales reported smoking in 2022–23, as reported by the National Survey for Wales.[66] Smoking prevalence shows a strong association with deprivation: those living in the most deprived quintile of areas in Wales are almost three times as likely to smoke as those in the least deprived areas (Fig 4.8).

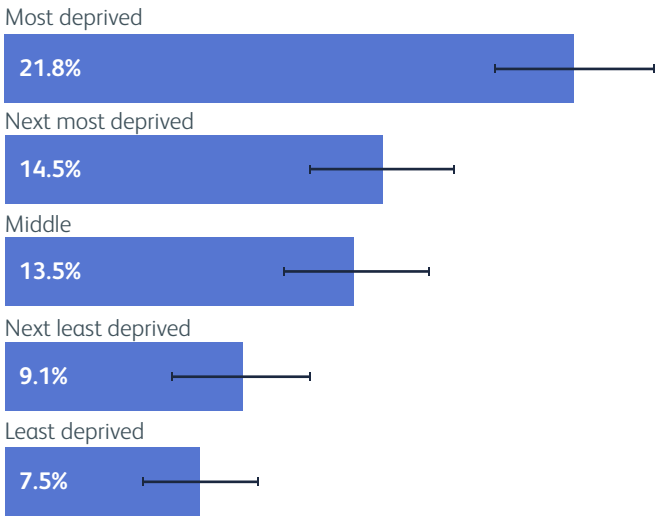

Fig 4.8. Adults who smoke, age-standardised percentage, persons aged 16+, Wales by deprivation quintile, 2022–23.

Source: Public Health Wales: National Survey for Wales headline results: April 2022 to March 2023, licensed under the terms of the Open Government Licence v3.0.[66]

Similar to the other countries in the UK, trends in smoking prevalence in Wales by IMD demonstrate a persistent gap over several years in smoking prevalence between those living in the most deprived areas compared to the least deprived areas (Fig 4.9).

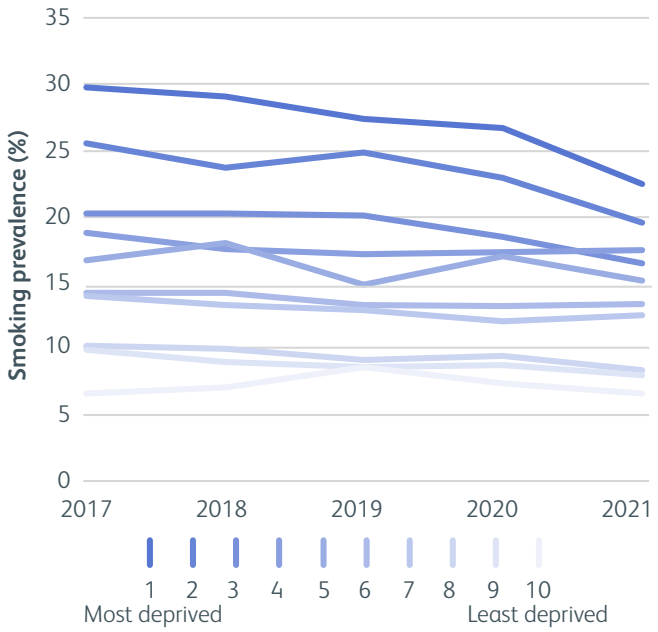

Fig 4.9. Smoking prevalence in Wales 2017–21.

Source: Census 2021 geographies from the Office for National Statistics (APS smoking prevalence data by IMD not available before 2017).[54]

An average of 3,845 deaths among adults aged 35 and over between 2020–22 were attributable to smoking in Wales, more than one in ten of all deaths in this population.[67] These harms are socially patterned, the European Age Standardised Rate (EASR) of mortality from smoking is more than three times as high among those living in the most deprived quintile of areas in Wales compared with the least deprived (Fig 4.10a). A similar deprivation gradient is evident for the 17,000 annual smoking-attributable hospital admissions, the EASR for those living in the most deprived quintile of areas in Wales was 2.7 times higher than the EASR in the least deprived quintile (Fig 4.10b).

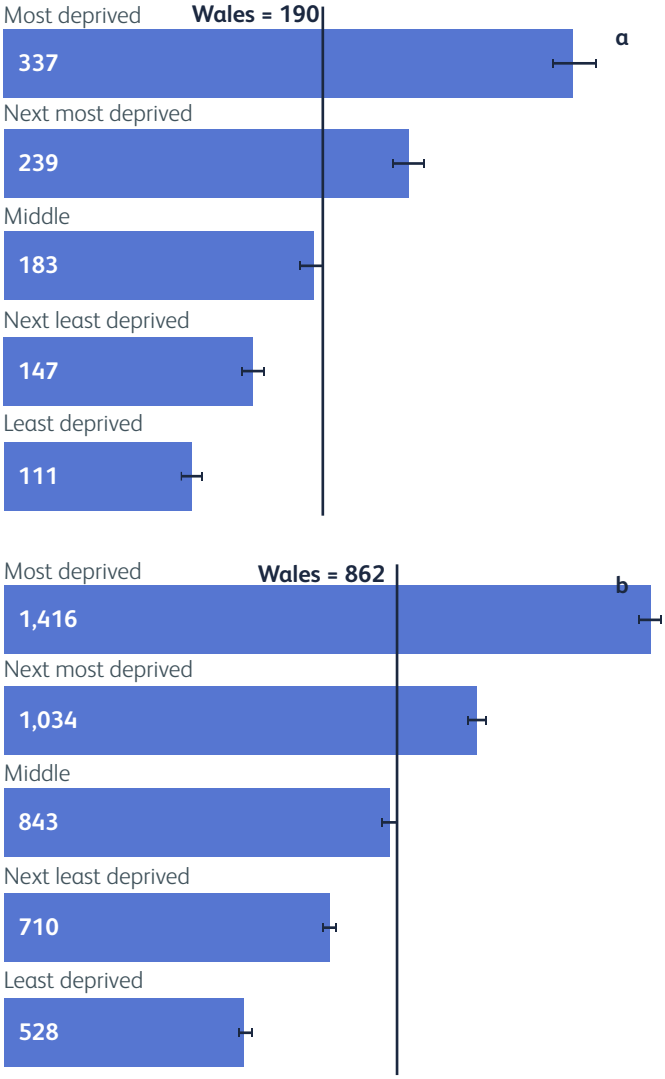

Fig 4.10. (a) Mortality and (b) hospital admissions attributable to smoking, European Age Standardised Rate (EASR) per 100,000, persons aged 35+ by deprivation quintile, Wales, 2020–22.

Source: Public Health Wales. Smoking attributable mortality and hospital admissions for Wales, 2020–22, licensed under the terms of the Open Government Licence v3.0.[67]

While smoking prevalence continues to fall, modelling (Fig 4.11) suggests that the Welsh government target of reducing adult smoking prevalence below 5 % will not be achieved, but also that the substantial differences in smoking prevalence between those living in areas with

high and low deprivation will persist for decades to come, in a pattern similar to England (see chapter 1, Fig 1.2).

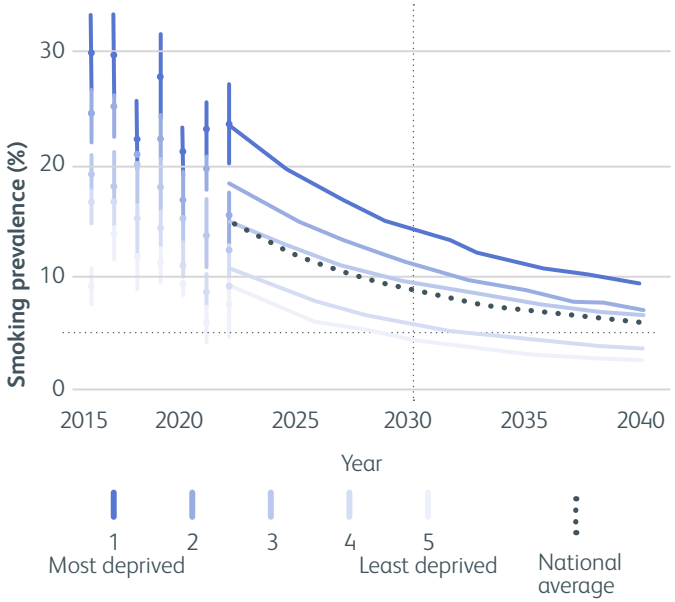

Fig 4.11. Observed trends in smoking prevalence by WIMD quintile 2016–22, and forecast rates for 2022–40.

Source: Sheffield Addictions Modelling Group (SARG); National Survey for Wales.

4.4.4 Northern Ireland

In Northern Ireland, 13% of adults smoked cigarettes in 2023–24, having fallen from a 22% prevalence in 2014–15. Smoking was concentrated in respondents living in the most deprived areas or living in urban settings (Fig 4.12).[68]

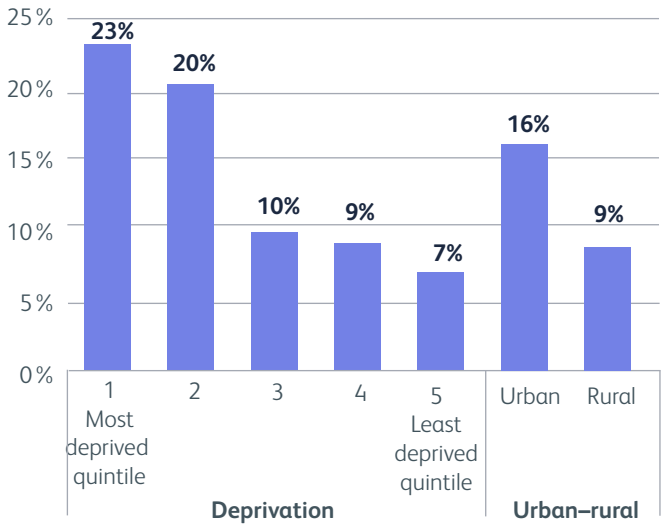

Fig 4.12. Smoking prevalence in Northern Ireland by deprivation and rurality in 2023–24.

Source: UK Government. Statistics on smoking cessation services in Northern Ireland 2023–24, licensed under the terms of the Open Government Licence v3.0.[68]

The almost fourfold difference in smoking prevalence between those living in the most deprived versus the least deprived areas has persisted since 2010–11 (Fig 4.13).

Fig 4.13. Smoking prevalence in Northern Ireland 2010–24.

Source: Department of Health. Health Survey Northern Ireland, licensed under the terms of the Open Government Licence v3.0.[69]

4.5 Tobacco-related health inequalities in specified populations

As described above, data on tobacco-related inequalities may be identified and described using geographical boundaries. However, many people living within these geographies may be exposed to additional drivers of inequality relating to other aspects of their lives, which may include protected characteristics, where they live, their employment status or use of products such as alcohol or drugs. These people, populations and characteristics of tobacco-related inequality will be considered in the sections below.

4.5.1 Tobacco prevalence and patterns of use among people with protected characteristics

In the UK, tobacco use varies considerably across groups defined by the Equality Act 2010's protected characteristics,[70] contributing to health disparities.

4.5.1.1 Age

Young adults are more likely to smoke than older adults. According to the 2023 APS in the UK, cigarette smoking prevalence was highest among those aged 25–34 (14.0%) and lowest among those aged ≥65 and over (8.2%).[2] The STS in England – which also captures non-cigarette tobacco smoking and likely more non-daily cigarette smoking[71] – documents the same pattern for all tobacco smoking: in 2024, prevalence was highest among those aged 25–34 (21.7%) and lowest among those aged ≥65 (8.6%).[72]

Between 2014 and 2024, tobacco smoking prevalence declined among younger and middle-aged adults, but remained relatively stable among those aged ≥65.[72,73] In particular, there was a sharp decline in daily cigarette smoking among young adults over this period (eg from 21.4% to 9.3% among those aged 18–24 and from 22.2% to 13.8% among those aged 25–34). At the same time, there were increases in non-daily cigarette smoking, non-cigarette tobacco smoking and vaping in the younger age groups, with vaping prevalence surpassing smoking among 18–24-year-olds by 2023.[72] While older adults have also shown movement away from daily smoking, traditional smoking patterns remain more prevalent in this group and uptake of vaping has been slower.[72]

Data from the International Tobacco Control (ITC) Youth Survey of 16–19-year-olds show that past 30-day use of any non-cigarette tobacco product increased in England, rising from 7.4% in 2017 to 11.6% in 2024 (Fig 4.14a).[74] In contrast, use of non-cigarette tobacco products declined over the same period in the USA (10.2% to 7.1%) and Canada (9.2% to 7.9%), suggesting that increases were unique to England. When looking at individual products, past 30-day use of cigarillo, cigars and smokeless tobacco increased to a greater extent in England than in Canada or the USA. In England, cigarillo use rose from 2.2% in 2017 to 4.7% in 2024 (Fig 4.14b), cigars from 1.4% to 3.7 % (Fig 4.14c) and smokeless tobacco from 1.4% to 4.1% (Fig 4.14d) (although the increases observed in 2024 in smokeless tobacco use may partly be attributed to misreporting of nicotine pouch use). Youth use of waterpipe/shisha fluctuated in England over the study period and was 5.3% in 2024 (Fig 4.14e). Youth use of bidis and heated tobacco remained below 3% across all survey waves in England.

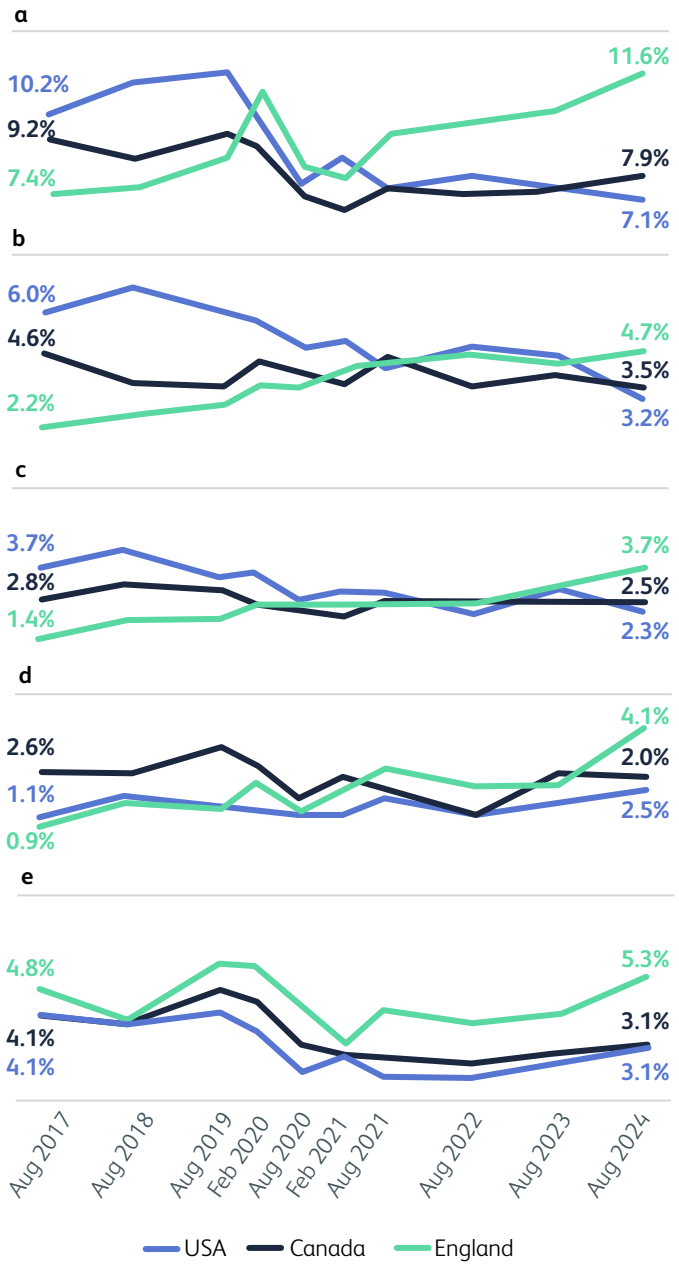

Fig 4.14. Youth use of (a) any non-cigarette tobacco product,* (b) cigarillos, (c) cigars, (d) smokeless tobacco, (e) shisha/waterpipe in the past 30 days (ITC Youth Survey, ages 16–19, 2017–24, N = 129,575).

*At least one of cigarillos, cigars, waterpipes, bidis, smokeless tobacco, heated tobacco.

Adapted from Aria *et al* (2025) under the CC BY 4.0 licence.[74]

4.5.1.2 Sex and gender

Smoking rates have historically been higher for men than for women. As of 2023, the APS estimated that 13.7% of men and 10.1% of women smoked cigarettes.[2] The STS has also documented greater use of other smoked and

smokeless tobacco products among men.[75,76] Specifically, men are more likely than women to use cigars, cigarillos, pipes, snus and other smokeless tobacco (eg chewing tobacco).[75] This reflects traditional gendered patterns of tobacco use. Smoking prevalence is also higher among those who do not identify as a man or a woman (eg non-binary). In 2024, the STS estimated that 17.4% of men, 13.8% of women and 25.6% of those who identified in another way smoked any tobacco product.

Although women report lower rates of tobacco use overall, smoking prevalence is higher among certain female demographics – eg 25% among women aged 35–45 from less advantaged occupational social grades. While smoking remains less prevalent among more advantaged women, prevalence appears to have increased among those aged 18–45 (from 11.7% in 2013 to 14.9% in 2023), while declining among men and less advantaged women.[77]

Among young people aged 16–19 in England, past 30-day use of any non-cigarette tobacco product in 2024 was higher among men (14.6%) than women (8.4%). Similar sex differences were observed for cigarillos (6.4% vs 2.9%), cigars (5.3% vs 1.9%), shisha/waterpipe (6.7% vs 3.9%), smokeless tobacco (5.4% vs 2.8%), bidis (3.8% vs 1.5%) and heated tobacco (3.4% vs 1.1%) (additional data from Aria *et al*).[74]

4.5.1.3 Gender reassignment and sexual orientation

Smoking rates are disproportionately high in the LGBTQ+ community. The latest available APS data from 2017 show that the prevalence of cigarette smoking was 23.1% among individuals identifying as gay or lesbian and 23.3% among those identifying as bisexual – approximately 50% higher than among heterosexual people (15.9%).[78] Data on smoking prevalence among trans and non-binary people are currently limited, especially in the UK. However, existing evidence suggests that these groups are also more likely to smoke than cisgender people.[79,80] The reasons for these elevated rates include higher levels of stress due to discrimination, social marginalisation and targeted tobacco marketing.[81–83] Culturally competent cessation services that recognise and affirm LGBTQ+ identities are essential in reducing these disparities.

4.5.1.4 Race and ethnicity

Tobacco use and consumption patterns vary widely by ethnicity in the UK. According to the 2023 APS, cigarette smoking is most prevalent among people from mixed/multiple ethnicities (12.5%), followed by White ethnic groups (11.0%).[2] Prevalence is lower among those from 'other' (7.5%) and Black ethnic groups (4.8%), and lowest among Asian ethnic groups (2.0%).[2]

However, this broad categorisation masks a more complex picture. Because some minority ethnic groups make up a small proportion of the UK population, survey data are often aggregated into larger categories (eg 'Black') to ensure sufficient sample sizes. However, when STS data from 2013 to 2025 are pooled to improve statistical power, notable differences emerge within these broad groups (Table 4.3) – for example, between Black African, Black Caribbean and other Black communities. Similar variation is seen among Asian populations and people of mixed or multiple ethnicities. More granular data also show that current smoking is significantly higher among Gypsy and Traveller communities (33.1%) than in any other ethnic group, where prevalence ranges from 5.7% to 24.6%. Within some ethnic groups (eg certain Asian ethnicities), there are also stark gender differences in smoking, with higher prevalence among men than women (Table 4.3).

Importantly, these figures only reflect cigarette smoking and do not capture the full range of tobacco products used in England. These include other combustible products (eg cigars, cigarillos, waterpipe tobacco (eg shisha, hookah)), smokeless forms (eg chewing tobacco such as paan, zarda, gul or gutka; snus; nasal snuff), and heated tobacco products. While overall use of these products is relatively low,[75] certain minority ethnic communities have higher rates of use (see section 4.5.6 below). For example, waterpipe smoking is more common among Arab communities[84,85] and chewing tobacco use is higher among South Asian groups.[86,87]

Health inequities experienced by minority ethnic groups in the UK are well documented and shaped by many factors including socio-economic deprivation and structural racism, but are also likely contributed to by differences in tobacco use.

Table 4.3. Smoking prevalence by ethnicity in England.

	Adjusted prevalence % (95% CI)		
	Overall	Men	Women
White British	18.3 (18.1–18.5)	19.4 (19.1–19.7)	17.3 (17.0–17.6)
White Irish	21.3 (19.4–23.1)	23.6 (20.9–26.3)	19.0 (16.4–21.7)
White Gypsy/Traveller	33.1 (26.3–39.9)	36.0 (26.7–45.4)	30.0 (20.3–39.8)
White other	21.9 (21.1–22.6)	26.5 (25.3–27.7)	17.7 (16.8–18.6)
Black Caribbean	16.6 (15.2–18.1)	19.9 (17.5–22.3)	13.7 (12.0–15.5)
Black African	5.7 (5.1–6.3)	7.8 (6.8–8.8)	3.7 (3.1–4.3)
Black other	15.1 (12.6–17.7)	18.7 (14.7–22.7)	11.7 (8.6–14.7)
Asian Bangladeshi	12.2 (10.8–13.5)	19.7 (17.3–22.0)	3.2 (2.1–4.4)
Asian Pakistani	10.5 (9.7–11.2)	15.5 (14.3–16.7)	3.8 (3.1–4.5)
Asian Indian	7.6 (6.9–8.3)	11.2 (10.0–12.3)	3.4 (2.7–4.1)
Asian Chinese	7.8 (6.3–9.3)	11.5 (8.9–14.0)	4.4 (2.8–6.1)
Asian other	10.3 (8.9–11.7)	14.9 (12.6–17.2)	5.4 (3.9–6.8)
Mixed White/Black Caribbean	24.6 (22.1–27.1)	27.0 (22.9–31.0)	22.3 (19.3–25.4)
Mixed White/Black African	16.5 (13.8–19.2)	19.0 (14.8–23.2)	14.1 (10.7–17.6)
Mixed White/Asian	17.2 (15.0–19.3)	19.7 (16.4–23.0)	14.6 (11.8–17.5)
Mixed other	20.0 (17.7–22.4)	18.8 (15.5–22.1)	20.8 (17.7–24.0)
Arab	17.2 (14.5–19.9)	23.4 (19.4–27.4)	8.3 (5.1–11.5)

Estimates are weighted and adjusted for age, survey year and mode of data collection.

Source: data from the Smoking Toolkit Study, pooled between 2013 and 2025.[21]

Among youth aged 16–19 in England, past 30-day use of any non-cigarette tobacco product in 2024 was highest among those identifying with multiple ethnicities (15.9%), compared to White (11.3%), Black (10.6%) and other ethnicities (11.6%). Shisha/waterpipe and smokeless tobacco use were also higher among youth identifying with multiple ethnicities (8.2% and 5.3%, respectively) than those who identified as White (4.6% and 4.4%, respectively), Black (6.1% and 3.1%, respectively) or other (6.6% and 3.4%, respectively). (Additional data from Aria et al.[74])

4.5.1.5 Religion or belief

Tobacco use originates from North America and, before its colonisation and commercialisation, tobacco was used as a sacred medicinal plant and in religious and cultural ceremonies by many different indigenous communities.[88] Other religious affiliation can also be associated with tobacco use, though this area is less extensively studied. Generally, individuals affiliated with religions that discourage smoking report lower smoking rates, while those identifying with no religion tend to have higher smoking prevalence.[89] For example, some Islamic communities (eg South Asian) tend to have lower rates of cigarette use but may use other tobacco products, such as chewing tobacco, which can serve cultural significance.[90] People from certain faiths may also change their tobacco use throughout the year according to religious events, for example Muslim communities will abstain from tobacco use during the month of Ramadan.[91] Cultural sensitivity and religious engagement could play a constructive role in smoking cessation programmes in multi-faith communities.

4.5.1.6 Disability and mental health

Disabled people and those with long-term mental health conditions have significantly higher smoking rates than the general population. Data from the UK Household Longitudinal Study show that across all age groups, disabled men and women are more likely to smoke than

their peers.[27] This disparity appears to be increasing over time as smoking rates have fallen more rapidly among non-disabled people.[27] Smoking prevalence and mental health is discussed further in section 4.6.3 below.

4.5.1.7 Pregnancy and maternity

Smoking during pregnancy is a significant public health concern due to its adverse effects on maternal and child health. Pregnant women and pregnant people from more deprived areas remain significantly more likely to smoke, creating stark regional and socio-economic disparities.[92] Pregnancy and smoking are discussed further in section 4.6.4 below.

4.5.1.8 Marriage and civil partnership

While this characteristic is primarily protected in employment contexts, limited evidence suggests that marital status may indirectly influence smoking habits. Some studies have shown that married people are less likely to smoke,[93] potentially due to shared health goals, mutual support and increased social responsibility. Conversely, relationship breakdowns or social isolation – more common in single or separated individuals – may contribute to smoking initiation and relapse.[94,95]

According to the 2023 APS, cigarette smoking prevalence was lower among individuals who were married or in a civil partnership (7.7%), compared with those who were single (16.2%) or divorced, separated or widowed (15.4%).[2] A similar pattern was seen in the STS in 2019–20 (when data on marital status were most recently collected), when the prevalence of any tobacco smoking was 9.5% among married participants, compared with 22.5% and 21.1% among those who were single and divorced/separated, respectively; differences that persisted after adjustment for age. However, smoking prevalence was higher among those in civil partnerships (33.9%), likely reflecting higher overall prevalence among lesbian, gay and bisexual people.[78] Though data are sparse, smoking cessation programmes might benefit from considering the role of social relationships and support systems in influencing behaviour. There is good evidence that people are more likely to quit smoking if their partner does so at the same time.[96]

4.5.2 People experiencing homelessness

Tobacco smoking in the UK and internationally is consistently and significantly higher among adults experiencing homelessness or insecure housing, often up to four times higher than those in the wider general population.[52,97] Among young people, this disparity is even more pronounced, with smoking rates up to seven times higher among young people who experience homelessness compared with their housed peers.[98]

Homelessness itself is not a single experience. It encompasses rough sleeping, temporary accommodation and hidden homelessness, such as sofa surfing, staying with friends or family, or living in unsuitable or insecure housing (see section 4.3.2 above).[99] Many people in these situations also face overlapping challenges, including mental illness, substance use and involvement with the criminal justice system. These intersecting pressures shape smoking prevalence, patterns and access to support. Despite these inequities, we still lack a clear picture of how smoking varies as people move between different forms of homelessness, making it difficult to capture consistent trends. As a result, smoking prevalence, patterns, motivation to quit and opportunities to access support can vary widely, depending on personal circumstances and the type of housing or instability that people are navigating.

Patterns of smoking also differ. Smoking in this population is often influenced by inconsistent access to tobacco, financial hardship, poor mental health and the instability and uncertainty of the competing demands of day-to-day life. Similar to other groups with greater rates of smoking, number of cigarettes per day and carbon monoxide levels are high.[100,101] People in these circumstances frequently engage in what are often described as risky smoking behaviours, such as sharing cigarettes, smoking discarded cigarettes and asking strangers for cigarettes,[100] and as a result report feeling deeply ashamed about this.[102] These behaviours can also be understood as scarcity-driven responses, where limited access to tobacco intersects with intermittent and intense tobacco dependency. In the context of addiction, scarcity doesn't reduce the urge to smoke; it reshapes how that need is met, and the need for relief can outweigh concerns about health risks or social stigma. Framing tobacco dependency and its treatment through this lens helps shift the focus from individual behaviour to the broader social justice conditions that influence it.

Tobacco use among this group rarely exists in isolation. It often co-occurs with the use of other substances, including alcohol, cannabis, opioids and stimulants (see section 4.5.8 below).[97] This poly-substance use exacerbates poor physical health conditions including respiratory illness, cardiovascular disease and infections.[103] From a social justice perspective, these patterns of use need to be seen in the context of structural disadvantage, cumulative trauma, social exclusion and unmet health and social care needs.[104]

Contrary to persistent myths, people experiencing homelessness often express an interest in reducing or quitting smoking.[105,106] Most people who smoke understand the health risks of tobacco and want to make positive changes, but the pathways to quitting are often obstructed by several barriers. Factors that can make it harder for people experiencing homelessness to quit smoking include high levels of stress, mental health challenges, co-occurring substance use and practical barriers to accessing support.[98] Many face logistical difficulties attending cessation programmes, feel uncertain or doubtful about whether treatment will work, or prefer to try quitting on their own. The cost of nicotine replacement therapy (NRT) or e-cigarettes can be prohibitive, and being surrounded by others who smoke, including staff, often makes quitting even more difficult.[52,100,106,107] To understand and respond effectively, we need data and services that reflect the full complexity of people's lives and living conditions.

4.5.3 Prison settings

There are currently around 97,000 adults in prisons across the UK, of whom just 4% are women.[108–110] People in prison are disproportionately drawn from one or more overlapping disadvantaged groups in society and, as a result, smoking prevalence in this population is significantly higher than in the general population. A global systematic review, which included data from 50 countries, found that smoking prevalence (with the exception of China) among those entering prison or currently in prison exceeded corresponding community rates by up to six times.[111] Another review, encompassing over 16,000 individuals in prisons across nine Western European countries, reported a pooled smoking prevalence of 72%.[112] Greece and Italy had the highest prevalence (100%), while Switzerland, Germany, Finland and Spain reported the lowest (<50%). Data from this study go on to suggest that twice as many men in prison smoke compared with their female counterparts (83% and 44%, respectively).[112]

Since 2015, comprehensive smoke-free policies (complete and partial) have been introduced across prisons in England, Wales and Scotland to protect all those living and working in prisons from exposure to high levels of secondhand smoke (SHS). Prior to the introduction of smoke-free policies throughout these jurisdictions, smoking prevalence among people in prison was estimated to be between 70% and 80%.[113–116] High prevalence meant that tobacco played an integral part within the cultural and social norms in prisons,[117–120] with smoking being used to cope with boredom and stress, as a vehicle for illegal drug use, and with a monetary value in an environment without currency.[113,121] As a result, banning smoking in prisons was a momentous move and its successful rollout across England, Wales and Scotland was attributed to a long lead-in with sustained communication between staff and prisons, local and regional justice teams working in partnership with health agencies, increased provision of smoking cessation services, and the introduction of e-cigarettes for people in prison to purchase.[122,123] All prisons in Scotland (Categories A–D) rolled out a complete smoke-free policy (no smoking permitted anywhere within the perimeter walls),[124] whereas across the prison service in England and Wales, the complete policy included its closed estate only (Categories A–C), with a partial policy (permitting tobacco smoking on the prison sites within designated shelters) introduced across its 15 open prisons, all located in England (Category D).[125] Since tobacco has become a contraband item across most English, Welsh and Scottish prisons, indoor levels of SHS have significantly reduced.[126,127] Studies with prison staff working in complete smoke-free establishment suggest that smoking does still occur; however, it has not been reported to be a major problem.[122,123] Currently Northern Ireland is the only UK nation to have not yet adopted a smoke-free prison policy – though it was due to commence such a policy in 2020, this was delayed due to the COVID-19 pandemic, and no new implementation date has been set.[128]

Staff working across the open prison estate in England have estimated that between 70–90% of people who used to smoke return to tobacco on their move from the closed (completely smoke-free) to the open (partially smoke-free) prison estate.[122] They attributed this high resumption rate to a number of factors, namely: new arrivals into open prisons being offered a 'smoker's pack' (loose tobacco, lighter and rolling paper), tobacco being used as a coping mechanism for some when transiting from a regimented closed regime into an more relaxed open regime, and that maintaining a tobacco-free status in an environment where the majority of people smoked is challenging. One study (awaiting publication) has recorded relapse to smoking among people who move from a closed (completely smoke-free) prison to an open (partially smoke-free) prison in England. The cross-sectional survey recruited 30 people who used to smoke tobacco (who had experienced enforced abstinence within the closed estate) around 6 weeks after their arrival at one open prison in the Midlands. 90% of participants returned to regularly smoking tobacco within just 1 week, with 70% commencing smoking on the day that they entered open conditions. Those who resumed tobacco use reported smoking on average eight

roll-up cigarettes per day, with nearly half reporting that they were currently smoking less compared to the period before enforced abstinence (either within a closed prison or in the community). One study completed after smoke-free prison polices were rolled out across England found that the majority of staff who implemented the move felt like an opportunity had been missed by not moving the open estate completely smoke-free at the same time as the closed estate and, in turn, supported any future move for the open estate to completely smoke-free.[122]

4.5.4 Asylum seekers

While specific, comprehensive UK-wide data on smoking prevalence among asylum seekers are scarce due to their systemic exclusion from standard household surveys, proxy data on broader migrating populations offer some insight. For instance, data from the Migration Observatory suggest that men born outside the UK smoke more than men born in the UK (around 19% vs 13%).[129] However, these general migration data may not fully capture the elevated smoking rates observed in populations experiencing high levels of stress and precarity, which are characteristic of asylum seekers. Studies consistently indicate that those who migrate to seek asylum often have worse health outcomes compared to other migrant groups or the UK-born population, whose experiences of trauma and protracted uncertainty are directly linked to poorer mental and physical health and, consequently, higher rates of detrimental coping mechanisms like smoking.[129–131]

4.5.4.1 Barriers to cessation and healthcare access

Asylum seekers face numerous formidable barriers to accessing effective smoking cessation support. Language barriers are a primary obstacle, limiting their ability to understand health information or engage meaningfully with healthcare providers.[132] Cultural differences in perceptions of health and illness, as well as a lack of culturally sensitive services, can further deter engagement.[133] The transient nature of their living situations, coupled with frequent relocation and lack of a stable address, makes continuous engagement with health services challenging. This instability also impacts the consistency of care, as individuals may move between different service providers, hindering long-term cessation efforts. Furthermore, requirements for proof of identification and address, coupled with fear and mistrust of authorities (often stemming from experiences in their home countries, during migration, or due to concerns about data sharing between health services and immigration enforcement), can deter asylum seekers from registering with a GP or engaging with health services.[134] These systemic barriers create an environment that fosters continued smoking and makes quitting almost impossible for this population.

4.5.4.2 Implications for public health and social justice

The lack of accurate data hinders the development of targeted, culturally appropriate and accessible smoking cessation interventions for asylum seekers. Without understanding the scale of smoking within this population, resources cannot be effectively allocated, and their disproportionate health challenges remain unaddressed.

From a social justice perspective, the failure to account for asylum seekers in public health planning reflects a systemic neglect of a highly vulnerable group.[135] Addressing health inequalities is crucial, especially when disparities result from structural factors over which affected communities have little control, such as restrictive immigration policies, precarious living conditions and barriers to accessing mainstream services.[136]

4.5.5 Smoking and health-related economic inactivity

It is well established that smoking-related ill health contributes to economic inactivity, defined as not working and not seeking work.[137–140] An analysis of the relationship between smoking and health-related economic inactivity among working-age adults in England[141] was conducted using data from the nationally representative STS, which surveyed over 173,000 adults aged 18–64 in monthly cross-sectional surveys between 2013 and 2025. The research examined trends in economic inactivity caused by long-term illness or disability and differences across smoking statuses (comparing people who currently, previously and never smoked) and estimated the number of people who smoked who were out of work due to poor health in early 2025.

Over the 12-year period, health-related economic inactivity more than doubled across the general working-age population, rising from 2.5% in 2013 to 5.5% in 2025. This inactivity was disproportionately linked to people who smoked. Across the period, rates of inactivity were consistently much higher among people who currently smoked, rising from 5.4% to 11.3%, compared to smaller absolute increases in people who previously smoked (from 2.5% to 5.8%) and people who never smoked (from 1.4% to 3.3%). This widening absolute

disparity meant that, by early 2025, one in nine working-age adults who smoked was not in employment due to long-term illness or disability. Despite declining smoking prevalence over the study period,[2] the number of people who currently smoked who were economically inactive due to ill health increased from approximately 390,000 in 2013 to around 750,000 in 2025.

Differences in economic inactivity by smoking status were more pronounced in older age groups, consistent with evidence that the health impacts of smoking typically become more evident in mid- and later life. For example, prevalence of economic inactivity in 2025 among people who never smoked versus people who currently smoked was 0.8% vs. 3.1% among 18–24-year-olds compared with 6.9% vs 21.4% in those aged 55–64.

Among people who used to smoke, a dose–response pattern was observed. Those who had quit recently were more likely to be out of work due to illness than those who had quit longer ago. For example, in 2025, 12.1% of people who had quit smoking 1 year ago were economically inactive, compared to 9.2%, 6.8% and 4.6% of those who had quit 5, 10, and 20 years earlier, respectively. This suggests that health improvements associated with smoking cessation accumulate over time and that, during early post-quitting periods, people might still be dealing with smoking-related health consequences. It may also reflect underlying socio-economic factors: individuals who quit earlier are often more socio-economically advantaged, and have better baseline health and greater access to cessation support[142] – factors that themselves contribute to a lower risk of long-term economic inactivity.

Collectively, this evidence has clear implications for public health and economic policy. Economic modelling suggests that smoking costs the economy in England an estimated £27.6 billion annually in lost productivity due to smoking-related unemployment, lost earnings and premature mortality.[140,143] Smoking is a modifiable behaviour with severe disease outcomes that result in long-term work absence and economic disengagement,[144–146] methodology, and sample characteristics. Methods We searched for studies that reported on smoking status and sickness absence, used empirical data, were published in a peer-reviewed journal in the last 25 years, and written in English. We conducted pooled analyses in which uni- and multivariate generalized linear regression models were applied. Results After screening 2551 unique records, 46 articles from 43 studies were included, of which 33 studies (with 1 240 723 participantsis also associated with poor mental health[147–149] and is an increasingly important contributor to long-term sickness absence.[150,151] Severe psychological distress has become more prevalent in the UK since the COVID-19 pandemic, with particularly high levels among people who smoke.[152] Over the same period there has been a marked increase in the proportion of working-age adults who are economically inactive due to ill health or disability.[150,153] While smoking prevalence has declined in recent decades, it remains disproportionately concentrated in socio-economically disadvantaged groups,[2,142] among whom the effects of poor health and labour market exclusion are greatest.[44] Structural inequalities may compound the effects of health behaviours like smoking, together contributing to poor health and exclusion from the labour market.

