Northern Ireland
Audit Office

Tackling the public health impacts of smoking and vaping

Report by the Comptroller and Auditor General

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Comptroller and Auditor General

Northern Ireland Audit Office
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List of Abbreviations

BCC	Belfast City Council
BOA	Brief Opportunistic Advice
DoH	Department of Health
ENDS	Electronic Nicotine Delivery Systems
FPNs	Fixed Penalty Notices
FR	Final Review
GB	Great Britain
HIU	Health Intelligence Unit
HSC	Health and Social Care
IPH	Institute of Public Health
KPIs	Key Performance Indicators
MTR	Mid-Term review
NI	Northern Ireland
NICE	National Institute for Health and Care Excellence
NRT	Nicotine Replacement Therapy
ONS	Office for National Statistics
PHA	Public Health Agency
PSNI	Police Service of Northern Ireland
RoI	Republic of Ireland
SHS	Second Hand Smoke
TCS	Tobacco Control Strategy
TSISG	Tobacco Strategy Implementation Steering Group
UK	United Kingdom
VFM	Value for Money

Key Facts

34,900

Number of smoking related hospital admissions recorded in NI annually

£218m

Estimate of costs incurred by hospitals in NI in treating smoking-related illnesses

£3.23m

The amount spent by PHA on tobacco control in 2021-22 (with £0.12 million spent on media campaigns in the same period)

14%

Percentage of adults who smoke in Northern Ireland

98%

The rate of deaths per 100,000 as a result of smoking related illnesses is 98 per cent higher in the most deprived areas of NI than the least deprived areas.

4.5 x

The proportion of births where the mother reported smoking during pregnancy in the most deprived areas was over four and a half times the rate in the least deprived areas

39,000

The number of people setting 'quit dates' in 2011-12 through PHA funded services

8,000

The number of people setting 'quit dates' in 2022-23 through PHA funded services

25%

The rate of vaping test purchases that identified age-of-sale offences

Executive Summary

Smoking is a significant health issue, representing the greatest cause of preventable illness and death, and the one of the greatest causes of health inequalities

1. Smoking remains the greatest global cause of preventable illness and death. An estimated 320,000 people aged 16 and over currently smoke in Northern Ireland (NI), and the latest available data from various sources starkly illustrates the dangers associated with this:

- each year, around 15 per cent (2,200) of deaths in NI are attributable to smoking;
- around 1,045 people die each year from lung cancer (accounting for 23 per cent of all cancer related deaths);
- people killed by smoking-related illnesses live shorter average lives of up to 15 years; and
- pregnant women smokers and their babies are at increased risk of significant health defects, and their babies have up to 40 per cent higher risk of infant mortality.

2. The most recent analysis shows that there are around 34,900 smoking-related hospital admissions recorded in NI annually, with 60,000 hospital bed days attributed to tobacco-linked mental or behavioural disorder alone. The Department of Health (DoH or the Department) estimates that local hospitals incur annual costs of around £218 million in treating smoking-related illnesses. However, a Public Health Agency (PHA) estimate of other factors, including premature deaths and excess sickness absence, indicates that local annual economic costs arising from smoking are around £450 million. Smokers with a 20-a-day habit incur annual costs of over £4,600, impacting disproportionately on lower income households.

3. Perhaps most significantly, smoking also causes some of the largest health inequalities in NI, with the following gaps still apparent between the most and least deprived areas:

- smoking related deaths per 100,000 population – 98 per cent higher;
- lung cancer deaths per 100,000 population – 151 per cent higher; and
- smoking prevalence during pregnancy – 440 per cent higher.

Notable progress has been made in reducing the overall smoking prevalence in NI, with health surveys indicating all UK countries have a broadly similar smoking prevalence

4. Annual health surveys indicate that the overall prevalence of current smokers aged 16 and over in NI has fallen from 24 per cent in 2010-11 to 14 per cent in 2022-23 . Progress is also evident amongst all age groups and socio-economic groups. However, some challenges remain, particularly given that the 24 per cent prevalence amongst people from the most deprived quintile is still 17 percentage points higher than the 7 per cent levels in the least deprived quintile. In addition, around 2,200 pregnant women continue to smoke annually, and emerging research suggests a high smoking prevalence amongst local people with mental health issues.

5. The current 14 per cent local adult smoking prevalence recorded by DoH's annual health survey is slightly higher than the latest available health survey data for England (12 per cent) and Wales (13 per cent), but lower than Scotland (15 per cent) and the Republic of Ireland (RoI) (18 per cent). However, the impact of COVID-19 on data collection means that caution should be applied over recent survey results, and additional research is likely required to draw firmer conclusions. The Office for National Statistics (ONS) also measures prevalence for people aged 18 years and older in a single UK-wide survey. Its latest 2022 data similarly suggests the four UK countries are grouped closer together (Wales 14.1 per cent, NI 14 per cent, Scotland 13.9 per cent, and England 12.7 per cent).

Whilst none of the most recent Tobacco Control Strategy smoking reduction targets were met by the scheduled dates, further progress has subsequently been made

6. DoH is responsible for developing policy around local tobacco control and the PHA oversees the delivery of this. In February 2012, DoH published a 10-year Tobacco Control Strategy for Northern Ireland (the TCS or the strategy). This strategy restated a previously identified need to reduce smoking rates among disadvantaged groups, children, and pregnant women. However, developing an associated action plan proved protracted and this was only finalised in 2015. It had initially been planned to formally review the action plan in 2015 to assess progress against its goals and ensure that it aligned with the revised Programme for Government, and to develop an evaluation framework to measure the plan's effectiveness. However, the plan itself was only finalised in 2015 and an evaluation framework was not developed.

7. A `mid-term review' (MTR) of the TCS was completed in February 2020, eight years after its introduction and only two years before it was due to expire. The Department was unable to complete this sooner as key staff were transferred to emergency planning activity, including preparing for EU exit. An earlier review would likely have allowed emerging research and best practice in the areas of tobacco control to have been identified and considered for implementation in NI sooner.

8. A Final Review (FR) was then completed in September 2023. Both reviews highlighted multiple measures delivered or ongoing to support the strategy. However, whilst smoking had reduced across all target groups, all four reduction targets were not achieved by their scheduled 2020 dates.

- **overall smoking prevalence** (target was to reduce to 15 per cent but stood at 18 per cent at time of MTR);
- **manual workers** (target was to reduce to 20 per cent but stood at 27 per cent); and
- **pregnant women** (target was to reduce to 9 per cent but stood at 12 per cent);
- **children and young people** (target was to reduce to 3 per cent and stood at 4 per cent).

9. Positively, further progress has been achieved since then. The 14 per cent adult smoking prevalence identified by the 2022-23 health survey (paragraph 4) means that the 15 per cent target set for 2020 has subsequently been met. In addition, subsequent evidence indicates that smoking amongst children has also reduced to 2 per cent, the lowest level ever recorded.

Development of a revised tobacco control strategy which also adequately addresses emerging issues around vaping amongst adults and children is now a key priority for stakeholders

10. Taking account of the latest evidence, and the Strategy's short remaining lifespan, DoH's MTR prioritised 17 recommendations which it considered could be progressed immediately. However, progress in implementing these has been limited, partly due to COVID-19. DoH acknowledges that a successor strategy will need to consider what remains to be done around these recommendations.

11. The rapid emergence of vaping has also presented new challenges. Whilst adult smoking levels in NI have been reducing, vaping levels have almost doubled from 5 per cent to 9 per cent between 2014-15 and 2022-23. Prevalence is also much higher amongst 16-24 year olds (20 per cent) and 25-34 year olds (14 per cent), although DoH pointed out that these results are based on a relatively low number of respondents. Research to date has produced mixed findings about vaping. Whilst tending to support the benefits of adults vaping to help them quit smoking, it has also highlighted that not enough is known yet on potential long-term health effects. Latest analysis indicates that 44 per cent of adults who vape considered it had helped them quit smoking altogether with 31 per cent stating it had helped them reduce their smoking levels. The PHA is now faced with developing more conclusive population guidance on vaping, whilst working towards implementing National Institute for Health and Care Excellence (NICE) guidelines which acknowledge its role in smoking cessation. DoH has commissioned the institute of Public Health (IPH) to complete work on the international evidence base on vaping and associated health implications (initially focusing on children and young people), and this is scheduled for completion by late 2023.

12. The uncertainty over longer-term health impacts means that the UK public health bodies all agree that children should not vape. However, vaping amongst local children has been increasing. The latest 2022 survey showed that 9 per cent of local 11-16 year olds were vaping, with 6 per cent doing so regularly, an increase from the respective levels of 6 per cent and 3 per cent in 2019. Underlying this, 24 per cent of year 12 children currently vape. March 2020 research by Ulster University found that whilst local young people perceived vaping as a healthier option than smoking, 80 per cent had not received any school education around it. As the PHA has received very significant public representation on this issue, regular measurement on child vaping levels is required, to inform whether new interventions are needed to address these .

13. Stakeholders must now focus on developing a revised strategy which continues addressing key tobacco control objectives, but which also gives adequate coverage to vaping. There are currently no smoking reduction targets in place for NI as the previous targets lapsed in February 2020. The Department has extended the TCS from its scheduled expiry data of February 2022 until February 2024, to allow for its FR, but told us it is continuing to work towards its goal of a tobacco-free society in the interim. It has also now commenced development of a new strategy, with publication envisaged by the end of 2024. As previous deadlines for tobacco control plans and strategies have slipped, development of a revised document now needs to proceed as a priority. Key considerations for the new strategy include new targets for further reducing smoking levels (including if these should ultimately aim for a smoke-free society with an overall smoking prevalence of 5 per cent or less), and whether the high number of smokers with mental health problems should be given priority status.