These data suggest that smoking is not only a leading cause of preventable illness and mortality, but also strongly linked to economic inactivity that reduces workforce participation and places strain on the healthcare system and public services (see chapter 5, section 5.4.1). These associations are embedded in broader patterns of structural inequality that shape both health behaviours and labour market outcomes. The increase in economically inactive people who smoke has occurred despite declining smoking rates, and may indicate that the concentration of health risks is rising among a smaller, more disadvantaged smoking population. Reversing this trend requires urgent, coordinated action across health, employment and social policy. Reducing smoking prevalence is not only a public health imperative; it is a vital step toward promoting greater equality across society, addressing rising economic inactivity and improving national productivity.

4.5.6 Waterpipe and smokeless tobacco

Although cigarette use is declining in the UK, the proportion of adults using non-cigarette forms of tobacco (such as waterpipe and smokeless tobacco) has increased by about fivefold in the past decade.[76] Use of non-cigarette forms of tobacco is higher among specific population subgroups, such as young adults, men and women of Bangladeshi origin (for smokeless tobacco), minority ethnic groups and those who currently smoke cigarettes.[75] Income inequality exists among minority ethnic groups; almost two-thirds of Bangladeshi and Pakistani communities in the UK live in low-income households.[154,155] Waterpipe cafes and smokeless tobacco product retailers are concentrated in many socio-economically deprived inner-city areas in the UK, disproportionately impacting already marginalised groups.[156] A lack of general awareness of their harms,

insufficient surveillance[76] and less stringent and minimally enforced regulations[156,157] of waterpipe and smokeless tobacco further exacerbates these inequalities.

4.5.6.1 Smokeless tobacco prevalence and use patterns

25% of the world's tobacco is consumed using smokeless tobacco products that are chewed or sucked, including paan, zarda, gul or gutka, snus and nasal snuff,[9,158] contributing to 350,000 deaths annually.[159] Research on smokeless tobacco consumption in Bangladesh, India, Pakistan and the UK[160,161] shows that its use is strongly related to tradition, making it highly culturally and socially acceptable, and that its consumption predominantly occurs in people in less socio-economically advantaged groups.[162] The use of smokeless tobacco remains high in the South Asian diaspora in the UK (Table 4.4).[157]

South Asian smokeless tobacco products are highly addictive (exhibiting 3–4 times higher nicotine dependency than cigarettes)[163,164] and contain dangerous levels of tobacco-specific nitrosamines and heavy metals,[165,166] contributing to poorer health outcomes.[167–169] People of South Asian origin experience disproportionately higher rates of head and neck cancers compared to the general population in the UK,[170] which may be accounted for by high use of smokeless tobacco in the UK, with a survey from 2004 identifying the highest prevalence of 16% reported in women of Bangladeshi origin.[154] In addition, purchased smokeless tobacco products are almost entirely illicit.

Despite the consequences of smokeless tobacco on populations and communities, data on the use of these smokeless products are limited. The sampling methods used in national surveys[75] may underrepresent minority ethnic groups, leading to an underestimation of the overall use of smokeless tobacco products in the UK.

4.5.6.2 Waterpipe tobacco prevalence and use patterns

Waterpipe, called 'shisha' in the UK, consists of a single- or multi-stemmed apparatus used to inhale tobacco smoke after it passes through water.[171] Its use is growing among young adults,[172] particularly those of South Asian origin and those of other/mixed ethnicity (Table 4.5).[157] Waterpipe smoking delivers dangerous levels of toxicants,[173–175] with users having a higher risk of cancer[176] and cardiorespiratory illnesses[177,178] than non-users.

The uptake of exclusive waterpipe smoking (in the absence of any other form of tobacco use) increased in the UK at the start of the COVID-19 pandemic[76] and is currently estimated to be 0.9%, using data from the STS.[75] However, representative data on waterpipe smoking are limited in the UK, as exclusive waterpipe users would be excluded from surveys that focus only on cigarette smoking, such as the APS[2] or surveys conducted by stop smoking services and outreach programmes.[75]

Despite the consequences of waterpipe and smokeless tobacco use on populations and communities, data on the use of these tobacco products are limited.

Table 4.4. Use of smokeless tobacco products by ethnic group in the UK, 2019.

Smokeless tobacco use, by ethnicity	White	South Asian	Black/African/ Caribbean	Other/mixed ethnicity
Ever tried	12%	23%	19%	20%
Regular use (at least monthly)	1%	7%	5%	3%
Never tried	86%	64%	75%	75%

Reproduced from ASH (2024).[157]

Table 4.5. Use of waterpipe by ethnic group in the UK, 2023.

Shisha use, by ethnicity	White	South Asian	Black/African/ Caribbean	Other/mixed ethnicity
Ever tried	12%	28%	29%	27%
Once a year or more	2%	15%	8%	11%
Less often	10%	13%	22%	17%
Never tried	73%	51%	54%	56%

Reproduced from ASH (2024).[157]

The sampling methods used in national surveys[75] may underrepresent minority ethnic groups, leading to an underestimation of the overall use of these products in the UK. Ongoing surveillance and research are critical to enable policymakers to allocate resources effectively, to reduce the impact of these products on health inequality.

4.5.7 Illicit tobacco

National and regional surveys provide limited data on the use of illicit tobacco geographically and in population subgroups. The STS includes a regular question on the source of tobacco purchase, giving an insight into illicit tobacco purchasing behaviours in England. A recent analysis investigating trends in illicit tobacco purchasing between 2019 and 2022 found that about one in 10 people who smoked in the past year reported illicit tobacco purchases, with no statistically significant change in the proportion reporting illicit tobacco purchases (from 9.2% to 8.5%) during this period. The prevalence of illicit tobacco purchasing was higher among people from less advantaged versus more advantaged social grades.[179] Men were four times more likely to encounter illicit tobacco than women. In the general population sample, people in less advantaged groups were more likely to believe that 'Selling (illicit cigarettes) doesn't do anyone any harm'.[180]

In the north east, Fresh, a regional tobacco control programme, has tracked the illicit tobacco market in the area since 2009, the most recent survey wave conducted in 2025.[181] The survey samples people who smoke (n ≈ 1,200) and those who do not smoke (n ≈ 1,500), and includes sub-samples of adults who buy illicit tobacco (n ≈ 300) and young people aged 14–16 with smoking experience (n ≈ 100). The 2025 survey found that 21% of the adult smoking population buy illicit tobacco and that it makes up 41% of their total consumption. 59% of children aged 14 and 15 who smoke say that they buy illegal tobacco, and 67% say that they have been offered it. Private addresses or 'tab houses' are the main source of illicit tobacco, with 33% saying that this was where they mainly bought from, followed by pubs/clubs at 26% and shops at 12%. 82% of illicit buyers in the north east said that using illicit tobacco made it possible for them to smoke when they could not afford to otherwise, illicit tobacco (cigarettes or rolling tobacco) being two- to threefold less costly than licit tobacco.

Over half of people in the north east who smoke and buy illicit tobacco are from the most deprived socio-economic groups (C2DE), although more deprived people who smoke are not more likely to buy illicit tobacco than more affluent people who smoke. Illicit tobacco use among other disadvantaged groups, such as people with a mental health condition, is less well understood, as the sample size is not sufficient to provide reliable data.

The north east data suggest that illicit tobacco trade undermines laws to protect young people from tobacco, and the availability of illicit tobacco perpetuates health inequalities by maintaining people in their addiction, especially those from more deprived populations.

4.5.8 Substance use

People who use drugs or drink alcohol heavily have among the highest rates of tobacco smoking in the population.[182–185] However, because the immediate harms of their other substance use are often more acute, tobacco use is frequently overlooked.

4.5.8.1 Tobacco and alcohol

Tobacco smoking and alcohol drinking are closely linked behaviours. In the UK, data from over 100,000 participants in the Smoking and Alcohol Toolkit Study found that smoking rates rose steadily with Alcohol Use Disorders Identification Test (AUDIT) scores; 13.8% of those with an AUDIT score of 5 smoked tobacco, rising to 75.9% among those with the highest AUDIT score of 40 (Fig 4.15).[182] Moreover, among people who smoke, those drinking at levels that put them at risk of alcohol dependency have higher tobacco dependency than those not at risk of alcohol dependency: smoking on average three more cigarettes per day and having 2.8 times greater odds of having their first cigarette within 5 minutes of waking.

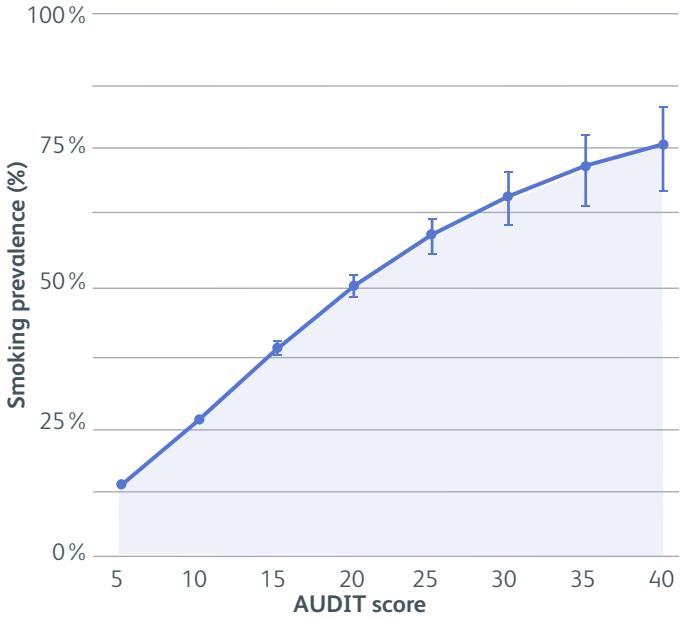

Fig 4.15. Prevalence of current smoking among drinkers (weighted n = 103,162) by their level of alcohol consumption, as indexed by their AUDIT score.

Adapted from Garnett *et al* (2022) under the CC BY 4.0 licence.[182]

The high prevalence of co-use of tobacco and alcohol is especially concerning, given that using both products together appears to magnify health risks more than the sum of the risk of using each product alone. A meta-analysis of 24 cohort and case–control studies found multiplicative synergistic interactions between alcohol consumption and tobacco smoking for increased risk across several cancer types, with the strongest effects for head and neck cancers.[186] The magnitude of the synergy increases with heavier use of both alcohol and cigarettes, meaning that the excess risk from drinking and smoking together was greater at higher levels of both behaviours, exceeding what would be expected from their individual effects alone.

Multiplicative risks have also been observed for cardiovascular disease. In a prospective cohort study of 1,204 hypertensive patients, smoking and alcohol use interacted to increase the risk of major adverse cardiovascular events: people who smoked and drank alcohol had about four times the risk compared with people who neither smoked nor drank, and more than twice the relative risk seen in people who smoked but abstained from alcohol.[187] Alcohol and tobacco co-use can inhibit attempts to quit smoking, as one of the most common settings where people report smoking relapse is in environments where they drink alcohol.[188,189] A systematic review found that, in randomised trials and observational studies, people who drink alcohol are less likely to quit tobacco smoking successfully and that, in experimental studies, exposing people to alcohol-related cues (eg pictures of alcohol) induces urges to smoke.[190] Co-use of tobacco and alcohol at possible dependency levels is more common among people in more disadvantaged groups (Fig 4.16). Therefore, the combination of these behaviours likely contributes to the alcohol harm paradox, whereby disadvantaged groups experience greater health harms from alcohol despite reporting lower or similar overall consumption.[191]

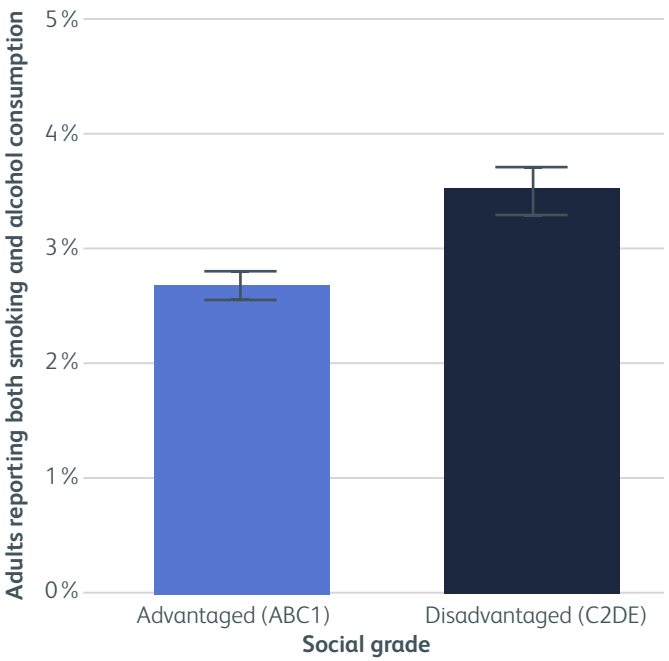

Fig 4.16. Percentage of adults reporting both current tobacco smoking and alcohol consumption at possible dependency levels (AUDIT-C score ≥ 8) by social grade (National Readership Survey Classification).[192]

Estimates are weighted to be representative of the population, with error bars showing 95% confidence intervals.

Source: Figure created using data from the Alcohol and Smoking Toolkit Study, January 2021 to July 2025.

4.5.8.2 Tobacco and cannabis

Cannabis and tobacco co-use refers to people who use both substances, either concurrently or through co-administration.[193] Concurrent co-use means using both substances separately, for example smoking cannabis in a pipe each night and cigarettes during the day. Co-administration means mixing them together, most commonly by rolling dried cannabis with tobacco to make a joint.

In Europe, co-administration with tobacco is the most common way that cannabis is consumed. In Great Britain, a 2020 ASH/YouGov cross-sectional survey found that 61% of people with past-year cannabis use reported smoking it with tobacco; the Global Drug Survey reported even higher rates of 77.2%.[194] Concurrent co-use is also widespread; the ASH/YouGov survey found that 43.3% of people who had used cannabis in the past year also reported smoking tobacco.[183]

Tobacco cessation is particularly important in this group, as cigarette smoking appears to undermine attempts to stop using cannabis. Across five inpatient studies, the odds of cannabis relapse were 19 times higher among those who continued smoking cigarettes than among those who quit.[195] The reverse is also true: cannabis use appears to reduce success in quitting tobacco. In cohort data for 8,218 adults from the US Population Assessment of Tobacco and Health (PATH) study, people who used cannabis had 25% lower odds of discontinuing all

tobacco use across the follow-up.[196] Lower odds of successful tobacco smoking cessation were also found in a Canadian study of 83,206 adults enrolled in cessation treatment[197] and a study of 45,151 callers to a US quitline in California.[198]

These difficulties may reflect the close behavioural and social ties between cannabis and tobacco. To stop smoking tobacco, people who smoke joints and cigarettes face a dual behaviour change: they must quit cigarette smoking, but also modify how they consume cannabis (eg switching to a cannabis vaporiser or a herbal tobacco substitute) or quit cannabis entirely. Supporting both behaviours together may improve outcomes, as explored in several feasibility and pilot studies.[199] However, qualitative research with UK NHS stop smoking service advisers found that, while advisers were willing to support cannabis/tobacco co-users, they often lacked the training and recording systems to do so effectively.[200] This highlights the need for better guidance and training on treating people who co-use tobacco and cannabis.

4.5.8.3 Tobacco and opioids

Tobacco smoking is extremely common among people who use opioids like heroin; an international systematic review found that, on average, 85% of people in treatment for opioid dependency report currently smoking tobacco,[185] and in England, 93% of primary care patients with recorded illegal opioid use currently or previously smoked tobacco.[184] Despite this, it is often viewed as a much lower-priority concern than their drug use, and people in this group often do not receive adequate tobacco smoking cessation support.[201]
An analysis of 106,789 people in England who used illegal opioids between 2001 and 2018 challenges the view that smoking is a low-priority concern in this group.[202] Using period life-table modelling based on age- and cause-specific mortality rates from the Clinical Practice Research Datalink linked to national mortality records, the study estimated the proportion of premature deaths attributable to tobacco and to illegal drugs. Two-thirds (63.2%) of co-users of tobaccos and opioids were estimated to die before age 70, compared with 16.2% of the general population. Tobacco smoking accounted for 23.6% of these premature deaths, while illegal drugs accounted for 27.6% (Fig 4.17).

In addition, the modelling showed that eliminating tobacco smoking would reduce the risk of premature death by 11.8 percentage points, compared with 9.4 percentage points for eliminating illegal drugs, as shown in Fig 4.18. Although drug-related deaths occur at younger ages, causing about three times as many years of life lost per person than smoking, the contribution of tobacco to early mortality in this group is substantial. These findings undermine the idea that smoking is a negligible issue among people who use heroin in comparison to their drug use. Addressing tobacco use alongside other substance use could deliver meaningful gains in life expectancy for this population. Furthermore, the longitudinal US PATH study found that within-person transitions from current to former smoking were associated

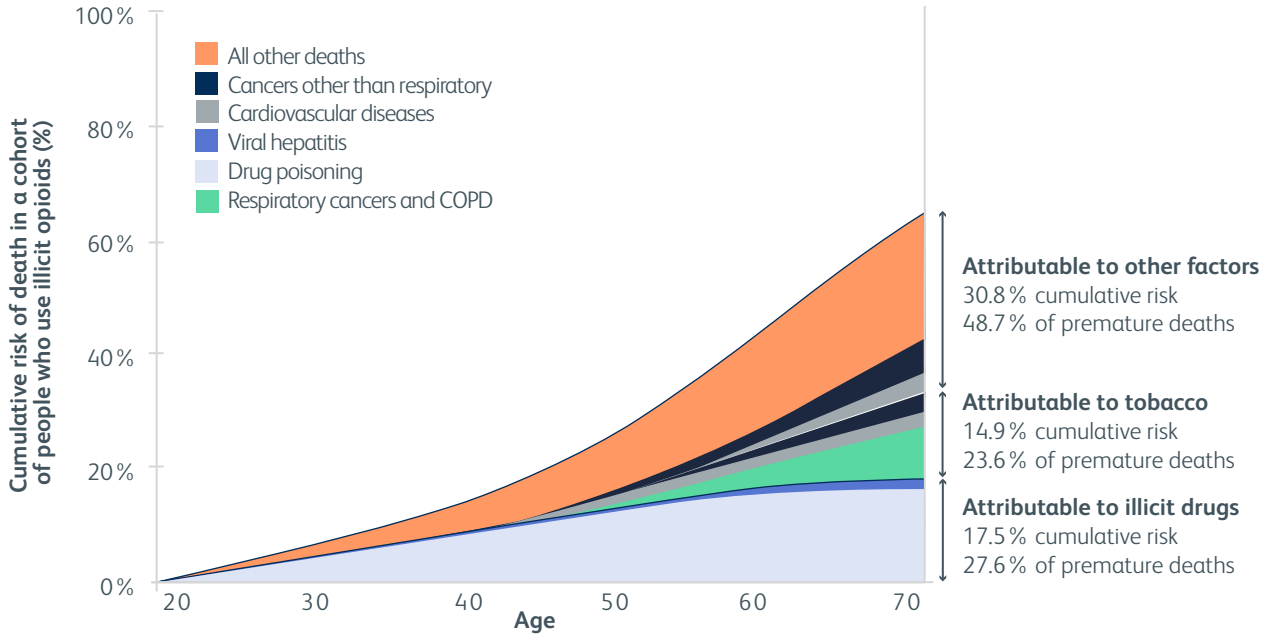

Fig 4.17. Deaths attributable to tobacco and illicit drugs among people who used illegal opioids in England, based on life-table modelling.

Adapted from Lewer *et al* (2025) under the CC BY 4.0 licence.[202]

with higher odds of recovery from other substance use disorders, suggesting that smoking cessation may play a role in supporting recovery processes.[203]

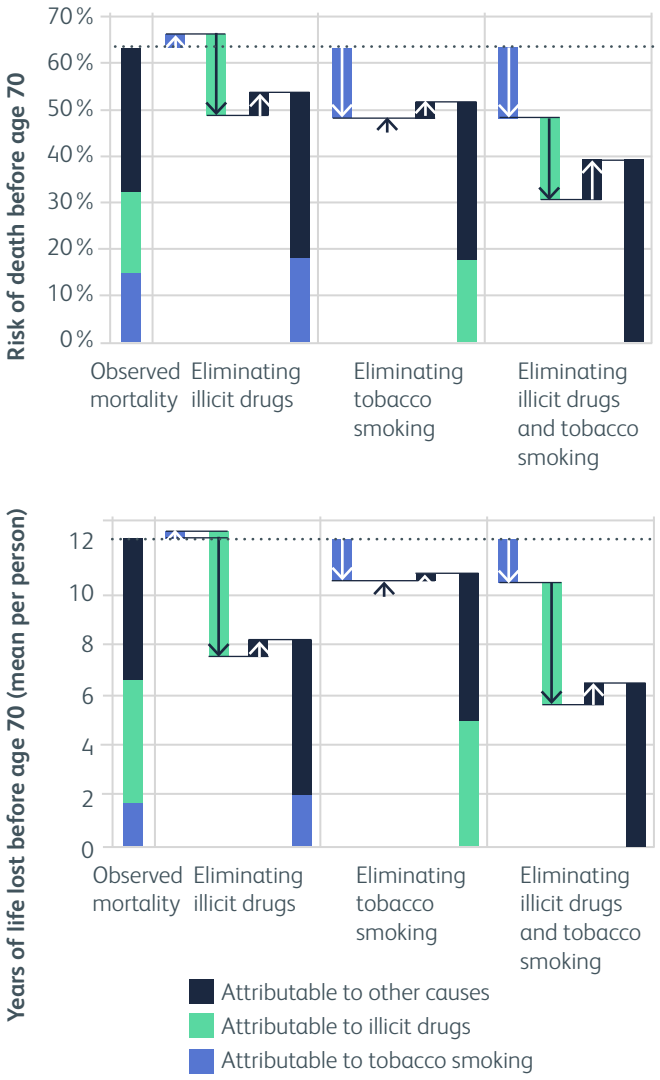

Fig 4.18. Risk of premature death and years of life lost before age 70 among people who used illegal opioids, with risk split into parts attributable to illegal drugs and tobacco smoking, and into scenarios where illegal drugs and/or tobacco smoking were eliminated.

Adapted from Lewer *et al* (2025) under the CC BY 4.0 licence.[202]

4.6 Tobacco-related inequalities identified in healthcare settings

The vast majority of the UK population are registered with a GP and use NHS services throughout their lifecourse.[204] Demographic information is routinely recorded into NHS data collection systems, which capture some information on markers of health inequality such as protected characteristics and Index of Multiple Deprivation (linked to postcode). Smoking status of individuals may be recorded by GPs (incentivised by the 'Quality Outcome Framework'), on admission to hospital, at the time of booking for pregnancy or as part of annual health checks for a range of conditions such as asthma or severe mental illness. This combination of NHS data collection on indicators of health inequalities and smoking status provides a rich source of data for people accessing healthcare services, although data systems may not capture the use of all forms of tobacco products such as smokeless tobacco or heated tobacco.

4.6.1 Acute care hospitals

In England, attendances for hospital services (inpatient, outpatient and emergency care)[205–207] number over 180 million each year, with evidence that people who smoke are more likely to be admitted to hospital or attend emergency departments than people who have never smoked.[208,209] In England in 2022/23, over 400,000 hospital admissions of adults aged 35+ were attributable to smoking, predominantly related to cancers, respiratory disease and cardiovascular disease (Fig 4.19).[14]

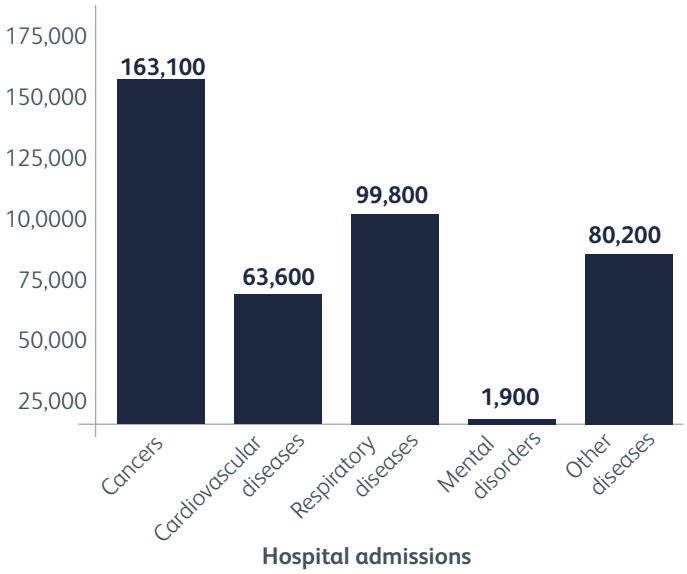

Fig 4.19. Hospital admissions directly attributable to smoking in England, 2022/23 (adults aged ≥35).

Note: Mental disorders also include behavioural disorders.

Source: Statistics on smoking. House of Commons Library Research briefing 28 July 2025.[14]

Data on smoking status for people using hospital services are not universally collected – historically one in four inpatients are not asked their smoking status on admission to hospital.[210] Other sources of information on smoking by hospital patients are provided in national audits, registries or extrapolated from national surveys (see section 4.2). Of note, there is no automated transfer of smoking status from an individual's primary care record to the hospital setting.

Since the 2021 phased implementation of the NHS Long Term Plan introducing opt-out tobacco dependency treatment services for hospital inpatients and maternity services, a new data source on smoking and health inequalities has become available.[211] The treatment pathway requires:

- identification of smoking status on hospital admission
- provision of NRT to prevent nicotine withdrawal symptoms
- opt-out referral to in-house tobacco dependency advisers to facilitate in-depth bedside consultation and further smoking cessation pharmacotherapy
- at discharge, patients are offered a transfer of care to local government stop smoking services to complete a 12-week course of treatment including behavioural support, with ascertainment of smoking status 28 days after commencement of the quit attempt.

Patient-specific data capture and reporting to NHS England are required for each element of the pathway, including information on protected characteristics (age, sex, ethnicity) and Index of Multiple Deprivation.[212,213]

In 2025, approximately 93% of 147 acute hospitals had started their inpatient tobacco dependency service (source: unpublished data, personal communication), although the maturity of these services and quality of data reporting varies. Pseudo-anonymised information captured on patients who smoke in these pathways is made accessible through the NHS Tobacco Dashboard[213] and NHS Model Hospital system,[214] including data relating to health inequalities. Access to the NHS Tobacco Dashboard is largely limited to those working within the NHS, although plans to make the data publicly accessible are at an advanced stage.

Data on patients who smoke admitted to acute hospital in England in 2023–24 were provided by a recent national cohort study and considered whether tobacco dependency treatment was equitable, using Index of Multiple Deprivation as a marker of health inequality.[215] Information on a cohort of 185,000 people who currently smoke admitted between 1 January and 31 December 2024, for whom there was a complete dataset, was examined. The data demonstrated a sixfold difference in the absolute numbers of people undertaking a quit attempt in the more deprived quintiles compared to the least deprived (Fig 4.20); adjusted data demonstrated that the likelihood of commencing a supported quit attempt was highest in the most deprived quintiles (Fig 4.21).

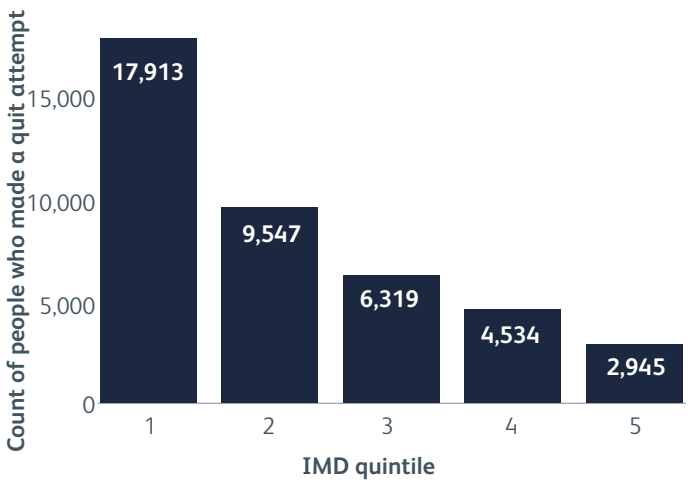

Fig 4.20. Number of people who smoke commencing a supported quit attempt by deprivation quintile.

Adapted from Agrawal *et al* (2026) under the CC BY-NC 4.0 licence.[215]

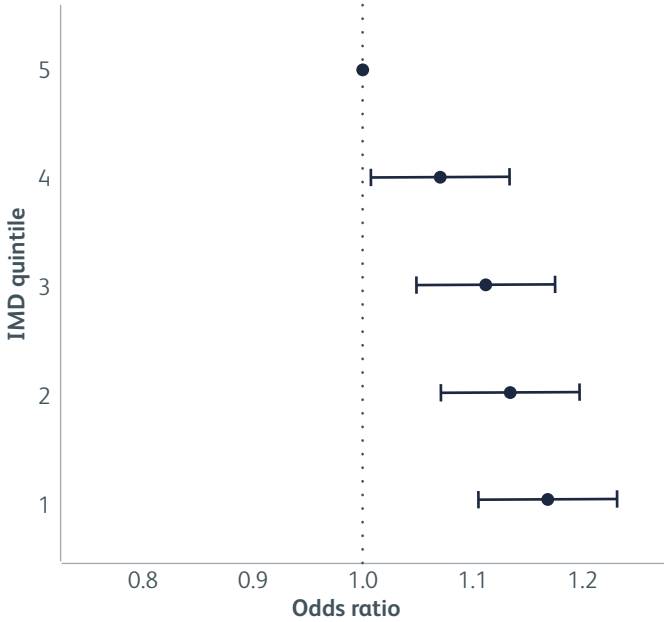

Fig 4.21. Adjusted odds of commencing a supported quit attempt by deprivation quintile.

Adapted from Agrawal *et al* (2026) under the CC BY-NC 4.0 licence.[215]

Of those commencing a supported quit attempt, it was notable that women, people in older age bands and people of Asian ethnicity were more likely to make a quit attempt (Table 4.6).

A similar pattern to those commencing a quit attempt was reported for people successfully quitting, with unadjusted data demonstrating a fourfold greater volume of people quitting in the more deprived quintiles (Fig 4.22); however, the likelihood of successfully quitting was highest for people in the most advantaged quintile of deprivation (Fig 4.23).

Table 4.6. Sensitivity analysis using complete-case ethnicity data: 'Commencing a quit attempt' as the dependent variable, including those for whom all demographic data fields were complete (N = 159,191); univariate and multivariate logistic regression.

		Unadjusted			Adjusted		
		Odds ratio	95% lower and upper CI	*P* value	Odds ratio	95% lower and upper CI	*P* value
Deprivation	Quintile 1 – most deprived	1.44	1.38–1.51	**<0.0001**	1.17	1.11–1.24	**<0.0001**
	Quintile 2	1.25	1.19–1.32	**<0.0001**	1.14	1.07–1.21	**<0.0001**
	Quintile 3	1.20	1.14–1.27	**<0.0001**	1.12	1.05–1.19	**0.0003**
	Quintile 4	1.11	1.05–1.17	**0.0002**	1.08	1.01–1.15	**0.0178**
	Quintile 5 – least deprived	1.00			1.00		
Gender	Female				1.13	1.10–1.17	**<0.0001**
	Male				1.00		
Age group	18–24				0.36	0.33–0.40	**<0.0001**
	25–29				0.48	0.44–0.52	**<0.0001**
	30–34				0.56	0.52–0.61	**<0.0001**
	35–39				0.66	0.62–0.71	**<0.0001**
	40–44				0.80	0.74–0.85	**<0.0001**
	45–49				0.91	0.85–0.98	**0.0069**
	50–54				1.00		
	55–59				0.94	0.89–1.00	**0.0425**
	60–64				1.03	0.97–1.10	0.2898
	65–69				1.01	0.95–1.07	0.7637
	70–74				0.88	0.82–0.94	**0.0001**
	75–79				0.77	0.72–0.83	**<0.0001**
	80–84				0.56	0.51–0.61	**<0.0001**
	90+				0.20	0.15–0.27	**<0.0001**
Ethnicity	Asian or Asian British				1.15	1.07–1.24	**0.0001**
	Black, African, Caribbean or Black British				0.99	0.90–1.08	0.8319
	Mixed or multiple ethnic groups				1.03	0.90–1.17	0.6915
	Other ethnic group				1.02	0.94–1.12	0.6160
	White				1.00		

Adapted from Agrawal *et al* (2026) under the CC BY-NC 4.0 licence.[215]

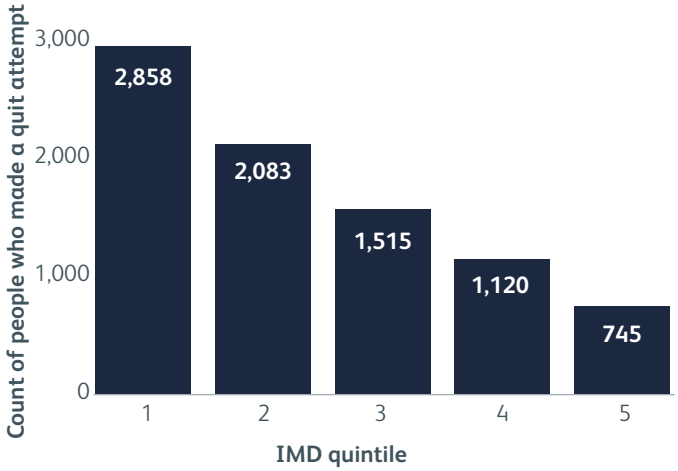

Fig 4.22. People successfully quitting after a supported quit attempt by deprivation quintile.

Adapted from Agrawal *et al* (2026) under the CC BY-NC 4.0 licence.[215]

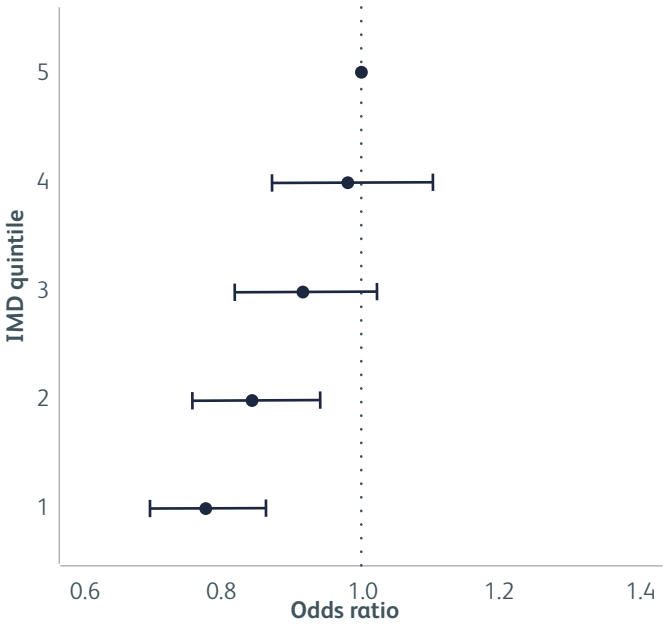

Fig 4.23. Adjusted odds of making a successful quit attempt by deprivation quintile.

Adapted from Agrawal *et al* (2026) under the CC BY-NC 4.0 licence.[215]

In summary, for people who smoke admitted to acute hospitals and provided opt-out treatment, a greater volume of people from more deprived localities commence a quit attempt and stop smoking, whereas the likelihood of successfully quitting was highest in more advantaged localities, a pattern observed by community stop smoking services.[216] The reasons for this observation may be related to higher levels of nicotine addiction, the need for tailored treatment duration, and intersectionality of additional conditions such as alcohol misuse or mental health disorder.

4.6.2 Primary care

The data available in the UK to assess smoking behaviours range from snapshot audits through to routine healthcare data, and the Quality and Outcomes Framework (QOF)[217] has increased the reliability of smoking data coded in primary care (although it does not capture smokeless tobacco use, concentrated in minority ethnic groups). A data source accessible to researchers is the Clinical Practice Research Datalink (CPRD) Aurum database, which contains representative anonymised data from GP practices across England, covering 29.3% of the population.[218,219] The dataset indicates that adult smoking prevalence decreased from 17.5% to 14.7% between 2018 and 2024 and that smoking prevalence in the most deprived quintile remained twice that of the least deprived quintile (Fig 4.24a). While smoking prevalence declined in all regions, the reduction was lower in the north east and East Midlands in 2024 (Fig 4.24b). The drop in smoking prevalence occurred across sex and age categories (Figs 4.24c and d).

A similar declining trend was seen in smoking initiation incidence rates in people who have never smoked, with incidence rates higher in those living in more deprived IMD quintiles (Fig 4.25a). Sharp drops in 2020 and 2021 were most likely related to under-recording of smoking status due to the reduction in GP visits during the COVID-19 pandemic. Successful smoking cessation quit attempts (defined as a code indicating successful smoking cessation or use of an ex-smoking code, with no indication of a current smoking code within 1 year) have remained reasonably stable over time, and appear consistently higher in the least deprived compared with the most deprived IMD quintile (Fig 4.25b).