For some time, the tobacco control budget has predominantly been directed towards encouraging existing smokers to quit, with limited spend on preventative measures

14. Whilst DoH allocates the PHA an overall annual budget, it determines internally its spend on tobacco control measures. The £3.2 million allocated in 2020-21 by the PHA represented under 4 per cent of the it's net commissioning expenditure. Whilst this is a small proportion of its budget, benchmarking this with funding levels elsewhere in the UK is problematic, due to differing delivery structures.

15. Since 2011-12, the PHA has generally spent over 75 per cent of its tobacco control budget on specialist smoking cessation services and the associated use of Nicotine Replacement Therapy (NRT), specifically aimed at encouraging existing smokers to quit. The support provided to current smokers is even higher (perhaps as much as 87 per cent of the budget) as some funding from other streams is also directed at this group. Limited funding is therefore usually available for preventative measures aimed at discouraging people from starting smoking.

16. In recent years, funding allocated towards tobacco focused media and publicity campaigns has also been reducing significantly. Aside from 2019-20, this area received only £0.1 to £0.14 million of annual funding between 2017-18 and 2021-22. No funding was allocated in 2020-21 or in 2023-24 (with the latter reflecting a spending freeze introduced on mass media campaigns), despite evidence that, when deployed, these campaigns have impacted strongly with the smoking public, in terms of recognition and behavioural influence.

17. Aside from issues around the current budget allocation, this report highlights that as any revised strategy will have to both continue focusing on further reducing smoking prevalence, and addressing emerging issues around vaping, the PHA may have to reassess funding requirements for delivering such an enhanced strategy.

The impact of key measures to encourage existing smokers to quit has reduced dramatically

18. The PHA deploys various measures to encourage existing smokers to quit, including health and social care (HSC) staff providing patients with brief `opportunistic' advice on stopping during their normal contact with them. This involves providing guidance, self-help material, and potentially referral to more intensive support.

19. However, the PHA has limited information on the impact of this initiative. Between 2013-14 and 2017-18, a target for 2,080 HSC staff to be trained annually to deliver this advice was mainly exceeded, but a key underlying annual training target for 1,040 staff from defined groups, including GPs, specialist nurses, practice midwives and health visitors, was not met in any year, with only 367 and 683 staff trained in 2016-17 and 2017-18. There is also limited available data on the number of people being provided with advice. The PHA is currently seeking to compile updated information on training and uptake.

20. The primary intervention aimed at existing smokers involves people engaging with PHA-commissioned specialist smoking cessation services. Smokers receive behavioral advice and information around smoking cessation, and pharmaceutical assistance, principally NRT. Participants are encouraged to set a quit date, with outcomes followed up at both 4 and 52 weeks.

21. In 2010-11, 34,400 smokers set dates and the TCS concluded that such activity needed to be maintained to achieve meaningful impact, but participation has instead fallen dramatically. In 2019-20, only 13,800 smokers set dates, falling further to only 8,000 in 2021-22 and 2022-23. Although the reduced local smoking prevalence and the impact of the pandemic contributed to these trends, demand for the services had also been falling before COVID-19. The numbers setting dates within the three key target groups have also reduced sharply between 2011-12 and 2022-23:

- people from most deprived quintile – (by 76 per cent) from 10,165 to 2,489;
- children and young people – (by 96 per cent) from 921 to only 34; and
- pregnant women – (by 58 per cent) from 1,424 to 591.

22. Attempts by the PHA to increase service uptake have been largely unsuccessful. The falling uptake means that the overall numbers successfully quitting at four-weeks have also reduced by 76 per cent between 2011-12 and 2022-23 (from 20,300 to 4,800). The reduced smoking prevalence has contributed to lower uptake of services but demand has also been falling amongst the remaining smoker base. Our report also highlights that a significant proportion of four-week outcomes are lost in follow-up (around 20 per cent annually since 2011-12), with variable outcomes around uptake and success rates across individual trusts and provider settings.

23. The highly addictive nature of nicotine means that maintaining smoking cessation in the longer-term proves challenging. Whilst a four-week quit rate of 60 per cent was achieved in 2021-22[1], this had fallen to 23 per cent by the 52-week stage. A high percentage of outcomes are again lost in follow-up between the four and 52-week stage between 31 per cent and 43 per cent. The lower participation means that whilst over 6,700 people had successfully quit at 52 weeks in 2011-12, this had fallen to 1,921 in 2021-22.

24. Assessing value for money (VFM) delivered by the services is complex, but the most recent available data (for 2018-19) indicates that local services perform comparatively well compared to the rest of the UK for uptake and four-week quit rates. However, the lower participation levels mean that the PHA has been achieving a diminishing return on its investment. The costs of £75 per person setting quit dates and £429 per successful 52-week quit in 2011-12, have risen to £360 and £1,296 in 2021-22[2]. Despite this, VFM may still be delivered, particularly if services help reduce the level of chronic illnesses , but measuring this is difficult. Whilst the activity is still contributing to reducing smoking levels, the PHA may have to reassess the ongoing merits of directing a high proportion of its budget to this one activity.

25. The impact of other PHA measures aimed at current smokers has also reduced in recent years. The number of hits on its stop smoking website has fallen from 74,400 in 2016-17 to 30,500 in 2022-23, and the number of quit kits issued to smokers (which include practical tools and tips on stopping smoking) also reduced from 7,600 in 2013-14 to only 2,300 in 2019-20. The PHA suspended this initiative in 2019, pending a planned further review, but has not yet been able to complete this, meaning no kits have been issued since then. Alongside the falling uptake of smoking cessation services, these developments can only have damaged efforts to reduce current smoking levels.

1 The time lag means that 2021-22 is the latest year for which 52-week follow-up is available.

2 This analysis is based on the funding directed towards specialist smoking cessation services and the number setting quit dates in that year, and the number of successful 52-week quits reported the following year.

Whilst recent enforcement of tobacco control legislation remains below required levels, around 13 per cent of test purchases identify tobacco being sold to children, with 25 per cent of vaping purchases in 2022-23 identifying similar offences

26. As tobacco use represents a high risk to health and wellbeing, regulations are needed to safeguard people from avoidable premature death and disease, and these need to be strongly enforced. The PHA funds the 11 local councils to enforce various strands of tobacco control legislation. Council staff liaise with businesses and retailers, investigate complaints, and carry out `spot checks' of compliance with legislation, including making `test purchases' to proactively identify if tobacco or vaping products are being sold to children.

27. Available data indicates that council enforcement of the legislation banning the sale of tobacco to people aged under 18 had generally increased between 2011-12 and 2018-19 (no data was readily available for 2019-20 and enforcement was largely stood down in 2020-21 and 2021-22 due to COVID-19), but that KPIs set by the PHA for the required number of annual visits and test purchases were still often not met. Overall, the 5,068 tobacco test purchases made between 2011-12 and 2018-19 identified 570 age-of-sale offences (13 per cent), confirming the importance of ongoing enforcement, which needs to be enhanced to reflect the required KPI levels.

28. Although it has also been illegal to sell vapes to people under 18 since February 2022, local businesses stocking these do not currently have to register with councils in the way tobacco retailers have had to since April 2016. This report concludes that this can only hinder council enforcement of this area. In Scotland, mandatory registration for both tobacco and vaping retailers was introduced in April 2011. An initial 273 test purchases of vaping products in 2022-23 identified 69 age-of-sale offences (25.2 per cent), with a 50 per cent offence rate identified in the Belfast City Council (BCC) area. The very high non-compliance provides significant cause for concern.

Introducing quality standards for enforcement could ensure a more consistent approach

29. In 2022-23, only 10 of the 43 identified tobacco age-of-sale offences (21 per cent) were fined through Fixed Penalty Notices (FPNs), with the rest dealt with through warnings or cautions. Enforcement approaches also varied significantly. For example, whilst FPNs were issued for all five offences identified in Derry and Strabane, none were issued for seven offences in Armagh, Banbridge and Craigavon and only one was issued for 11 offences in Mid Ulster.

30. With individual councils having autonomy over their enforcement approaches, we consider that a review of current practices to assess their overall value and impact may be beneficial. This report also highlights how the need to now carry out test purchases of both tobacco and vaping products raises question over whether councils will have sufficient resources to adequately fulfil this dual function. Whilst BCC has maintained the total number of test purchases previously conducted, it has had to reduce its tobacco purchases by 50 per cent to accommodate newly prioritised test purchase activity for vapes. This further reinforces the need to reassess the budgetary requirements for delivering a future combined tobacco and vaping strategy.

Conclusions

The reduction in overall smoking prevalence over the last decade highlights how progress is achievable in this area. Despite this, annual health surveys suggest current smoking levels in NI continue to place a considerable strain on HSC resources and blight the lives of many people.

Further reducing local smoking prevalence will require measures which effectively address key target groups including people from disadvantaged areas, and manual workers which have previously proved difficult to influence. Whilst smoking levels have been reducing, vaping amongst adults and children is increasing. Stakeholders must also now identify the new risks and challenges presented by vaping, and strategically address these in an ongoing and reactive manner. The PHA needs to consider if its current tobacco control budget is sufficient to adequately address both tobacco control and vaping and reassess how it prioritises and allocates this. It should also assess how the impact of brief advice and smoking cessation services can be enhanced and consider how enforcement of legislation can ensure better compliance with both tobacco and vaping regulations.

Recommendations

Recommendation 1

All countries would benefit from having smoking prevalence data which is as uniform as possible to accurately benchmark their relative standing. DoH and the PHA should attempt to further work with the other stakeholders responsible for the various health surveys to try and develop compatible data and ongoing benchmarking of smoking prevalence across the UK and RoI, and annual reporting on this.

Recommendation 2

In what has become a fast-moving environment, more regular information on local vaping levels amongst children is required to inform ongoing consideration on the necessary responses required to address this, and DoH and the PHA should consider moving to annual measurement of this area.

Recommendation 3

Alongside updated tobacco control measures and targets, any new strategy should also give coverage to the rapid emergence of vaping , including assessing benefits in assisting adult smoking cessation whilst also discouraging non-smokers and children from vaping. The strategy should also clearly outline how and when the success of the various interventions will be evaluated and reported on and be subject to a timely interim progress review.

Recommendation 4

In addition to setting revised smoking reduction targets, including considering if a smoke-free date should be set for NI, new targets for reducing vaping amongst children should be considered as more information on health impacts becomes available. Arrangements for flexibly monitoring emerging evidence on vaping and developing timely responsive actions, including potentially enhancing school education programmes, should be established.

Recommendation 5

Future initiatives to reduce smoking levels must be heavily prioritised towards addressing socially disadvantaged areas and, as there may be significant crossover, people with mental ill-health. DoH and the PHA should assess which aspects of ongoing work are proving successful and need to be continued or expanded, and also: identify best practice interventions elsewhere which have demonstrably proved effective in addressing these groups; assess their suitability for local implementation; and prioritise measures which could deliver greatest impact.

Recommendation 6

In developing a potentially enhanced strategy which addresses both key tobacco control work and vaping, DoH and the PHA should cost the funding required to fully deliver all the proposed measures and determine if this area merits increased support to try and achieve further progress. They should also reassess the continued merit of allocating such a high proportion of budget funding to the specialist smoking cessation services and NRT, and whether increased support should be provided to advertising campaigns. Proposed actions should be ranked and prioritised so that if funding constraints prevent full implementation, areas of greatest priority and impact can be progressed.

Recommendation 7

A revised tobacco control strategy should clearly set out proposals for enhancing the planning, delivery and oversight of brief opportunistic advice to smokers, and for reporting outcomes.

Recommendation 8

Specialist smoking cessation services will only achieve their full potential if the decline in take-up is arrested and reach amongst the smoking population increased. The PHA needs to definitively establish why service uptake has reduced so steeply and consider how delivery models could be redesigned to try and increase demand, and if outcome tracking can be improved, possibly by commissioning an independent review. The PHA should further assess if best practice evident in HSC settings can be rolled out across other provider settings.

Recommendation 9

Any revised strategy should clearly articulate if and when the merits of redesigning and relaunching the quit kit initiative will be reviewed, or whether alternative measures to support a self-help approach to quitting smoking may deliver greater impact.

Recommendation 10

DoH should assess the merits of introducing mandatory registration for retailers selling vaping products as a priority. The PHA should also work with councils to develop `Quality Standards' which reflect best practice around monitoring and enforcement of tobacco and vaping control legislation, to ensure a more consistent approach across monitoring and enforcement work, including decisions on issuing penalties.

Part One:
Introduction and Background

Smoking is the greatest cause of preventable illness and premature death, contributing to around 2,200 deaths in Northern Ireland each year

1.1 Smoking remains the greatest global cause of preventable illness and death. The Department of Health (DoH or the Department) and the Public Health Agency (PHA) estimate that over 320,000 people aged 16 and over currently smoke in Northern Ireland (NI). This contributes significantly to many cancers and chronic diseases and is estimated to cause around 2,200 deaths annually in NI (15 per cent of the total recorded in 2021).

1.2 In addition to lung cancer, smoking contributes to mouth, lip, throat, pancreas, bladder, stomach and liver cancer, and the PHA estimates that smoking is the primary cause of one in four of all cancer deaths. On average, there are more than 4,500 local cancer deaths annually. Lung cancer alone accounts for around 24 per cent of these, with smoking the main causal factor in 80 per cent of such deaths. Smoking is also responsible for around 80 per cent of emphysema and bronchitis related fatalities, together with 14 per cent of heart disease deaths, and a recognised contributory risk factor to other illnesses including strokes and asthma.

1.3 Smoking also considerably reduces life expectancy. Research[3] suggests that smokers' lifespans are shortened by around five minutes for each cigarette smoked, and that, on average, those killed by smoking related illnesses have shorter lives of between 10 and 15 years. In addition, smoking during pregnancy can harm both mothers and unborn children. As well as the danger facing all smokers, specific risks to pregnant women include deep vein thrombosis and placenta praevia, as well as an increased chance of having a stillbirth or premature delivery. Their babies are at greater risk of lower birthweight, breathing difficulties, birth defects including cleft lip, and of a significantly higher infant mortality rate of up to 40 per cent[4].

1.4 Second Hand Smoke (SHS), a combination of smoke exhaled by smokers and sidestream smoke produced by the burning of tobacco products, can also cause significant harm to humans. In addition to immediate health effects felt by people exposed to SHS, including reduced lung function, increased respiratory problems, sore throats, and headaches and nausea, more serious health impacts can potentially arise, particularly with long-term exposure, including higher risk of lung cancer and coronary heart disease. Children exposed to SHS are particularly vulnerable to developing respiratory illnesses, particularly as their lungs are still developing and they breathe at a faster rate than adults.

3 Royal College of Physicians (RCP). Nicotine Addiction in Britain. A report of the Tobacco Advisory Group of the Royal College of Physicians. RCP: London, 2000.

4 Smoking: stopping in pregnancy and after childbirth. NICE, 2010.

Smoking results in high costs to the HSC sector and considerable wider societal impacts and costs

1.5 The DoH is responsible for developing policy around local tobacco control and the PHA oversees delivery of this policy, including measures aimed at reducing smoking levels. The Department published a `Tobacco Control Strategy' (TCS or the strategy) in February 2012, which contained various proposed measures aimed at reducing the overall NI smoking prevalence from 24 per cent to 15 per cent by 2020. The prevalence subsequently fell to 17 per cent by 2021-22, meaning this target was not achieved within its intended date . More positively, the latest 2022-23 data shows that this prevalence has now further reduced to 14 per cent, with male smoking levels falling from 20 per cent to 15 per cent, and female levels reducing from 15 per cent to 12 per cent between 2021-22 and 2022-23. The prevalence of children smoking over the last decade has also reduced from 8 per cent to 2 per cent. Whilst progress is evident amongst all groups, smoking levels remain higher amongst the most deprived quintile in NI (24 per cent).

1.6 Quantifying the number of hospital admissions or bed days directly linked to smoking is difficult given that it can wholly or partly contribute to many clinical conditions. The latest available data indicates that almost 35,000 hospital admissions annually are attributable to smoking, with mental or behavioral disorder linked to tobacco use accounting for over 60,000 hospital bed days.

1.7 The local health and social care (HSC) sector also incurs high costs in treating smokers who develop medical conditions. Estimates by the Institute of Public Health (IPH) in 2015 suggested annual hospital costs of treating smoking-related illnesses in NI amounted to £164 million, which was then equivalent to the salary costs of 7,800 nurses. More recent DoH analysis has indicated that these costs had reached £218 million in 2019-20.

1.8 The financial burden caused by smoking is, however, significantly higher. Other factors, such as wider healthcare costs, premature deaths, excess sickness absence, smoke breaks, and early deaths linked to SHS, must be considered. Drawing on other UK studies, the PHA's Health Intelligence Unit (HIU) estimated in 2015 that smoking costs the NI economy around £450 million annually. The PHA also acknowledges that approximately one million working days are lost each year in NI due to smoking. In overall UK terms, previous estimates have suggested that[5] a one per cent decrease in smoking prevalence could produce a net annual economic gain of approximately £240 million.

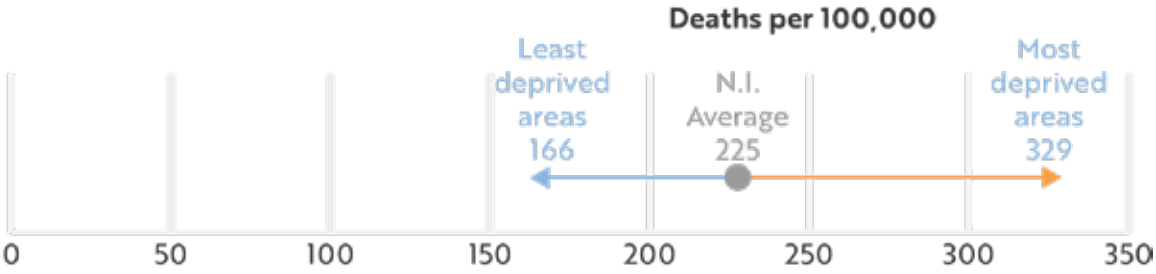
1.9 Smokers themselves also incur considerable costs. At current prices, the annual cost of a 20-a-day habit amounts to £4,600. The PHA has estimated that smokers spend an average of 15 per cent of their annual income on the habit. The higher smoking prevalence among lower income group means these people incur disproportionately higher costs.

5 All Party Parliamentary Group on Smoking and Health. Inquiry into the effectiveness and cost-effectiveness of tobacco control: Submission to the 2010 Spending Review and Public Health White Paper Consultation process.