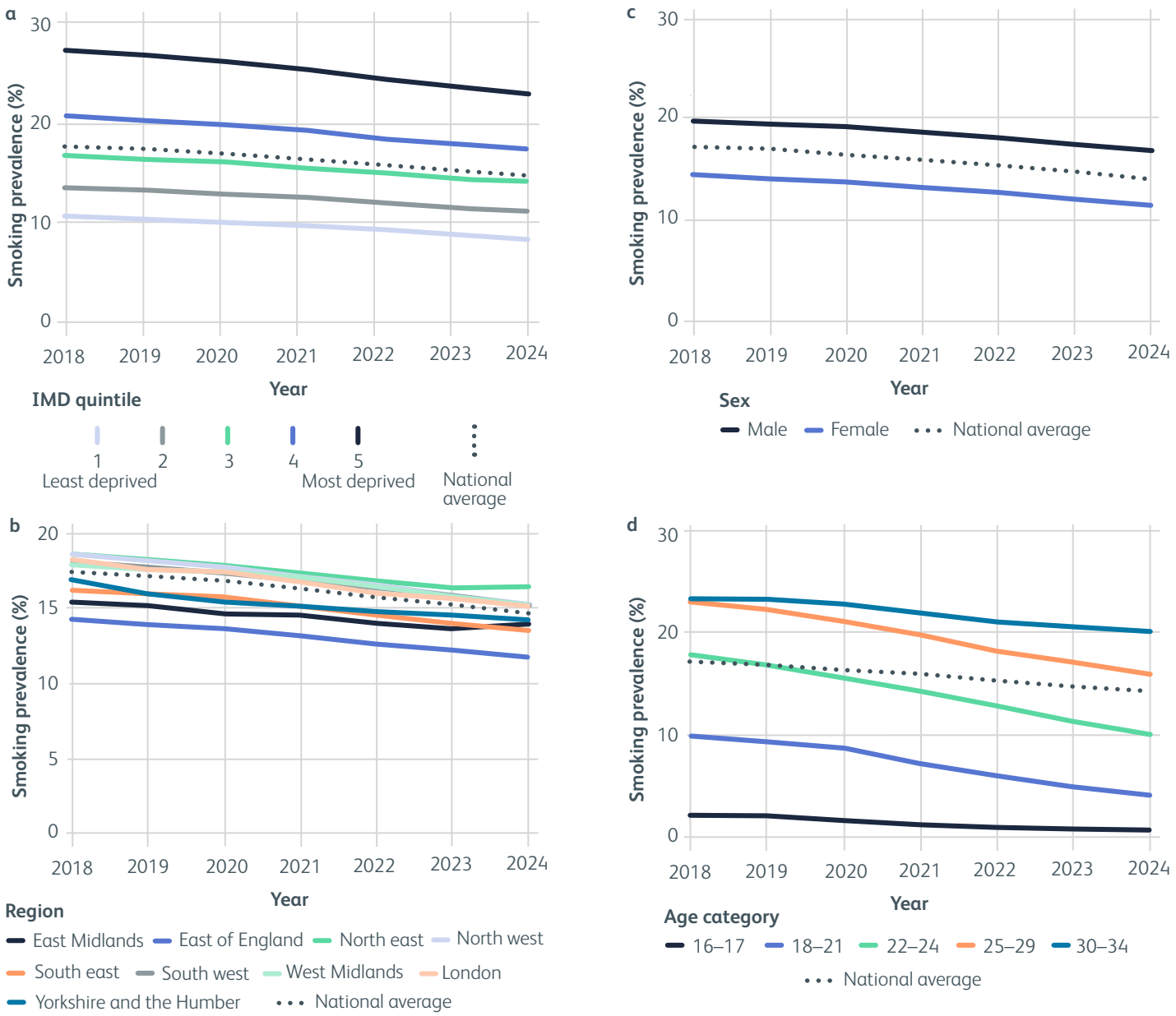

Fig 4.24. Smoking prevalence between 2018–2024 by (a) IMD quintile, (b) region, (c) sex, (d) age.

Source: Clinical Practice Research Datalink (CPRD) 2025, licensed under the terms of the Open Government Licence v3.0.[219]

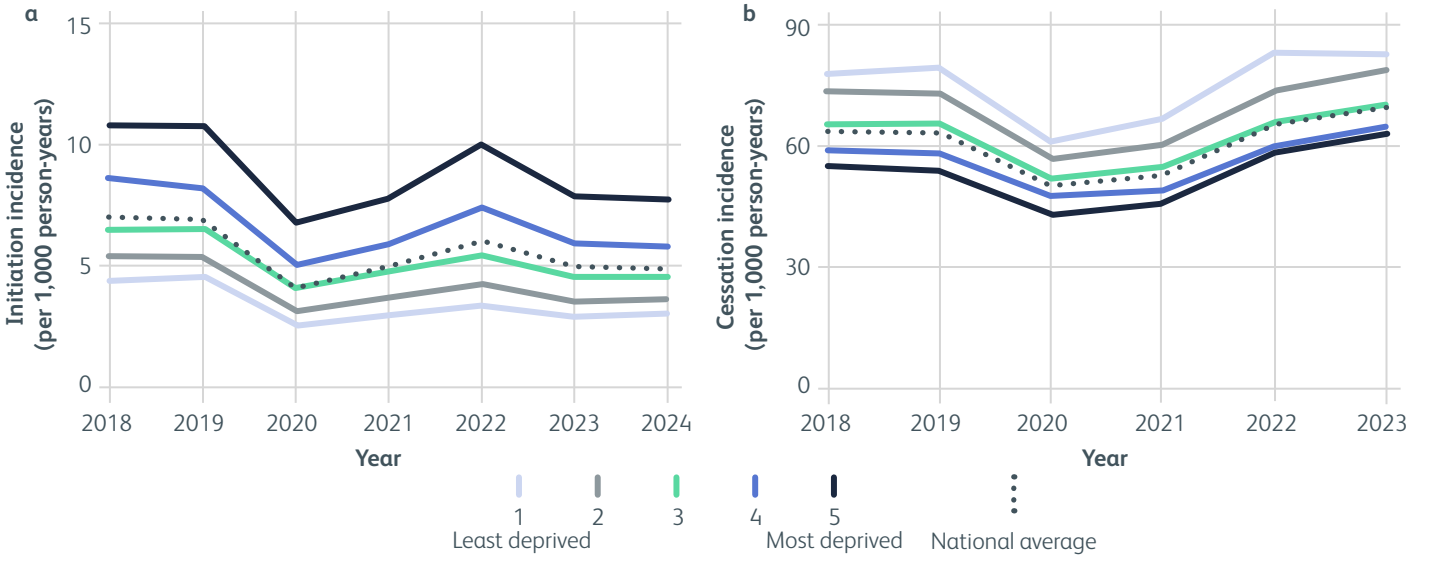

Fig 4.25. (a) Smoking initiation incidence and (b) successful smoking cessation incidence by IMD quintile.

Source: Clinical Practice Research Datalink (CPRD) 2025, licensed under the terms of the Open Government Licence v3.0.[219]

4.6.3 Mental health

While overall smoking prevalence has plummeted in recent years, prevalence among people experiencing poor mental health has remained stubbornly raised and significantly higher than in the general population: an estimated 25–65% of people with mental health (MH) disorders are currently smoking and/or dependent on tobacco.[220,221] This disparity has widened the gap in the quality and length of life between those who do and do not experience MH disorders, with smoking accounting for up to two-thirds of the reduced life expectancy among people with severe MH disorders.[222,223]

People with MH disorders are a heterogeneous group, and prevalence and patterns of tobacco use vary according to the type of MH disorder and wider clinical and sociodemographic circumstances, as well as the measures used to define poor MH and tobacco use. A recent meta-analysis of the prevalence of diagnosed tobacco use disorder among 7,527 participants with diagnosed severe MH disorders found the highest rates among patients with schizophrenia (65% (95% CI 59.8–69.6%)), although odds of having tobacco use disorder were 63% lower in women than in men in this group.[220] The prevalence was 46.3% (33.9–59.2%) among those with bipolar disorder and significantly elevated if they also had alcohol use disorder, and 33.4% (26.5–41.1%) among people with major depressive disorder (MDD), although prevalence significantly decreased with age in this group.[220]

Smoking rates are also elevated among so-called common MH disorders, although there are fewer recent data on these conditions. In 2014, the nationally representative Adult Psychiatric Morbidity Survey of England found a smoking prevalence of 34.1% among respondents with depression, phobia, generalised anxiety disorder, panic disorder, obsessive-compulsive disorder (OCD) and mixed anxiety and depressive disorder, compared to 19.6% among those without a MH disorder.[224] Smoking prevalence is estimated to be around 50% among people with personality disorders (PD), although this varies by the nature of the PD, with current smoking more likely to be associated with schizotypal, borderline and antisocial PDs, and lower associations with avoidant PD.[225] Other disorders that have an elevated association with tobacco use are attention deficit hyperactivity disorder (ADHD) and post-traumatic stress disorder (PTSD).[226,227]

Various distinct patterns of tobacco use among people with MH disorders have been identified. People with MH conditions smoke more heavily and are more likely to smoke roll-your-own cigarettes;[228] take puffs on a cigarette more rapidly and have higher carbon monoxide levels (in schizophrenia);[229] are more dependent on nicotine and are more likely to report smoking for relief of affective distress or anhedonia (especially in depressive disorders);[230] and experience greater distress when withdrawing from tobacco.[231]

Adding to the issue of tobacco-related morbidity is diminished social capital; the poverty and social isolation experienced by many people with MH disorders are further exacerbated by smoking.[232] People with MH conditions who smoke spend as much as £2,200 a year on tobacco, contributing to keeping 130,000 people with a common MH disorder in poverty.[233] 12-year follow-up data from the English Longitudinal Study of Ageing (N = 8,780) found smoking to be independently associated with higher levels of loneliness at baseline and higher levels of social isolation and loneliness over time, irrespective of depression.[234] As the population of people who smoke becomes increasingly dominated by people with MH disorders, these reciprocal forces of social isolation, poverty, stressful living conditions and poor MH increasingly need to be given attention by the services that provide tobacco dependency treatment.

A finding consistently replicated across MH disorders is that people with poor MH who smoke do want to quit and are motivated to seek help,[235] but achieve abstinence at a far lower rate than those without an MH disorder.[236,237]

An NHS opt-out tobacco dependency treatment pathway for people admitted to MH trusts in England commenced in 2021. While 93% of 52 MH trusts reported that services had commenced in June 2025, data reporting and data quality are lower than for acute hospital trusts and maternity services.[213]

Over a 12-month period between April 2024 and March 2025, more people who were seen by tobacco dependency advisers (Fig 4.26a) commenced a quit attempt (Fig 4.26b) and successfully quit smoking (Fig 4.26c), were in the lower quintiles of deprivation compared to the more advantaged; however, the proportions of people with MH disorders who commenced a supported quit attempt or successfully quit were greater in the more advantaged IMD quintiles, a pattern seen in patients admitted to acute hospitals described in section 4.6.1 above.

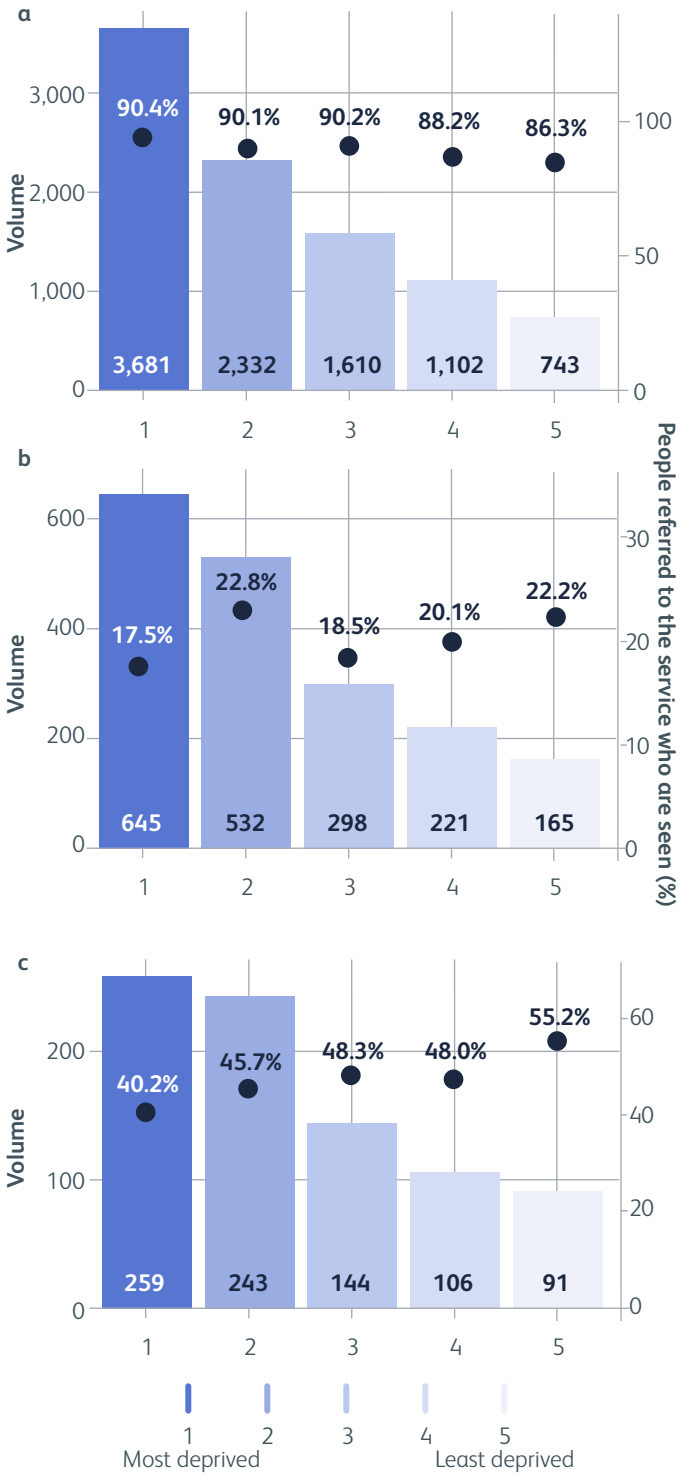

Fig 4.26. Patients (a) referred to the tobacco dependency service, (b) commencing a supported quit attempt and (c) successfully quitting by IMD quintile.

- % of people (a) referred to the service who are seen, (b) seen by the service who commence a quit attempt and (c) who successfully quit following a quit attempt
- 12-month rolling totals, 1 November 2024 to 31 October 2025

Source: NHS Digital. Tobacco Dependence Programme Patient Level Data Collection, licensed under the terms of the Open Government Licence v3.0.[213]

4.6.4 Maternity

Women and people of reproductive age have high rates of regular smoking compared with other groups in society, and smoking prevalence within this population is consistently higher among those from less advantaged social groups. In 2023, smoking prevalence among women and people of reproductive age from more advantaged social groups (occupational social grade ABC1) was 14.9%, while women and people of the same age from less advantaged groups (occupational social grade C2DE) had a reported smoking prevalence of 22.4%.[77] Those who smoke in pregnancy are more likely to have started smoking early in life, to experience financial hardship and to have partners and/or social networks who are more likely to smoke.[238]

Smoking in pregnancy remains consistently higher in specific geographical areas with populations with high levels of deprivation (see Table 4.7).[14,239] The prevalence of smoking in pregnancy was 9.6% in NHS Norfolk & Waveney Integrated Care Board (ICB) in quarter 4 of 2024/25, for example, compared with 2% of the pregnant population in NHS North West London ICB.[240]

Table 4.7. Smoking in pregnancy prevalence by region of England (adults aged 18 years and over).

	Maternities	Currently smoking	Smoking (%)
London	95,448	3,116	3.3
South east	80,643	4,493	5.6
South west	46,018	2,946	6.4
East of England	60,887	3,789	6.2
North west	69,183	4,410	6.4
Midlands	102,804	7,019	6.8
North east and Yorkshire	78,655	5,897	7.5
England	**533,638**	**31,670**	**5.9**

Source: Statistics on smoking. House of Commons Library Research briefing 28 July 2025.[14]

Within areas, there are also marked differences in smoking prevalence of pregnant populations by other protected characteristics. In 2023, when smoking in pregnancy was 4% overall in north-west London, people of mixed White and Black Caribbean ethnicity and White Irish ethnicity had the highest prevalences of smoking (12 and 9%, respectively). There is a wide inequalities gap, with an over fourfold increase in the prevalence

of smoking between the most and the least deprived groups (5.6 versus 1.3 %), demonstrating that there are significant health disparities even within a population with low overall prevalence.[238]

Smoking in pregnancy is harmful to mothers and babies. Tobacco smoking increases the risk of adverse pregnancy outcomes, including stillbirth, having a low-birth-weight baby and premature birth.[238,240] For newborns, maternal smoking also confers risks to infants through exposure to secondhand smoke.[241] Newborns are particularly susceptible to respiratory and other infections if exposed to tobacco smoke, and more likely to develop asthma and eczema, as well as being at double the risk of sudden infant death.[242] There are additional unquantified risks for babies born to people who smoke and are living in poverty: poor housing, exposure to damp, suboptimal nutrition and lack of access to outdoor space may all represent cumulative risk exposures, placing the most vulnerable babies at much higher risk of poor health and developmental outcomes compared with those born in affluent areas without environmental exposure to tobacco smoke. There is good evidence that mothers on lower incomes and with low levels of education are less likely to breastfeed and more likely to smoke, placing infants born into poverty at additional risk.[243]

Despite apparent effectiveness of current intensive smoking cessation in pregnancy services in England, services may miss those who stand to benefit the most.[244] Those who do not engage with maternity services, for example, will likely not be picked up by stop smoking services. There is a strong association between deprivation and maternity outcomes, linked to engagement or not with maternity provision, with women living in the most deprived areas having maternal mortality rates twice that of women living in the least deprived areas.[242] This suggests a complex interaction of intersectional risk factors for continued smoking and adverse pregnancy outcomes.

An NHS opt-out tobacco dependency treatment pathway for maternity services in England was introduced in 2021, which requires all pregnant patients to have carbon monoxide testing at booking and subsequent appointments, and provides intensive treatment for tobacco dependency (nicotine replacement and behavioural support from smoking cessation advisers) unless they opt out. In 2025, 97 % of 119 maternity services have reported that opt-out treatment services have commenced (source: unpublished data, personal communication).

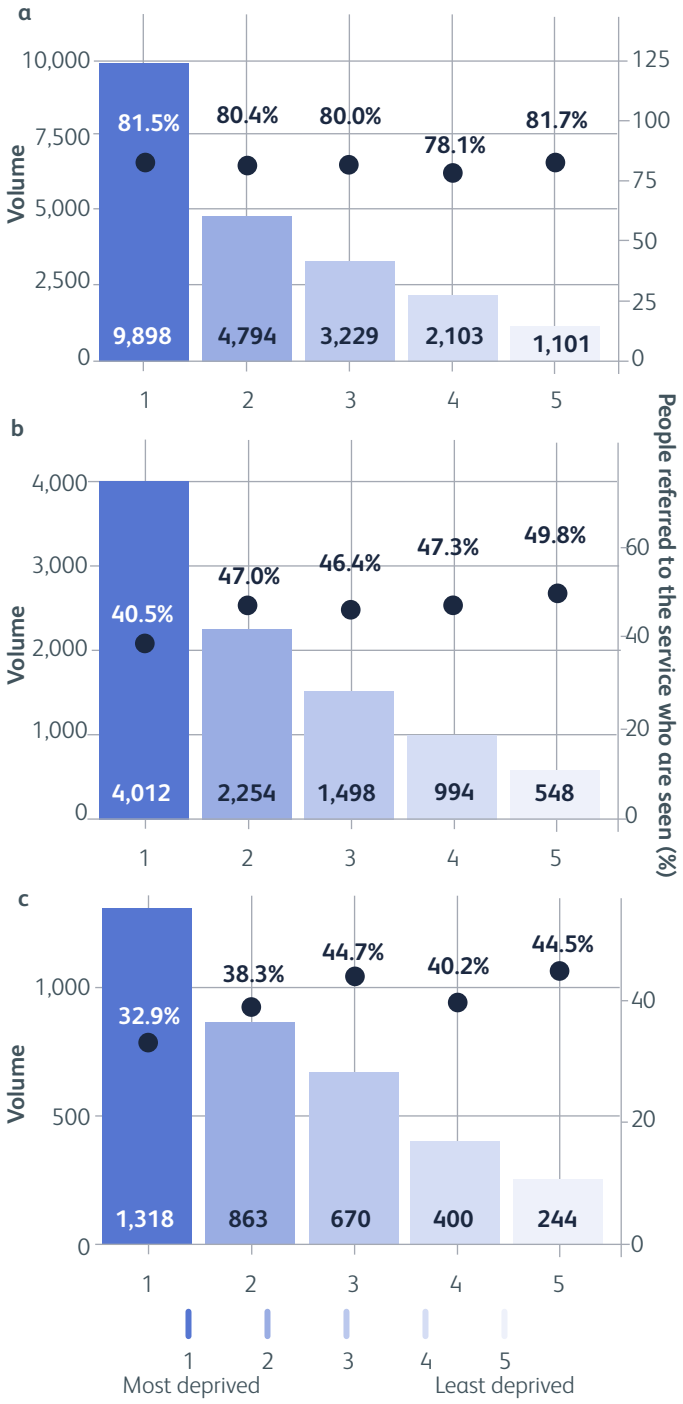

Fig 4.27. Pregnant patients (a) referred to the tobacco dependency service, (b) commencing a supported quit attempt and (c) successfully quitting by deprivation quintile.

> % of people (a) referred to the service who are seen, (b) seen by the service who commence a quit attempt and (c) who successfully quit following a quit attempt

>12-month rolling totals, 1 May 2024 to 30 April 2025

Source: NHS Digital. Tobacco Dependence Programme Patient Level Data Collection, licensed under the terms of the Open Government Licence v3.0.[213]

The NHS Tobacco dashboard displays data returns from the maternity pathway, including information on Index of Multiple Deprivation and certain protected characteristics. Over a 12-month period between October 2023 and September 2024, more people in the lower quintiles of deprivation were seen by tobacco dependency advisers (Fig 4.27a), commenced a quit attempt (Fig 4.27b) and successfully quit smoking (Fig 4.27c) compared with the more advantaged quintiles; however, the proportions of people who attempted to quit or successfully quit were lower in the less advantaged quintiles, a pattern seen in patients admitted to acute hospitals and mental health trusts described in sections 4.6.1 and 4.6.3 above.

In England, a national financial incentives scheme for smoking cessation in pregnancy is currently funded,[245] based on strong evidence that financial incentives are effective for smoking cessation in pregnant populations. Pooled pregnancy incentives trials delivered a risk ratio at longest follow-up (up to 48 weeks postpartum) of 2.13 (95% CI 1.58–2.86; I^2 = 31%; 13 studies, 3,942 participants; high-certainty evidence), in favour of incentives.[246] However, the core evidence for the incentives scheme in England comes from a large randomised controlled trial that recruited pregnant women and pregnant people via stop smoking services,[247] which potentially did not capture the most vulnerable who do not access maternity services. In other jurisdictions, incentives trials have specifically targeted those on low incomes or experiencing other health inequalities, such as substance misuse or with complex clinical presentations. Incentives may be particularly effective for populations with greater financial needs.[248] There is a potential opportunity to engage with those who are particularly vulnerable remotely, outside service provision, to offer incentives for smoking cessation.

For those who manage to quit smoking during pregnancy, risks of returning to smoking postpartum are high, particularly for those living with a partner who also smokes.[249] A recent trial of a complex intervention to support sustained maintenance of smoking abstinence postpartum (the Babybreathe trial)[250] demonstrated promise for increasing long-term quit rates for those receiving support by a health visitor and given access to relapse prevention resources (unpublished data). Although differences in outcomes were not statistically significant across low- versus high-income women, smoke-free status was almost 10% lower for those from the lowest IMD quintile who received support, suggesting that relapse prevention support may be especially beneficial for those with the most social and contextual challenges to staying smoke-free (unpublished data).

4.7 Quit attempts and success by markers of health inequality

In the UK, the percentage of people aged ≥16 years who smoked cigarettes regularly and quit smoking continues to rise.[2] However, quit attempts, types of cessation aids used and quitting success can vary by population group and depending on a person's socio-economic position, a key driver of inequalities in smoking-related outcomes in the UK.[251]

4.7.1 Quit attempts

Analyses from the Smoking Toolkit Study (STS), a nationally representative, cross-sectional, monthly survey in England, found that people from more disadvantaged socio-economic positions had lower odds of reporting a quit attempt, relative to the most advantaged (Fig 4.28). This finding was consistent when measured across different indicators of socio-economic position including occupational social grade, education level and household income.[252]

4.7.2 Cessation aids

A wide range of effective pharmacological and/or behavioural cessation aids are available to support a quit attempt, and these vary greatly in dose, duration of use, mode of delivery, content and intensity. Their effectiveness also varies,[253,254] which is important given some evidence that the use of these aids differs by socio-economic position.[252]

In England, e-cigarettes were the most used quit aid in 2023–24 (40.2% (95% CI 37.6–42.8%)), followed by over-the-counter NRT (17.3% (95% CI 15.3–19.2%)).[255] A Cochrane review reported high-certainty evidence that nicotine e-cigarettes are among the most effective interventions for quitting smoking.[254] When considering employment status, STS analyses indicated that people from relatively socio-economically disadvantaged groups (students, people who are retired or not in paid work) were less likely to use e-cigarettes compared to those in paid employment, while people with less education were more likely to use e-cigarettes compared with people in the highest education category (Fig 4.28).[252] This suggests that e-cigarette use varies not only between more and less socio-economically disadvantaged groups, but also that the direction and strength of the association with socio-economic position depends on the type of socio-economic deprivation. Differences by type of deprivation were also observed in the use of over-the-counter NRT, with higher odds of use by people on lower income compared with the highest household income bracket. However, there was a lack of clear

	Quit attempts	Quitting success	E-cigarettes	Over-the-counter NRT
Occupational social grade				
AB	**Ref**	**Ref**	**Ref**	**Ref**
C1	↓↓	↑	↓	↓
C2	↓↓	↓	↑↑	↓
D	↓↓	↓	↑	↓
E	↓↓	↓	↓	↑
Employment status				
Paid work	**Ref**	**Ref**	**Ref**	**Ref**
Student	↑	↓	↓↓	↑
Not in paid work	↑	↓	↓↓	↑
Retired	↓	↑	↓↓	↑↑
Housing tenure				
Owner occupied	**Ref**	**Ref**	**Ref**	**Ref**
Private rented	↓↓	↓↓	↓	↓
Social rented	↑	↓↓	↓	↓
Other	↑↑	↓	↑	↑
Education				
University degree	**Ref**	**Ref**	**Ref**	**Ref**
A-level/equivalent	↓	↑↑	↑↑	↑
GCSE/vocational	↓↓	↓	↑↑	↑
No post-16 qualification	↓↓	↓	↑↑	↓
Other/still studying	↓↓	↑	↑	↓
Household income				
£50,000+	**Ref**	**Ref**	**Ref**	**Ref**
£25,000–£49,999	↓↓	↑	↓	↑↑
£13,500–£24,999	↓↓	↓	↓	↑↑
Up to £13,499	↓↓	↓	↓	↑↑

Fig 4.28. Direction of effect plot for outcomes: quit attempts, quitting success and use of cessation aids (electronic cigarettes and over-the-counter NRT) by each indicator of socio-economic position and subcategories.

Socio-economic position (ordered highest to lowest socio-economic subcategories):

- **Occupational social grade:** AB (higher managerial, administrative or professional); C1 (supervisory or clerical and junior managerial, administrative or professional); C2 (skilled manual workers); D (semi-skilled and unskilled manual workers), E (casual or lowest-grade workers, pensioners and others who depend on the welfare state for their income).
- **Employment status**: paid work; student; not in paid work; retired.
- **Housing tenure**: owner occupied; private rented (renting from private landlord); social rented (rented from local authority/ housing association); other.
- **Educational level:** university degree, A-level or equivalent (high school senior); General Certificate of Secondary Education (GCSE)/O-level/CSE (high school sophomore) or vocational qualification (high school senior); no post-16 formal qualifications; other or still studying.
- **Annual household income:** £50,000+; £25,000–49,999; £13,500–24,999; up to £13,499.

Legend

↑↑	Statistically significantly greater odds/effect for each outcome in the lower subcategories relative to highest subcategory of socio-economic position for each indicator (point estimate odds ratio ≥ 1.0 to < 2.0; β > 0.0 to < 0.3).
↑	Direction of effect favours greater odds/effect for each outcome in the lower relative to highest subcategories of socio-economic position for each indicator; however, CI includes the possibility of no difference (point estimate odds ratio ≥ 1.0, but CI includes no statistically significant difference (lower bound of 95 % CI < 1.0); β > 0.0, but CI includes no statistically significant difference (lower bound of 95 % CI ≤ 0.0)).
↓	Direction of effect favours lower odds/effect for each outcome in the lower relative to highest subcategories of socio-economic position for each indicator; however, CI includes the possibility of no difference (point estimate odds ratio < 1.0, but 95 % CI includes no statistically significant difference (upper bound of CI ≥ 1.0)); β < 0.0 but CI includes no statistically significant difference (lower bound of 95 % CI > 0.0)).
↓↓	Statistically significantly lower odds/effect for each outcome in the lower relative to highest subcategories of socio-economic position for each indicator (point estimate odds ratio: ≥0.50 to <1.0; β > –0.3 to 0).

evidence for associations with other socio-economic indicators, specifically education, housing tenure, employment status and occupational social grade. As other cessation aids are less commonly used, sample sizes were too low to draw meaningful conclusions regarding potential differences in their use patterns by level of disadvantage.[252]

4.7.3 Quitting success

Even if quit attempts were evenly distributed across socio-economic groups, contextual factors affecting different socio-economic groups may moderate the success of any given quit attempt and the efficacy of an individual-level smoking cessation intervention, such that the same intervention may perform differently in different populations and contexts. Conceptual models such as the Reserve Capacity Model explain how socio-economic status impacts health inequalities.[256] People in more socio-economically disadvantaged groups encounter more stressful experiences, but have fewer tangible, intra- and inter-personal resources available to manage them. This taxes the system, and impacts health both directly and indirectly through physiological and behavioural pathways.[256,257] This can also apply to other elements of disadvantage, including historically marginalised groups and people living with mental health conditions.

Additionally, there is some evidence to suggest that people from more socio-economically disadvantaged groups may experience more severe nicotine withdrawal symptoms, which may be due to higher nicotine dependency,[258,259] making it harder to quit. People from disadvantaged groups or historically marginalised communities may also face additional barriers due to social norms, less social support, lower self-efficacy and poorer adherence to treatments.[142,216,260–62] Different behavioural smoking cessation interventions will vary in ability to manage these factors, thereby potentially leading to differences in quitting success by group.

Adjusted observational data from the STS suggests few differences in effectiveness of different cessation aids by socio-economic position (as measured by occupational social grade), except for face-to-face behavioural support (used by 2.2% in 2023–24), which was associated with higher odds of quitting success among those from less advantaged (odds ratio, 1.59 (95% CI, 1.19–2.14)) but not more advantaged (odds ratio, 0.91 (95% CI, 0.65–1.29)) socio-economic positions.[255] Another STS analysis found that odds of quitting success were lower in more disadvantaged housing tenures; however, no clear evidence was observed when looking at other indicators of socio-economic position (Fig 4.28).

A 2025 Cochrane review summarised randomised controlled trial (RCT) data to investigate differences in effectiveness of smoking cessation interventions by socio-economic status.[263] The review found no clear evidence to support using different individual-level smoking cessation interventions for people from more and less socio-economically advantaged groups. However, as all evidence reviewed was graded of low to very low certainty, authors cautioned that conclusions could change as further data became available and recommended that further RCTs on individual-level smoking cessation interventions stratify random assignment by socio-economic advantage.[263]

4.7.4 Other factors: service access

A 2020 systematic review assessed the impact of UK specialist and primary care-based stop smoking support on socio-economic inequalities in cessation.[264] They found that UK primary care providers and stop smoking services were effective at engaging and supporting more disadvantaged groups. Although quit rates tended to be lower among people from more disadvantaged socio-economic groups, the greater reach of these services in more disadvantaged populations helped to offset this disparity.[264] However, recent research shows that take-up of referrals to such services remains low, particularly in populations experiencing disadvantage.[265] Multiple trials have shown effectiveness of 'opt-out' and/or opportunistic models for smoking cessation interventions in a variety of settings, including general practice, hospitals and financial advice settings (see section 4.6 above)[266] and may provide an effective policy option to expand service access in historically marginalised groups with higher smoking prevalence.

4.7.5 Intersectionality across other groups

Socio-economic disadvantage not only exists in multiple forms and degrees, but can overlap and intersect with other dimensions of marginalisation, such as mental health conditions, homelessness, imprisonment and race/ethnicity. This can make it challenging to tease out whether variations in quit attempts, quit aids and quit success are driven by socio-economic disadvantage or by other, intersecting identities, although some research suggests that socio-economic disadvantage remains a critical driver.[267]

Evidence from the STS in England found that after adjusting for sociodemographic and smoking characteristics, quitting success was not significantly associated with mental health problems (defined as ever

diagnosed, past-year treatment and past-month moderate to severe psychological distress).[147] E-cigarettes were among the most used cessation aids and, compared with non-evidence-based support, were strongly associated with increased quitting success, irrespective of mental health status.[147] There is no evidence that specific cessation interventions work better or worse for people living with mental health conditions,[268] but there is clear evidence that quitting smoking improves mental health.[149]

People in prison disproportionately come from more disadvantaged backgrounds and experience higher rates of mental health conditions, both of which are associated with higher smoking rates (see section 4.5.3 above).[269] An interrupted time series analysis evaluated the impact of smoke-free legislation implemented in 2018 in prisons across England, Wales and Scotland[269] by examining dispensing rates of medications for nicotine dependency (used as a proxy for smoking cessation or quit attempts) and for mental health.[270] The study found an increase in dispensing nicotine dependency medications (primarily NRT) and the authors suggested that the policy led to more quit attempts without short-term negative effects on mental health treatment needs.[270]

Despite a strong motivation to quit, people experiencing homelessness in the UK made fewer quit attempts, and those attempts typically lasted less than 24 hours.[106] People experiencing homelessness are often underrepresented in research.

An area where there is evidence of differential effectiveness of smoking cessation treatment relates to ethnicity. A recent systematic review found that culturally tailored (typically based on ethnicity) interventions, particularly those which tailored a surface structure such as language or messenger (eg intervention delivered in the language of the participant and/or by someone from a cultural group with whom the participants identified), may be more effective than non-tailored interventions for quitting smoking.[271] The authors conclude that adapting or adding cultural components to tobacco dependency treatment interventions originally developed for majority populations could improve cessation rates in populations that do not fully identify with majority cultural norms.=

4.8 Improving assessment, research methods and funding

This chapter has summarised current UK data sources on tobacco-related health inequalities, described information on 'hidden populations', reviewed data on specific groups that include geographic and protected characteristics, those who are homeless, in prison, seeking asylum, economically inactive and people who use shisha or smokeless tobacco, other drugs and illicit tobacco, and people who are accessing healthcare services. It has also described the relative effectiveness of individual and population-level smoking interventions by markers of health equity.

A key finding is that there are important gaps in the government's primary means of monitoring smoking prevalence, the Annual Population Survey (APS). These gaps can be classified into three categories: i) sampling, which excludes key subgroups of the population; ii) narrow assessment of primarily regular cigarette smoking, which excludes or underestimates non-daily smoking, non-cigarette smoking and smokeless tobacco; iii) inadequate assessment of other characteristics to describe prevalence and quitting in priority subgroups.

These first two issues suggest that the extent of smoking in the UK may be substantially underestimated. The exclusion of hidden populations may result in the omission of approximately 1 million people who smoke from these groups from official estimates. Similarly, the focus on regular smoking in the APS may cause the exclusion of approximately 2 million people who smoke either non-daily or non-cigarette products from national prevalence estimates.[272] These underestimations risk underinvestment in population-level tobacco control.

Also, the UK's 'smokefree generation' ambition set out in the Tobacco and Vapes Bill is likely to face future challenges from the tobacco industry and political opposition, both in the UK and in other countries that consider implementation in the future. Evaluations must try to account for the true smoking population at baseline in order to avoid underestimates of the impact of the policy. One solution would be for the government to invest to expand official assessments of smoking prevalence in the UK. The APS could include more questions beyond regular cigarette smoking to assess also non-daily cigarette smoking, non-cigarette smoking and smokeless tobacco, and a range of questions to assess other protected characteristics. Also, recognising the coverage limitations of the APS, the government could consider providing a primary estimate of annual smoking prevalence derived from a range of sources. An expert group could triangulate information from a range of alternative surveys, as illustrated by the workbook method earlier in this chapter, and other data sources like cigarette sales data, discarded cigarette pack analysis and wastewater analysis.

The third issue presents a challenge for monitoring progress on tobacco-related inequalities, evaluating the equity impact of new policies, and sufficiently allocating targeted resources to priority subgroups. Beyond direct government investment, research funders should prioritise methodological research on the best ways to integrate and triangulate this information across a variety of sources, and proposals to evaluate the Tobacco and Vapes Bill that take a broad approach and focus on understanding the equity impact.

In terms of future research on the relative effectiveness of individual-level smoking cessation interventions, studies should collect, analyse and report quit rates by multiple measures of deprivation. Where feasible, trials of quitting interventions should stratify randomisation by a key measure of deprivation to ensure that studies are adequately powered to assess whether the interventions have an equitable impact. Researchers often routinely directly or indirectly exclude a wide range of groups from cessation trials, such as people who smoke non-daily, those who smoke non-cigarette products, people who are experiencing homelessness, severe mental illness, specific health conditions or other drug use; funders should discourage this practice and incentivise researchers to take a broad approach to inclusion. Finally, research on interventions that may plausibly have equity-positive impacts should be prioritised.

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05

Economic impact

People who smoke earn around

9%

less than those who don't

Smoking leads to

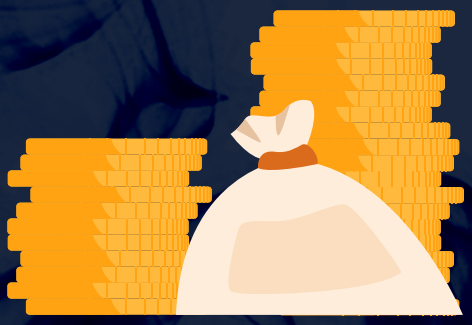
400,000+

hospital admissions each year in England

Smoking harms health, public services and the economy

Smoking reduces life expectancy by

10 years



A smoke-free England could generate

£10.9bn

a year, plus £9.7bn in wider economic gains

Key points

1 Smoking is the leading cause of premature death and morbidity in the UK, reducing life expectancy by around 10 years. Smoking-related mortality leads to significant economic losses, especially among experienced workers aged over 45. In 2024, premature deaths caused by smoking resulted in approximately £1.35 billion in lost productivity across the UK.

2 The economic impact of smoking is most severe among disadvantaged and vulnerable groups, with significantly higher smoking rates observed in these populations compared to the general UK population, thereby worsening health and social inequalities. In 2023, smoking rates approached or exceeded 40–80% among vulnerable groups, including people with significant mental illness and those experiencing homelessness. This far exceeds the prevalence observed in the general adult population, which had fallen to 10.6% in 2024.

3 UK and international studies show that people who smoke are more likely to be unemployed, often due to health-related inactivity. This employment gap is notably wider among disadvantaged groups, such as people with a disability as well as individuals in midlife who smoke. Reduced employment levels for people who smoke, compared to those who do not, account for around £8.9 billion of productivity losses for the UK each year.

4 Among those in employment, smoking increases sickness absence, presenteeism and early retirement due to ill health, leading to substantial productivity losses and reduced workforce participation. People who smoke take more sick days, costing the UK £1.5 billion annually in absenteeism, and are less productive while at work (presenteeism) than those who do not smoke. Furthermore, smoking is one of the leading causes of disability, with people who smoke heavily retiring on average 3.3 years earlier than those who do not smoke.

5 Additionally, employed people who smoke earn around 9% less than employed people who have never smoked, a gap linked to poorer health, lower educational attainment and co-occurring risk behaviours. This further contributes around £11 billion in annual earnings losses.

6 Smoking imposes a considerable economic burden on UK public services. It accounts for over 400,000 hospital admissions annually in England and increases primary care demand, with people who smoke visiting their GP 35% more often than those who do not smoke. In 2024, smoking-related healthcare costs were estimated at over £2 billion across the UK.

7 Smoking also increases demand for social care, costing the UK an estimated £1.36 billion annually in publicly funded care, £9.25 billion in informal care delivered by unpaid carers, and £5.94 billion due to unmet care needs. Additionally, smoking-related fires result in approximately £394 million annually in fire and rescue service costs.

8 Taken together, the total annual cost of smoking to UK public services exceeded £19 billion in 2024. Disadvantaged groups account for a disproportionate share of public service costs due to higher smoking prevalence, earlier onset of smoking-related diseases and greater dependency on publicly funded health and social care. Addressing smoking inequalities offers a major opportunity for the NHS and wider society to achieve both fiscal savings and improved population health outcomes.

9 Spending on preventing smoking by local government and the NHS is insecure. Although £154 million has been committed to local authority stop-smoking services each year from 2026–29, the approximate £30 million annual funding for NHS tobacco dependency services is at an increased risk of erosion due to decommissioning, following the end of NHS ring-fenced funding in 2025. Spending on smoking prevention represents a small fraction of the £19 billion annual cost of smoking.

10 Inconsistent assurance and reporting processes across the NHS and local government undermine efforts to reduce tobacco-related inequalities. Sustained, protected investment is needed to maintain services, improve accountability and achieve the intended reductions in smoking prevalence and public sector costs.

11 Tobacco expenditure exacerbates household poverty, especially in households containing working-age adults, pensioners and children. After subtracting tobacco spending from net income, an additional 560,000 households, including 680,000 working-age adults, 270,000 pensioners and 160,000 children, would be defined as living in relative poverty.

12 The 'smoke-free dividend' in England, defined as the value that could be added to local economies each year through the money that people who smoke tobacco would save if everyone quit smoking, has been estimated to be £10.9 billion; at the individual level, this equates to £246 per adult in England, and £1,776 per adult who smokes.

13 When people redirect spending from tobacco, it stimulates more growth in the economy than if they continued to purchase tobacco; the wider impact of reallocated expenditure on the UK economy of a smoke-free UK is estimated at £9.7 billion per year, including a net increase in employment of 135,865 full-time equivalent jobs.

Recommendations

- Prioritise targeted interventions to reduce smoking prevalence among disadvantaged groups experiencing poverty, poor health and social exclusion, with a particular focus on working-age adults.
- Integrate tailored smoking-cessation support into employment, welfare and disability benefit programmes to address the higher rates of smoking-related unemployment and productivity losses.
- Increase and ring-fence funding for tobacco control provided to local government and for smoking-cessation services in the NHS, to prevent decommissioning of services and so that longer-term programmes of work can be established to reduce smoking in high-prevalence groups.
- Strengthen assurance processes to ensure that funding provided to the NHS and local government is targeted to the least advantaged communities to reduce tobacco-related inequalities.

5.1 Introduction

The impact of smoking on health and health inequalities is well established.[1–4] Smoking also imposes substantial economic costs on individuals, households and society, with these burdens falling disproportionately on disadvantaged groups and communities. This chapter presents an overview of the economic impact of smoking in the UK, including:

- its effects on productivity, including employment, earnings and premature mortality
- the costs imposed on NHS healthcare, social care and other public services
- patterns of tobacco control spending within local government and the NHS
- the relationship between tobacco expenditure and poverty
- the potential economic gains associated with achieving a smoke-free UK.

5.2 Smoking and productivity

Smoking has negative impacts on workforce productivity in the UK, affecting both individual employees and the economy as a whole. Evidence suggests that, after controlling for factors such as age, gender and education, people who smoke are less likely to be employed than those who do not (see Chapter 4, section 4.5.5) and that, among those who are employed, smoking is associated with reduced performance and lower earnings.[5] More specifically, smoking contributes to higher unemployment, increased sickness-related absences (absenteeism), reduced productivity at work (presenteeism), earlier exits from the workforce (eg retirement due to ill health) and premature mortality, which shortens working lives.[3,6] Collectively, these factors lead to reduced earnings for people who smoke and lower productivity for society overall.

As smoking remains disproportionately high among certain disadvantaged groups (see Chapter 4, section 4.5), productivity losses attributable to smoking are increasingly concentrated within these disadvantaged groups, exacerbating existing inequalities.[7,8] In other words, people already struggling with challenges such as poverty, poor mental and physical health, and social exclusion also face the added burden of smoking-related work absences, lower earnings and shortened working lives, reinforcing persistent cycles of disadvantage and inequality.

This section offers an overview of smoking's impact on productivity in the UK, based on published reports by ASH and Landman Economics.[6,9] This section examines how smoking affects employment, job performance and earnings, while also quantifying the overall economic costs of lost productivity due to smoking. Where possible, data are disaggregated by subgroup to illustrate how the harms of smoking vary across different segments of society. A clearer understanding of the scale and distribution of smoking's impact on productivity will enable policymakers and health advocates to target interventions more effectively to reduce smoking-related inequalities and achieve a healthier, more productive population.

5.2.1 Impact on employment and unemployment rates

Smoking directly influences an individual's likelihood of being employed, with multiple UK and international studies finding that people who smoke are less likely to be employed than comparable people who do not smoke (see Chapter 4, section 4.5.5). Using the longitudinal Understanding Society (USoc) dataset, Reed *et al* estimated that people who have smoked for a long time are approximately 9.9% less likely to be employed than their non-smoking counterparts, after controlling for factors such as age, gender, educational attainment, region and housing tenure.[9] One study, *A workforce up in smoke?*, examined working-age adults in England from 2013 to 2025 and consistently found the highest rates of health-related economic inactivity among adults who were currently smoking. As of early 2025, among those not working due to long-term illness or disability, around one in nine adults who smoked (11.3%) were out of work for health reasons, a percentage much higher than the 5.8% of those who used to smoke and 3.3% of those who had never smoked.[10]

Longitudinal studies in other countries reflect a similar pattern. A Danish 5-year prospective cohort study with a sample of 87,000 adults found that those who smoked were significantly more likely to exit employment than those who had never smoked.[11] A 2025 US study, using data from the 2023 National Health Interview Survey, found a strong association between smoking and employment status, revealing that unemployed individuals, especially those unable to work due to health conditions, were 93% more likely to smoke than employed individuals.[12] The study also identified substantial occupational disparities, with the highest

smoking rates occurring in the industries of wholesale trade (20.5%), information (16.9%) and mining (15.9%), highlighting the need for targeted tobacco-control efforts for both unemployed individuals and high-risk occupational groups.

The negative impact of smoking on employment is greater among groups that are already disadvantaged. Fig 5.1 presents data from Landman Economics' analysis of USoc Wave 12, demonstrating that the gap in employment between people who smoke and those who do not is modest among healthy, non-disabled adults, but much wider among those with long-standing illnesses or disabilities.[9] More specifically, among people with a long-term disability, only 35% of those who smoked were employed, compared to 49% of those who did not. Smoking is associated with lower employment rates across all ages beyond the 30s, with the gap becoming particularly pronounced in midlife and older working ages (Fig 5.2). By their 40s and 50s, people who smoke are far less likely to be employed than people of the same age who do not smoke, reflecting the cumulative impact of smoking on health and employability.

From an economic perspective, the lower employment rate among people who smoke leads to productivity losses, estimated by the 2025 Cost Benefit and Public Finance Model of Smoking (CBPF) at approximately £7.5 billion in England and £8.9 billion across the UK.[13]

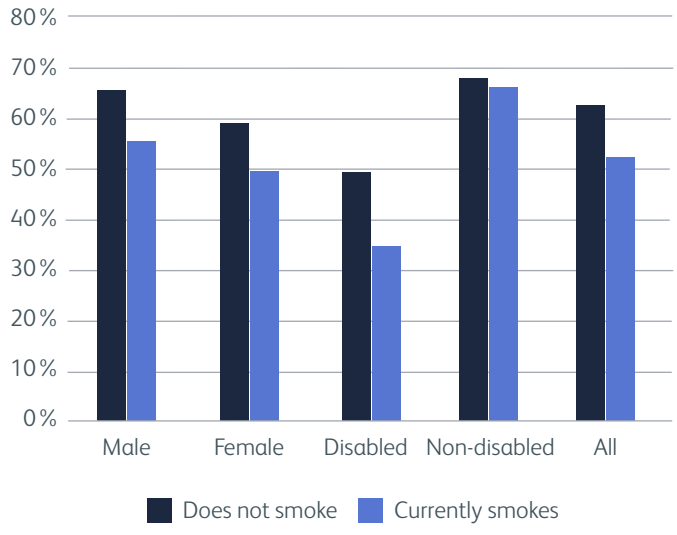


Fig 5.1. Employment rates by smoking status across selected groups (UK, ages 20–69).

Source: ASH and Landman Economics, 2020.[9]

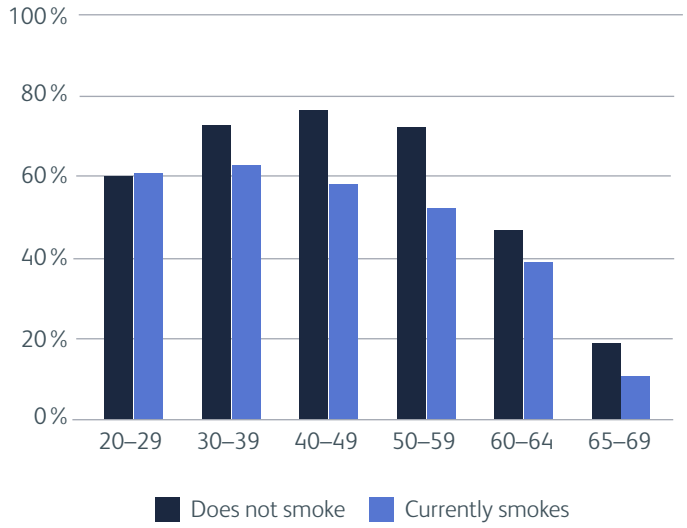


Fig 5.2. Employment rates by smoking status across selected age groups (UK, ages 20–69).

Source: ASH and Landman Economics, 2020.[9]

5.2.2 Impact on earnings and income

Evidence indicates that, among those in employment, individuals who smoke typically earn lower wages and experience weaker income-growth trajectories than those who do not.[11,14] Smoking contributes to lower income through several pathways;[11,15,16] health deterioration and disability constitute the most significant mechanism. Smoking significantly elevates the risk of numerous chronic conditions, including cardiovascular diseases, respiratory illnesses and various cancers, each of which can significantly impair an individual's ability to work.[17] As health declines, people who smoke often experience reduced productivity, potentially causing them to reduce their working hours, take prolonged sick leave or even permanently leave the workforce. Fig 5.2 illustrates that people in their 40s and 50s who smoke are more likely to exit employment than their non-smoking counterparts. Many individuals who smoke develop long-term illnesses or disabilities in midlife, with conditions like chronic obstructive pulmonary disease (COPD), heart disease, stroke and cancer becoming increasingly prevalent and debilitating. Once disability develops, maintaining employment becomes challenging, explaining in part why disabled people who smoke have significantly lower employment rates and incomes than disabled people who do not smoke.

Smoking varies across levels of educational attainment, although the direction of causality is uncertain and likely shaped by wider socio-economic conditions.[18,19] Young people from disadvantaged backgrounds who take up smoking may also leave school earlier, or progress into higher education at lower rates, than their non-smoking peers.[19] Fig 5.3, drawing on *Adult smoking habits in the UK* (2014 and 2023),[7,8] illustrates these disparities. In 2023, smoking was more common among adults with no formal qualifications (22%) than among those educated to degree level (6.5%). Although prevalence has declined across all education groups since 2014, the underlying educational gradient remains.[7,8]

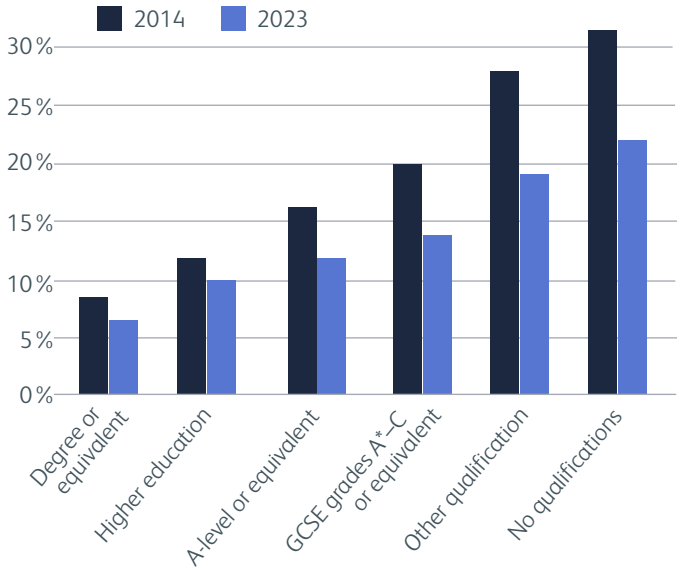


Fig 5.3. Smoking prevalence by highest level of educational attainment (UK, 2014 vs 2023).

Source: Office for National Statistics, Adult smoking habits in the UK: 2014 and 2024.[7,8]

Finally, co-occurring risk behaviours contribute to the relatively low incomes of people who smoke. Smoking often coincides with other risky behaviours, such as heavy drinking and substance misuse, which can further negatively impact employment prospects and earnings potential.[16] Evidence also suggests that alcohol misuse frequently occurs alongside smoking.[20]

Table 5.1 summarises data on median earnings for people who currently do and do not smoke from Reed's 2023 report, which analysed data from USoc Wave 12 (2019–20).[6] In the UK, the median monthly income for people who smoke was approximately £1,677, well below the £2,073 for those who do not smoke, representing an earnings gap of around 19%. The difference in earnings according to smoking status varied by demographic subgroup. Median earnings for men who smoke were about 23% lower than those for men who do not smoke (£1,920 vs £2,500 per month). Among women, this gap was slightly smaller at approximately 18% (£1,419 vs £1,732 per month). These findings suggest that smoking may exacerbate income inequalities in the workforce, with men who smoke particularly disadvantaged relative to their non-smoking counterparts.

Using regression analysis to adjust for other determinants of earnings, people who smoke earn approximately 9% less than individuals who have never smoked after controlling for various factors, including age, gender and education.[6,13] The analysis modelled this wage differential across the population of individuals who smoke in the UK, resulting in an estimated annual income loss of around £11 billion.

5.2.3 Absenteeism and presenteeism

People who smoke tend to have higher rates of absenteeism than people who do not smoke as a result of missing work due to illness.[21,22] A systematic review and meta-analysis by Troelstra *et al* (2020) provides robust evidence linking smoking to increased sickness-related absences.[23] Analysing data from 43 studies involving over 1.3 million participants, their review found that people who smoke have a 31% higher risk of sickness-based absence than people who do not smoke, which is equivalent to an average of 2.89 additional sick days per year. These findings are consistent with an earlier UK study, which found that people who smoke are approximately 33% more likely to be absent from work than people who have never smoked, and take an average of 2.7 more sick days per year.[21]

In 2024, the UK's working-age population (ages 16–64) was approximately 43 million, with around 75% employed, equating to a workforce of roughly 32 million individuals.[24] With adult smoking prevalence at 10.6% in 2024, approximately 3.4 million of these workers smoke.[7] Based on the estimate that people who smoke take an average of 2.89 more sick days per year than people who do not, smoking is estimated to account for around 11 million extra sick days per year. Using the 2024 average UK weekly earnings figure of £692, these lost workdays correspond to an estimated productivity loss of around £1.5 billion per year.[25]

Beyond absences, smoking contributes to reduced workplace productivity through presenteeism, where employees are present at work but perform below their full capacity.[26] Smoking can contribute to presenteeism through smoking-related health issues (eg chronic cough, shortness of breath and fatigue) that reduce performance, as well as frequent smoking breaks taken during working hours.[27]

Table 5.1. Median earnings among people who currently smoke and those who do not smoke in USoc Wave 12.

	Do not smoke	Currently smoke	Difference
Gender			
Male	£2,500	£1,920	23.2%
Female	£1,732	£1,419	18.1%
Disability status			
Disabled	£1,907	£1,504	21.1%
Non-disabled	£2,106	£1,746	17.1%
Age group			
20–29	£1,691	£1,500	11.3%
30–39	£2,300	£1,737	24.5%
40–49	£2,473	£1,858	24.9%
50–59	£2,187	£1,700	22.3%
60–64	£1,733	£1,646	5.0%
65–69	£1,250	£1,240	0.8%
Highest level of educational attainment			
Degree	£3,265	£2,500	23.4%
Other higher education	£2,925	£2,979	-1.8%
A-level	£2,083	£1,725	17.2%
GCSE	£1,693	£1,676	1.0%
Other	£1,646	£1,800	-9.4%
None	£1,542	£1,390	9.9%
Overall sample	**£2,073**	**£1,677**	**19.1%**

Source: ASH and Landman Economics, 2023.[6]

A 2018 report by the Royal College of Physicians (RCP) found that people who smoke take around 10 additional minutes of break time per day than people who do not smoke.[28] Unlike absenteeism, these on-the-job productivity losses may not be immediately obvious to employers, but they accumulate over time.[24,25,29–31] These additional factors, while more difficult to quantify, remain relevant to the full economic impact of smoking on workplace productivity.[25]

5.2.4 Early retirement and workforce exit

Early retirement refers to individuals leaving the workforce before reaching the statutory pension age due to ill health or disability, rather than through voluntary early retirement.[32] In other words, early retirement refers to those who are compelled to stop working prematurely as a result of smoking-related diseases or disabilities. Smoking is a leading cause of many chronic conditions, including cardiovascular disease, lung disease and cancers, which often underlie retirement due to ill health. Smoking remains the leading preventable cause of premature death and disability in the UK.[33,34]

Smoking-related early retirement carries substantial economic consequences, particularly as governments in the UK and worldwide seek to extend working lives to improve the financial sustainability of pension systems and maintain a robust labour force. A large body of research confirms that smoking increases the likelihood of early retirement due to disability.[32,35] For example, a Danish cohort study reported that individuals who smoke more than 20 cigarettes per day have five to six times higher odds of receiving a disability pension before the age of 60, compared to individuals who do not smoke.[32] Similarly, a study of Swedish twins found that, among adults aged 50–64, 10.5% of people who smoked received full disability pensions, compared to just 4.5% of their non-smoking siblings.[35] In a Finnish twin cohort, people who currently smoke had a 22-fold higher risk of disability retirement due to COPD than those who have never smoked.[36] Taken together, these findings present consistent evidence that smoking is an important risk factor for early withdrawal from the labour market due to health limitations.

Gaggero *et al* (2024), using Mendelian randomisation and data from the English Longitudinal Study of Ageing (ELSA), identified a direct causal link between heavy smoking and early retirement.[37] Their analysis found that people who smoke heavily retire at an average age

of 59.5 years, about 3.3 years earlier than those who do not smoke (62.8 years). This suggests a substantial loss of potential working life among individuals who smoke. Combined with the UK's average weekly earnings (£692), the productivity loss from people in the UK who currently smoke retiring 3.3 years early amounts to an estimated £27 billion over these individuals' working lives. Because early retirement is one pathway through which smoking reduces overall labour-market participation, this estimate overlaps with the productivity losses arising from lower employment rates described above in section 5.2.1; the figures therefore cannot simply be added together. Rather, they collectively illustrate the substantial economic impact of smoking-related reductions in working life expectancy.

5.2.5 Premature mortality and lost working years

Smoking remains the leading preventable cause of premature mortality in the UK.[38] Doll *et al*'s (2004) landmark 50-year prospective study of over 34,000 male British doctors provides long-term evidence of the health risks associated with smoking and the substantial benefits of cessation.[39] In this cohort, the relative risks (RRs) of all-cause mortality for people who currently smoke compared to those who have never smoked were 1.6 for ages 35–44, 2.3 for ages 45–54, 2.5 for ages 55–64 and 2.7 for ages 65–74, demonstrating that the excess mortality risk due to smoking increases with age during midlife. On average, people who smoke died approximately 10 years earlier than those who have never smoked.[39] A large-scale study by Pirie *et al* (2013), based on a cohort of over 1 million UK women with a median age of 55 years, reported similar findings. Among women under 60, the RR of all-cause mortality for those who currently smoke compared to those who have never smoked was 2.6 (95% CI: 2.5–2.7); for those aged 60–69, the RR was 2.8 (95% CI: 2.7–2.9).[40]

In England, smoking-attributable mortality has declined in recent years, reflecting the decline in the prevalence of smoking.[41] Between 2013–15 and 2016–18, the smoking-related death rate decreased from 244 to 202 deaths per 100,000. In 2019, smoking was estimated to be responsible for approximately 74,600 deaths in England and 90,000 across the UK, accounting for 15% of all deaths that year.[29,42,43] Individuals over the age of 45 had a higher RR of smoking-related mortality. As this age group includes many of the most experienced and highest-earning workers, their premature deaths carry significant economic consequences at the national level.

The latest CBPF model estimated the productivity loss from smoking-related early deaths in the UK by combining the above elements.[13] First, smoking-attributable mortality rates were applied to the estimated number of people aged 35 and over who smoke. This figure was then disaggregated by sex and age. Next, age- and sex-specific employment rates were used to determine the number of smoking-attributable deaths among individuals who would have otherwise been employed. The model then calculated the number of years of potential productivity lost based on the expected number of remaining working years until the state pension age (66 years in 2024). These lost years were then multiplied using earnings distribution data to calculate productivity loss. A 3.5% discount rate was applied to account for the present value of future earnings.[44] Based on this approach, the estimated productivity loss due to smoking-related early deaths in 2024 was approximately £1.11 billion in England and £1.35 billion across the UK.

5.2.6 Differential economic impacts on less advantaged groups

The economic impacts of smoking on productivity are not distributed uniformly across the population; rather, they disproportionately affect vulnerable and disadvantaged groups, exacerbating existing health and social inequalities. Fig 5.4 illustrates the disparities in smoking prevalence across key disadvantaged groups. In 2023, while smoking prevalence dropped to 11.9% of the UK population, 20.2% of adults in routine/manual occupations smoked, compared to just 7.9% in professional occupations.[45] Unemployed individuals were also almost twice as likely to smoke as those who were employed (20% vs 11%).[45] Smoking rates approached or exceeded 40–80% among vulnerable groups, including people with significant mental illness, those experiencing homelessness, those in prison and those with substance dependencies, far exceeding the 12% prevalence observed in the general adult population.[46–50] Overall, adult smoking prevalence continues to fall, reaching 10.6% in 2024.[51]

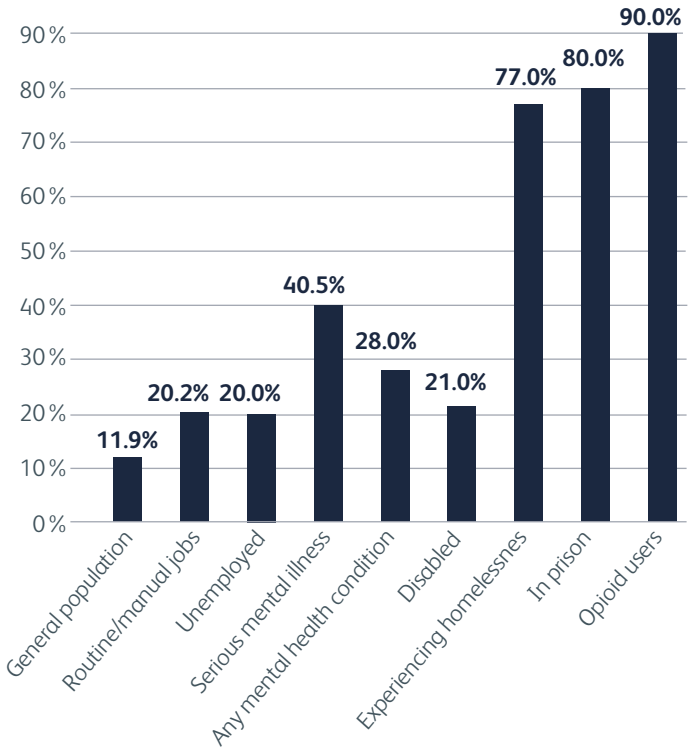


Fig 5.4. Smoking prevalence among disadvantaged groups and the general population (UK).

Source: Office for National Statistics, Adult smoking habits in the UK: 2023.[45]

5.2.6.1 Socio-economic disadvantage

Smoking prevalence remains disproportionately high among individuals with lower socio-economic status (SES). In the UK, SES is generally determined based on occupation, using social class based on occupation or socio-economic group (SEG) classifications.[52] There is a strong and well-established gradient in smoking rates across occupational groups. According to 2023 Annual Population Survey (APS) data, about 20% (95% CI: 19–21%) of adults in lower-paid manual occupations smoke, compared to 8% (95% CI: 7–8%) of those in higher-paid professional and managerial jobs, a rate more than 2.5 times higher.[7]

Fig 5.5 illustrates the decline in smoking prevalence across all occupational groups between 2014 and 2023.[7] Smoking rates fell notably among individuals in managerial and professional occupations, from around 13% in 2014 to 8% in 2023, representing a 38% relative reduction. In contrast, smoking prevalence among those in routine and manual occupations declined from 30% to 20%, representing a smaller (33%) reduction over the same period and highlighting persistent inequalities in outcomes between these groups.

In addition to exhibiting higher rates of smoking, people in routine and manual occupations typically earn less than those in higher-status jobs, increasing the economic burden of smoking. According to data from the Annual Survey of Hours and Earnings (ASHE, 2024), workers in routine and manual occupations have average weekly earnings of approximately £472, well below the roughly £990 earned by those in managerial and professional roles.[53]

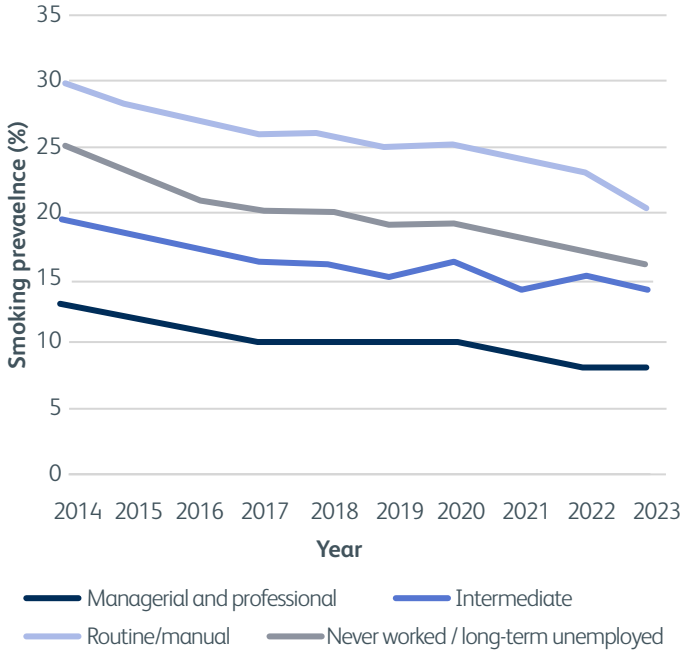


Fig 5.5. Smoking prevalence by occupational group (2014–23).

Source: Office for National Statistics, Adult smoking habits in the UK: 2024.[7]

5.2.6.2 The economic impact of tobacco use among individuals with mental health conditions

The intersection of tobacco use and mental illness represents one of the most significant and persistent drivers of inequality in the UK (see Chapter 4, section 4.6.3).[54]

The dual burden of smoking and mental health conditions has substantial socio-economic consequences, particularly in terms of employment. In addition to the adverse impacts of smoking on individuals' employment prospects and productivity, mental health conditions further contribute to employment disparities. A national household survey in the UK found that only 57% of individuals with a common mental health condition (CMHC; eg anxiety or depression) were in paid employment, compared with 69% of those without such conditions.[55] The gap is even wider among those with

more severe mental health conditions. For example, only 9% of individuals with a probable psychotic disorder were employed full time, with an additional 19% working part time.[55] Moreover, when people with mental health conditions lose their jobs, they often remain unemployed for prolonged periods. One survey reported that 70% of jobseekers with CMHCs had been out of work for a year or longer, making a return to employment unlikely.[56]

For those who are employed, mental health conditions can also impair on-the-job performance. Symptoms like fatigue, impaired concentration and memory difficulties make these conditions leading causes of both presenteeism (ie being at work but underperforming) and absenteeism.[55] In 2009/10, the economic cost of smoking among people with mental health conditions in the UK was estimated at £2.34 billion, with productivity losses stemming from work-related absenteeism accounting for £823 million and premature mortality (ie the loss of potential working years) accounting for £797 million.[57] This estimate is now over a decade old. Given declining smoking rates, rising rates of mental health conditions and increased average earnings over the past decade, updated cost estimates are recommended once new data (eg APMS 2023/4) become available.[58]

Individuals with mental health conditions also face unique challenges in their efforts to quit smoking, including greater difficulty accessing cessation support, lower treatment effectiveness and higher relapse rates.[46] Despite these barriers, research shows that people with mental health conditions who smoke are equally motivated to quit as those in the general population who smoke.[59] Therefore, integrating tailored smoking-cessation support into mental health services is crucial. Such measures have the potential to improve health and wellbeing, increase workforce participation, reduce poverty and fulfil a societal obligation to support this disadvantaged group.

5.2.6.3 The economic impact of tobacco use among individuals experiencing homelessness

Smoking prevalence among adults experiencing homelessness in the UK is exceptionally high, with estimates ranging from 57% to 82% (see Chapter 4, section 4.2).[48,49] Individuals in this population often face chronic unemployment alongside smoking-related health issues, such as lung cancer, COPD and heart disease. These conditions contribute to the higher morbidity and premature mortality observed in this population.[60] The mean age of death for individuals experiencing homelessness in the UK is just 43.2 years for women and 45.4 years for men, well below the national average.[61]

Early deaths in this population imply substantial losses in potential working years, as they occur long before the standard retirement age. This reduces the economic and societal contributions that individuals might otherwise have made. However, the specific proportion of these productivity losses that is attributable to smoking has not been quantified, due to limitations in available data. In addition, people experiencing homelessness who smoke frequently prioritise spending their limited financial resources on tobacco over essential needs like food, shelter and healthcare. This pattern of expenditure constrains their ability to save money, secure stable housing or access healthcare, deepening economic marginalisation and perpetuating the cycle of homelessness.

Many individuals experiencing homelessness who smoke also suffer from co-occurring mental health disorders or substance abuse issues, exacerbating their social and economic exclusion and further diminishing their employment prospects.[62] Nevertheless, some people engage intermittently in employment or possess the capacity to re-enter the workforce if provided with adequate support.[62] Thus, supporting smoking cessation in this population could improve physical health, enhance employment prospects and mitigate medical conditions that often disrupt efforts towards stable resettlement.

The scarcity of specific productivity data for this group points to a systemic oversight or difficulty in quantifying the economic impact of smoking on one of the most marginalised populations, suggesting a large, unmeasured burden. One report estimated the annual cost for the UK economy of young people aged 16–24 experiencing homelessness at £8.5 billion, with approximately 70% (£5.4–£6.0 billion) attributable to productivity losses from inactivity and unemployment.[63] However, data on older homeless adults remain limited. Reducing smoking in this community would improve health and free up income, and could thus facilitate transitions into stable housing and employment, yielding substantial benefits for individuals, communities and society.

5.2.6.4 Intersectional disadvantages: compounding the burden

The productivity impacts of smoking are rarely attributable to a single cause. Instead, they are often intensified by multiple intersecting forms of disadvantage. Individuals who belong to several

disadvantaged groups, such as those experiencing poverty, mental illness or disability, face an increased burden, including greater barriers to employment and steeper earnings penalties associated with smoking.

A growing body of evidence supports the link between cumulative disadvantage and increased smoking risk.[64–66] For instance, a US cross-sectional study including a nationally representative sample of more than 278,000 adults developed a cumulative social risk index incorporating six factors: unemployment, poverty, low educational attainment, disability, serious psychological distress and heavy alcohol use.[64] The findings revealed a clear dose–response relationship. Smoking prevalence rose incrementally with each additional disadvantage: 13.8% among individuals with no risk factors, 21.4% with one disadvantage, 26.6% with two, 35.1% with three, 45.7% with four, and 58.2% with five or six. The study also found that from 2008–17, smoking rates declined the least among those with multiple disadvantages, widening disparities over time.

Further evidence from a UK longitudinal study examined the influence of cumulative disadvantage across the lifecourse on smoking trajectories among a cohort of 9,936 British women aged 22–34.[66] The study assessed four key indicators of disadvantage: poor socio-economic background in childhood, low educational attainment (leaving school at 16 or earlier), early motherhood (by age 22) and financial hardship in adulthood. The findings demonstrated that the accumulation of these disadvantages increased the likelihood of smoking and reduced the likelihood of cessation. Among women who experienced none of the four disadvantages, only 18% currently smoked. In contrast, among those who experienced all four disadvantages, the smoking prevalence was 63%, more than three times higher than their less disadvantaged counterparts.

A 'one-size-fits-all' approach may fail to address the complex and intersecting factors that drive smoking prevalence and its economic consequences in the most marginalised communities. Policy and intervention design must therefore be responsive to the diverse and intersecting needs of individuals facing multiple disadvantages. Interventions that strategically target those experiencing the greatest degree of cumulative disadvantage could yield higher returns on investment.

In summary, smoking reduces workforce productivity in the UK through its effects on employment, earnings, absenteeism and presenteeism, early retirement and premature mortality. People who smoke are more likely to be unemployed, contributing to annual productivity losses of around £8.9 billion, while lower earnings among employed people who smoke add a further £11 billion. Increased sickness absence costs an estimated £1.5 billion each year, and smoking-related premature deaths result in an additional £1.35 billion in lost productivity. Together, these factors amount to a total annual productivity loss of approximately £23 billion, with the greatest impacts concentrated among disadvantaged groups already experiencing poverty, poor health and social exclusion.

5.3 Smoking and public service costs

Smoking imposes a major economic burden on the UK's public services, including the NHS, the social care system, and public safety services like fire and rescue. These costs are disproportionately high for disadvantaged groups, who have higher smoking rates and consequently greater smoking-related illness. This section summarises the public service costs of smoking in the UK, based on the 2025 CBPF model and prior analyses by the RCP and ASH.[6,13,28]

5.3.1 NHS healthcare costs attributable to smoking

A widely adopted approach for estimating smoking-attributable healthcare costs is based on smoking-attributable fractions (SAFs). The SAF represents the proportion of disease cases attributable to smoking. It is calculated from the relative risks of the disease for people who currently smoke (*Rc*) and those who used to smoke (*Rx*) compared with those who have never smoked, along with the prevalences of people who currently smoke (*Pc*) and people who used to smoke (*Px*). Using these values, the SAF for a given condition is computed as:

$$SAF = \frac{Pc(Rc - 1) + Px(Rx - 1)}{1 + Pc(Rc - 1) + Px(Rx - 1)}$$

This method has been described in detail in earlier RCP reports, and the relative risks for major smoking-related diseases were published in the RCP's 2018 report *Hiding in plain sight*.[28,54] Applying this approach, recent NHS England data indicate that, in 2022/23, approximately 408,700 hospital admissions in England were attributable to smoking.[67] These admissions represented around 3% of all hospital admissions among adults aged 35 and over. Of these smoking-attributable admissions, cancers accounted for 40%, respiratory diseases for 24%, and cardiovascular conditions for 16%.

Primary care services bear an important share of the smoking-related health burden. As the first point of contact for most patients, general practice is responsible for both the initial diagnosis and ongoing management of smoking-related illnesses. On average, people who smoke are estimated to visit their GPs 35% more frequently than those who do not smoke, reflecting the chronic nature of many smoking-related conditions and the additional burden placed on primary healthcare services.[68]

A detailed analysis by Public Health England in 2015 estimated that smoking imposed an annual cost of approximately £1.1 billion on primary care services in England.[69] Within this total, GP consultations were estimated to cost £794 million per year, practice nurse visits approximately £111.7 million per year, and smoking-related prescriptions £144.8 million per year. These figures were modelled by comparing the frequency of healthcare use by people who currently smoke and those who used to smoke relative to those who have never smoked, with the differences attributed to the health consequences of smoking.

While data for England are the most detailed and frequently cited, comparable costs are incurred across the UK. NHS Scotland was estimated to spend between £300 million and £500 million annually on smoking-related healthcare in 2022.[70] In Wales, the cost has been estimated at approximately £302 million per year, and in Northern Ireland, the estimated annual cost of smoking-related hospital care reached £218 million in 2019/20.[71,72] Although these figures are based on different years and methodologies, they consistently confirm the considerable financial healthcare burden of smoking throughout the UK.

The most recent update from the 2025 CBPF model reported that the total cost of smoking-attributable healthcare reached £1.82 billion in England in 2024, and £2.16 billion across the UK.[13] These figures reflect the sustained public service pressures caused by tobacco use, and reinforce the economic rationale for effective control measures to reduce smoking prevalence and relieve NHS demand.

5.3.2 Social care costs of smoking

Social care in the UK provides essential support for individuals who are unable to live independently due to age, illness or disability.[73] This includes assistance with activities of daily living, delivered either in people's homes (domiciliary care) or in residential settings such as care homes. Smoking substantially contributes to increased demand for both forms of care by accelerating the onset of chronic illnesses, particularly cardiovascular, respiratory and neurological conditions, which impair mobility, functional ability and self-sufficiency. Evidence consistently shows that people who smoke not only develop disabilities earlier in life, but are also more likely to require both formal and informal care than their non-smoking peers.[74] Drawing on Reed's 2021 report for ASH and the 2025 CBPF model, this section summarises the estimated social care costs attributable to smoking and outlines the methodological approach used to derive these estimates.[13,74]

Because smoking leads to earlier and more intensive care needs, it increases reliance on publicly funded social care.[53] Using data from ELSA and the Health Survey for England (HSE), Reed applied SAFs to estimate excess demand for social care among people who smoke.[74] After adjusting for age, sex, health status and socio-economic factors, it was found that people who currently smoke were more than 2.5 times as likely as those who had never smoked to receive domiciliary care. Meanwhile, people who used to smoke were approximately 1.5 times more likely than those who had never smoked to require domiciliary care. Recent quitters (within the past decade) showed similarly elevated care needs, indicating the long-lasting health impacts of smoking. Notably, both those who currently smoked and those who recently quit smoking were found to be nearly twice as likely as those who had never smoked to receive local authority-funded care, reflecting both increased needs and the tendency for smoking-related illness to reduce income and assets, qualifying more individuals for publicly funded support.