Smoking accounts for some of the largest health inequality gaps in Northern Ireland

1.10 The DoH `Health Inequalities Annual Report' measures health inequality gaps between the most and least deprived areas of NI. The most recent report, which was published in March 2023, assessed outcomes up to 2021. It highlighted that smoking continued to show some of the largest health inequalities monitored in NI. Whilst smoking related deaths per 100,000 population have been gradually reducing across all social categories over the last decade, the inequality gap between the most and least deprived areas for such deaths has grown and stands at 98 per cent for 2017-21 (**Figure 1**).

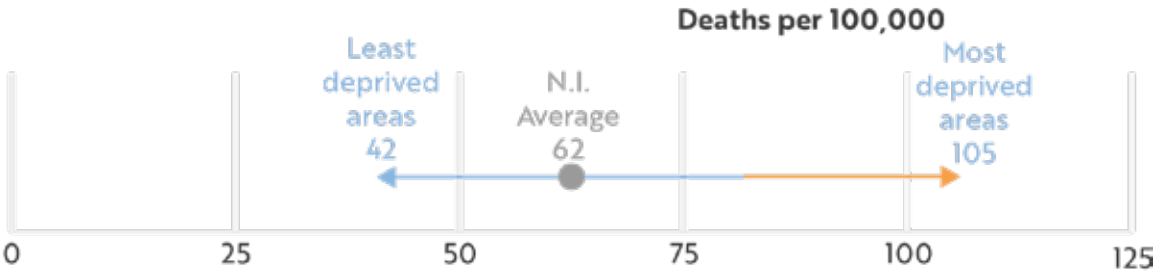
Figure 1: There is currently a 98% inequality gap in death rates in NI for smoking related illnesses between the most and least deprived areas



Source: DoH Health Inequalities Annual Report 2023.

1.11 Despite reducing slightly from 161 per cent in 2014-18, the latest available data shows that the inequality gap for lung cancer deaths also remains high, at 151 per cent (**Figure 2**). Available information indicates that around 70 per cent of all lung cancer cases are directly attributable to smoking.

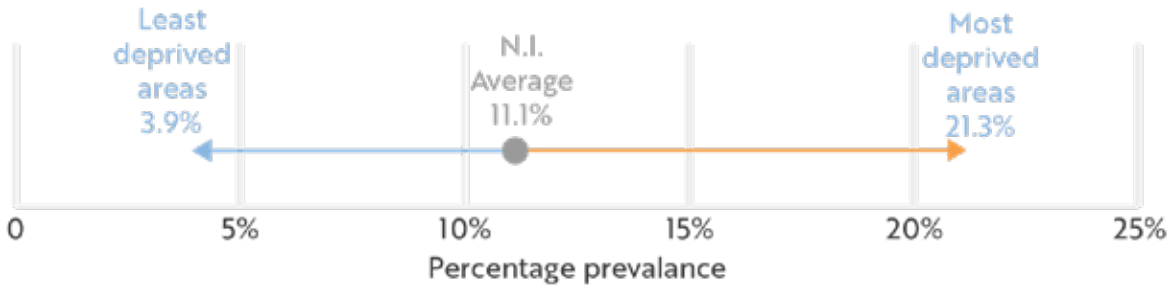
Figure 2: There is a 151% inequality gap for lung cancer deaths between the most and least deprived areas in NI



Source: DoH Health Inequalities Annual Report 2023.

1.12 The proportion of births where the mother reported smoking during pregnancy has again been reducing across all social categories. Nonetheless, smoking during pregnancy in the most deprived areas is more than four times higher than the rate in the least deprived areas (**Figure 3**). The 11.1 per cent of pregnant women who continue to smoke represents around 2,200 women per year.

Figure 3: Women in the most deprived areas in NI are over four times more likely to smoke during pregnancy than in the least deprived areas



Source: DoH Health Inequalities Annual Report 2023.

Vaping has presented stakeholders with new challenges

1.13 The emergence of e-cigarettes (or vaping) in recent years has presented new challenges. International health experts have struggled to agree on the benefits or otherwise of adults vaping to help them quit smoking. Whilst research has tended to support this approach, there remains inadequate evidence on potential long-term health effects, and for that reason the four UK health agencies all agree that children should not vape.

1.14 Available data shows that vaping is increasing in NI amongst both adults and children. Adult vaping levels have almost doubled from 5 per cent in 2014-15 to 9 per cent in 2022-23 . A 2022 survey commissioned by various NICS departments found that 9 per cent of local 11-16 year olds now vape compared to 6 per cent in 2019, with regular users having doubled to 6 per cent from 3 per cent during that period. Prevalence is much higher amongst older children, with 24 per cent of Year 12 children currently vaping. Globally, health agencies including the PHA are now having to develop clearer policies and advice around e-cigarette usage.

Discarded tobacco and vaping products also account for a significant proportion of local street litter

1.15 Research funded by the Department of Agriculture, Environment and Rural Affairs and published in July 2023 has also highlighted that tobacco and vaping products account for a sizeable proportion of street litter in NI. An estimated 1.19 million cigarette butts are scattered throughout NI at any one time (representing 10 per cent of overall litter), with vaping products accounting for a further 2 per cent of litter (similar to coffee cups and food litter). This presents environmental issues around increased manufacture of single use plastics, plastic pollution and waste from vape parts including lithium-ion batteries, and toxic battery acid and nicotine leaking into water supplies and wildlife habitats.

Scope of this report

1.16 Despite the reducing prevalence, smoking continues to cause a high number of local fatalities and significantly contributes to many serious illnesses, placing both significant operational and cost pressures on the local HSC sector and bringing wider economic and societal impacts, with the most deprived people greatest affected. As such, a concerted focus is still needed to try and further reduce local smoking levels. Stakeholders most now also assess the new challenges and potential risks posed by vaping and consider what responses may be required to address these.

1.17 The remainder of this report assesses:

- trends in smoking prevalence in NI over the last decade, and comparison of these with available information in the rest of the UK and the RoI, and assessment of key problem groups (**Part Two**);
- the measures, initiatives and strategies introduced locally to try and reduce smoking levels, performance against the most recent smoking prevalence reduction targets in NI, and developing issues around vaping (**Part Three**); and
- the effectiveness of key measures taken to try and support tobacco control, including those aimed at supporting existing smokers to quit, and the enforcement of tobacco and vaping control legislation (**Part Four**).

Part Two:

Smoking prevalence in Northern Ireland

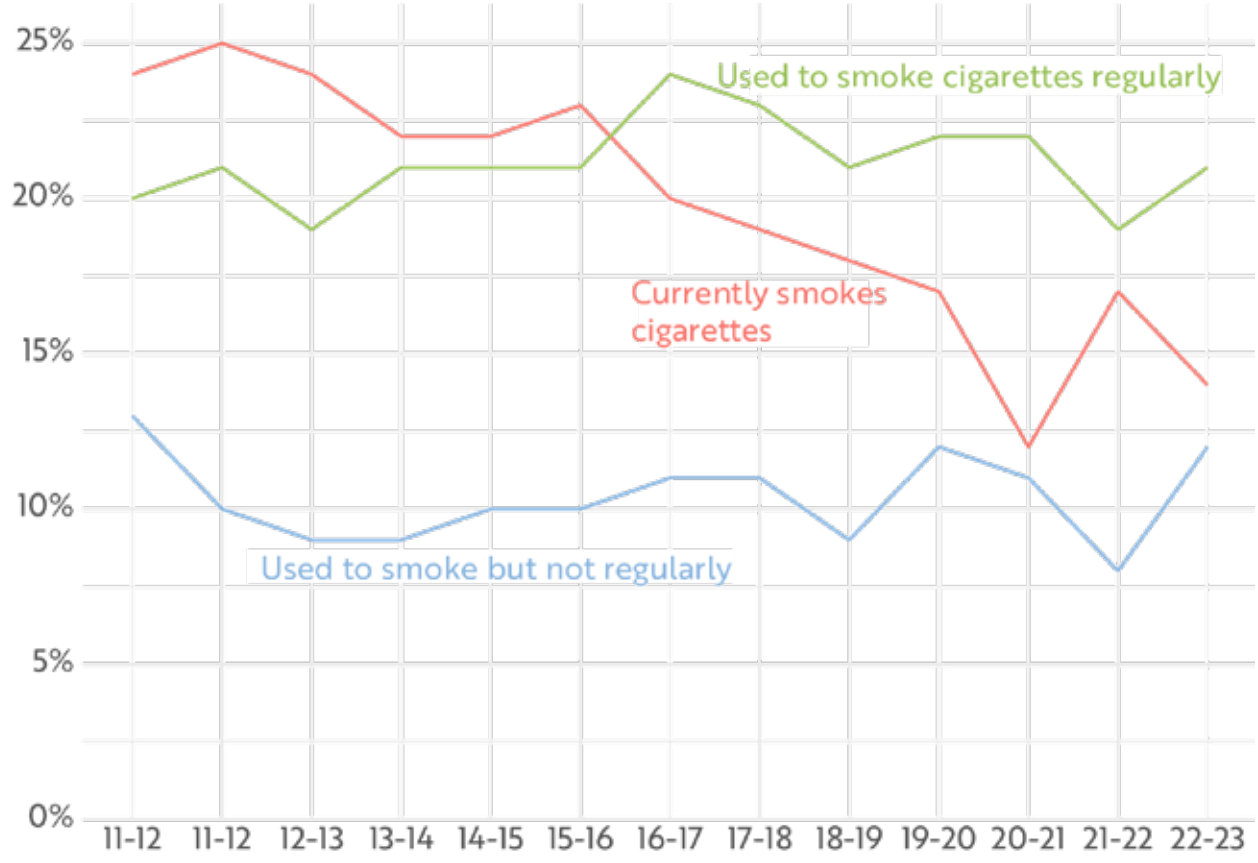
The overall smoking prevalence in NI has reduced by 10 per cent over the last decade, but remains relatively high amongst certain groups

2.1 The `Health Survey Northern Ireland' which DoH has undertaken annually since 2010-11 comprehensively monitors local population health, wellbeing and lifestyles through gathering information from a systematic and random sample of local address.