Reed estimated that approximately 1.65 million individuals in England require social care support as a direct result of smoking-related conditions. On average, people who smoke start to experience serious difficulties with everyday tasks around 7 years earlier than those who have never smoked, and begin receiving care about 10 years earlier. Among those receiving support, people who currently smoke and those who have recently quit smoking require around 18 hours of paid care per week, compared with just 5 hours for those who have never smoked, a disparity of more than threefold.

In financial terms, Reed estimated that local authorities in England spend approximately £1.2 billion annually on smoking-related adult social care, including both domiciliary and residential care. This represents around 8% of the total adult social care expenditure. In comparison, smoking-attributable healthcare costs account for roughly 2% of the NHS budget, highlighting

smoking's relatively greater economic impact on the social care system. The £1.2 billion comprises an estimated £625 million for additional in-home support and £565 million for residential care placements necessitated by smoking-related illness. These estimates, first obtained in 2019 and updated by Reed in 2021, were calculated by applying observed differentials in care utilisation by smoking status to national cost data. The 2025 CBPF model further refined these estimates, reporting that in 2024, the annual public cost of smoking-attributable social care reached £1.14 billion in England and £1.36 billion across the UK.

Beyond formal care services, a substantial share of care for frail or disabled individuals is delivered informally by unpaid carers, including spouses, adult children and other family members. Smoking adds significantly to this burden by increasing the prevalence and severity of disability. Using ELSA data, Reed compared the amount of unpaid care received by people who smoke versus those who have never smoked, controlling for demographic and health characteristics. The additional informal care attributable to smoking was then valued using a replacement cost method, that is, by estimating the cost of providing that care using paid professionals at market rates. This analysis yielded an estimated annual informal care cost of £8.16 billion in England. As smoking rates continue to decline, the 2025 CBPF model adjusted this figure to £7.8 billion for England and £9.25 billion across the UK in 2024. These figures represent a substantial hidden burden on households and carers, with consequences for employment, wellbeing and financial security.

In addition to formal and informal care, a third domain of cost relates to unmet care needs: cases in which individuals require assistance, but do not receive it from any source. People who smoke are more likely than those who have never smoked to report unmet care needs, even after controlling for age, socio-economic status and other covariates. One analysis found that people who currently smoke were over 2.5 times as likely as those who do not smoke to experience unmet needs. Reed (2021) estimated these costs by analysing HSE data on functional limitations and reported assistance, identifying the additional unmet needs attributable to smoking.[74] The hypothetical cost of meeting those needs was then calculated using standard unit costs for social care provision. The result was an annual estimated cost of £5.9 billion in England in 2021. According to the 2025 CBPF model, this figure is projected to remain at approximately £5.94 billion across the UK in 2024, with around £5.0 billion of that in England.

5.3.3 Other public services: fire and rescue

In addition to its impact on health and social care systems, smoking imposes considerable costs on other public services, most notably fire and rescue services.[75] Fires caused by smoking materials (such as cigarettes and cigars) are a known source of accidental domestic fires. These incidents frequently lead to emergency callouts, damage to property and, in many cases, serious injuries or fatalities, all of which impose measurable financial and societal costs on public services.

Although smoking materials are responsible for a minority of accidental dwelling fires, they account for a disproportionately high share of fatal outcomes. According to Home Office fire statistics for England, in 2022/23, smoking materials were identified as the ignition source in just 8.2% of accidental house fires; however, they caused 35% of all fatalities in such incidents, by far the highest proportion attributed to a single ignition category.[76] This disparity reflects the inherent lethality of smoking-related fires.

The CBPF model provides a detailed economic estimate of the burden imposed by smoking-related fires. Drawing on fire incident data published by the Home Office, the CBPF model estimates that smoking-related fires cost the public and society approximately £332 million annually in England.[13,77] This figure includes costs borne directly by fire and rescue services, as well as the broader societal costs of property damage, injuries and fatalities. When scaled to reflect the full UK population, the total annual cost of smoking-related fires rises to £394 million.

In summary, smoking imposes a substantial economic burden on UK public services, exceeding £19.1 billion in 2024. This includes £2.16 billion in NHS costs, driven by over 400,000 smoking-attributable hospital admissions and increased primary care utilisation. Additionally, smoking accounts for approximately £16.5 billion annually across social care services, comprising £1.36 billion in public spending, £9.25 billion in informal care and £5.94 billion related to unmet care needs. Fire and rescue services incurred a further £394 million due to smoking-related incidents.

5.4 Tobacco control spending in the NHS and local government

Funding for tobacco control is provided by the Department of Health and Social Care (DHSC), although additional funding may arise due to cross-governmental department involvement with some components of tobacco control, such as border forces to tackle illicit tobacco. Local government has a wide tobacco control remit, which includes responsibility for delivery and uptake of stop smoking services, managing trading standards for tobacco and vape products, preventing underage sales and maintaining smoke-free places. NHS funding for tobacco treatment is lower than that for local government (approximately one-fifth), reflecting a more limited role, specifically providing opt-out treatment for hospital inpatients, pregnant women and pregnant people who smoke. Budgets provided to NHS organisations and local authorities for tobacco-related work are subject to cuts at national or local level, with local spending decisions made independently of central government control, discussed in more detail in the sections below. The complementary dual-funding streams and delivery of services provided by the NHS and local government enables much greater access to cessation services for people who smoke, especially for those populations with a higher smoking prevalence, than would be possible utilising a single-funded delivery mechanism.

5.4.1 Local government spending on tobacco

Since 2013, local authorities in England have been responsible for tobacco control in their communities, using funding from the public health grant. As part of this funding, local authorities must record and report how much they spend, specifically showing costs for 'stop smoking services and interventions' as well as 'wider tobacco control'. This has allowed tracking of expenditure every year since 2013–14. Over time, spending has decreased: in 2023–24, local government spent approximately £98 million on tobacco control, compared with £207 million (adjusted for inflation) in 2013–14 (Fig 5.6).[78]

Furthermore, tobacco control has shifted in the overall public health spending of local government, dropping from 5.9% of overall public health expenditure in 2013–14 to less than 2.5% in 2023–24 (Fig 5.7). Reversing this downward trend, an additional £70 million per annum was committed to local government smoking-cessation services in *Stopping the start: Our new plan to create a smoke-free generation* announced in 2023, alongside additional funding announcements for Trading Standards, mass media campaigns, the 'Swap to stop' e-cigarette scheme and the maternity financial incentive scheme.[38] The annual £70 million additional funding for local authorities is contingent upon demonstration that the local authority meets centrally set targets for additional people setting a quit date. Approximately £154 million annually between 2026–29 for local authority stop-smoking services has been committed, consolidating funding for the 'Swap to stop' scheme, Smokefree Generation Grant and baseline funding for local government stop smoking services.[79,80]

5.4.2 NHS spending on tobacco control

The NHS Long Term Plan in 2019 committed to offering all patients admitted to hospital NHS-funded tobacco dependency treatment services by 2023–24.[82] It also committed to more focused support during pregnancy and inpatients with mental health needs. By March 2025, 95% of hospital trusts had implemented tobacco dependency services and pathways (source: unpublished data, personal communication). In 2024, approximately 250,000 inpatients who smoke were identified in NHS hospital settings, with the majority from the most deprived quintile of deprivation (see Chapter 4, Figs 4.20 and 4.22).[83] It is estimated that between £30–35 million has been spent per annum on these services since 2021,[84] which falls short of the funding required for services to offer tobacco dependency treatment to all admitted patients. Funding of these new NHS services has been provided through ring-fenced 'system development funding' between April 2021 and March 2025. Since April 2025 the funding mechanism has changed, with monies no longer ring-fenced but included in integrated care system baseline allocations, with the intention of NHS England to assure integrated care boards (ICBs) that this funding is permanent. However, with the removal of the financial ring-fence, these services have become vulnerable to local decommissioning decisions.[85]

A recent survey from ASH reported that six acute trusts and two mental health trusts have begun decommissioning tobacco dependency services in 2025–26, with unclear commissioning intentions from 2026–27 for the remaining ICBs. There is a risk of increased tobacco-related health inequality if widespread decommissioning of hospital and maternity services takes place.[85,86]

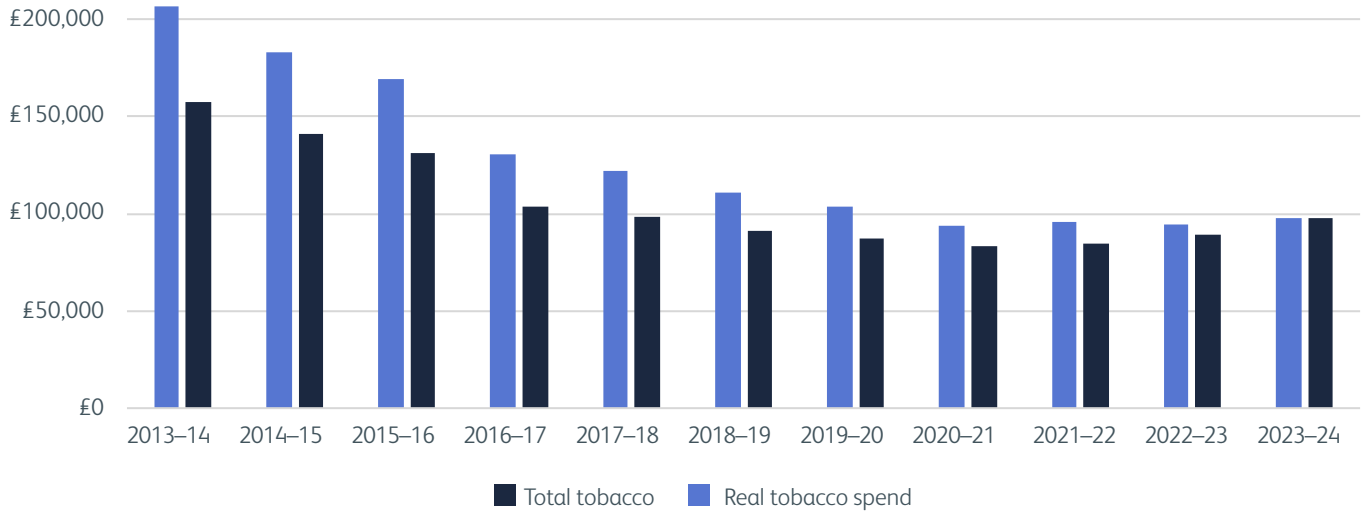


Fig 5.6. Local authority out-turn expenditure on tobacco control 2013–14 to 2023–24, cash and real spending (deflated by the GDP deflator).

Source: HM Treasury. GDP deflators at market prices, and money GDP June 2024 (Quarterly National Accounts).[81]

5.4.3 Assurance of tobacco control spending

Assurance of spending on tobacco control differs in the level of reporting, scrutiny and transparency between local government-commissioned services, and services commissioned separately by the NHS. Strong assurance processes could be leveraged to ensure that funding is targeted to the most disadvantaged communities to reduce tobacco-related inequalities.

5.4.3.1 Local government assurance

An additional £70 million per annum of spending on tobacco control in local government in England was committed in 2023. The conditions attached to this are an example of strong and clear assurance (Box 1).

This focuses on assurance that the £70 million is genuinely additional spend (over and above existing expenditure through the local government public health grant); setting out the outcome measures expected and

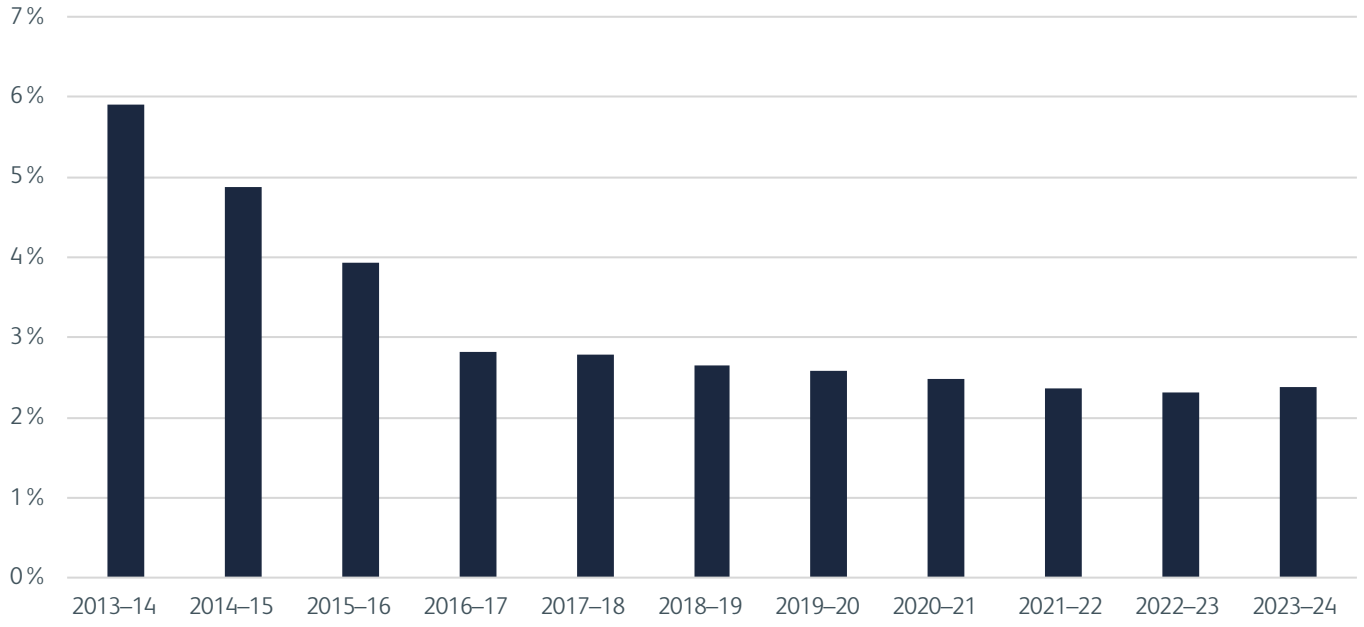


Fig 5.7. Tobacco control as a percentage of total (minus COVID spend) public health expenditure 2013–14 to 2023–24.

Source: HM Treasury. GDP deflators at market prices, and money GDP June 2024 (Quarterly National Accounts).[81]

Box 1. Assurance on spending of additional £70 million per annum to local government for tobacco control.

To receive the funding, local authorities must maintain their existing spend on stop smoking services, based on the stop smoking service data that they have submitted for the year 2022–23. They should ensure that they maintain this level of funding throughout the whole grant period. Local authorities must also comply with the reporting requirements for expenditure related to the stop smoking service by submitting quarterly reports to NHS England. The small number of local authorities that did not provide data in 2022–23 will be required to show that they are providing evidence-based stop-smoking support and meet the grant funding criteria to claim the new section 31 grant.

- Expected reporting mechanisms
- The key success indicators for this funding are:
- number of recorded quit dates set per 100,000 people who smoke
- percentage of people engaging with services who successfully quit smoking (recorded quit rate)
- number of recorded quits per 100,000 people who smoke.

Local authorities will need to report data throughout the life cycle of the grant. This will take place through two methods:

1. The Stop Smoking Services Collection is an existing data collection and reporting system used to monitor the delivery of local stop-smoking interventions. NHS England collects the data from local authorities and there is a requirement to submit activity for each quarter. NHS England publishes submission dates, and local authorities can return activity and outcome data associated with quit support provided. The collection requires local authorities to submit cumulative counts of activity using a template, which you can request from the Strategic Data Collection Service.
2. Starting from the second payment, local authorities will need to complete a statement of grant usage to the DHSC grants team, before they receive the next payment. The statement of grant usage will ask local authorities to provide the funding amount they received, their actual eligible spending, and a reason for any differences.

Source: Department of Health and Social Care. Local stop smoking services and support: funding for 2025–26.[88]

reported from activity; and the requirement to report on specific activities and outcomes to unlock additional spending. Specific measures to use additional funds to address smoking-related health inequalities were included in the guidance.[87]

The assurance of existing tobacco control expenditure that has been spent as part of the wider local government public health grant is less specific and stringent. Local directors of finance and of public health have to report to the Ministry of Housing, Communities and Local Government how they have spent the overall grant that they received, of which spending lines on 'stop smoking services and interventions' and 'wider tobacco control' are included. These spending figures are reported and published annually by the government in the local government spending returns, so there is some assurance through transparency of how much is actually spent.[89]

A larger annual report is also published, with finalised data for the year.[90] The publications contain in-depth analyses of the key measures of service delivery in pregnant women and pregnant people and by ethnic group, gender, sexual orientation, age group, financial year and socio-economic classification (see Chapter 4). The analysis is available by intervention type and setting, smoking aid, local authority (LA), commissioning region and sub-ICB. These data are published quarterly and annually in depth (allowing more complex additional analyses by others), are summarised in annual reports and feed into other publications and data sources, including the public health outcomes framework and local tobacco control profiles.[91] Assurance therefore comes through high levels of transparency in terms of local government-commissioned services, on what is spent, and what and whom this expenditure is spent on. DHSC is not able to use penalties or reallocation of funding to other organisations where local authorities do not meet specified standards or report data relating to tobacco control services.

5.4.3.2 NHS assurance

Less clarity and public transparency and assurance are available for NHS-commissioned tobacco dependency treatment services. Beyond high-level commitments,

data on overall out-turn spending on tobacco control in the NHS are not collected. It is not possible to set out how much the NHS budget spends on treating tobacco dependency from its own funding. Since 2021, assurance of implementation of new hospital tobacco dependency treatment services in the NHS has been provided from ICBs to NHS England via quarterly internal reports, and subsequently collated and provided to internal national NHS England Boards. The 2023–4 NHS England annual report and accounts states that 'At the end of 2023/24, 85% of all eligible inpatient and 94% of all maternity services had implemented new tobacco dependence treatment services'.[92] Patient-level data reporting by hospitals and maternity providers on patients identified as people who smoke and their subsequent treatment has been a 'mandated' collection since April 2022, including data relating to markers of inequality. However, there remains a significant gap in reporting, with approximately 25%, 35% and 45% of acute, maternity and mental health providers respectively not reporting patient-level data in September 2025, more than 3 years after the mandated collection commenced, hampering data-driven improvement of services.[93]

Since the removal of ring-fenced funding in 2025, commissioning of NHS-delivered tobacco dependency services has deteriorated, and mechanisms to assure NHS England that ICBs implement effective services and report patient-level data appear to be decoupled from national policy intentions set out by government and NHS England funding.[82,94] When NHS organisations do not meet service requirements despite receiving funding, there appears to be no penalty or ability for the DHSC or NHS England to reallocate funding to other organisations or stakeholders who may be able to deliver local services.

In summary, contradictory policy intentions and assurance processes undermine the potential to reduce the gap in tobacco-related health inequalities in local government and the NHS in England. The current level of public investment in tobacco dependency treatment, of approximately £180 million in 2024/25,[80,95] is likely to fall short of what is needed to secure rapid reductions in smoking by 2030. Sustained investment is required to narrow the gap in smoking-related inequalities, which will improve employment and productivity, reduce pressures on the NHS and social care, and save £3.6 billion in cumulative public spending by 2030.[96]

5.5 Smoking and poverty

The UK government's *Households below average income* statistics defines a household as living in poverty if its income (after tax, and including welfare benefits, and adjusted for size and composition) is less than 60% of the national average (median).[97] Research by Reed commissioned by ASH (unpublished data) uses data from the UK Living Costs and Food Survey on self-reported household spending on tobacco. By subtracting this tobacco expenditure from net household income, it estimates how many more households fall into poverty as a result.[98]

Table 5.2 shows the estimated impact of smoking on measured poverty for households in the UK. The middle column shows the increase in measured poverty for all households and for different groups of people (working-age adults, pensioners and children), while the right-hand column shows the results for households with people who actually spend money on tobacco (and for working-age adults, pensioners and children within those households).

When tobacco expenditure is subtracted from household net income, the proportion of households in relative poverty (measured in 2022/23) rises from 17.7% to 19.7% – an increase of 2.0 percentage points. The proportion of pensioners in relative poverty increases by 2.3 percentage points, while the proportion of working-age adults increases by 1.7 percentage points. The increase in child poverty is somewhat smaller, at 1.2 percentage points. But overall, factoring in tobacco expenditure leads to a clear increase in estimated poverty rates across households and all groups.

Looking at just households where people spend money on tobacco, baseline poverty before tobacco expenditure is taken into account is higher – 20.1% compared with 17.7% for all households. This pattern is also observed for working-age adults (17.8% vs 14.8%), and especially for children (30.9% vs 22.1%). However, for pensioners the opposite is true – those living in households that spend money on tobacco are slightly less likely to be in poverty than pensioners overall (16.4% vs 18.3%).

In summary, when spending on tobacco is taken into account, the measured poverty rate for households with people who smoke jumps from 20.1% to 35.0% – almost doubling. Among pensioners in these households, the poverty rate more than doubles, from 16.4% to 42.6%.

Table 5.2. UK poverty before and after taking tobacco expenditure into account, 2022/23 financial year.

	Whole sample	Households with positive tobacco expenditure only
Proportion of households in poverty	**%**	**%**
Before tobacco expenditure	17.7	20.1
After tobacco expenditure	19.7	35.0
Percentage point increase in poverty rate once tobacco expenditure is taken into account	2.0	15.0
Proportion of working-age adults in poverty	**%**	**%**
Before tobacco expenditure	14.8	17.8
After tobacco expenditure	16.5	28.6
Percentage point increase in poverty rate once tobacco expenditure is taken into account	1.7	10.9
Proportion of pensioners in poverty	**%**	**%**
Before tobacco expenditure	18.3	16.4
After tobacco expenditure	20.6	42.6
Percentage point increase in poverty rate once tobacco expenditure is taken into account	2.3	26.3
Proportion of children in poverty	**%**	**%**
Before tobacco expenditure	22.1	30.9
After tobacco expenditure	23.3	39.1
Percentage point increase in poverty rate once tobacco expenditure is taken into account	1.2	8.3

Source: estimates by Reed (2025) using pooled Living Costs and Food Survey data for 2019/20, 2021/22 and 2022/23. Baseline poverty estimates calibrated using Family Resources Survey data for 2022/23.[98]

Poverty among working-age adults and children in these households also increases, but by smaller amounts. Overall, using pooled data from the Living Costs and Food Survey for 2019/20, 2021/22 and 2022/23, subtracting tobacco expenditure from net income leads to an extra 560,000 households falling into poverty, including 680,000 working-age adults, 270,000 pensioners and 160,000 children.

5.6 The economic impact of a smoke-free UK

Recent studies have investigated the impact that freeing up expenditure on tobacco could have on communities and the wider economy. Morris *et al* estimated the size of the 'smoke-free dividend' in England, defined as the value that could be added to local economies each year through the money that people who smoke tobacco would save if everyone quit smoking.[99] The estimate is based on evidence that only a small proportion of expenditure on legal tobacco – about 7%, which goes to small retailers – is retained in local economies; the rest is made up of tobacco taxes and tobacco industry profits. The potential dividend in the case of a smoke-free England was estimated as 93% of expenditure on legal tobacco, plus 100% of illicit tobacco expenditure. The total annual dividend nationally was estimated to be £10.9 billion; at the individual level, this equated to £246 per adult in England, and £1,776 per adult who smokes. The analysis highlighted regional variation in the dividend, which ranged from £209 in the south-east to £320 in the north-east. Analysis at the local level highlighted socio-economic variation in the smoke-free dividend, which was higher in low-income areas, due to the higher proportion of people who smoke. Expenditure

on tobacco also accounted for a higher proportion of people's income in these areas.

The £246 annual smoke-free dividend per adult in England represents the average amount of money that would be freed up if all people who smoke quit. It is an estimate of the potential economic benefit per adult, reflecting increased household budgets and local economic activity, rather than a direct payment to individuals or a fund for local government. Morris *et al* highlight that quitting smoking frees up disposable income that can be redirected to other expenditures, to pay off debts or saved, though they also note ethical challenges associated with categorising tobacco expenditure as 'unnecessary'.[99] Reed quantifies not only the expenditure that could be reallocated in a smoke-free UK, but considers the wider impact of this reallocated expenditure on the UK economy.[100] The study estimates change in Gross Value Added (GVA), a measure of the contribution of a sector or industry to the economy, and additional jobs as a result of reallocated expenditure.

The net change in GVA, calculated as the estimated increase in GVA arising from the reallocation of consumer expenditure to products other than tobacco in a smoke-free UK, minus the estimated increase in GVA arising from current tobacco expenditure, was estimated at £9.7 billion per year. The net change in employment was 135,865 full-time equivalent jobs.

The findings are explained by the multiplier effect. There is almost no tobacco production in the UK and very few other jobs that are reliant on the tobacco industry. Therefore, when people buy something other than tobacco, it stimulates more growth in the economy than if they continued to purchase tobacco. ASH has also published estimates showing that the £6.8 billion raised annually through tobacco taxes in England is far outweighed by the £43.7 billion that smoking costs society.[101] Reducing smoking prevalence in the UK to zero would therefore deliver significant economic benefits, increasing UK economic output and employment. Importantly, the loss of tobacco tax revenue is more than compensated for by positive impacts on public finances such as health and social care costs, and tax revenue from redirected spending.

Taken together, these studies highlight some of the potential economic benefits to making smoking obsolete. These benefits would be concentrated in some of the country's most disadvantaged communities and economies.

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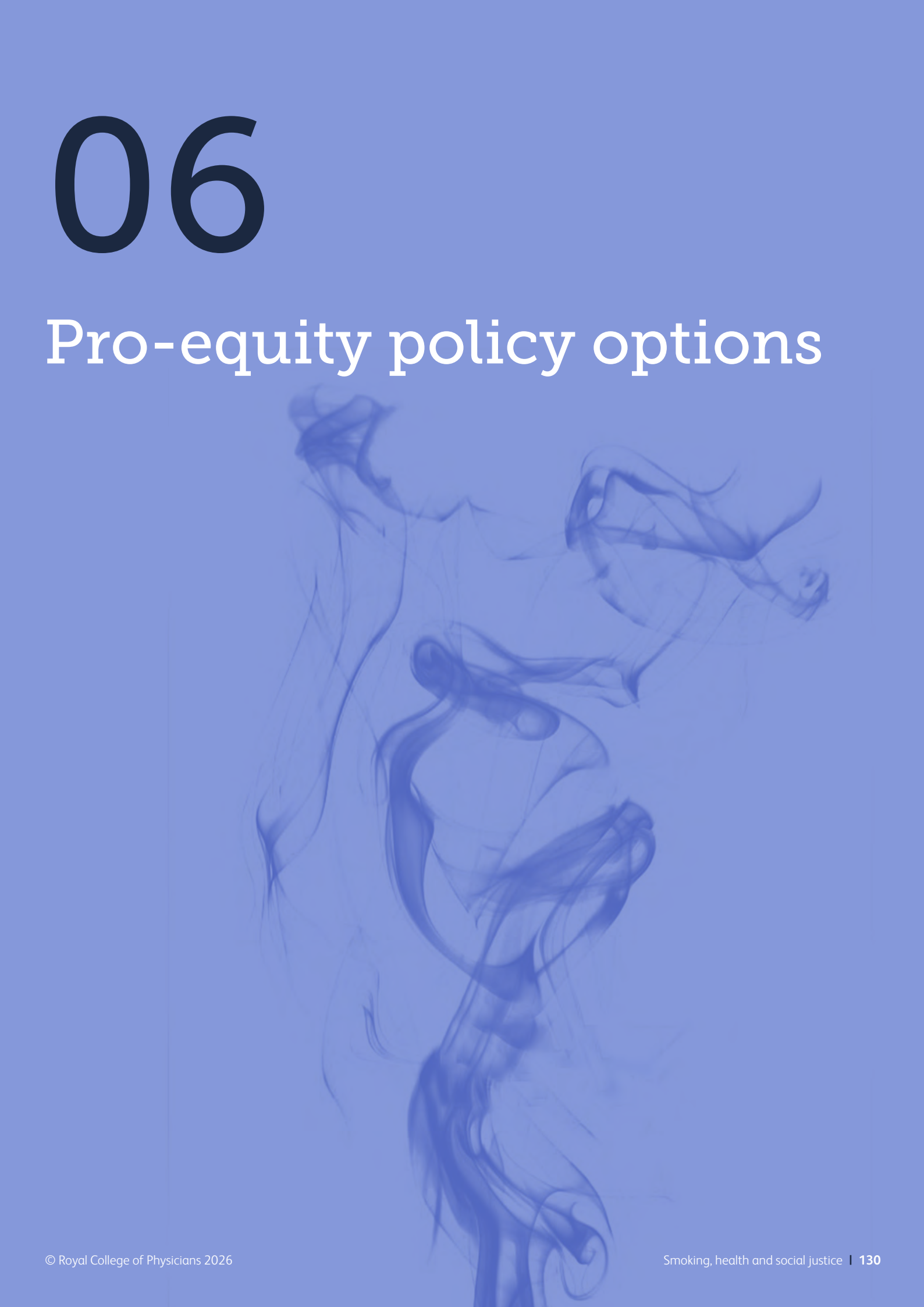
06

Pro-equity policy options



A national **tobacco control plan** is needed to drive action

Opt-out cessation should be introduced in all NHS settings

Reducing smoking inequalities requires targeted and systemic action

Primary care delivery of cessation treatment and pharmacotherapy **should be strengthened**

Financial incentives and digital support for priority groups should be expanded

Key points

1 Tobacco-related health inequalities will be reduced if tobacco control policies differentially affect higher prevalence groups. They will remain the same if all population groups are impacted equally, and will widen if policies differentially affect low prevalence groups, all other things being equal.

2 UK tobacco control policy has been successful in lowering smoking prevalence in the general population. However, more can and should be done to address smoking in higher prevalence groups to reduce the unjust burden of smoking on individuals, families and communities.

3 National tobacco control plans can provide a clear strategy and ambition to tackle smoking and reduce health inequalities. However, there has been no national tobacco control plan in England since 2022, which may diminish the likelihood of closing the smoking-related health equity gap.

4 NHS and local government tobacco dependency treatment services are complementary and offer significant benefits in addressing tobacco-related inequality as each service provides access to different local sub-populations of people who smoke.

5 There is consistent international evidence that tobacco price increases reduce smoking rates overall and that they can reduce inequalities in smoking because they have a greater impact in the least advantaged groups. Price increases should be coupled with support to stop smoking to avoid widening disparities in people who continue to smoke.

6 The Tobacco and Vapes Bill sets out a range of powers for a tobacco retail licensing scheme for the UK. Such a scheme would further support the enforcement of product and age of sale regulations.

7 Mass media campaigns are effective in triggering smoking quit attempts but have increasingly abandoned conventional media and shifted into digital spaces, which risks exacerbating existing inequalities.

8 The Tobacco and Vapes Bill provides powers to ban smoking and vaping in most public places; however, these restrictions could make it harder for people to use vapes to quit smoking or worsen perceptions of harm, potentially increasing smoking and related health inequalities. One particularly important area is in mental health trusts, where smoking prevalence is high and nicotine vapes have proven to be a critical component of treatment pathways.

9 Regional and sub-regional tobacco control programmes such as Fresh in the north east of England can play a bridging role between national and local teams and are effective in reducing overall smoking prevalence and absolute inequality in smoking.

10 Opt-out cessation pathways in NHS and local authority settings reduce inequalities in access to tobacco dependence treatment, particularly in socially deprived areas where smoking prevalence is high and awareness of tobacco cessation services is low. Training in the delivery of these services should focus on trauma-informed approaches, tailored language and advanced use of stop smoking aids.

11 Use of non-cigarette tobacco forms such as waterpipe and smokeless tobacco is higher among minority ethnic groups; and most of these products are sold through illicit supply and distribution networks in areas with high deprivation where there may not be compliance with statutory regulations. There is a persistent unmet need to integrate waterpipe and smokeless tobacco-specific cessation advice in cessation services and for enforcement efforts to focus on this area.

12 Housing tenure has emerged as a strong predictor of smoking behaviour; approximately one-third of social housing residents smoke. More than 60% of local authorities are targeting social housing as an extension of the range of settings where smoking cessation support is offered.

13 Smoking prevalence is greater than 70% in people experiencing homelessness, although motivation to quit smoking in this population is often high. While many barriers to quitting exist, the use of tailored cessation programmes that integrate nicotine replacement therapy (NRT), e-cigarettes and behavioural counselling are promising.

14 Since the introduction of the smoke-free policy in prisons in England there has been little uptake of prison smoking cessation services. In some establishments people who vape were not eligible to sign up for stop smoking services due to concerns over the dual use of nicotine vapes and NRT, and NRT products being traded.

15 Reduction to quit, abrupt quitting and digital behavioural support are all effective strategies for long-term smoking cessation, with digital cessation interventions appearing to be equally effective for both the least and most advantaged groups.

16 Providing financial incentives to support smoking cessation is clinically and cost effective. Incentives create an expectation of reward, which is a key mechanism for changing behaviour, including among more disadvantaged groups.

17 Tobacco dependence treatment and harm reduction interventions may be more effective when co-designed with people who smoke.

Recommendations

- National tobacco control policy should be weighted towards high prevalence groups to close the tobacco-related health inequalities gap. A national tobacco control plan in England should be published to provide a clear strategy and targets to achieve this policy objective.
- Price increases for tobacco should be coupled with support to stop smoking to avoid widening disparities in people who continue to smoke.
- Opt-out smoking cessation treatment models should be introduced in every NHS setting – including emergency departments, primary care, outpatients and neighbourhood health – to promote equity by enabling tobacco dependency treatment including harm reduction options to be offered to people who smoke accessing NHS services.
- Funding and commissioning structures should be aligned to enable primary care providers to deliver smoking cessation treatment and pharmacotherapies, ensuring equitable access for disadvantaged groups who are more likely to smoke and frequently visit GPs.
- Financial incentives and digital interventions are effective in populations with a high prevalence of smoking, and their use should be expanded to make smoking cessation more effective and accessible to high prevalence populations.
- All NHS regions and integrated care boards should establish regional and supra-local tobacco control programmes to reduce smoking-related inequalities by coordinating action on illicit tobacco, maximising cessation pathways and optimising tobacco control policy implementation between local authority, NHS and voluntary sector organisations.
- Powers granted by the Tobacco and Vapes Bill to ban smoking and vaping in most public places should exclude vaping in places that support smoking cessation, such as acute hospitals and mental health trusts, where smoking prevalence is high and nicotine vapes are a proven critical component of treatment pathways.
- Comprehensive regulation for waterpipe and smokeless tobacco should be introduced, including flavour restrictions, packaging and display requirements, and robust registration, licensing and enforcement systems.
- NHS smoking cessation services should provide tailored advice for waterpipe and smokeless tobacco users, supported by comprehensive training for healthcare professionals and additional specialist training for practitioners working with high-prevalence groups to deliver effective, culturally informed support.
- Tobacco harm reduction should be one of the offers to address tobacco dependence for everyone who smokes, to promote greater equity.

6.1 Introduction

Tobacco control policies in the UK have resulted in a decrease in smoking prevalence across the whole population and in all socio-economic groups. However, a gap in smoking prevalence between more and less advantaged population cohorts persists (see Chapter 4, Fig 4.2), a pattern that is also seen in other nations.[1,2]

This uneven prevalence of smoking among population cohorts may be linked to the social and commercial determinants of health (see Chapters 2 and 3). Although multiple factors contribute to tobacco-related inequity, the extensive data on smoking related to markers of disadvantage make it possible to consider interventions to reduce smoking-related inequality.

As the UK and other nations aspire to drive down smoking prevalence, especially among the least advantaged groups in our society, now is an appropriate time to consider policy options that could deliver substantial health and economic benefits to individuals and communities (see Chapter 5).

This chapter considers measures that may reduce tobacco-related health inequality, including tobacco control policy, legislation, regulation, funding and organisation of services; interventions for specific population groups; and how we might improve treatment pathways for people in a variety of settings or with different needs.

6.2 Relative effectiveness of tobacco control policies for reducing health inequalities – an international perspective

Several reviews have synthesised the evidence on the impact of tobacco control policies on inequalities in smoking. In 2008, Thomas *et al* concluded that population-level tobacco control interventions have the potential to benefit more disadvantaged groups. They found tobacco price increases to be the population-level intervention with the strongest evidence for reducing smoking-related inequalities in health.[3] A subsequent review by Hill *et al* found that evidence on the equity impact of interventions other than price was inconclusive.[4] Brown *et al* found that tax increases had the most consistent positive equity impact in both adults and young people but that overall the evidence base was limited.[5,6]

In a 2021 review of studies published since 2013, Smith *et al* found that studies evaluating price and taxation measures and targeted cessation support suggested an equity-positive impact, but also that a high proportion of studies had mixed/unclear equity impacts.[7]

Studies of the effect of Framework Convention of Tobacco Control (FCTC) policy implementation on smoking behaviours by socio-economic status (SES) in European countries have found mixed results. One study found that high- and low-income adults who smoke benefited approximately equally from FCTC policies.[8] Another concluded that associations between tobacco policies and smoking cessation were mainly detectable in higher SES groups.[9] A study looking at policy effects in adolescents in European countries who smoke found no statistically significant differences by education level, though effects were consistently stronger in those with highly educated parents.[10]

The FCTC policy implementation studies and the studies included in the systematic reviews outlined above have some important limitations. Firstly, much of the existing evidence is not up-to-date and it is not clear to what extent the findings are generalisable to the current context. Secondly, the studies are mostly limited to investigating equity impact in terms of differences by socio-economic group. While low socio-economic groups remain a key target population for tobacco control, there is a need to understand the impact of tobacco control policies in other disadvantaged groups.

Increasing the price of tobacco is a policy consistently supported by international evidence for its positive equity impact (see Chapter 3). Recent UK estimates, while in line with existing evidence that higher prices reduce tobacco use, have measured only the population average response to price rises. The equity impact of price increases is therefore not currently well understood. Given the high financial burden of smoking in people who continue to smoke, there is a need for evidence to understand the extent to which tobacco prices remain the most effective approach to reducing smoking in disadvantaged populations and health inequalities.

Mills *et al* critique the lack of progress in reducing inequities in smoking in the USA.[11] While the US context differs from that in the UK – for example, Mills *et al* highlight the lack of progress on tobacco pricing in the USA, which has been a major feature of UK tobacco control for many years – the study makes several recommendations to advance equity in tobacco control that are pertinent to the UK context:

- ensuring that surveillance systems adequately sample populations disproportionately affected by smoking and tobacco-related disease
- prioritising the implementation of policy interventions that will have a pro-equity impact on smoking and related disease and evaluating the equity impacts of tobacco control interventions
- funding tobacco control activities focused on eliminating inequities in smoking
- establishing specific equity-focused goals for tobacco control programmes and establishing accountability mechanisms
- targeting root causes of inequities in smoking, including partnerships with non-traditional stakeholders in tobacco control that focus on addressing the root causes.

On the last point, the article highlights root causes such as income inequality and stress, reflecting the need for a systems perspective which addresses the wider factors that drive and sustain tobacco addiction and inequities in smoking.[12]

6.3 National policy approaches to reduce tobacco-related health inequalities

Many tobacco control interventions take a population shift approach, which reduce smoking prevalence across the entire population but can maintain the gap in smoking prevalence between high and low prevalence population cohorts. Reducing smoking in disadvantaged populations will require prioritisation of measures with a pro-equity impact on smoking cessation, targeting the highest risk groups. This section considers national policies that may help to achieve these objectives and includes organisation and delivery of services, legislation, funding, taxation, assurance and regulation.

6.3.1 Tobacco control plans

There is international recognition of the success of UK regulatory environment on tobacco consumption, which may in part be related to having a clear national strategy and ambition to tackle smoking, articulated in consecutive national tobacco control plans over the past quarter of a century.[13] UK tobacco control plans usually span 3–5 years and provide policy direction, designate responsibility among public bodies and set targets to reduce smoking prevalence, often with a focus on some high prevalence or priority sub-groups such as people with mental health conditions or those who are pregnant.[14–16]

The extent to which these plans have succeeded may be judged by the rate of decline of smoking prevalence among the general population and in population cohorts that experience higher smoking-related inequality (see Chapter 4). Despite these tobacco control plans, modelling included in the Royal College of Physicians *Smoking and health 2021* report[17] suggests that smoking prevalence for people in the most deprived quintile of deprivation will not reach <5% before 2050 (Fig 6.1).

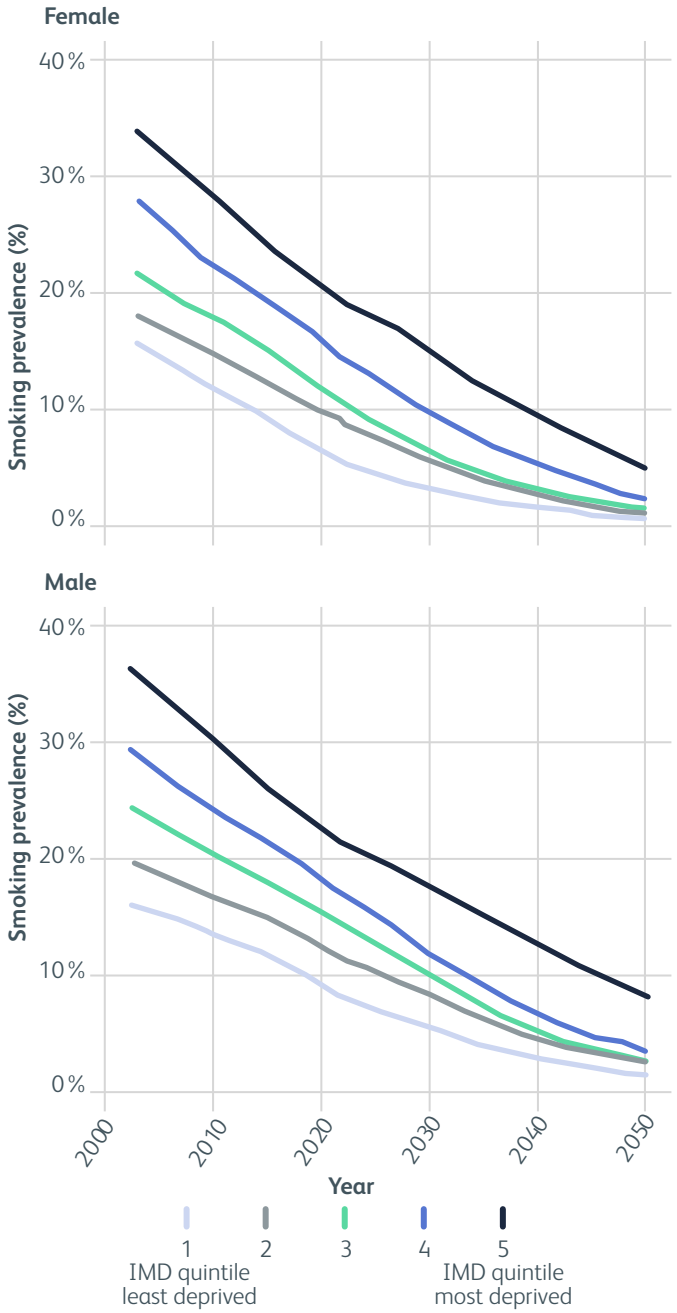


Fig 6.1. Estimated smoking prevalence by quintile of deprivation to 2050.[17]

Smoking prevalence (%) among males and females aged 11–89 years by Index of Multiple Deprivation quintiles in England, 2003–2050. Results are for a scenario where initiation probabilities continue to fall and quitting probabilities continue to rise.

Published in 2022, *The Khan review: making smoking obsolete* is the most recent review of tobacco control policy in England.[18] The report made 15 recommendations to improve tobacco control overall and specifically to reduce tobacco-related health inequality in pregnancy and in people with mental health conditions (Fig 6.2). The most notable proposal was to increase the legal smoking age progressively every year from the age of 18. This stepped escalator to legal eradication of smoking is now part of the Tobacco and Vapes Bill.[19] In October 2023, the government responded to the Khan review with *Stopping the start: Our new plan to create a smokefree generation*, acknowledging that reducing smoking rates is one of the biggest single health interventions that we can make to level up the nation. It committed a new grant totalling £70 million per year for the financial years 2024–29.[20] The grant was intended to provide specific individual level support for people who smoke with a focus on improving tobacco-related inequity.[21] Although measures and new funding announced in *Stopping the start* are welcomed, including passage of the Tobacco and Vapes Bill, no formal tobacco control plan currently exists in England, which may diminish the likelihood of closing the smoking-related health equity gap.

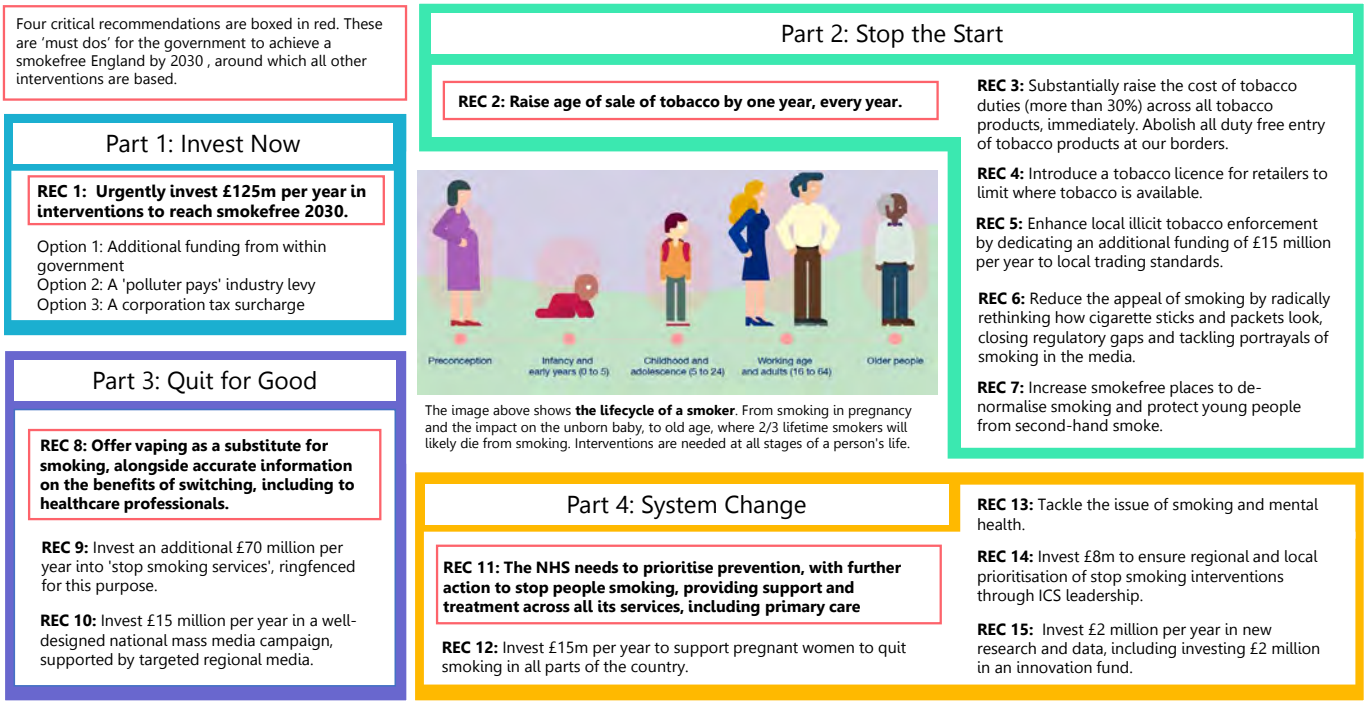


Fig 6.2. A visual summary of the recommendations in the Khan review.

Reproduced from Khan (2022)[18] under the terms of the Open Government Licence v3.0.

6.3.2 Delivery of tobacco control policies to reduce health inequalities

In England, the responsibility for the delivery of tobacco control policies largely sits with public health services in local government. It includes the delivery and uptake of stop smoking services, managing trading standards for tobacco and vape products, preventing underage sales, preventing the supply of illicit tobacco and vaping products, and maintaining smoke-free places. Evidence suggests that deprivation-based targets for stop smoking services can lead to greater quit success in priority socio-economic groups by focusing resources on supporting cessation in less advantaged communities.[22] An Action on Smoking and Health (ASH) survey of local authority tobacco control leads in 2024 indicated widespread targeting of populations experiencing inequalities (Table 6.1).[23] However, in 2024, only 4% of people in Great Britain who smoked and tried to quit in the past year used a stop smoking service in their attempt.[24]

In parallel with local government treatment services, since 2021 the implementation of the NHS Long Term Plan has provided equitable access to tobacco dependence treatment in local communities for hospital inpatients and those who are pregnant (see Chapter 4, section 4.6).[25,26]

Table 6.1. Target groups for local authority tobacco dependence treatment with relevance to health inequalities.

Population group	Local authorities (%)
People living in areas of deprivation	108 (90%)
People with mental health conditions	106 (88%)
People in routine/manual occupations	105 (87%)
Pregnant women and pregnant people	100 (83%)
Partners/household members of those who are pregnant	89 (75%)
People with alcohol or drug problems	83 (68%)
People living in social housing	90 (67%)
People who are unemployed	72 (60%)
Black and minority ethnic groups	70 (58%)
People on low incomes	69 (57%)
Young people	69 (57%)
People experiencing homelessness	54 (45%)
LGBTQ+ communities	52 (43%)
Parents with young children	52 (43%)
People with learning disabilities	45 (37%)
Refugees and asylum seekers	34 (28%)

Adapted from ASH (2025)[23]

Smoking is recognised within the NHS Core20PLUS5 framework as a key driver of health inequalities that should be addressed by NHS services,[27] included in the NHS health inequalities data dashboard and used in NHS assurance processes to demonstrate action to reduce health inequalities.[28] Opt-out models of smoking cessation support in secondary care have demonstrated increased treatment engagement in least advantaged groups.[25,29] The 10 Year Health Plan for England published in 2025 indicates that to address tobacco-related inequality, the NHS will expand its current scope by establishing tobacco treatment services 'in all routine care within hospitals'.[30]

An understanding of the inter-relationship and complementary nature of local government and NHS tobacco-related services is helpful in considering how they contribute to reducing smoking-related inequality (Fig 6.3). NHS and local government services receive funding for tobacco-related services from different budgets, the NHS through the NHS budget allocated by the DHSC and local government via the Public Health Grant (also from the DHSC). Traditionally, the NHS budget grows year on year, while the public health grant has been subject to slower growth and in-year cuts, some of which have led to widespread decommissioning of local authority stop smoking services after 2015 (see Chapter 5).

Data and reporting requirements differ between NHS and local government services due to the populations they serve. However, both provide extensive data related to smoking-related health inequalities that are used to drive programmes of targeted activity, such as treating tobacco dependency in people with mental health illness or those who live in social housing.

Fig 6.3. The inter-relationship of local government and NHS tobacco-related services.

The parallel NHS and local government tobacco dependency treatment services offer significant benefits in addressing tobacco-related inequality as each service provides access to different local sub-populations of people who smoke. For example, there is a social gradient with people in more deprived quintiles of deprivation using healthcare services. People who smoke are more likely to be admitted to hospital or use primary care services and may be more motivated to make a quit attempt due to health problems (see Chapter 4, section 4.6), whereas people in some community settings such as social housing have a higher smoking prevalence and may have more interaction with local government services. Currently, people admitted to hospital start smoking cessation treatment and continue their 12-week treatment pathway after hospital discharge using the local government smoking cessation service, ensuring integrated care between NHS and local government pathways. This integrated pathway is especially important in the acute hospital setting where the average length of stay is usually under 5 days, so the vast majority of the 12-week treatment is community-based. Since the widespread introduction of NHS secondary care treatment services in 2023–24, the decline in local stop smoking service footfall has reversed, suggesting synergistic integration of NHS and local government treatment pathways (Fig 6.4).

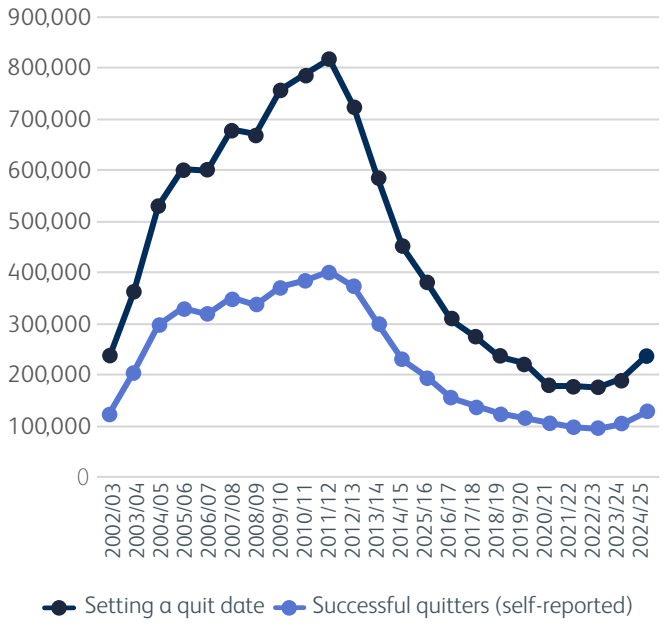


Fig 6.4. Local authority smoking services collection: Persons setting a quit date and outcome.

Data source: NHS Digital. Local Government stop smoking services annual returns 2002–25

6.3.3 Tobacco pricing and illicit tobacco

As summarised in section 6.2, there is consistent evidence that price increases will reduce smoking rates overall and that they reduce inequalities in smoking because they have a greater impact in low SES groups.[4–7] However, recent UK estimates, while in line with existing evidence that higher prices reduce tobacco use, have measured only the average response to price rises, and therefore the equity impact of price increases is not currently well understood.[31] As smoking is increasingly concentrated in disadvantaged groups, and the high financial burden of smoking in people who continue to smoke, there is a need for evidence to understand the extent to which increasing tobacco prices remains the most effective approach to reducing smoking in disadvantaged groups and health inequalities.

In October 2024, the government implemented above-inflation excise tax rises for all tobacco products. Higher tax rises were implemented for hand rolling tobacco, with the aim of reducing the price differential between factory-made cigarettes and hand rolling tobacco, and to reduce opportunities to down trade to a cheaper tobacco product rather than quitting. The government has also implemented a minimum excise tax for factory-made cigarettes, reducing opportunities for the tobacco industry to sell low-cost cigarettes and for consumers to down trade to cheaper products. Furthermore, a significant price differential between the cost of smoking and vaping has been maintained, to ensure affordable access to a less harmful alternative to smoking for adults who are trying to quit or for whom tobacco becomes unaffordable. The combination of pricing measures to make tobacco less affordable, provide accessible tobacco dependency treatment services and ensure the availability of affordable nicotine alternatives offers a clear policy direction in populations with a high smoking prevalence. However, further research is needed to assess how these pricing measures impact different population groups, particularly those experiencing disadvantage, to ensure that they reduce rather than widen health inequalities.

The tobacco industry has consistently argued that high taxes inevitably lead to high levels of illicit supply; however, this ignores evidence of the strong correlation between corruption and illicit supply, the tobacco industry's own role in driving the illicit trade, and the role of enforcement.[32,33] The UK experience highlights that in the context of a comprehensive strategy to tackle illicit tobacco, the role of tobacco taxes in driving the size of the illicit market is small.[33,34] The Tobacco and

Vapes Bill sets out a range of powers for a tobacco retail licensing scheme for the UK, covering England and Wales, and amending the existing Scottish and Northern Irish retail registers. Such a scheme would further support the enforcement of product and age of sale regulations and has the potential to reduce the availability of illicit products in more deprived communities.

6.3.4 Mass media campaigns and targeted communication

Mass media campaigns (MMCs) communicate messages to large proportions of the population via traditional media (such as television, radio and newspapers) and, increasingly, via digital media (such as websites, streaming services and social media, eg Facebook and Instagram). Social marketing campaigns (SMCs) integrate marketing activities and can target audiences through multiple media channels. MMCs have been used to motivate quit attempts and/or signpost and encourage use of treatment and support. Campaigns of sustained intensity and duration are associated with increased quit attempts, increased success, reductions in smoking prevalence and cigarette consumption, and are cost effective.[17]

In England, the National Institute for Health and Care Excellence (NICE) guideline on smoking recommends that campaigns are developed in partnership with the NHS, governmental and non-governmental organisations, to support the delivery of activities designed to promote quitting, including stop smoking services.[35] The guideline recommends using 'why to' and 'how to' stop messages, both of which have been shown to be effective.[36] MMCs in England have successfully promoted quit attempts[37] and use of support,[38] and expenditure on MMCs is associated with quit success.[37,39,40]

6.3.4.1 MMCs and inequalities

The NICE guideline also states that those developing campaigns should consider targeting and tailoring campaigns 'towards groups that epidemiological data identify as having higher than average or stagnant rates of smoking, to address inequalities.'[35] However, the effects of MMCs in reducing health inequalities caused by smoking is less clear.[41] All other things being equal, health inequalities would be reduced if MMCs differentially affected higher prevalence groups, they would remain the same if all population groups were impacted equally, and they would widen if MMCs differentially affected low prevalence groups. MMCs could be targeted at high prevalence groups through i) targeting where they live, and/or ii) using tailored messages, and/or iii) through use of media channels more commonly used by high prevalence groups, such as radio and TV. This is of course complicated as high prevalence groups are not homogeneous, ranging from, for example, more socially disadvantaged groups, people with mental health conditions, sexual minority groups, some minority ethnic groups (such as young mixed-race populations), people who are sleeping rough, and offender populations.

6.3.4.2 Geographical targeting of certain groups

In a systematic review, the evidence base was insufficient to determine whether MMCs can effectively target people from ethnic minority backgrounds.[42] Evidence from the Smoking toolkit study in England indicated that between 2006 and 2024, smoking rates in the North of England fell faster than the national average, narrowing the geographic inequalities in smoking prevalence and bringing the North of England into alignment with other regions by 2024.[43] The authors concluded that regional tobacco control programmes that feature MMCs and have been more sustained in northern regions appeared to contribute to this progress.

6.3.4.3 Tailoring messages

There is good evidence that people who smoke in high prevalence groups can be as motivated to quit as others and attempt to quit at same rates, but quit success is lower.[44,45] This suggests that to reduce health inequalities, greater focus should be on messages encouraging people to seek support for their quit attempts to maximise success. Messages can also be tailored to be more relevant or salient to high prevalence groups. A systematic review concluded that MMCs have limited impact on people with mental health conditions, although campaigns that are specific to smoking and mental health may be effective.[46] Indeed, a recent experimental study found that people with mental health conditions were more motivated to stop smoking when they saw a message focused on the mental health benefits of stopping smoking compared with a message focused on the physical health benefits.[47] Co-designing such messages will likely maximise their impact.

6.3.4.4 Targeting through media channels

Given reductions in the use of traditional media and increases in digital/social media, MMCs have increasingly shifted into digital spaces, but this risks exacerbating existing inequalities. For example, due to funding cuts, Stoptober was limited to digital media in 2016. As a result, campaign recognition declined, and it became less effective at reaching older people and those on lower incomes who smoke.[48]

Populations such as people experiencing homelessness or those living with mental health conditions often have limited or inconsistent access to digital technologies, and the COVID-19 pandemic highlighted the persistence of this digital divide.[49] Additionally, MMCs in traditional broadcasting enable passive consumption in between routine programmes, while some digital and social media require more active opt-in participation (eg clicking on a website). A systematic review found that social media can reach large numbers of users quickly as well as targeting and tailoring messages but found that more interactive social media interventions had little to no effect on smoking rates over and above non-interactive social media interventions.[50] Finally, traditional broadcast media (TV and radio) and print still appear to be the most trusted media, while trust in the internet and social media is lower.

In summary, sustained intensity and duration of MMCs and SMCs are associated with increased quit attempts and increased success. They are cost effective and have the potential to reduce geographical variation in health inequality and by tailoring of messages for certain population cohorts. The announcement of £15 million in 2023 toward partial restoration of MMC funding should be directed toward marketing campaigns targeting groups with high smoking prevalence.

6.3.5 Smoke-free environments legislation

Secondhand smoke causes significant harm and health inequality. UK legislation to prohibit indoor smoking introduced almost 20 years ago demonstrated it to be effective in reducing both exposure to smoke and harm to health. Legislation to prohibit smoking in cars carrying children was introduced in England in 2015.[51] These legislative interventions addressed inequalities that arose when people were exposed to secondhand smoke in enclosed spaces. The Tobacco and Vapes Bill proposes regulating outdoor exposure to environmental tobacco smoke. The bill takes powers to ban smoking in most public places, but the government proposes an initial focus in England on hospitals, school gates and children's play areas.

6.3.5.1 Social housing

The USA has prohibited smoking in multi-unit social housing since 2018. The legislation can be described as needed given the high prevalence of smoking among social housing tenants and the high levels of exposure to secondhand smoke in homes where people smoke.[52] Well-enforced regulations are likely to reduce the harm experienced by disadvantaged groups, and some will welcome the incentive to reduce or quit smoking. This sort of ban is unlikely to be 'wanted' by all of those affected. It has proved largely 'workable' in the USA where, it is argued, the health benefits of the smoke-free rule to individuals who smoke and those around them outweigh the arguments of personal autotomy.[53] It is essential to provide acceptable, effective and appealing smoking cessation support in this context. Partial measures, such as the provision of a proportion of housing stock as smoke-free or phasing in smoke-free tenancies may offer a gradualist alternative, whereas prohibiting smoking in the outdoor areas of public housing may nudge those who smoke back indoors.

6.3.5.2 Vape-free places

The Tobacco and Vapes Bill will give the health secretary powers to extend existing smoke-free legislation and also to designate a range of indoor and outdoor spaces as vape free. Vaping is already banned on public transport and often forbidden by those responsible for many indoor spaces such as cafes and shops. This is typically driven by concerns around nuisance and enforcement (distinguishing vaping from smoking), as well as concerns about health risks to staff and customers from passive vape exposure. Many people with asthma report that passive vape exposure aggravates their symptoms. Vaping does raise particulate levels, and, in exceptional cases, to a level comparable to smoking. However, levels tend to return to baseline much more rapidly and the contents of vape emissions are far less toxic than tobacco emissions and so the harms from passive vape exposure are likely to be much lower.[54,55] Despite this, public support for including a ban on vaping in areas where smoking is also banned is high. This may be partly due to inflated risk perceptions.[56] Any restriction to vaping in public spaces must be weighed against the risk of people who remain nicotine dependent relapsing to smoking. One particularly important area is hospital grounds, where it is critical to support patients admitted to hospital who smoke, and their visitors, to be smoke-free throughout their hospital admission. Supplying nicotine vapes for use on the external grounds of the hospital is part of NHS hospital treatment pathways and included in many hospital smoke-free policies.[57,58] This is even more important in mental health trusts where smoking prevalence is high, the level of tobacco dependency is higher, and admission lengths are prolonged. Nicotine vapes have proven a critical component of smoke-free mental health trusts and must continue to be a core component of treatment pathways.[59]

6.4 Regional and local tobacco control policy to tackle health inequalities

Hundreds of organisations hold responsibility for reducing tobacco-related health inequalities at local and supra-local level. In England, this includes integrated care boards (ICBs), lower-tier local authorities, and upper-tier or unitary authorities and NHS trusts, as well as several supra-local collaborations.

Since 2005, regional and supra-local tobacco control programmes have played a 'bridging' role between national and local teams.[60] As set out in Chapter 4, the North of England hosts several large-scale supra-local or regional tobacco programmes, including in the north east, Greater Manchester and Humber and North Yorkshire. From 2006 to 2024, the area has seen greater falls in overall smoking prevalence and in absolute inequality in smoking prevalence than the Midlands and the South, areas with limited supra-local tobacco control.[43] Supra-local activity has recently risen; in 2024, six of the nine English regions in 2024 had re-established or maintained some form of supra-local tobacco control.[23] Research suggests there are five distinct activities that are well-suited to supra-local teams operating in England's comparatively centralised environment and could contribute to reducing inequality in smoking prevalence. They are summarised below.[61]

1) Action on illicit tobacco

Illicit tobacco disproportionately affects disadvantaged groups (see Chapter 4, section 4.5.7). Those selling it often operate across local authority boundaries, meaning supra-local teams often are well-placed to offer public health input into illicit tobacco strategies. Evaluation of the regional approach in the North of England, led by Fresh North East, to communicate harms of illicit tobacco to children and communities, showed increased awareness of illicit tobacco and increased community reporting of illicit tobacco sellers.[62]

2) Media campaigns and communications

A supra-local platform offers economies of scale and reach for public tobacco-related campaigns while tailoring messages for a supra-local audience.[63] A Greater Manchester Cancer Research UK campaign promoted e-cigarettes as a harm reduction measure specifically to least advantaged groups; recognition of the campaign was strong and consistent across socio-economic groups, with more than one in three recognising it.[64]

3) Policy coordination and intervention development

Supra-local leads are often well-placed to streamline tobacco dependence pathways across local authorities, acute care, maternity, mental health services and targeted screening, maintaining quality treatment across geographic and organisational boundaries. They can exploit economies of scale for interventions, such as offering unified digital cessation portals and shared protocols for enforcement against illicit tobacco. They can also coordinate common policy positions on contentious issues, eg nicotine vapes,[65] reducing policy fragmentation and reinforcing consistent communication to other professionals and the public.

4) Supporting implementation of national policy

Supra-local programmes provide local areas with advice and guidance on the 2007 implementation of smoke-free indoor spaces, and could support delivery of future policies such as the annual rise in the age-of-sale of tobacco products that will be introduced when the Tobacco and Vapes Bill becomes law, which may have the potential to reduce socio-economic inequalities.[66,67] Supra-local support for targeting of enforcement and communication of the new legislation in areas of greater deprivation could enhance the policy's potential to reduce health inequalities.[19] Supra-local areas may also have a role in supporting equitable delivery of potential new tobacco licensing powers contained within the Tobacco and Vapes Bill, with tobacco retailers currently concentrated in areas of higher deprivation.[68] Higher regional compliance with national policy has been associated with reduced smoking prevalence.[69]

5) Advocating for tobacco control

Supra-local teams have historically played a significant role in making the case for investment in tobacco control and introducing new legislation. The UK government has made significant recent investment in local tobacco control through £70 million annual funding for local stop smoking services, ring-fenced NHS tobacco dependence treatment services and vouchers for pregnant women and pregnant people. However, the £70 million for stop smoking services is reviewed annually and the NHS tobacco dependence treatment ringfence has been removed.[70] As ICBs – and potentially local authorities – merge across larger footprints, authoritative and enduring supra-local programmes can maintain consistent advocacy. In doing so, they could advance the health, economic and social justice case for protecting investment from local authorities, ICBs, NHS trusts and government departments to address tobacco-related inequalities.

Prior research has also identified the qualities of supra-local programmes that enable successful delivery. This includes (1) a focus on health inequalities, (2) leadership skills and a mandate to lead, (3) tobacco control experience and expertise, (4) strong relationships across the supra-local system, and (5) a specific focus on tobacco.[61] ASH has published resources designed to support set up or scale up of supra-local coordination functions, including templates for mapping local provision, draft briefing papers, and budget calculations. Funding for supra-local programmes can be pooled from a combination of local authority and NHS sources.

In conclusion, research and investment in supra-local or regional programmes, with an expert-led focus on tobacco control, can support reduction of inequalities in regional tobacco prevalence, inequalities in regional health and even inequalities in regional economies.

6.5 Tools to assist local commissioners with service provision

6.5.1 Local stop smoking commissioning

Local authorities receive a ring-fenced public health grant each year from the Department of Health and Social Care (DHSC). As discussed previously, the *Stopping the start* white paper introduced the local stop smoking and support grant to provide £70 million per year additional funding to local stop smoking services in England for 5 years from 2024/25.[71] In 2024–26, all local authorities accepted this grant. The grant is ring-fenced, which means it is legally restricted to its designated purpose – increasing the number of people who quit smoking – and cannot be used for anything else. It has resulted in a substantial funding increase for smoking cessation in all local areas, including those that had previously decommissioned services. The increase in smoking cessation funding leads to the question of how it should be spent and consideration of the commissioning cycle.

6.5.2 The commissioning cycle

The commissioning cycle is a structured, continuous process to plan, purchase and monitor services. This work is undertaken by specialist commissioners working in the local authority in collaboration with the public health team, ultimately under the oversight of the director of public health. The first step is to undertake a health needs assessment to understand local need and service gaps. Local authorities have a statutory duty to work with NHS partners to produce and keep updated a Joint Strategic Needs Assessment (JSNA) that provides a high-level overview of the key health priorities and inequalities in their area. The JSNA identifies overarching priorities and is often a framework for justifying and prioritising investment in local stop smoking services.

Ideally, a specific health needs assessment is undertaken to support the commissioning of local stop smoking services. The typical steps in a smoking-focused health needs assessment include:

- reviewing the evidence base and national guidance to establish best practice. Key resources include NICE guidance (NG209)[72] and National Centre for Smoking Cessation and Training (NCSCT) commissioning guidance.[73] Guidance such as *Smoking and tobacco: applying All Our Health*[74] should also be reviewed to consider the wider context for smoking cessation across the health system
- collecting data on local smoking prevalence and harms, and associated health inequalities (groups with higher smoking prevalence or smoking-related disease). The local smoking profile in the Fingertips public health data platform developed by the Office for Health Improvement and Disparities (OHID) is a key data resource[75]
- mapping current smoking cessation provision, referral routes, capacity and coverage
- assessing current local stop smoking service performance using key resources such as the Local Government Outcomes Framework[76] and other established national metrics (Box 6.1) and qualitative insight from surveys or focus groups with service users and professional stakeholders
- projecting future demand based on local population trends.

The next step is to develop an updated service specification based on the health needs assessment. This will determine which elements of the local stop smoking service should be strengthened, what new initiatives could be introduced, and potentially areas that can be discontinued, in order to use resources effectively, meet the needs of the local population and tackle health inequalities. After a specification is agreed, this will usually be put out to tender either as a stand-alone smoking cessation service, or as part of a wider integrated lifestyle service that might include healthy weight management, for example. Public sector procurement is complex, but typically anyone interested in providing local stop smoking services can bid as part of the tendering process. This can include NHS providers, non-profit organisations and for-profit commercial

operators. Some local authorities choose to provide some or all of their smoking cessation offer in-house, with directly employed and managed staff delivering the service. Once a provider is selected, they assume responsibility for the day-to-day delivery of the service. However, the local authority commissioner will maintain regular oversight of the service's performance, monitor agreed key performance indicators and take feedback from service users. Over the course of contract there will typically be both informal dialogue and formal review processes to enable changes to be made to the service to meet changing population needs.

6.5.3 Local tobacco control plans

Many local authorities develop tobacco control plans to set out a strategic framework for tackling local tobacco harms within the context of national policy and local JSNA, taking in to account specific local challenges and opportunities. Ideally, tobacco control plans should provide an integrated approach to prevention, cessation, and regulation and enforcement. Tobacco control plans typically inform the commissioning cycle, guiding service design and funding priorities. A key component for a tobacco control plan is to set out an evaluation framework, often based on national key performance metrics (Box 6.1). This allows progress to be monitored and guides revisions and evolution of the plan.

Box 6.1. Key national metrics.

Local Government Outcomes Framework
> Percentage of local population who smoke provided with support to quit
> Percentage of successful quitters
Other key metrics
> Overall smoking prevalence
> Smoking prevalence at the time of delivery (maternity settings)
> Total quit dates set
> Total successful quits

These metrics are available from OHID Fingertips,[75] Office for National Statistics[77] and NHS England.[78,79]

6.5.4 CLeaR; Challenge, Leadership and Results model

CLeaR (Challenge, Leadership and Results) is an improvement model and self-assessment tool developed by OHID for local authorities and partners to support a structured, evidence-based approach to improving local tobacco control and reducing smoking-related health inequalities.[80] Effectively, it is a practical framework to audit, benchmark and identify priorities for improving tobacco control and local stop smoking services.

The CLeaR tool presents a set of best practice statements, which teams can use to evaluate how well their local service meets each one. Effective engagement with CLeaR requires bringing together multi-agency partners to capture information from across the local system; for example, local public health teams, integrated care body, provider trust, community pharmacy leads, trading standards, voluntary and community sector stakeholders, and local stop smoking service staff. This creates an opportunity for partners to reflect on strengths and areas for further development. CLeaR also offers an opportunity for peer assessment and challenge from external experts such as local authorities, regional or national teams. This can facilitate the dissemination of shared learning and best practice across different localities to address health inequalities.

6.5.5 Health Equity Assessment Tool (HEAT)

The Health Equity Assessment Tool (HEAT) is promoted by OHID as a framework to systematically incorporate consideration of health inequalities into service planning and design.[81] It consists of a series of questions and prompts to help public health teams to assess health inequalities related to a service (eg underserved or disproportionately affected groups) and identify actions to reduce those inequalities through four stages: prepare, assess, refine and review (Box 6.2).

Box 6.2. HEAT tool overview.

- **Prepare:** describe the programme; identify relevant local data on population need and service provision; gain insight form community voices
- **Assess:** identify populations who face greatest health inequalities; consider the possible causes of health inequalities and interaction of your programme with this.
- **Refine:** consider how your programme might reduce health inequalities and any potential unintended detrimental impacts; plan how you could adjust your programme to maximise positive impact on inequalities.
- **Review:** review the impact of your programme on health inequalities at 6–12 months against pre-determined criteria; consider how you can iteratively develop your programme to further tackle health inequalities.

HEAT is designed to be flexible and to avoid placing a high burden on its users. It is most effective when used iteratively throughout the commissioning cycle, from supporting an equity lens to health needs assessments, through to final evaluation. While HEAT helps to ensure that commissioners meet their Public Sector Equality Duty obligations, under the Equality Act 2010, it also encourages users to explore health inequalities beyond protected characteristics, for example, considering socio-economic and geographic inequalities (Box 6.3). An e-learning module on the NHS Learning Hub is available to equip professionals with essential skills for undertaking a HEAT assessment.[82] An example of a smoking-focused HEAT assessment is available from Coventry and Warwickshire ICB.[83] Action on Smoking and Health produces a range of resources that can help inform HEAT assessments, including a briefing on health inequalities and smoking.[84]

Box 6.3. Protected characteristics and health inclusion groups.

Protected characteristics defined by the Equality Act 2010

- Age
- Sex
- Sexual orientation
- Gender reassignment
- Marriage and civil partnership
- Pregnancy and maternity
- Race
- Religion or belief
- Disability (consider severe mental illness in particular)

Selected health inclusion groups relevant to smoking cessation

- People working in routine and manual occupations or unemployed
- People living in social housing
- People affected by substance misuse
- People involved in the criminal justice system (eg prisoners)
- People with care experience

6.6 Measures to reduce inequality in healthcare settings

As outlined in Chapter 4, smoking and its harms are more common in people experiencing multiple indicators of socio-economic deprivation, and despite being more likely to try and quit smoking than more advantaged individuals they are on average less likely to succeed in doing so. Population-wide policies that regulate the price, availability and characteristics of cigarettes are fundamental to reduce take up of smoking and encourage cessation in the overall population.[85] However, in the context of smoking-related health inequalities, a comprehensive approach to reduce smoking should consider individual-level support alongside population-wide policies. For instance, while there is evidence that policies targeting price can decrease inequalities in smoking due to greater price sensitivity among people on lower incomes, such policies can be regressive for those who do not quit smoking in response to higher prices.[86] This section outlines the evidence for the most effective and promising approaches to treatment that can contribute to equity-positive reductions in smoking.

6.6.1 Opt-out referral pathways for tobacco dependence treatment

Opt-out referral pathways automatically refer all tobacco users to treatment programmes provided by third parties such as local government cessation services or community pharmacies, unless they specifically state that they do not wish to be referred. It is based on the premise that it may be more effective to be proactive in providing treatment, rather than relying on people being motivated to accept referral for support. Opt-out referral directs individuals towards desired behaviours and treatment by removing some of the barriers to support; it can be viewed as a form of nudging and is the preferred referral model.[87,88]

For many clinical treatments and behaviour change programmes the opt-out model of referral is standard practice.[89] However, it has not been widely adopted for tobacco dependence treatment. The most common referral model for tobacco dependence treatment is the opt-in model where people are offered support and must actively decide to accept treatment or referral. The opt-in model's reliance on the tobacco user having the capability, opportunity and motivation to agree to referral risks serving as a barrier to accessing treatment.