2.2 The results indicate that the overall prevalence of people aged 16 or over who currently smoke in NI has fallen from 24 per cent in 2010-11 to 14 per cent in 2022-23 , with the proportion who have never smoked increasing from 44 per cent to 53 per cent (**Figure 4**). The 2020-21 survey had suggested that the smoking prevalence had considerably reduced to 12 per cent. However, DoH acknowledges that caution should be applied over these results, as COVID-19 meant that data was collected via telephone calls rather than the usual face-to-face interviews, which may have altered population responses. Furthermore, the 18 per cent response rate was substantially lower than the 55 per cent normally achieved for face-to-face interviews.

2.3 Although the 2022-23 survey was also conducted via telephone interviews and caveats still apply to comparing its findings with previous trends, the 14 per cent prevalence indicated by it would represent a 10 per cent reduction over the last decade. The Department however acknowledges that trends will have to be continually monitored as surveys return to face-to-face interviews.

Figure 4: The overall smoking prevalence in NI has reduced from 24% to 14% over the last decade



Source: DoH NI Annual Health Surveys.

2.4 Underlying the overall improvement, smoking has also reduced notably amongst both males and females since 2010-11. Smoking levels have traditionally been higher amongst males, and the 2022-23 survey findings indicate that 15 per cent of males continue to smoke compared to 12 per cent of females (**Figure 5**).

Figure 5: Smoking has reduced notably for both males and females

	2010-11	2022-23	Difference
Currently smoke cigarettes (Males)	25%	15%	-10%
Currently smoke cigarettes (Females)	23%	12%	-11%
Never smoked (Males)	39%	48%	9%
Never smoked (Females)	48%	58%	10%

Source: DoH NI Annual Health Surveys

Smoking levels have reduced within all age groups and deprivation quintiles since 2011-12, but remain higher amongst people and in deprived areas

2.5 Smoking levels have also reduced across all age groups and deprivation quintiles since 2011-12. Despite this progress, they remain higher amongst people living in socially deprived areas. Whilst having considerably reduced, the 24 per cent prevalence within the most deprived quintile remains 17 per cent higher than the least deprived quintile (**Figure 6**).

Figure 6: Smoking prevalence by deprivation quintile in NI 2011-12 and 2022-23

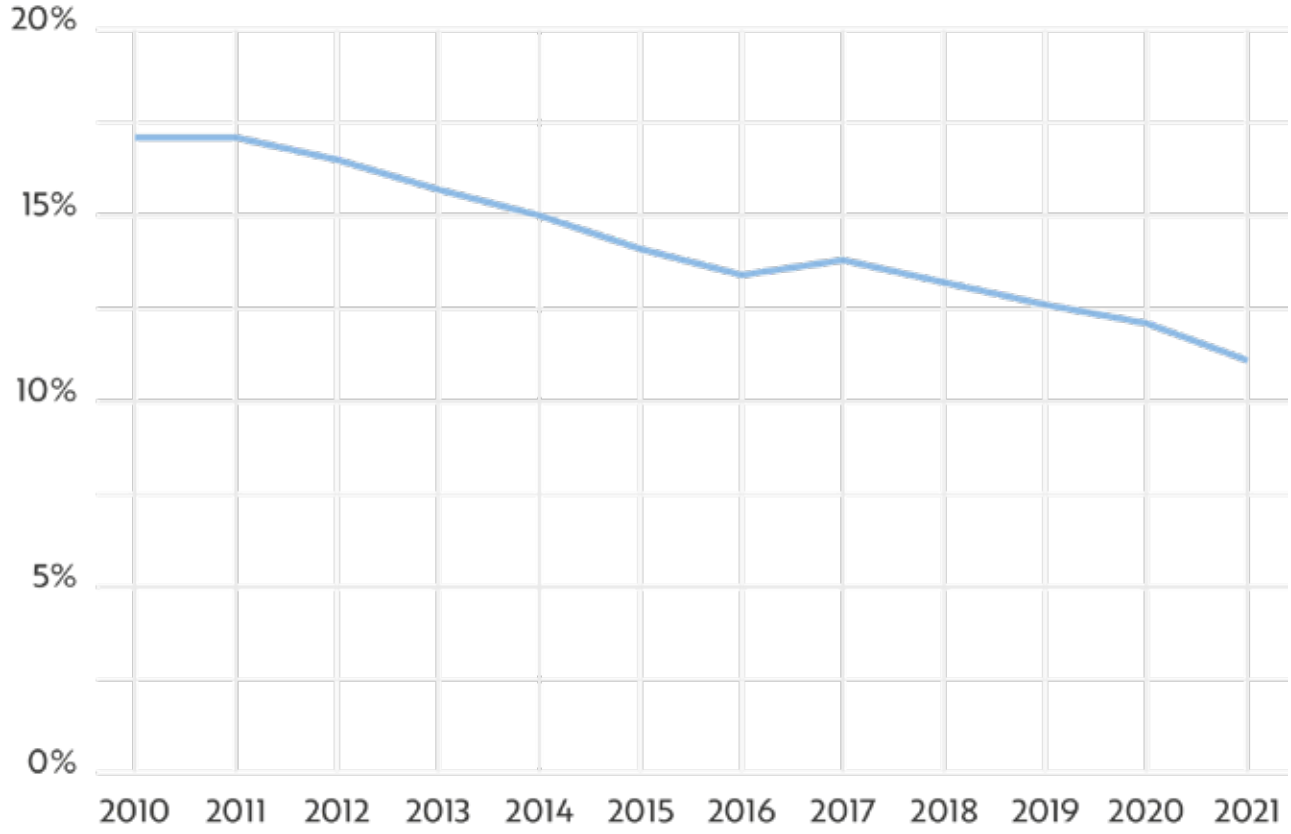
Deprivation quintile	2011-12	2022-23	% point reduction
Most Deprived	39%	24%	-15%
Quintile 2	26%	16%	- 10%
Quintile 3	23%	12%	-11%
Quintile 4	19%	11%	-8%
Least Deprived	18%	7%	-11%
Overall	25%	14%	-11%

Source: DoH NI Annual Health Surveys.

Around 2,200 women in Northern Ireland smoke each year during pregnancy

2.6 The `Health Inequalities Annual Report' (paragraph 1.10) shows that the overall proportion of women smoking during pregnancy has reduced from 17.1 per cent in 2010 to 11.1 per cent in 2021 (**Figure 7**). Although again encouraging, around 2,200 pregnant women continue to smoke annually in NI. The fact that all smoking prevalence information recorded by DoH is `self-reported' means there is some risk of under-reporting, but DoH considers that data for pregnant women smokers may be particularly prone to this.

Figure 7: Smoking prevalence amongst pregnant women has been reducing but still stands at 11%



Source: DoH Health Inequalities Annual Report 2023.

Socially disadvantaged areas continue to exhibit the highest prevalence of smoking in NI

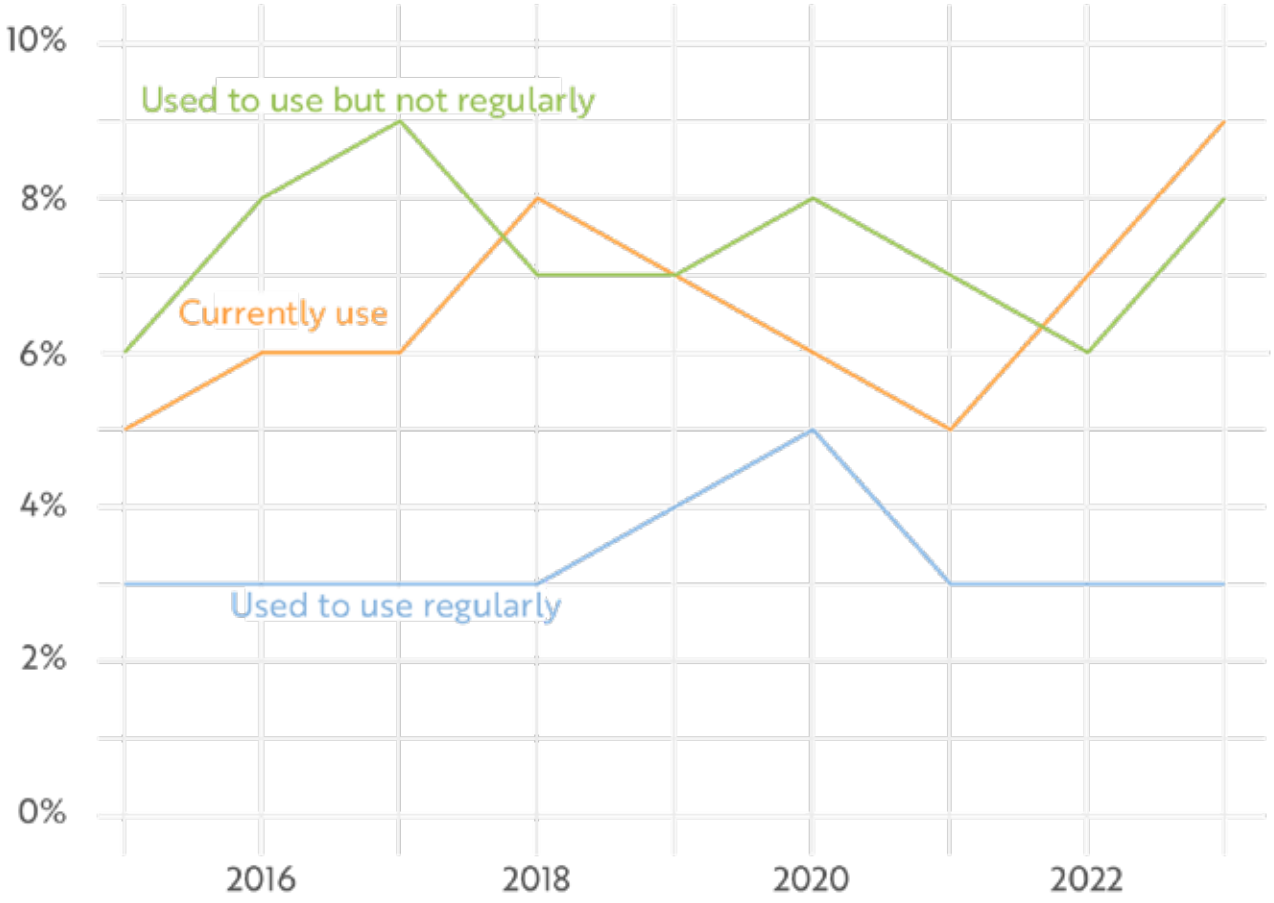
2.7 In summary, local smoking levels have reduced considerably across all fronts since 2010-11, indicating that anti-smoking measures promoted by DoH and the PHA have achieved positive results. However, prevalence remains higher amongst socially disadvantaged people, who have long had the highest smoking rates. A sizeable proportion of pregnant women also continue to smoke. Further targeted work which secures progress in these areas would bring both tangible health benefits to individuals and help ease the pressures which smoking places on the local HSC sector.