There is growing evidence that opt-out referral pathways achieve higher referral and acceptance rates and can lead to a twofold increase in rates of stopping smoking. Opt-out referral has been identified as being particularly valuable in reducing inequalities in access to tobacco dependence treatment. This may particularly be the case in socially deprived areas, where the prevalence of smoking is high and awareness of tobacco treatment services is low. There is also evidence that opt-out interventions are more effective for individuals who have social environments conducive to smoking and are less motivated to quit.[90] Recent evidence shows that people benefit from opt-out treatment regardless of their motivation to stop smoking at the time of referral.[91]

Most evaluations have taken place in one of three settings: maternity care, inpatient acute hospital, and cancer care. However, more recently, opt-out referrals in community-based settings have shown enhanced uptake of smoking cessation support.[92,93] Several evaluations have assessed opt-out referral as one component of comprehensive treatment pathways.

Opt-out referral is recommended by NICE for pregnant women and pregnant people who smoke, and is a key part of the NHSE maternity care tobacco treatment pathway and Savings Babies Lives Care Bundle.[35] A large (n=2,300) UK-based evaluation of women attending antenatal care found a 6% increase in people engaging with smoking cessation services and twice as many women set a quit date following introduction of 'opt-out' service model compared to CO testing triggered referrals to cessation services.[94] Opt-out service models are feasible and well accepted by both staff and those who are pregnant, with staff believing that it helped engage people motivated to quit and offered a unique chance to impart smoking cessation knowledge to those who might not otherwise have engaged in support.[95,96] There is some evidence that referrals initiated by midwives may be more acceptable than those from other team members.[96]

Evaluations of opt-out referral in hospital settings have also demonstrated a significant increase in uptake of referrals, use of medications and counselling support, and short-term smoking abstinence. [25,29,91,97–99] A large randomised controlled trial (RCT) of opt-out support in the hospital setting compared with opt-in also reported that opt-out doubled treatment engagement and increased quit attempts.[29] Participants in both the opt-in and opt-out groups were provided with inpatient nicotine replacement therapy, treatment planning and a 2-week medication starter kit, and four outpatient counselling calls. The study reported a significant increase in smoking abstinence at 1 month but not at 6-month follow-up. The evaluation of a large scale opt-out programme in acute hospitals on equity is described in detail in section 6.6.3.1 below.[25]

Several recent research trials have examined opt-out referral models in oncology outpatient clinics in Canada and the USA and have shown the model to be feasible with positive effects on treatment uptake and smoking abstinence.[100–103] Recent evaluations of opt-out referral in primary care show considerable success;[92,93] with a large US study currently underway.[104]

Training for staff in the delivery of effective opt-out referrals has been identified as important to their success. Research indicates that ensuring follow-up support is patient-centred and that patients do not feel they are being forced to stop smoking at a pace that is not appropriate to their circumstance is useful for engaging referred patients.[29] Several authors have identified that extended duration of treatment should be considered to further increase quit rates and this may be particularly beneficial for tobacco users experiencing health inequalities who experience more barriers to stopping and higher rates of relapse.[29,97]

6.6.2 Primary care

In the UK in 2024, approximately one in three adults from the least advantaged social grade who smoked and saw their GP in the past year, received brief advice to stop smoking. In comparison, one in two from the most advantaged social grade were given similar advice (Fig 6.5). Of those who received a brief intervention, approximately one-third of all adults across all social grades were referred to a specialist stop smoking service.

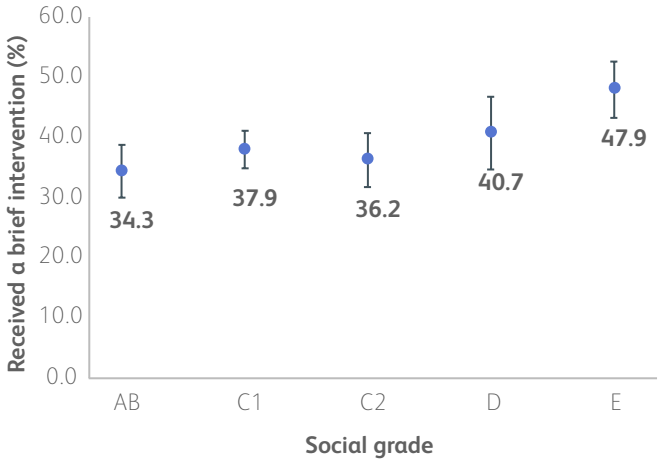


Fig 6.5. Receipt of brief interventions to stop smoking in primary care by social grade in 2024.

Source: Smoking Toolkit Study

Stop smoking medication was more commonly prescribed to people in the most deprived quintile than those in the least deprived quintile (Fig 6.6).

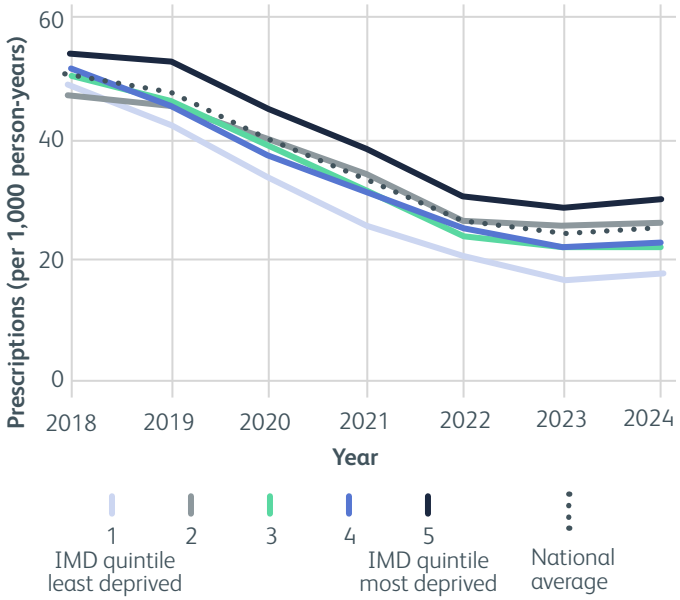


Fig 6.6. Prescription of smoking cessation medication over time stratified by IMD quintile.[105]

Source: Clinical Practice Research Datalink (CPRD) 2025, licensed under the terms of the Open Government Licence v3.0.

Prescription rates in Black and 'other' ethnicities appeared noticeably lower than those of White, Asian and mixed ethnicity at older ages (Fig 6.7). This may be due to biases in ascertaining smoking status or prescribing smoking cessation drugs, patient cultural beliefs around not wanting treatment, or increased patient reluctance to quit in some groups.

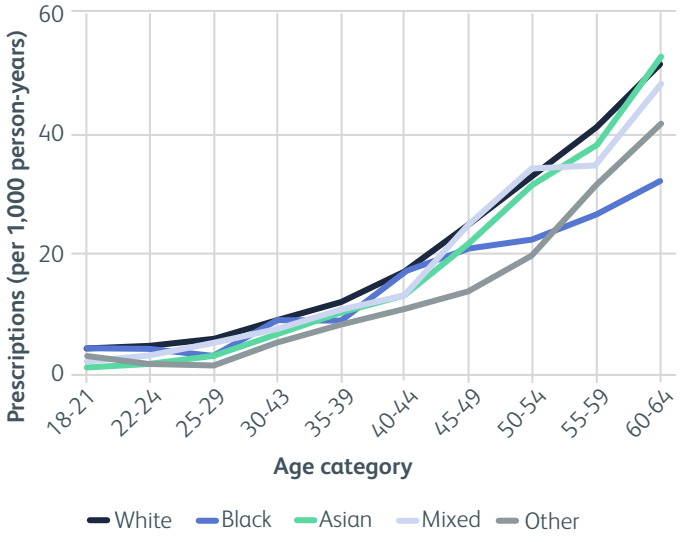


Fig 6.7. Nicotine replacement therapy prescription by age group and ethnicity.[105]

Source: Clinical Practice Research Datalink (CPRD) 2025, licensed under the terms of the Open Government Licence v3.0.

People in the most deprived quintile were most likely to be referred for smoking cessation but time to referral remains too long; it took just under 2 years for 5% of patients in the most deprived IMD quintile to be referred for smoking cessation (Fig 6.8).

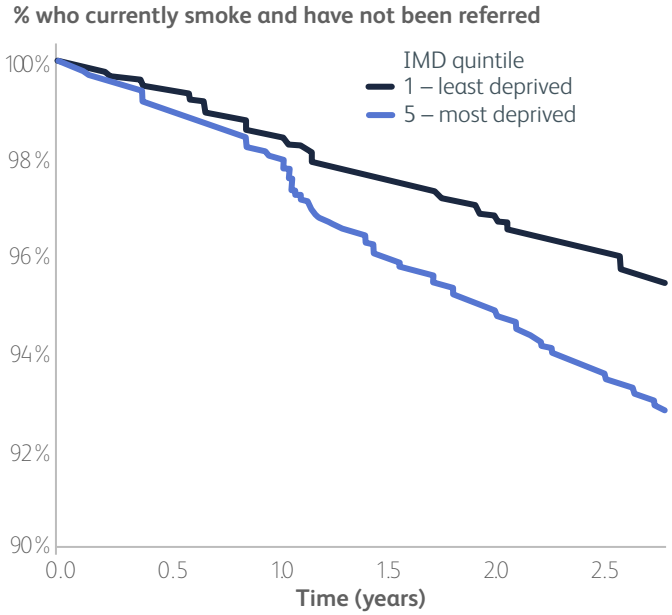


Fig 6.8. Time to referral for smoking cessation for people who currently smoke (data from 2022).[105]

Source: Clinical Practice Research Datalink (CPRD) 2025, licensed under the terms of the Open Government Licence v3.0.

A major barrier to greater delivery of smoking cessation within primary care is the siloed funding and commissioning structures that exist. Despite people who smoke being a third more likely to see their GPs than people who do not smoke and more likely to be from disadvantaged backgrounds, funding to treat tobacco dependency in primary care is provided to local authorities so many GPs do not provide treatment or pharmacotherapies for smoking cessation to patients.

Evidence of the impact that siloed commissioning within tobacco control has on primary care can be identified through prescription data for smoking cessation. This has steadily reduced over time, from 52 prescriptions per 1,000 person-years in 2018 to 26 prescriptions per 1,000 person-years in 2024 (Fig 6.9). The decline appears largely due to the withdrawal of varenicline in 2021 by the manufacturer; however, the reduction in varenicline prescriptions was not replaced by increases in other drugs used for smoking cessation such as cytisine, which was introduced to the UK in January 2024.

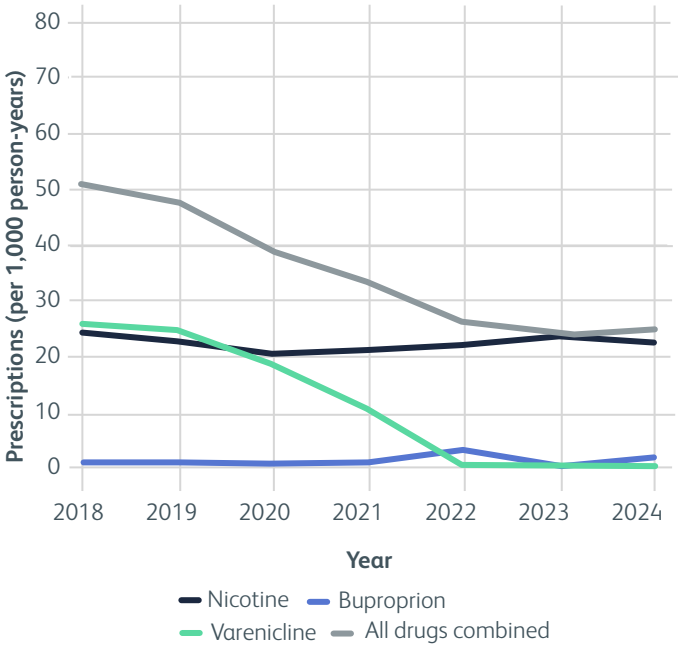


Fig 6.9. Smoking cessation drug prescriptions over time.[105]

Source: Clinical Practice Research Datalink (CPRD) 2025, licensed under the terms of the Open Government Licence v3.0.

In summary, the current model of treating tobacco dependency in primary care to tackle smoking-related health inequality represents a major missed opportunity, as demonstrated by low referral rates to local government stop smoking services, low levels of prescribing of smoking cessation medications and the lack of opt-out treatment of tobacco dependency.

The poor utilisation of general practice to address smoking-related inequality could be reversed if the opt-out model of tobacco dependency treatment were adopted, using highly effective, low-cost pharmacotherapies.[106,107] Achieving these changes would require adjustments to the current funding, oversight and assurance mechanisms and could be coordinated through the planned introduction of neighbourhood health centres described in the NHS 10 Year Health Plan.[30]

6.6.3 Acute care hospitals

Secondary care offers a sizeable opportunity to deliver opt-out tobacco dependency treatment in a location where there is significant footfall of people that smoke. Approximately 150 million people visit acute hospitals in England each year as inpatients, outpatients or to the emergency department.[31,108,109] If hospital-based tobacco dependency treatment services were to be embedded in 'all aspects of hospital care' as committed to in the NHS 10 Year Health Plan, the benefits would be substantial and weighted towards patients from areas of the highest deprivation.

6.6.3.1 Inpatients

In 2024 there were approximately 20 million hospital admissions in England; 39% of hospital admissions in patients who smoke were people living in the highest levels of deprivation. Implementation of the NHS Long Term Plan since 2021 has provided information on markers of health inequality for people admitted to hospital and the success of opt-out treatment interventions for in-patients.[25]

A recent evaluation of the opt-out NHS Tobacco Dependence Programme patient level data collection identified 185,195 unique patients admitted to hospital in 2024 who were identified as people who currently smoke.[25] A total of 41,258 (22%) made a supported quit attempt and of those, 8,321 (20%) were successful with a recorded abstinence at 28 days. When analysed by deprivation quintiles, the study identified that people who lived in the most deprived areas had a sixfold greater number of quit attempts than people living in the least deprived areas. They were also more likely to make a supported quit attempt (25% in the most deprived quintile versus 18% in least deprived quintile) and had a fourfold greater number of successful quits, although the likelihood of a successful quit was lower (16% in most deprived quintile versus 25% in least deprived quintile) (see Chapter 4, section 4.6.1).[25]

The success of NHS tobacco dependency services in treating higher proportions of hospital inpatients from more deprived areas is likely to be related to the opt-out model of delivery and systematic identification of people who smoke at admission. Key elements of this include automated referral to and rapid review by trained in-house tobacco dependency advisers, provision of nicotine replacement therapy to prevent nicotine withdrawal symptoms, smoking cessation pharmacotherapy at hospital discharge and referral to local government smoking cessation services to complete a 12-week course of treatment.

In addition to treating more people from the most deprived areas, treating tobacco dependency in hospital is also cost effective. The reported cost per quit in a real-world UK service was £475. A health economic model from the same UK service, determined a return on investment (ROI) as:[110]

- a gross financial ROI ratio of £2.12 for every £1 invested with a payback period of 4 years
- a cashable financial ROI ratio of £1.06 for every £1 invested with a payback period of 10 years
- a public value ROI of £30.49 for every £1 invested.

An economic evaluation from another UK centre demonstrated the cost-effectiveness of inpatient tobacco dependency services with the cost per quit of £1,712.55, equating to an estimated age-adjusted incremental cost per life year gained of £3,325.[111] The variation in cost per quit between studies reflect the time-period in which they were undertaken, the model of service delivery and calculation methods used by researchers. However, the values remain well below NICE thresholds of £25,000–£35,000 per QALY for cost-effective interventions.[112]

Despite the success of hospital-based tobacco dependency services treating smoking in high deprivation population cohorts, being cost effective and of high value to localities, some ICBs have decommissioned services and more may be at risk.

6.6.3.2 Outpatients

The current scope of funded services for NHS tobacco dependency treatment is focused on hospital inpatients and pregnant individuals who smoke, rather than patients attending outpatient clinics. This approach risks missing a large opportunity to address smoking-related inequality. For example, in the context of cancer care an integrated opt-out tobacco dependency service within an outpatient lung cancer diagnostic and treatment achieved a 93% engagement rate with a 34% 12-week abstinent rate.[113] Furthermore, a cost-effectiveness analysis from Canada evaluated the impact of integrating a systematic tobacco dependency treatment pathway across outpatient oncology services and estimated a 500–1,250% return on investment, largely through a reduction of treatment failures and the need for second- or third-line cancer treatments. The number needed to treat for one person who smokes diagnosed with cancer to stop was four, and the number needed to treat to prevent one cancer treatment failure was 45.[114]

In the financial year 2023–24, there were 104.6 million outpatient attendances in England, a 9% year-on-year increase.[115] This included approximately 34 million first appointments. If 60% are unique patients (to account for more than one new patient appointment in the same calendar year), there are approximately 20 million new patients attending an outpatient appointment per year. The distribution of these patients is relatively similar across the 10 deciles of deprivation, equating to 2 million within each decile. Using national smoking prevalence statistics of 23.8% for people in decile 1 and 6.8% in decile 10,[116] this would equate to an estimated 485,506 new patients who currently smoke attending an outpatient appointment from decile 1 and 138,699 from decile 10 (Table 6.2). This is likely an underestimate as the prevalence of smoking in patients attending outpatient clinics is likely to be higher than the general population, due to the diseases caused by smoking. Therefore, if the NHS provided an opt-out treatment model whereby treatment and specialist support could be initiated in the outpatient setting and if we apply the same proportion of patients making a supported quit attempt and success rates as the opt-out inpatient service, this could result in 120,691 patients successfully quitting tobacco. If the inequality in successful abstinence was eliminated such that the success rate achieved in the most deprived quintile was identical to that of the least deprived quintile, then an additional 26,783 patients would stop using tobacco.

Table 6.2. Projected numbers of NHS outpatients supported to quit smoking if all inequalities are removed.

Deprivation decile (smoking prevalence)	Patients attending a first outpatient appointment who currently smoke	Supported quit attempts	Patients successfully abstinent from tobacco	Additional number successfully abstinent if inequalities removed (25.3% success)
1 (23.8%)	485,506	120,406 (24.8%)	19,265 (16.0%)	11,198
2 (19.5%)	397,740	98,640 (24.8%)	15,782 (16.0%)	9,174
3 (15.7%)	320,232	70,131 (21.9%)	15,289 (21.8%)	2454
4 (13.9%	283,518	62,090 (21.9%)	13,536 (21.8%)	2173
5 (12.7%)	259,041	54,399 (21.0%)	13,056 (24.0%)	706

Deprivation decile (smoking prevalence)	Patients attending a first outpatient appointment who currently smoke	Supported quit attempts	Patients successfully abstinent from tobacco	Additional number successfully abstinent if inequalities removed (25.3% success)
6 (11.5%)	234,565	49,259 (21.0%)	11,822 (24.0%)	641
7 (9.7%)	197,850	38,977 (19.7%)	9,627 (24.7%)	234
8 (8.4%)	171,334	33,753 (19.7%)	8,337 (24.7)	203
9 (8.0%)	163,176	29,861 (18.3%)	7,555 (25.3%)	-
10 (6.8%)	138,699	25,382 (18.3%)	6,422 (25.3%)	-

Data derived from ONS (2023)[116] under the Open Government Licence v3.0.

6.6.3.3 Emergency departments

Between a half and a third of the population attend emergency departments (EDs) each year in high-income countries,[117,118] with 26.3 million ED attendances each year in England.[108] People who attend EDs are disproportionately likely to be from lower socio-economic groups.[119] In England in 2022/23 there were twice as many ED attendances for the 10% of the population living in the most deprived areas (3.3 million), compared with the least deprived 10% (1.7 million). Limited spoken English or understanding of the healthcare system and difficulty accessing primary care services due to work or caring responsibilities can all result in increased ED attendances for vulnerable groups.[119] Surveys conducted in EDs in the USA, Canada, New Zealand and Australia show higher smoking prevalence among ED attendees (20%–41%) compared to the general population.[121–126] Those living in more deprived areas are less likely to quit if they access stop smoking service support[127] and less likely to quit in general,[128] therefore EDs may offer a valuable opportunity to reach people who smoke who may face barriers to quitting. A large proportion of people attending ED are ambulatory, fully conscious and will be in the ED for several hours.[129,130] They are therefore a 'captive audience', thinking about their health and more receptive to behaviour change interventions.

A recent international systematic review (awaiting publication) has found trials involving nicotine replacement delivered in the ED were successful at achieving smoking abstinence compared to usual care (risk ratio (RR) 1.61, 95% confidence interval (CI) 1.25–2.07, p=0.002, 7 RCTs, n=4,500, I^2=37%). For trials using behavioural support alone the RR for quitting with an intervention compared with controls was 1.18 (95% CI 0.85–1.64, p=0.32, 11 RCTs, n=4,711, I^2=37%).

The Cessation of Smoking Trial in the Emergency Department (COSTED) was a multi-centre RCT, which recruited over 1,000 people from six EDs across the UK.[131] Participants were randomised to intervention (brief advice, an e-cigarette starter kit and referral to stop smoking services) or control (sign posting to stop smoking services). Those in the intervention group were more likely to quit at 1, 3 and 6 months, and also at long-term follow up (18 months). Self-reported quit rates in the intervention group were 24.2% at 6 months compared to 13.6% in the control group (RR for quitting 1.75, p<0.001).[132] An economic evaluation of the intervention found the cost to be around £48 per participant – highly cost-effective using the current NICE thresholds.[133] A process evaluation of COSTED found that attending the ED is the right time and place to deliver a smoking cessation intervention. This was the case even for those who were not motivated to quit. People waiting in the ED were willing to receive the intervention, and clinical staff were willing to support intervention delivery as long as it did not add to their workload. Overall, the context of the ED was found to be helpful in supporting people to switch away from tobacco. Of those recruited to COSTED, 28% were unemployed or unable to work due to ill health and 28% were in the bottom two most deprived deciles. Unlike evidence from other locations, there was no evidence that those living in more deprived communities were less likely to quit having received the intervention (quit rate in the most deprived quintile = 31.9% compared to 31.4% in the least deprived).[134]

Modelling suggests that if the COSTED intervention was implemented in all large EDs in England from 9am–6pm, 7 days per week (excluding bank holidays), this would result in 22,908 extra quits per year with a cost per quit of £477.75. COSTED has now been successfully implemented in nine EDs across the UK. Calderdale and Huddersfield NHS Foundation Trust has implemented and embedded the COSTED intervention in its ED and so far delivered the intervention to 279 patients, with 53 (19%) reporting having quit 4 weeks later. The COSTED action group is a group of over 60 organisations who are interested in implementing the COSTED approach. The group offers the opportunity to share learning and problem solve.

Emergency departments offer a valuable opportunity to address health inequalities by reaching the large number of people who have the most to gain from stopping smoking and successfully and cost-effectively supporting them to quit. The substantial number of people who attend EDs each year supports the efficiency of COSTED and provides a practical example of how this can be implemented in practice to achieve reduction in population smoking prevalence, weighted towards groups with higher rates of tobacco use.

6.6.4 Mental health services

Despite having some of the highest levels of tobacco dependence[135] and often being subject to multiple sources of disadvantage and stigma,[136] people with mental health (MH) conditions who smoke are motivated to quit smoking,[44] and experience as much, if not more, benefit from smoking cessation as people without MH disorders.[137] However, current treatment modalities are designed primarily for the general population, and although some people with MH disorders do successfully quit, their success rates are significantly lower than those of people without MH disorders.[138] In the UK and internationally, MH disorders are increasingly part of the profile of people accessing tobacco dependence treatment (TDT) services; one recent Czech study reported a 4% year-on-year increase in the prevalence of MH disorders on the TDT caseload, rising from 23% in 2006 to 35% in 2019.[139] It is imperative that treatment meets the needs of this population.

There are no reasons to withhold TDT from people with MH disorders: the self-medication hypothesis (people smoke to treat their symptoms) does not stand up to scrutiny. A systematic review and meta-analysis of 26 longitudinal observational studies to investigate change in mental health after smoking cessation compared with continuing to smoke found both psychological quality of life and positive affect significantly increased between baseline and follow-up in quitters compared with people continuing to smoke by 0.22 (95% CI 0.09–0.36) and 0.40 (95% CI 0.09–0.71), respectively).[137] The risk of increased toxicity of antipsychotic medications due to metabolic changes induced by smoking cessation can be managed through sensible care coordination and dosage adjustment.[140]

6.6.4.1 Mental health inpatient settings

Aside from funding issues, the challenge of implementing comprehensive smoke-free policy and integrated TDT is overcoming years of an ingrained culture in mental health settings, which has normalised and accepted smoking among patients. This culture has variously manifested in therapeutic pessimism from staff about patients' ability to quit and a perception that smoking is one of the few pleasures that a patient has, as well as largely unsubstantiated fears of an increase in violence after banning smoking on site.[141,142]

Admission to a psychiatric ward provides a key opportunity for smoking intervention in a population that experiences significant disadvantage and a high smoking prevalence (see Chapter 4, section 4.6.3). The average inpatient length of stay of 35 days in MH trusts (in comparison to 3 days for acute care hospital inpatients) lends itself to provision of sustained tobacco dependency treatment. Since 2021, the NHS Long Term Plan has led to the introduction of funded TDT services for MH inpatients and although 95% of MH trusts reported that their services had commenced by April 2025 (source: unpublished data, personal communication), the number of patients being seen by these services suggest incomplete coverage. The success of the TDT service is demonstrated by a 28-day abstinence rates of 45%, concentrated in people from the most deprived quintiles and double the quit rate of people treated in acute hospitals (see Chapter 4, section 4.6.1). However, as observed in acute hospital settings, despite the success of these services in reducing smoking-related inequality, some ICBs are decommissioning TDT services for MH trusts and more may be at risk.

Smoke-free policies for inpatient settings were first recommended in England by NICE in 2013, and after slow progress 85% of NHS mental health trusts now report having comprehensive smoke-free policies in place.[143] However, truly inclusive and meaningful smoke-free policies require more than just banning smoking on site, as temporary and forced abstinence does not lead to sustained abstinence from smoking once back in the community, further justifying the case for effective inpatient TDT services.

Further challenges exist outside of the inpatient ward, in community mental health settings. TDT here is still largely provided by local stop smoking services, which vary substantially between local authorities in terms of breadth and depth of offer and tend to be calibrated to the needs of the wider population of people who smoke. The impact of this lack of targeted TDT is evident; an Australian survey of 486 community mental health team patients found that out of a range of lifestyle risk factors, smoking was the factor associated with highest readiness for change (reported by 67.9%) but the lowest confidence in changing (reported by 32.1%).[144] Since 2021 as part of the NHS Long Term Plan commitment, the NHS has funded seven pilot sites to treat people with serious mental illness in community settings. Each pilot site identified community patients and provided the TDT service directly rather than through local government services, a qualitative evaluation of this programme showed that flexible, person-centred approaches were the most effective to engage people with quit attempts.[145] In a recent randomised controlled feasibility trial, an e-cigarette starter kit was offered to people who smoke with a mental health condition treated in the community, the intervention was acceptable and largely feasible, with harm reduction outcomes (ie switching from cigarette smoking to e-cigarette use and substantial reduction in cigarette consumption) favouring the intervention.[146]

6.6.4.2 Mental health populations in other settings

Many people with mental health disorders access acute hospital settings, with non-psychiatric hospitalisation regularly occurring for a range of reasons in patients with mental illness.[147] Data from two acute hospitals in London found two-thirds of patients receiving inpatient TDT had a current or past diagnosis of some form of MH disorder (n=1,375/2,067).[148] Here too, patients with MH disorders were no less likely to accept an intervention than those without, although this more often took the form of opting for temporary withdrawal management rather than making a quit attempt. Evidence from acute settings varies in terms of quit success, with some studies reporting lower rates of self-reported smoking abstinence 1 month after discharge compared to patients without MH disorders, and others finding no difference after adjustment for factors such as heaviness of smoking and intention to quit.[148]

Primary care also presents opportunities for intervention, although there are fewer high-quality longitudinal data from these settings. One study of people who smoke accessing English GP practices found recorded smoking cessation advice was given more frequently to patients with severe mental illness (SMI) than without, and nicotine replacement therapy (NRT) was more frequently prescribed to patients with SMI or depression than patients without, though this increased engagement did not convert into increases in recorded attempts to quit or changes of smoking status. A study of people who smoke accessing primary care in the USA similarly found that those with alcohol or substance use disorders or depression were offered TDT at higher or comparable rates than patients without, but patients with alcohol or substance use disorders had odds of being offered tobacco cessation counselling four times higher than patients with depression.

Although there are some encouraging findings across inpatient and community settings of people with MH disorders being offered TDT, the ongoing disparity in quit success between those with and without MH disorders demands a greater level of creativity in how TDT is provided. Insights from qualitative research highlight the importance of social and environmental contexts in health interventions, and the need to address the social determinants of health when tailoring interventions to meet the needs of people living with MH disorders. For example, in a qualitative study participants in a pilot RCT of the Parks and Recreation Quit programme,[149] a US-based smoking cessation intervention for people with SMI involving game-based group physical activity alongside NRT and counselling, talked of the benefit of meaningful social interaction, group-based peer support, and the use of green spaces in the process of smoking cessation. Creative, context-sensitive approaches should be more widely adopted if we are to make meaningful progress on health equity and reduce the longstanding disparities in smoking-related harm faced by people with mental health disorders.

6.6.5 Lung cancer screening

Lung cancer screening (LCS) is offered to individuals at high risk of developing lung cancer. In the UK, the National Screening Committee recommended the introduction of a targeted LCS programme for those aged 55–74 years with a high risk of developing the disease, including a history of current or former smoking. The prevalence of active smoking among participants in LCS trials has been reported to be in the region of one-third to over half of all attendees. Modelling by Cao and colleagues has shown that adding tobacco treatment programmes to LCS could decrease deaths by an additional 14% and increase life years gained by up to 81%.[150] Meanwhile, another modelling study evaluating the cost-effectiveness of different types of stop-smoking

intervention found that all approaches appeared cost effective at a threshold of £20,000 per quality adjusted life year (QALY) when compared to no intervention or behavioural support alone.

Given the links between smoking prevalence and socio-economic deprivation,[116] people eligible for and attending screening tend to be from more deprived populations. For example, in a recent UK study nearly one-third of LCS attendees were from the most deprived IMD quintile.[151] Effectively integrating stop smoking support within LCS programmes therefore has potential to decrease health inequalities. A recent health economic model reported that offering immediate smoking cessation as part of lung cancer screening appointments, compared with usual care (onward referral to stop smoking services) was estimated to be cost-effective with a net monetary benefit of £2,198 per person, and a saving of between £34 and £79 per person in reduced workplace absenteeism among working age attendees. Estimated healthcare cost savings were more than four times greater in the most deprived quintile compared to the least deprived, alongside a fivefold increase in QALYs accrued.[152]

International evidence from randomised controlled trials pooled as part of a recent meta-analysis has showed that providing stop smoking support as part of LCS programmes doubles the quit rate when compared to usual care (odds ratio (OR) 2.01, 95% CI 1.49–2.72), as does more intensive treatment (>3 behavioural counselling sessions plus pharmacotherapy) (95% CI 2.07, 95% CI 1.26–3.40) when compared to less intensive treatment. Additional trials published since the review have also supported the finding that more intensive treatments resulted in improved quit rates,[153–158] with multiple randomised controlled trials currently underway to add to the evidence base around the most effective approaches.

Although there is a compelling body of evidence that supports the health and financial gains in a high prevalence smoking cohort linked to socio-economic deprivation and UK recommendations that state people who smoke identified in LCS should be offered opt-out referral to smoking cessation services and treatment, there is currently no nationally commissioned provision of stop smoking support within LCS, representing a sizeable missed opportunity to reduce smoking-related health inequality.

6.7 Measures to reduce inequality in non-healthcare settings and populations

6.7.1 Waterpipe and smokeless tobacco

As discussed in Chapter 4 (section 4.5.6), use of non-cigarette tobacco forms such as shisha and oral tobacco are higher among young adults, people of Bangladeshi origin, minority ethnic groups, and those who currently smoke.[159] The health harms of oral tobacco products are substantial and include oral cancers, fibrosis of the mouth and cancers of the oesophagus and pancreas.[160] Income inequality is present among minority ethnic groups in the UK with almost two-thirds of Bangladeshi and Pakistani communities in low-income households.[161,162]

Evidence indicates that minority ethnic groups often underestimate the harms of non-cigarette tobacco products.[159] Knowledge of smokeless tobacco product ingredients varies greatly and there is low awareness of its health risks; some believe these could be offset by mouth rinsing after use and others attribute positive health benefits to it.[163] Waterpipe smoking popularity among young people stems from its social appeal, flavouring that masks tobacco, and misperceptions that it is non-addictive or that water-filters out the harmful chemicals.[164] A lack of specific public health campaigns has contributed to these low levels of awareness about the health risks and misperceptions about these tobacco products.[164] To effectively tackle this gap in knowledge and awareness, public health messaging should aim to include all tobacco forms and reach all population groups. Specifically, stop smoking services should adopt culturally tailored approaches to reach and engage with people using these forms of tobacco (eg consider use of correct terminology that encourages waterpipe and smokeless tobacco users engagement),[165] particularly in areas with high South Asian populations.

Cancer Research UK's Primary Cancer Care Survey has shown that people using smokeless tobacco and waterpipe are less regularly seen, advised and referred for cessation by healthcare professionals (HCPs).[166,167] Furthermore, GPs had lower harm perception for these tobacco forms compared to cigarettes.[167] There could be several reasons for this, including challenges in identifying waterpipe and smokeless tobacco consumers if they are only being asked about cigarette smoking at the point

of contact with health services, or health professionals and advisers not having the appropriate skills or training to support and adequately engage non-cigarette tobacco users with treatment.[166] Additional challenges exist, as some smokeless tobacco users have reported being marginalised by health services.[168] More awareness among HCPs is needed about these products, the form of use, associated risks, cultural associations and practical help they can offer.[169] Targeted education and CPD events might help to raise awareness among HCPs working in areas with high South Asian populations, including primary care, hospitals and specialist clinics.[167]

As well as providing smoking cessation service providers and HCPs with more guidance on how to support people to quit non-cigarette tobacco, there is a need for product regulation to be better aligned with the high level of regulation on cigarettes and hand rolling tobacco. The ban on supply of tobacco for oral use regulated under the UK Tobacco and Related Products Regulation 2016 and EU Tobacco Products Directive 2014 excludes inhaled or chewed products.[170–172]In addition, these regulations impose fewer requirements on most smokeless tobacco products compared to cigarettes, eg for pictorial warnings or plain packaging, for fiscal markings showing UK duty was paid, or minimum size purchase, or any restrictions on flavourings, making South Asian smokeless tobacco products cheap and accessible within the UK.[172,173] Most of these products, often sold through illicit supply and distribution networks, are concentrated in areas with high minority ethnic demographics and high deprivation, and do not comply with statutory regulations.[173] Similarly, the waterpipe industry in the UK operates with significant regulatory gaps, demanding stronger legislation.[174]

Key areas for improvement include taxation, prominent health warnings, and curbing misleading marketing and labelling and product deception.[174] Waterpipe tobacco smoking should be appropriately taxed to discourage purchase, and packaging should comply with the FCTC.[175] For example, its Article 11 Guidelines call for large, clear, and visible health warnings covering at least 50% of packaging. Given that waterpipe venues pre-pack pipes, prominent pictorial health warnings are needed directly on the apparatus and accessories, as customers rarely see product packaging.[174] Furthermore, waterpipe retailers' websites seldom provide health warnings, and their marketing is widely misleading.[176] Quite often, the nicotine levels stated on shisha tobacco packaging do not reflect actual nicotine delivery, potentially misleading users.[177] Similarly, 'herbal' waterpipe variants, marketed as safer, deliver comparable levels of toxicants to traditional waterpipes.[178]

Regulation and enforcement must consider waterpipe cafes as well as the products themselves. There has been a 210% rise in the number of waterpipe cafés in recent years, possibly as a result of gaps in regulation and policing.[174] The easy access to these venues, particularly near educational establishments, may encourage initiation,[179] as increasing use of these cafés has created the sense that they serve a community purpose for young people to safely meet, gather and 'stay out of trouble'.[180]

Waterpipe and smokeless tobacco legislation should, at a minimum, be placed on par with cigarette smoking. The powers in the Tobacco and Vapes Bill[181] should be used to:

- raise the age of sale of all tobacco products, including smokeless tobacco and waterpipe tobacco
- regulate the flavours and packaging of these products
- regulate the display of products at point-of-sale
- establish an effective registration system for the sale of all tobacco products, including smokeless tobacco and waterpipe tobacco
- ensure that the regulations and their enforcement are extended to waterpipe and smokeless tobacco products at the same scale as for cigarettes
- enable trading standards to issue fixed penalty notices (FPNs) for breaches of age of sale, proxy sale, free distribution, tobacco notice and display restrictions, as well as creating a licensing scheme for sales.

In addition, an increase in taxation on all tobacco products to align with cigarette taxes should be considered, which is outside of the scope of the Tobacco and Vapes Bill.

Existing global tobacco control frameworks and UK treatment guidelines offer general guidance for addressing all forms of tobacco.[175,182] However, for consumption of diverse tobacco products like waterpipe and smokeless tobacco, a more focused approach is needed.[165] The lack of good quality evidence in the literature for cessation of these products is a significant gap in supporting people who use waterpipe and smokeless tobacco.[165,174] The sparse evidence that exists shows that behavioural support, like cessation counselling (RR 1.76, 95% CI 1.44–2.16) and brief advice (RR 1.24, 95% CI 1.03–1.48) may help more people quit smokeless tobacco use compared with minimal or no support.[183] Furthermore, varenicline (RR 1.35, 95% CI 1.08–1.68) and nicotine replacement therapy (RR 1.18, 95% CI 1.05 –1.33) may also be effective in helping people quit using smokeless tobacco.[183]

Similarly, behavioural support interventions may help more people quit waterpipe use (RR 3.19, 95% CI 2.17–4.69) compared with minimal or no support.[184] However, the evidence is not sufficient for treating waterpipe addiction with pharmacotherapies, or e-health interventions.[184] Due to its prolonged session duration, waterpipe smoking can cause dependency even with less frequent use as nicotine buildup is gradual and sustained, compared to the rapid spike and drop from a cigarette.[185] Furthermore, its pattern of use has been shown to suppress recognised nicotine withdrawal symptoms in people who smoke, and so it has the ability to undermine cigarette smoking cessation attempts in non-exclusive users.[174,186] There is an unmet need to integrate waterpipe and smokeless tobacco-specific cessation advice in stop smoking services in the UK, and to understand the barriers and enablers of its provision, uptake and engagement by people who consume these products.

6.7.2 Social housing

According to census 2021 data, 17% of households in England live in social housing, which is defined as homes owned by social landlords (eg local authorities or housing associations) and rented at below-market rates.[187] Approximately one-third of social housing residents smoke; more than double the prevalence in other housing types.[52] Declines in smoking rates over time have also been notably smaller among this group.[52] Among various socio-economic indicators (eg income, employment, social grade), housing tenure has emerged as the strongest predictor of smoking behaviour.[188]

Evidence suggests that people who live in social housing and smoke are as motivated to quit and more likely to make a quit attempt than other people who smoke but are more addicted and less likely to successfully stop.[188] Therefore, smoking-related harm contributes substantially to health inequalities by housing type, underlining the need for tailored policy and intervention efforts in social housing.

Most published research on reducing smoking in social housing has been conducted in the USA. A scoping review identified 19 studies (18 in the USA, one in England) evaluating cessation-focused interventions.[189] Common components of these interventions were behavioural counselling, educational resources, pharmacotherapies, social support and environmental changes (building renovations to improve ventilation). Social support, often delivered by trained community advocates who had previously stopped smoking, was present in 14 studies. This approach was also highlighted as important during a social housing stakeholder workshop, conducted in Greater Manchester, UK in 2023, where residents acknowledged some distrust of healthcare providers and valued community-led support.[190] The scoping review authors concluded that most individual interventions had favourable outcomes on cessation (at <12 months follow-up) and other health indicators. There was also evidence that participants preferred onsite interventions and social support and/or free pharmacotherapy to be provided.

Nicotine vapes could provide an evidence-based alternative to smoking,[191] with some limited, very low certainty evidence of a greater relative effect on quit rates in lower compared with higher socio-economic groups (measured across a range of indicators), suggesting a possibly positive impact on health equality.[192] A 2023 nationally representative survey (the Smoking Toolkit survey) found similar rates of vape use for quitting among social housing residents (36.0%) and others (36.6%).[193] However, after adjustment for covariates, people who were still smoking in social housing had higher odds of perceiving vapes as more harmful than tobacco cigarettes (65.8%) than those who smoked in other housing types (58.4%; OR adj=1.61, 95% CI 1.30–1.99). Misperceptions were particularly high in people who exclusively smoked tobacco (ie were not vaping), but misperceptions also persisted in people using vapes and across other housing types, albeit at lower levels.

In 2018, the US Department of Housing and Urban Development introduced a federal rule banning tobacco smoking in and within 25 feet of public housing.[194] No such nationwide policy exists in the UK. Several studies, summarised in the aforementioned scoping review, assessed the effects of such smoke-free policies (32 studies, all conducted in the USA and Canada).[189] While the evidence suggests that there could be a positive impact of smoke-free policies in social housing on smoking cessation rates; findings on secondhand smoke exposure were mixed. Whereas some studies found a reduction in related toxins, others found an increase. It is hypothesised that this could be because residents misunderstood the rules or adapted their smoking behaviour to avoid detection, eg smoking inside, rather than outside on balconies. Other unintended consequences were reported, such as an increase in resident turnover and damage to property. However, there was some evidence to suggest that providing smoking cessation services alongside the implementation of smoke-free policies could boost the numbers of people stopping smoking.

In England, local authorities are targeting areas of high deprivation and inequalities specifically for smoking cessation, and this often includes an explicit focus on social housing and an extension of the range of settings where support is offered (eg community settings). The 2024 Action on Smoking and Health (ASH) annual survey of local authority tobacco control programmes found that 67% of respondents reported targeting social housing and 38% reported engaging with housing teams and supporting social landlords to promote smoke-free homes.[195] A complementary Cancer Research UK (CRUK) report stated that 62% of stop smoking services had done work specifically within social housing.[196] Initiatives reported by local authorities and stop smoking services across the datasets include:

- conducting qualitative research into implementing smoke-free home policies
- signing local tobacco declarations with social housing providers and producing supportive toolkits to achieve this
- working with social housing colleagues to promote their stop smoking service during community housing fun days
- piloting the 'Swap to Stop' nicotine vape scheme with social housing providers
- commissioning tailored services for specific populations, including social housing residents
- establishing smoke-free zones through partnership outreach
- providing an incentive scheme giving vouchers to people who stopped smoking
- embedding community engagement facilitators within communities to promote services through existing community groups.

6.7.3 People experiencing homelessness

In the UK, homelessness is defined as living without secure or suitable accommodation and can include sofa surfing, rough sleeping and living in temporary or unsuitable and unsafe accommodation. Housing status, ie the differences between owning a home, privately renting a home, social housing and having no secure housing, is an increasingly important marker for inequality and is a proxy marker for wealth and access to resources. Whereas we see a slope in the gradient of health between socio-economic positions, the difference in quality of life and health outcomes between those who have secure housing and those who do not is described as more akin to a cliff.[196]

An important factor in the health of people experiencing homelessness is smoking.[198] Smoking is highly prevalent among adults experiencing homelessness. While smoking rates have steadily declined across the general population in the UK and USA to around 10–12%, data from the Homeless Health Needs Audit, England's most comprehensive data on homelessness and health, reports smoking rates among its respondents to be 76%.[199] The differences between housing status and smoking prevalence rates is shown in Fig 6.10.

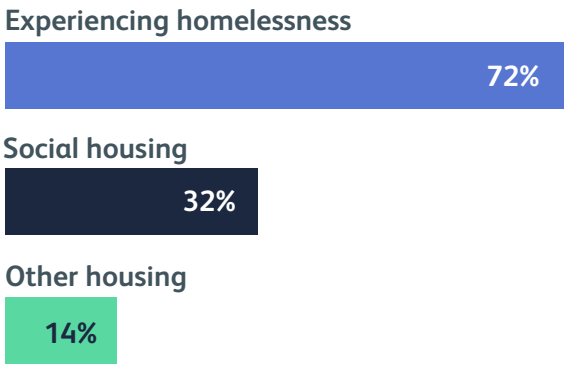


Fig 6.10. Smoking prevalence by housing status, where other housing is those in privately rented or owned (including mortgaged) accommodation.

Data derived from the Homeless Health Needs Audit[199] and the Smoking Toolkit Study.[52]

Contrary to common assumptions, motivation to quit smoking is often high among people experiencing homelessness. Many express a strong desire to stop smoking, and a significant proportion report having made quit attempts in the past year.[200] Yet their chances of success are much lower than those in the general population. Several key barriers account for this disparity. At the individual level, when people try to quit, qualitative research shows that the high number of other people who smoke around them makes it hard, including staff who support them.[201–204] Social networks among individuals often revolve around shared smoking practices, making cessation socially isolating.[203,204] Additionally, tobacco may be used as a currency or means of negotiating social standing and identity, further embedding it in daily life.[203] Psychological factors also play a central role. Mental health problems such as depression, anxiety and experiences of trauma are common in this population and can both drive smoking and increase the risk of relapse.[201–203] We know that many people who smoke have erroneous perceptions that smoking reduces stress,[205] and this is also true for people experiencing homelessness, who experience stress on an almost daily basis and so smoking and stress

are maintained in a vicious cycle.[201,203] On a structural level, cessation advice is often inaccessible or totally absent.[200,201] People experiencing homelessness may not be registered with a GP or may frequently move between locations, making continuity of care difficult. Health services often focus on crisis management, leaving smoking unaddressed.[200] Many health professionals also deprioritise smoking cessation for patients, either due to lack of training or assumptions that quitting is not realistic until housing is secured.[201,203] In a sample of 99 homeless services across the UK , very few had established contacts with their local stop smoking service but expressed a desire to help their services users address their smoking.[200] However, a lack of training is routinely highlighted as a barrier to offering this support.[200,201]

Despite these challenges, there is growing evidence for interventions that can support smoking cessation for people accessing homeless services.[198,206] One of the most promising developments has been the use of tailored cessation programmes that integrate nicotine replacement therapy (NRT) and e-cigarettes, sometimes with behavioural counselling (motivational interviewing).[198,206] However, it should be noted that the majority of the evidence to date derives from the USA,[198] which has a different approach to smoking cessation and homelessness and the issues related to it vary. Nonetheless, there is growing evidence on effectiveness from the UK and Ireland, which can inform wider practice and policy interventions.[200–202,204,207,208] In the UK, NICE advocates for person-centred models that address health, housing, mental health and substance use in tandem.[208] Assertive outreach, specialist homelessness teams and peer-led support models have all shown potential in increasing engagement and improving health outcomes across a range of health and social care agendas, and we should be looking to those examples to further integrate smoking cessation support.[208–211]

To date, there are two studies from the UK, which have shown promise for e-cigarettes for people accessing homeless services. The first was a feasibility study, which showed that people who access homeless services do want to quit smoking, would take up the offer of an e-cigarette, would be willing to provide baseline and follow-up data and that staff were willing and able to support the intervention with training.[212] This first study provided proof of concept for a second study, known as SCeTCH. This was a larger 32 centre randomised controlled trial with embedded economic and process evaluation, which measured the effectiveness of the offer of an e-cigarette versus the offer of a referral to usual care to people who smoke who access these centres.[207] People were offered an e-cigarette with the choice of flavours and provision of liquid for the device for up to 4 weeks. Quit rates in both arms were low, but the e-cigarette intervention did show signs of promise for harm reduction, with a notably higher 7-day point-prevalence abstinence 24 weeks after quitting (6.3% vs 2.1%) and, importantly, a significantly greater proportion of participants achieved at least a 50% reduction in cigarettes per day across all follow-up timepoints. The linked qualitative component highlights how the offer of an e-cigarette facilitated discussions between staff and participants on smoking, which are usually rare.[204]

Interventions are essential but they need to be offered by a workforce that is sufficiently trained. However, at the current time, there is no routine training for those working within the sector.[200] The National Centre for Smoking Cessation Training has a freely available online training video which covers all aspects on smoking and homelessness, including how to start conversations with service users and how to best support cessation.

In summary, homelessness and smoking is a preventable public health burden. Despite high motivation to quit, cessation support is sporadic: smoking is often deprioritised by services, data on housing status and smoking are limited, and frontline staff rarely receive targeted training. Emerging, person-centred, harm-reduction approaches (notably e-cigarette provision combined with NRT and tailored behavioural support) and interventions embedded within homelessness services show promising evidence of acceptability and impact. To reduce health inequities, tobacco control for people experiencing homelessness must be integrated into housing, mental health and substance use responses, with investment in routine data collection, staff training, and pragmatic harm reduction programmes.

6.7.4 Prison settings

In the UK, smoking prevalence of people in prisons prior to the introduction of smoke-free policies in 2015 was estimated to be 70–80% and people in prison are disproportionately drawn from one or more overlapping disadvantaged group (see Chapter 4, section 4.5.3).

To support people in prison with their nicotine dependence, establishments across the UK offer a free to access smoking cessation course or, in jurisdictions that have implemented smoke-free policies, nicotine vapes are also available for individuals to purchase.[213–215]

In England and Wales, the Minimum Service Offer (MSO) for stop smoking services in prisons is 8 weeks of behavioural and pharmacological support (such as NRT or varenicline), which should be accessible throughout a prisoner's sentence.[213] Data from Scotland examining NRT dispensing throughout the period of the smoke-free policy implementation found dispensing increased significantly (42%) in the year after smoke-free policy had been introduced.[216] However, 4 years after the start of the smoke-free move in England, national and local prisons service and healthcare leads stated that there was little to no uptake of prison cessation services since the policy roll-out, and that in some establishments people were not eligible to sign up for stop smoking services due to concerns over dual use of nicotine vapes and NRT and for fear of NRT products being traded.[217] They also acknowledged that there had been instances across the estate where the MSO for cessation had not been met by healthcare providers, for example, cessation services only being available to people on entry into prison and not for the duration of their stay. One study completed across two smoke-free sites in England in 2021 found that out of the 58 people who previously smoked and were nearing their release, 86% reported having never accessed a smoking cessation course on their current sentence.[217]

International studies have found that spending time in smoke-free prisons does not equate to lifelong smoking cessation after release.[218] One study following up people who previously smoked tobacco after release from a smoke-free prison in England found that nearly 60% returned to tobacco as soon as they were released, with nearly two-thirds stating that they did not take their prison issue vape home with them. Given the vast majority of people who smoke tobacco entering prison switch to a nicotine vape while living in smoke-free prison environments, incorporating nicotine vapes into cessation services available to prisoners throughout their sentence and at the time of release as well as guidance on the use of nicotine vapes for cessation, alongside a greater range of nicotine vape products could offer an opportunity to promote a tobacco-free life both inside and outside of prison.

The 2024 Scottish Prison Service survey found that many people in prison would like to stop vaping completely in prison. However, they lacked knowledge on how to access services to support them with their nicotine addiction while in prison.[219]

6.8 Specific treatments, interventions and actions to reduce smoking in high prevalence groups

6.8.1 Harm reduction

For people whose lives are shaped by trauma, poverty, discrimination or unmet health and social needs, traditional evidence-based approaches to tobacco dependence, particularly those that prioritise abstinence-only models, can often fail to engage those most at risk of smoking and experiencing smoking and related harms. Across healthcare, harm reduction is recognised as an established and ethical approach that supports people to reduce risk without requiring them to immediately stop the behaviour in question.[220] In tobacco control, definitions of harm reduction have evolved over time,[221,222] but there is broad consensus that substituting lower-risk, non-combustible nicotine or tobacco products for smoked tobacco can significantly reduce harm, particularly for people who cannot or will not quit nicotine in the near future,[223] although it is important to acknowledge this approach is helpful in the context of countries with tough tobacco control regulation, but may be exploited by industry in other jurisdictions.[55] For some, tobacco harm reduction may also involve temporary abstinence from smoking, cutting down before quitting, or reducing use without quitting, as part of a longer-term plan, or even as a final goal.

A harm reduction approach recognises that people have complex lives and meets people where they are, by offering practical tools and lower-risk options that may reduce harm in the short term and build trust over time, rather than demanding immediate abstinence. It avoids the binary framing of success versus failure and instead allows incremental progress. Cutting down, or transitioning to a less harmful product, are all meaningful steps, especially for those who have found conventional cessation services inaccessible, unwelcoming or ineffective. The aim of harm reduction is not to condone risk, but to reduce harm and create conditions where further change becomes possible.

One of the most accessible and widely used harm reduction tools are licensed nicotine replacement therapies (NRT), which are recognised by the World Health Organization as essential medicines. In the UK, NRT is approved not just for quitting smoking but also for cutting down, temporary abstinence and harm reduction.

A Cochrane review of 68 studies (43,327 participants) found that combination NRT (patch plus fast-acting form) is more effective than single types (relative risk (RR) 1.27, 95% CI 1.17–1.37), with higher-dose patches and preloading further improving outcomes.[224] Studies report that NRT can also facilitate a significant reduction in smoke intake, as well as quitting smoking altogether at a later date.[225] NRT is one of several harm reduction tools available to support people who smoke, alongside nicotine vapes, oral nicotine pouches and smokeless tobacco products.

Nicotine vapes are effective for helping people quit or reduce smoking. A 2025 Cochrane review of 104 studies, including 30,366 participants, found high-certainty evidence that nicotine vapes improve quit rates over NRT (RR 1.51, 95% CI 1.25–1.82) and moderate-certainty evidence that they outperform non-nicotine versions (RR 1.34, 95% CI 1.06–1.70).[191] Nicotine vapes also support harm reduction. People unable to quit with licensed stop smoking medications can benefit from using nicotine vapes to reduce smoking compared with using NRT. A randomised controlled trial of 135 people who had a history of unsuccessful quitting with stop smoking medications found that 26.5% of participants using nicotine vapes halved their smoking after 6 months (compared with 6.0% in the NRT group).[226] The RCP 2024 report on e-cigarettes and harm reduction recommended them as an option for groups facing the greatest tobacco-related harm.[55]

Oral nicotine products are smokeless and non-inhaled and are increasingly used by people seeking alternatives to combustible tobacco. They appear to be less toxic than cigarettes and can deliver comparable levels of nicotine, although most of the available data come from industry-funded studies. While long-term independent evidence is still emerging,[227] these products are being considered as part of broader tobacco harm reduction strategies. Heated tobacco products (HTPs) avoid combustion by heating processed tobacco. Studies by manufacturers suggest reduced toxicant exposure compared with cigarettes, though independent research and long-term health data remain limited.[228]

While some people stop abruptly, others reduce gradually, use nicotine products intermittently or take breaks from smoking before quitting altogether. Evidence from 51 trials involving over 22,000 participants shows that reduction-to-quit and abrupt quitting are similarly effective for long-term cessation.[224] Approaches such as cutting down or temporary abstinence, especially when supported with stop-smoking medicines, are valid, evidence-based routes to reducing harm and building toward lasting change. However, the role and value of tobacco harm reduction remain contested. Some argue that tobacco harm reduction interventions may delay cessation, prolong nicotine dependence, or serve the commercial interests of the tobacco industry by helping it rebrand while maintaining market share. Others highlight the lack of long-term health data on newer nicotine products, raising concerns about their safety.[55] This underscores the need for careful regulation, ongoing research and clear public communication.

The way we talk about and deliver harm reduction can either challenge or reinforce existing inequalities. Tobacco harm reduction is sometimes framed as a second-best option, intended for people perceived as lacking the intention or capacity to quit, a view that risks further stigmatising those who choose it. When harm reduction is offered only to the most marginalised people, it can inadvertently entrench inequality. If more affluent groups are supported to quit completely, while more disadvantaged groups are left with fewer or slower options, then the smoking gap widens. Making tobacco harm reduction accessible to all who smoke, not just as a consolation prize, promotes greater equity and helps ensure that no group is left behind. While full cessation remains an important goal, the route to getting there is not the same for everyone. For some, it will be slower, more complex, and shaped by very different starting points. People who smoke while navigating challenging circumstances bring unique insights into what works, what matters, and what gets in the way. Their voices are critical to making harm reduction effective and meaningful.

6.8.2 Financial incentives

Providing financial incentives to support smoking cessation is effective and cost effective, with the most extensive evidence from trials with pregnant women and pregnant people. Incentives create an expectation of reward, which is a key mechanism for changing behaviour,[229] including among more disadvantaged groups.[230–232]

Cochrane reviews of financial incentives for smoking cessation have been conducted since 2005.[233] At the time there was uncertainty about incentive effectiveness particularly over the longer term. However, over the past 20 years, the evidence has evolved, and the most recent Cochrane review found that these types of rewards help people to quit smoking for at least 6 months, and that this effect continues after rewards have ended, suggesting longer-term benefits.[234] Incentives can be

delivered in a range of ways, including money, vouchers or deposits. They can also be delivered alongside behavioural support for smoking cessation delivered in clinics, community programmes or (in evidence primarily from the USA) in workplaces. The 2025 Cochrane review identified 48 randomised controlled trials that tested incentive schemes with adults who smoke – delivered in mental health or cancer clinics, primary care, with veterans, in colleges/universities and community settings. An additional 14 trials involved pregnant women and pregnant people. Taken together, these trials found clear evidence that incentives help people who smoke to quit compared to those not receiving an incentive, particularly in pregnancy. Pooling study results, the Cochrane review found that 10% of people who received incentives quit smoking at 6 months or longer compared to 7% of those in the control (no incentive) arm in trial with the general adult population, and 13% vs 6% of those involved in pregnancy studies.[234]

Providing vouchers or other forms of incentives for smoking cessation remains controversial. These types of schemes are very challenging for service providers or governments to introduce when resources are constrained. However, the UK has been a leader in this respect both in terms of studies and practice. Based on evidence from local schemes in the NHS dating back to 2007 randomised controlled trials in the UK[235,236] and a change in NICE guidance to recommend incentives for smoking cessation in pregnancy,[35] a national scheme is now underway in England. This is being evaluated and will provide valuable evidence for the future.

6.8.3 Digital support and services

The availability of digital stop smoking interventions has increased substantially over the last decade. In England, digital is a popular type of behavioural support for quitting smoking, used in an estimated 8% of quit attempts in 2023/24.[237] The most prevalent type of digital stop smoking intervention is the smartphone app, found primarily on app stores. However, the evidence base for stop smoking apps is limited and most of the evidence for digital support is for traditional digital approaches, including website, email and text message interventions. The evidence is also limited regarding the types of digital support that are of most interest and adopted by different groups in society, and whether these types are differentially effective for these groups. However, some conclusions can be drawn.

There is no clear indication that interest in digital cessation support is related to characteristics such as gender, ethnicity and education in high-income countries such as the USA,[238] although there is a lack of research investigating this. Some evidence suggests interest in digital cessation support may increase with age,[238] although adoption of digital cessation support in England shows the opposite pattern, with those aged over 55 having lower adoption rates compared with younger age groups.[239] Adoption also appears to be slightly lower among those from lower social grades compared to higher grades, but not by gender.[239]

Adoption is affected by digital exclusion as well as interest in support. General drivers of digital health tool exclusion include low digital literacy and capabilities, inadequate devices (eg insufficient storage for app installation) and a lack of internet access or 'data'. These factors are more commonly experienced among certain groups, including older people, minoritised ethnic groups, disabled people, people experiencing homelessness and those from the least advantaged backgrounds.[240]

Digital cessation interventions appear to be as effective for people from the least and most advantaged groups.[241] However, different types of digital support may be differentially effective by socio-economic status. A Cochrane review found very low certainty evidence for a greater relative effect of web-based cessation interventions for those of lower versus higher socio-economic status.[192] This review also identified a potentially lower relative benefit for text messaging interventions for those from lower socio-economic groups, although neither effect reached statistical significance. The potential positive impact on health equality from web-based interventions is reinforced by a real-world study in England showing potentially higher relative benefits for websites and apps for people who smoke from lower versus higher social grade groups, but these were also not statistically significant.[237] Few studies have investigated differences in relative effectiveness of digital cessation support for characteristics other than socio-economic status. Population-specific reviews show that digital cessation support is borderline effective for people with severe mental illness,[242] and effective for people who smoke during pregnancy.[243] However, there is limited research investigating the effectiveness of digital support among other populations, such as sexual and gender minority groups and minoritised ethnic groups, although the limited evidence to date is encouraging.[244,245] The effectiveness of digital cessation support for people living with homelessness is inconclusive.[206] This is potentially due to low engagement rates, as found in a US study of a text message intervention, where participants who were homeless had a preference for interpersonal support.[246]

Artificial intelligence (AI) tools offer a new digital approach to support smoking cessation. Initial review evidence indicates cessation chatbots can be effective for the general population of people who smoke.[247] There is no evidence yet on how this type of cessation intervention might work for specific populations or affect health inequalities. Some have argued that tobacco-based large language models trained on general population datasets, with minimal representation of diverse groups, may worsen health inequalities.[248] Furthermore, evidence from evaluations of 'off-the-shelf' chatbots like ChatGPT show that while they reliably provided some types of quitting information, they occasionally give misinformation, particularly when advising on less evidence-based approaches.[249] One positive perception of cessation chatbots is how they are viewed as unlikely to be judgemental,[250,251] which may be important for certain populations, such as pregnant women and pregnant people.[252]

In conclusion, the limited evidence to date does not identify any clear impacts from digital smoking cessation support on health inequalities. Most evidence is focused on socio-economic status. While digital cessation support adoption may be slightly lower among people in England in the least advantaged groups, its effectiveness overall appears to be similar across socio-economic status groups, and types such as websites may even be more effective for those from least advantaged groups. Digital support appears to be of interest and effective for some but not all groups, and further investigations are needed into whether it may be differentially effective for different groups, and so contribute to health equality.

6.8.4 Participation and recognition: how co-design can help

As discussed in Chapter 4, smoking rates remain the highest among people facing multiple and intersecting issues, including those living with mental health conditions, experiencing homelessness, in contact with the criminal justice system, or using drug and alcohol services. A social justice approach to tobacco harm reduction and cessation acknowledges that the perspectives of those most affected by tobacco smoking are often absent from the development of policies and services intended to support them and seeks to change this.

Many people report finding stop smoking services inaccessible, overly rigid, or disconnected from their lived experience.[203,253] In contrast, co-designed, inclusive, low-barrier harm reduction approaches can help make support feel more relevant by reflecting people's voices and the realities of their lives.[254] Such approaches help to recognise that people who smoke, particularly those navigating complex lives, are not 'hard-to-reach', they are just easy to ignore, and many have been underserved by systems that do not align with the challenges they face.

The social justice principals of participation and recognition are increasingly embedded into UK health policy. The Health and Care Act 2022 in England places a legal duty on health and care bodies to involve patients, carers, and their representatives in planning and decision-making about the services they use. Similarly, the NHS Long Term Plan emphasises the importance of working in partnership with people and communities to improve health outcomes, experiences, and access to care. The NHS England People and Communities Framework (2021) goes further, explicitly endorsing co-design, co-production, and co-assessment as key approaches for developing services that 'work for people and with people', particularly in tackling health inequalities.

This commitment to participation and recognition is illustrated by the development of a co-designed tobacco harm reduction toolkit for use in the homeless sector (DITCH) project. The toolkit was co-produced through a participatory process involving people with experience of homelessness and with frontline staff. Their insights informed each stage, from identifying gaps in tobacco harm reduction service provision, to identifying what good tobacco harm reduction practice looks like, and helping to frame the messaging, tone and format. The content was informed by qualitative interviews with 44 service users and staff working in homeless services, and a UK-wide survey of 99 homelessness service providers.[200] Findings from both studies suggested there was a clear disconnect between the need for tobacco harm reduction and what is currently being offered.

These studies (and others) found that despite the high visibility of smoking in homelessness services, both staff and people with experience of homelessness reported limited exposure to tobacco harm reduction, though most had extensive knowledge of harm reduction for other substances and high-risk behaviours. Smoking was described as an ever-present, widely visible, often shared but rarely discussed activity between service users and staff. When conversations did take place, staff often lacked the confidence, tools, or organisational backing to act. Challenges included inconsistent access to nicotine products such as NRT or e-cigarettes, limited authority to procure supplies independently, and unclear or restrictive policies.

'Sometimes it's not appropriate to ask service users about their smoking when they have really complex issues'.

Staff, day centre [200]

'I have been under various services that are there to get people off the street ... and not one point did anybody ask you how much you were smoking, why you were smoking or anything.'

Day centre service user

Despite these barriers, there was strong appetite for change. Service users described wanting non-judgemental conversations about smoking, ideally with staff they knew and trusted. Low barrier access approaches (eg drop-in support, community cafes, low literacy/visual information, no wrong door policies) were often more welcome than formal assessments. The timing of support mattered; people were more open to discussing smoking when they felt emotionally safe and stable, not when they were in crisis. Peer involvement was also seen as valuable; support from someone with lived experience of smoking and quitting felt more relatable and less stigmatising.

Service users and staff wanted practical, immediate access to harm reduction tools, not referrals to external services or delays that undermined motivation. They wanted simple information and products that were easy to use and tailored to their preferences. Staff echoed this, calling for a flexible, well-stocked toolkit that could be accessed quickly and followed people as they moved between services.

'We had great success when we bought people vape kits... We saw a large number of people switch to vaping because we saw people supporting each other and helping each other, and that was more effective than sending someone to a group'

Outreach worker[200]

'I get given written information all the time, as so what? It is all just "do this and do that". And everyone will shake their head and say yes, but they won't, because they're sick of being given pieces of paper and told what to do'.

Day service user

Across service users and staff, abrupt cessation was often seen as unrealistic, but gradual changes, such as reducing the number of cigarettes, delaying the first smoke of the day, or switching to a less harmful product were experienced as empowering. These incremental changes helped people build confidence, regain a sense of control, and feel supported rather than judged.

'I didn't smoke for a whole weekend, it felt good. We went on from there for a few weeks, going days without smoking...'

Day service user

'So I think it should really be person centred...as we find with most things, if you're encouraging people and raising that success when they've cut down to a pack a day or a pack a week or whatever it might be, ... that that's a big deal and we should be encouraging that instead of going well – he's still smoking so you're a failure.'

Residential worker

Tobacco dependence treatment and harm reduction interventions may be more effective when co-designed with people who smoke, informed by lived experience, and guided by meaningful opportunities for participation and recognition. Embedding these principles into commissioning frameworks, service design, evaluation and workforce development could help to ensure support is more relevant, inclusive and responsive.

6.9 Training in tobacco dependence treatment and health inequalities

As population smoking prevalence drops but remains high within population cohorts, the focus is on overcoming barriers to accessing services by these groups (targeting), maximising effectiveness of interventions and the individual tailoring of support and treatment (tailoring). Training on tailoring treatment to people experiencing significant multiple health conditions and challenges aims to increase knowledge, skill and confidence in addressing barriers that frequently affect access, engagement and the success of stop smoking support.

High-quality and evidence-based training of staff increases reach and effectiveness of tobacco dependence treatment in clinical and community settings. Trained staff are better equipped to motivate people to stop smoking, provide effective interventions, and have higher rates of stopping with treatment.[255–258] Groups with additional needs include, but are not limited

to, people living with mental illness or co-addictions, disabled people, pregnant women and pregnant people, those living in social housing and those experiencing homelessness.

6.9.1 Workforce training in tailoring treatment to priority groups

Workforce training based on evidence and good practice on how to tailor support and treatment can support equitable access and increase effectiveness of treatment.[200,259–264]

NICE recommends that all social and healthcare professionals receive training in how to provide Very Brief Advice (VBA) on smoking.[35] Additionally, staff supporting people with stopping smoking should be trained to the National Training Standard with specialist training for those working with priority groups. It is important that workforce training extends to leaders and managers responsible for service specification and delivery, to support tailoring of interventions.

Training in the delivery of tailored (also known as bespoke) interventions for people experiencing inequalities focuses on:

- using tailored language to increase acceptability among members of priority groups
- advanced skills for developing rapport and supporting engagement in treatment, including trauma informed approaches
- supporting individuals with alternate ways of stopping including pre-treatment with stop smoking aids and Cut Down to Stop
- providing more intensive support (frequency of contacts) and extended duration of treatment (12 weeks or longer)
- advanced use of stop smoking aids (tailoring dosing, combination treatment) and extended duration (up to 12 months)
- assessment and appropriate management (dose reduction) of medications that interact with smoking upon cessation/reduction of smoking
- advanced strategies for managing urges to smoke, distress, and social and other cues to smoking
- re-engaging individuals in treatment after setbacks and relapse.

6.9.2 Social and healthcare staff: Very Brief Advice (VBA+) on smoking

Social and healthcare professionals in contact with people experiencing health inequalities should be trained in delivering VBA+ that is tailored to the populations they work with to increase receptivity.[35] This training should focus on the importance of using non-intimidating language, normalising concerns, communicating about support known to appeal to people experiencing barriers to stopping (eg vape starter kits, Cut Down to Stop, incentive programmes). See Box 6.4 for available VBA+ training for priority groups and the National Swap to Stop programme.

Prescribers

Prescribers should have confidence in advising on, and prescribing, medicines to individuals experiencing health inequalities who are frequently more tobacco dependent, experience withdrawal and urges to smoke with greater severity, and have higher rates of relapse. These evidence-based strategies include tailoring dosing, use of nicotine analogues (varenicline and cytisine), combining treatments with different mechanisms of actions, and extended use of stop smoking aids (3–12 months) to prevent relapse (Box 6.5).

Maternity care services

Training in tailoring interventions for those who are pregnant and their partners supports delivery of tailored support and addresses common barriers. It includes the National Smoke-free Pregnancy Incentives Scheme (Box 6.6).

Mental health

Training on tailoring treatment to people with common and severe mental health conditions for frontline staff and stop smoking advisers is based on latest evidence and good practice (Box 6.7).

Stop smoking practitioners working with priority groups

Practitioners delivering specialist support to priority groups should receive additional training to ensure they have the knowledge, skills and confidence to do so. In 2025, the National Training Standard was updated to reflect new evidence on tailoring treatment to people experiencing health inequalities. It identifies the knowledge and skills required by the tobacco dependence workforce to address the needs of priority groups and includes core and advanced competences (Box 6.8).

Box 6.4. National VBA+ training for priority groups.

Homelessness services: https://elearning.ncsct.co.uk/

Inpatient mental health trusts: https://learninghub.nhs.uk/Catalogue/tobaccodependenceinpatienttraining

Swap to Stop: https://elearning.ncsct.co.uk/swap_to_stop-registration

Box 6.5. Training for stop smoking aids.

Vaping: A guide for healthcare professionals : https://elearning.ncsct.co.uk/vaping-registration

Stop smoking aids: https://elearning.ncsct.co.uk/stop_smoking_medications-registration

Box 6.6. Training for maternity care providers and those supporting pregnant women and pregnant people with stopping.

VBA+ on smoking for pregnant women: https://elearning.ncsct.co.uk/

Supporting a smokefree pregnancy and smokefree families: https://www.e-lfh.org.uk/programmes/smoking-in-pregnancy/

National smoke-free pregnancy incentives scheme: https://elearning.ncsct.co.uk/financial_incentives-launch

Pregnancy and smoking cessation specialty module: https://elearning.ncsct.co.uk/pregnancy_specialty_module-registration

Box 6.7. Training in tobacco dependence treatment for mental health services.

Mental health (community)
Mental health and smoking specialty module: https://elearning.ncsct.co.uk/mental_health_specialty_module-registration

NHSE community mental health tobacco dependence training resources (local trainers): https://www.ncsct.co.uk/publications/category/NHSE-training-materials-SMI

Mental health (inpatient)
Treating tobacco dependence in inpatient acute and mental healthcare: https://learninghub.nhs.uk/Catalogue/tobaccodependenceinpatienttraining

NHSE inpatient mental health tobacco dependence training resources (local trainers): https://www.ncsct.co.uk/publications/category/inpatient-mental-health-training-resources

Box 6.8. Specialist training for stop smoking/tobacco dependence advisers.

Pregnant women and pregnant people
Pregnancy and smoking cessation specialty module: https://elearning.ncsct.co.uk/pregnancy_specialty_module-registration

Mental health (community)
Mental health and smoking specialty module: https://elearning.ncsct.co.uk/mental_health_specialty_module-registration

Priority groups
Tailoring tobacco dependence treatment for priority groups: (coming soon: see NCSCT website for updates)

In the absence of approaches tailored to less advantaged groups in the UK, there is evidence that deprivation-based targets for stop smoking services can lead to greater quit success in priority groups by focusing resources on supporting cessation in less advantaged communities.[22] In 2024, only 4% of people in England who smoked and tried to quit in the past year used a stop smoking service in their attempt.[24] Prioritising access to services through mobile clinics or incentivising referrals (including both self-referral or from primary care) could help increase service use and promote equity-positive cessation outcomes. In addition, opt-out models of smoking cessation support in secondary care have shown promise in increasing treatment engagement and quit attempts, and could be a promising strategy in other settings of the health system to increase treatment engagement in the least advantaged groups.[29]

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07

Ethical considerations

Health inequalities have been at the heart of public policy debate since the publication of the Black report in 1980.[1] While some variations in health among human populations are predominantly attributable to natural factors, research since the Black report has concentrated on identifying the social, economic and cultural factors that cause these variations in health.[2,3] In particular, this report focuses on the social and commercial determinants of health, which can be shown in and of themselves to create or enhance inequalities of health.

In ethics, health is a 'human good', something that is beneficial, fulfilling and conducive to flourishing as a human being, both as it is enjoyed by individuals, and as it is enjoyed collectively in 'public health'. Controllable influences that make someone less healthy thus diminish their enjoyment of this good, and other things being equal, this is bad. Where this diminishes our collective health, this is bad even when the impact varies across individuals in our community and we ourselves may not feel directly impacted. Tobacco smoking is a case in point: the impact on individuals may vary, and individuals may trade this off against other goods. However, collectively we are all worse off when tobacco smoking continues, because of the impact on smoking prevalence and other network effects – a society in which some people smoke is one in which others are affected by secondhand smoke and others may start smoking (or continue to smoke when they wish to give up).

Our first ethical concern therefore, discussed in previous RCP reports on smoking and health, is largely concerned with individual wellbeing and personal autonomy. Considering both the impact on personal autonomy posed by poor or misleading information, and contexts in which balancing the autonomy and interests of individuals wishing to smoke with those who prefer not to, or who do not enjoy full individual autonomy, requires society to limit access to smoking materials, to reduce harm, and to challenge the behaviours of the tobacco industry.

In addition to the direct effects of smoking on individuals, we also need to consider the ways in which these effects are socially patterned. This means we are concerned with health inequalities, and the ways in which health inequalities become health inequities. A health inequality is simply a pattern of difference across a group, while an inequity is unfair inequality. This report considers ways in which smoking creates or enhances health inequalities; and also ways in which other inequalities make exposure to smoking (direct consumption and second or thirdhand exposures) more likely.

The empirical evidence is consistent that smoking correlates strongly with economic and social inequality, as with other social vulnerabilities. To some extent the direction of causation is irrelevant: what matters is that when we take smoking out of the causal net, general health improves and health inequalities diminish. Since this factor is under our (social) control, both the ill health attributable to smoking and the inequalities correlated with smoking are under our control. Enabling this factor to persist is therefore unethical, as it exacerbates social, economic, and health inequalities, making people's lives more difficult and increasing pre-existing unfairness.

This suggests that a central objective in health and social policy should be to reduce health inequalities, and that reducing smoking – ideally to zero prevalence – should be a core element in that policy.

We must also consider the ethical and equity aspects of policy aimed at reducing smoking. It is possible that while the ends (reducing the harms of smoking and reducing smoking prevalence) are justified, the means are not. In order to ensure that any policy is ethically justified, we must be satisfied 1) that the evidence for the effects, effectiveness and efficiency of that policy is robust; 2) it does not in its own way worsen inequalities (for instance by imposing additional economic burdens on the least advantaged, or increasing risky behaviours with adverse health effects); 3) the methods it uses are proportionate to the intended ends of the policy; and 4) that the policy is credible and has the support of those most affected by it. Any policy should be cost effective and represent an efficient use of resources, in order to ensure a total allocation of resources that maximises health gain and/or minimises health harm.[4] Commissioners of health services have a duty to secure the most cost-effective use of resources for the population. This report shows that policies aimed at reducing smoking are highly efficient and cost effective, especially when compared to the use of resources to treat the health harms of smoking.

The evidence presented in this report provides robust arguments for the changes needed in national policy to meet these four conditions. Meanwhile, the evidence presented on the activities of the tobacco industry shows that, unchecked, they continue to worsen individual and population health, and inequalities within the population, significantly contributing to injustices and increasing health inequities.

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