Whilst adult smoking rates have been falling, vaping levels have almost doubled since 2014-15

2.8 The Heath Survey has also measured e-cigarette usage (or vaping) in NI since 2014-15. Recorded adult population usage has almost doubled since then from 5 per cent, to 9 per cent in 2022-23 (**Figure 8**). Furthermore, vaping prevalence is much higher amongst the 16-24 and 25-34 age groups (20 per cent and 14 per cent respectively).

2.9 E-cigarettes do not contain tobacco but do contain nicotine. Vaping is still a relatively recent development, but the latest health survey results indicate that whilst smoking is reducing amongst adults, vaping levels are rising, potentially due to more adults starting vaping to try and reduce their smoking levels or stop altogether. Whilst research has tended to support this approach, conclusive evidence on associated health impacts is still emerging, particularly around any long-term harm. Part 3 of this report assesses issues around e-cigarettes in greater detail, including recent evidence of vaping also increasing amongst local children.

Figure 8: Vaping amongst adults has increased from 5% to 9% since 2014-15



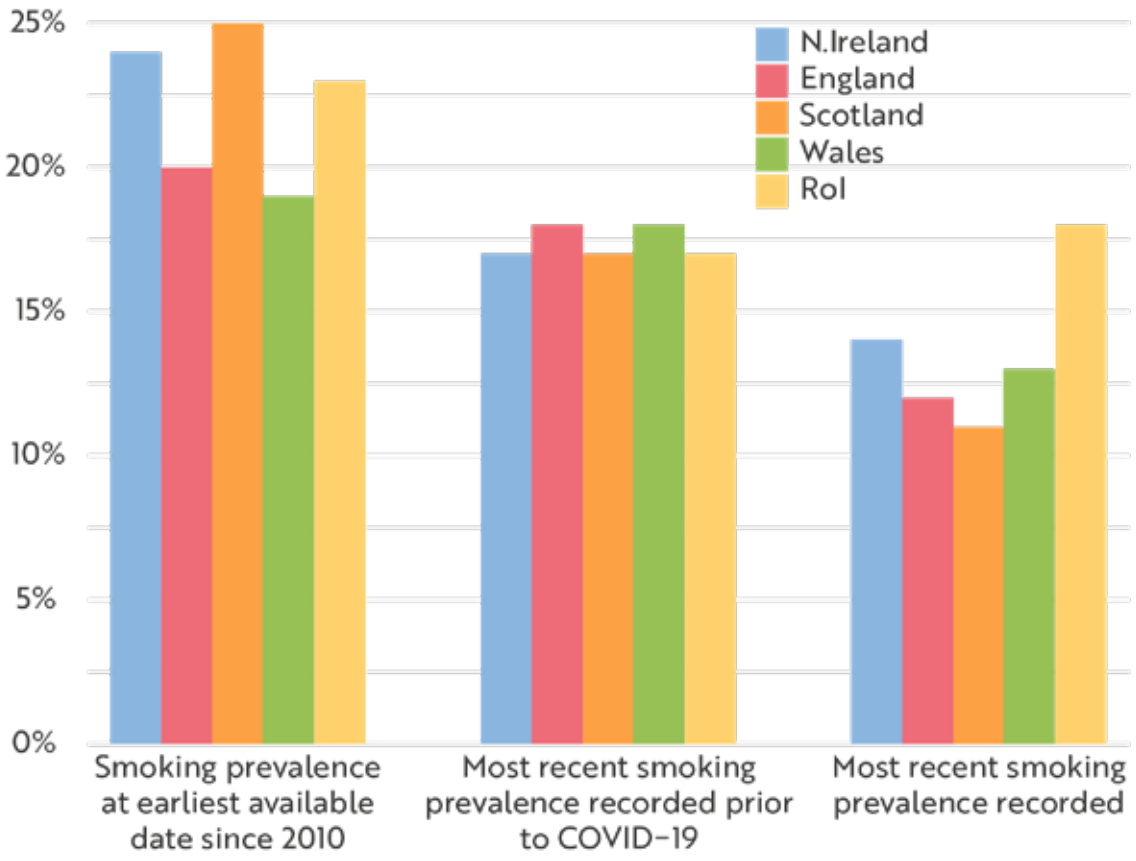
Source: DoH NI Annual Health Surveys.

Latest health survey information indicates NI has a slightly higher smoking prevalence than England and Wales but lower than in Scotland and the RoI, however further information is required to inform stakeholders

2.10 To fully assess NI trends, local data also needs to be compared with smoking levels across the United Kingdom (UK) and the Republic of Ireland (RoI). The `Health Survey England', `Scottish Health Survey', and `National Survey for Wales' measure smoking prevalence across the rest of the UK. Alongside its own survey, DoH views these as the official source of UK smoking prevalence data. Data for the RoI is obtained through the `Healthy Ireland' survey.

2.11 As questions and methodologies within the surveys vary, some caution needs to be applied when benchmarking data. The latest results indicate that the smoking prevalence across the UK is broadly similar, although significantly higher in NI (14 per cent) than England (12 per cent). Similar to NI (paragraph 2.2), COVID-19 has hampered data collection across other countries, with heavy reliance on telephone interviews again creating some uncertainty around comparing results. The most recent analysis based on solely face-to-face interviews before the pandemic indicated that all UK regions had a broadly similar smoking prevalence (either 17 or 18 per cent) (**Figure 9**).

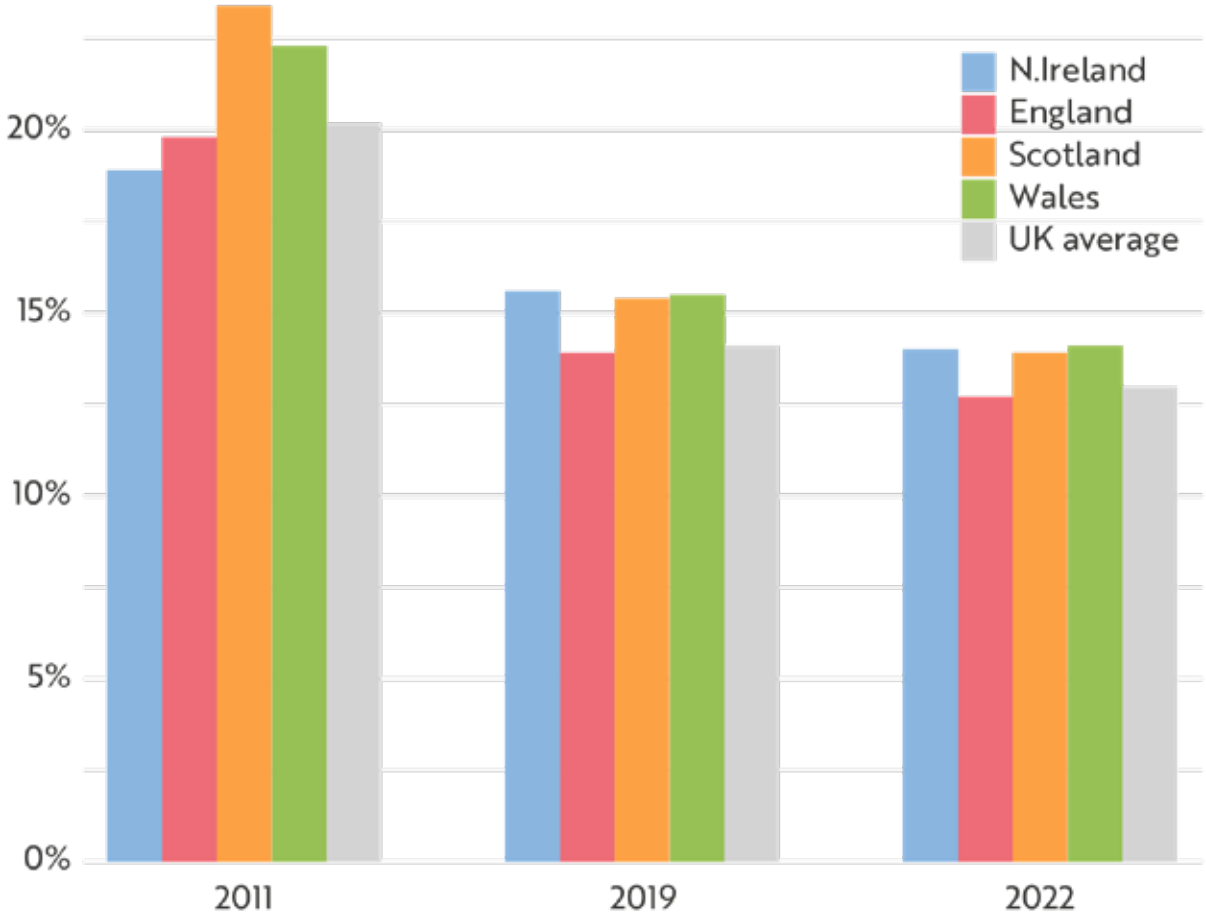
Figure 9: Comparison of smoking prevalence rates across the UK and RoI



Source: Annual Health Surveys in NI, The Health Survey England, Scottish Health Survey, National Survey for Wales, Healthy Ireland survey.

2.12 The Office of National Statistics (ONS) also gathers survey data on UK-wide smoking prevalence for adults aged 18 or over. Although viewing the UK health surveys as the official smoking prevalence source, DoH recognises that the ONS data provides useful comparisons, as it applies a consistent UK-wide methodology. ONS surveys during the pandemic also significantly used telephone interviews . The most recent 2022 results (based on 95 per cent confidence intervals) found that all four countries were grouped relatively close together with NI (14 per cent) having the second highest smoking levels for this age group compared to Wales (14.1 per cent), Scotland (13.9 per cent) and England (12.7 per cent). The final ONS survey before the pandemic (2019) suggested that NI had a significantly higher smoking prevalence than England (**Figure 10**).

Figure 10: ONS measurement of smoking prevalence across the UK (age 18 and over) 2011 to 2022



Source: Adult Smoking Habits in the UK (ONS).

2.13 The way in which surveys had to be conducted during the pandemic has blurred measurement and comparison of UK and RoI smoking levels, and further information is likely required to draw firm conclusions. This could assist the Department and the PHA to better understand current adult smoking levels in NI and its comparative standing, and confirm which groups continue to present the greatest challenges in further reducing prevalence. The Department agrees that such analysis would be beneficial but pointed out that in addition to the results derived from the annual health survey, this might require separate bespoke research.

2.14 It is also not currently possible to directly benchmark NI smoking prevalence for individual groups, including socially deprived people, pregnant women, and young people, with the rest of the UK, as data is gathered differently. For example, there is currently no UK-wide deprivation ranking measure, and the way information on smoking amongst local children in school years 8 to 12 is gathered in NI is not fully comparable with other UK surveys. DoH statisticians are currently participating in a UK-wide group which is aiming to foster statistical harmonisation and identify opportunities for greater coherence.

Recommendations

Recommendation 1

All countries would benefit from having smoking prevalence data which is as uniform as possible to accurately benchmark their relative standing. DoH and the PHA should attempt to further work with the other stakeholders responsible for the various health surveys to try and develop compatible data and ongoing benchmarking of smoking prevalence across the UK and RoI, and annual reporting on this.

"Whilst smoking levels have been reducing, vaping amongst adults and children is increasing. Stakeholders must also now identify the new risks and challenges presented by vaping, and strategically address these in an ongoing and reactive manner."

Northern Ireland Audit Office

Part Three:

Tobacco control strategies and targets and the emergence of vaping

The Department and the PHA published a ten year `Tobacco Control Strategy' in 2012

3.1 Stakeholders face challenges in reducing smoking levels as the decision to commence or stop essentially rests with individuals. Nonetheless, DoH and the PHA are responsible for formulating local smoking-related policy, including measures aimed at lowering smoking levels. A `Tobacco Action Plan' (the plan) published by DoH in 2003 represented the key strategic tobacco control document in NI until early 2012.

3.2 Various important local tobacco control measures were delivered over the plan's lifetime, including:

- introducing legislation in April 2007 to protect the population from exposure to Second Hand Smoke (SHS) in enclosed public and workplaces, and further legislation in 2008 which raised the age of sale for tobacco products from 16 to 18 years, given evidence that 80 per cent of smokers start before turning 16; and
- increasing the availability of specialist smoking cessation services to greater numbers of smokers wishing to quit, and the availability of pharmaceutical interventions, including making Nicotine Replacement Therapy (NRT) available on prescription.

3.3 Over the period covered by the plan, the overall local smoking prevalence reduced by 3 per cent from 27 per cent to 24 per cent. Although the plan had initially been due to expire in 2008, DoH did not review its implementation and impact until October 2009. It concluded that the key to achieving further significant reductions in smoking prevalence was to deter young people from starting the habit and to find innovative ways of encouraging and motivating existing smokers to quit.

3.4 The review suggested extending the plan for a further five-year period (to late 2014). However, the Department also established a working group in 2009 to commence work on developing a new local longer-term strategy. This work culminated in it publishing the '10 year Tobacco Control Strategy for Northern Ireland' (the TCS or the strategy) in February 2012. The previous plan continued to serve as the official policy document for a further four years until this date.

3.5 The refreshed strategy's overall aim was to achieve a tobacco-free society. It acknowledged that much remained to be learned about international best practice to secure further success, stating that "*given certain conditions, significantly greater inroads could be made into reducing smoking prevalence in Northern Ireland.*" The strategy reaffirmed a previously identified need to reduce the very high smoking rates among deprived socio-economic groups and manual workers. Its main objectives and target groups are summarised in **Figure 11**.

Figure 11: Key objectives and groups identified by the 2012-2022 Tobacco Control Strategy

Key objectives	Key groups identified
Fewer people starting to smoke	Children and young people
More smokers quitting	Disadvantaged people who smoke
Protecting people from tobacco smoke	Pregnant women, and their partners, who smoke

Source: Tobacco Control Strategy, DoH (2012).

3.6 To achieve these objectives, the TCS outlined various priorities, summarised at **Figure 12**.

Figure 12: Priorities for the Tobacco Control Strategy's three objectives

Key Objectives	Priorities outlined by the Strategy
Fewer people starting to smoke	Preventing young people starting, through: reducing the impact of tobacco promotion; raising awareness about effects on health by using public information and education; and reducing availability.
More smokers quitting	Encouraging people to access local specialist cessation services. The interventions available (brief opportunistic advice and specialist cessation services), supported by public information and signposting, needed to be targeted at children and young people, and high prevalence groups.
Protecting people from tobacco smoke	Until a tobacco-free society was achieved, appropriate measures were required to protect people from harm caused by exposure to second hand smoke (SHS).

Source: Tobacco Control Strategy, DoH (2012).

3.7 A multi-agency ` Tobacco Strategy Implementation Steering Group' (TSISG) was established in mid-2012 to lead strategy implementation. One of its objectives was to provide the PHA with advice and strategic direction over developing an action plan for the TCS, but this proved protracted, and available records indicate that an initial plan, based around the MPOWER best practice model[6], was not finalised until 2015. The TCS envisaged that the plan would have been developed sooner as it had stated that it would be formally reviewed in 2015 to assess progress against its objectives and targets and help inform any redesign necessary to align with the revised Programme for Government. It also stated that an evaluation framework would be developed to help measure the plan's effectiveness. However, the PHA acknowledges that neither of these steps was taken.

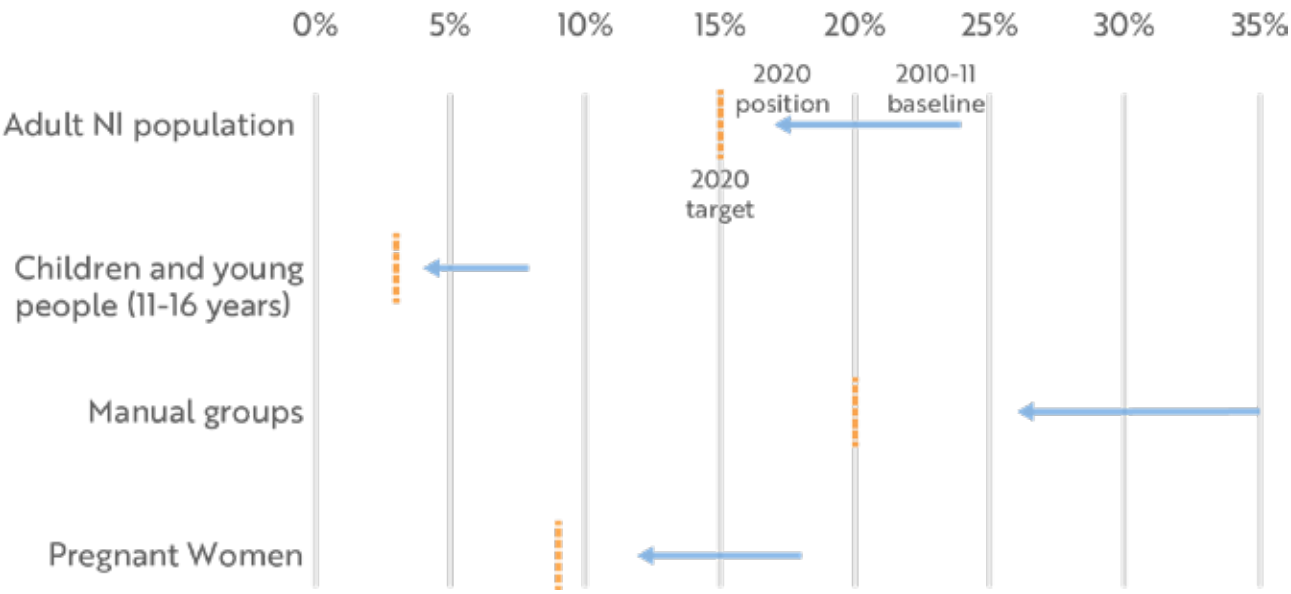
A mid-term review of the strategy was not completed until 2020, and whilst a 2023 end-term review confirmed none of the four smoking reduction targets were achieved, smoking levels have further reduced since then

3.8 In practice, a `mid-term' review (MTR) of the strategy was not completed until early 2020 (only two years before the strategy was due to expire). The Department had intended completing this sooner but was unable to progress it because staff were transferred to emergency planning activity, including preparations for EU Exit. An earlier review may have allowed emerging research and best practice around tobacco control to have been identified and considered for implementation sooner. Nonetheless, the MTR highlighted considerable work delivered or ongoing to support the strategy's three main objectives (summarised at **Appendix 1**).

3.9 Whilst the strategy had been scheduled to expire in February 2022, DoH extended its lifetime in October 2021 until February 2024, to allow for a final review (FR), and to develop a successor strategy. Published in September 2023, the FR reviewed progress against the strategy's four smoking reduction targets. The main target was to reduce the overall NI smoking prevalence from 24 per cent in 2010-11 to 15 per cent by 2020, alongside supporting targets aimed at the three identified high-risk groups (children and young people, manual workers and pregnant women). However, whilst smoking had reduced amongst all four groups, none of the targets were achieved by the required dates (**Figure 13**).

6 The MPOWER model which has been developed by the World Health Organisation involves a need to: Monitor tobacco use; Protect people from tobacco smoke; Offer to help stop smoking; Warn about the dangers of smoking; Enforce bans on tobacco advertising and promotion; and Raise taxes on tobacco products.

Figure 13 - all 4 of TCS's key smoking cessation targets by 2020 were missed



Source: DOH FR of Tobacco Control Strategy.

3.10 Positively, as Part 2 outlined, smoking prevalence in NI has further reduced since the FR was published. The overall 14 per cent prevalence recorded for 2022-23 means that the 15 per cent target set for 2020 has subsequently been met. More recent survey results have also found that smoking amongst children had further reduced to 2 per cent, the lowest ever recorded. Going forward, DoH will still need to identify suitably revised targets for further reducing smoking levels in NI and confirm which groups present the greatest opportunity for achieving this. The latest prevalence recorded for manual workers is 25 per cent from 2021-22. When available, updated data for 2022-23 will help confirm if this remains a key high prevalence group.

Despite delays in introducing key measures to address the impact of Second Hand Smoke, these are now in place

3.11 The period of the strategy saw notable delays in progressing regulations for banning both smoking in private vehicles with children present and selling e-cigarettes to people aged under 18. Draft legislation prepared by DoH in 2016 for these measures had not been ratified by the NI Assembly before it collapsed in January 2017. Whilst the necessary legislation for both measures was introduced in February 2022, this was significantly behind the rest of the UK (October 2015 in England and Wales, and April 2017 in Scotland).

3.12 Despite these delays, the ban on smoking in cars with children present, alongside the 2007 smoke-free legislation (paragraph 3.2) represented notable measures in addressing the impact of SHS. Further progress against this objective is evidenced by the annual health survey recording an increase in the proportion of respondents reporting that smoking was not allowed in their home, from 72 per cent in 2010-11 to 86 per cent in 2018-19.

The emergence of vaping has presented new challenges for stakeholders, with increased prevalence emerging amongst both adults and children

3.13 As e-cigarette usage (or vaping) was at an early stage when the TCS was published in 2012, the document contained minimal reference to this. Since then, the TSISG has regularly discussed emerging issues around vaping from 2015 onwards. E-cigarettes contain varying amounts of nicotine but do not contain tobacco. The Department acknowledged in its 2020 MTR that vaping had prompted intense global public health debate, with conflicting evidence and reports published, and with international health experts struggling to agree on the benefits or otherwise of people vaping to help them quit smoking. The research then available was mixed but mainly beginning to support this as a smoking cessation approach, albeit that there was inadequate evidence on potential long-term health effects. Some examples of research undertaken between 2015 and 2019 are provided at **Figure 14**.

Figure 14: Examples of research conducted into vaping 2015 to 2019[7]

Source	Research around e-cigarette usage
Large-scale international study on the effects of e-cigarettes (2018)[7]	**Positive** - found conclusive evidence that completely substituting tobacco cigarettes with e-cigarettes reduced users' exposure to numerous toxicants and carcinogens. **Concerns** - concluded that their use could not yet be categorised as either beneficial or harmful, and noted that almost all e-cigarettes contained potentially toxic substances.
Public Health England (PHE) evidence review (2015)	**Positive** - concluded that e-cigarettes were around 95 per cent less harmful than smoking and could potentially assist smokers to quit, and found no evidence that they acted as a route into smoking for children or non-smokers.
Further PHE review (2019)	**Positive** - proposed combining e-cigarette usage with conventional smoking cessation services as a recommended option available for all smokers. Also stated compelling evidence existed for making licensed e-cigarettes available on prescription.
WHO review (2019)	**Concerns** - concluded that "*evidence on the use of Electronic Nicotine Delivery Systems (ENDS) as a potential cessation aid is still being debated. Some evidence has suggested that ENDS may work as a cessation aid for some people. However, the evidence required to support the role of ENDS as an intervention at population scale is limited.*"

Source: NIAO, based on research between 2015 and 2019.

7 Review published by the National Academies of Sciences, Engineering and Medicine which drew on over 800 scientific studies.

3.14 As paragraph 2.8 outlined, adult vaping levels in NI reported by the annual health survey have increased from 5 per cent in 2014-15 to 9 per cent in 2022-23, with much higher levels of 20 per cent amongst 16-24 year olds and 14 per cent for 25-34 year olds. The 2022-23 survey found that 44 per cent of e-cigarette users considered that this had helped them completely quit smoking, with 31 per cent stating that it had helped reduce their normal smoking levels.

3.15 The MTR stated that DoH and the PHA would continue monitoring and reviewing ongoing research on vaping. DoH has subsequently endorsed revised tobacco control guidelines published by the National Institute for Health and Care Excellence (NICE) in November 2021, which concluded that e-cigarettes were an effective smoking cessation method, and that people seeking to stop should be provided with advice on accessing them. However, there are currently no plans in NI to provide e-cigarettes through smoking cessation services, unlike England, where a "Swap to Stop" scheme is providing around a million smokers (almost one in five) with free vaping starter packs during 2023 and 2024.

3.16 Globally, as vaping levels continue rising, public health agencies, including the PHA, are now tasked with developing more conclusive guidance on vaping which balances potential benefits with the ongoing uncertainty around longer-term health impacts. Unlike the rest of the UK, the PHA has not yet formally stated that vaping is safer than smoking tobacco (**Appendix 2**). However, aware of the need for clear communication around potential health risks, especially with young people, and to further inform local policy development, DoH has commissioned the Institute of Public Health (IPH) to assess the international evidence base on vaping and associated health implications, initially focusing on children and young people. This work is scheduled for completion by late 2023.

3.17 Whilst continuing uncertainty over longer-term health impacts means that all UK public health bodies agree that children should not vape, and it has been illegal to sell e-cigarettes to people under 18 since February 2022, evidence indicates that vaping amongst children in NI is increasing. A 2022 NICS-commissioned survey found that 9 per cent of local 11-16 year olds were using e-cigarettes compared to 6 per cent in 2019, with 6 per cent vaping regularly (at least weekly) compared to 3 per cent in 2019. It also identified a very high prevalence amongst older children, with 24 per cent of Year 12 children currently vaping and 17 per cent doing so regularly. This trend is in contrast to reductions in recent years in smoking amongst children (paragraph 3.10).

3.18 Research published in March 2020[8] found that whilst local young people perceived vaping as a healthier option than smoking, 80 per cent stated they had not received any school education around it. The FR acknowledged growing concerns about the recreational use of e-cigarettes, particularly around disposable products which are low cost, attractively packaged, available in various flavours, and appear to appeal to young people. The PHA has also received significant representation from schools and parents in recent years around children vaping. Whilst it has begun developing education and communication materials around vaping harms and is considering a pilot vaping / smoking cessation service for young people, this work is at an early stage. The FR has acknowledged that a successor strategy will need to address vaping in greater detail and set out clearly any required strategic response.

8 Research commissioned by NI Chest, Heart & Stroke and carried out by Ulster University.

Recommendation 2

In what has become a fast-moving environment, more regular information on local vaping levels amongst children is required to inform ongoing consideration on the necessary responses required to address this, and DoH and the PHA should consider moving to annual measurement of this area.

DoH acknowledges limited progress has been made in implementing recommendations from the mid-term review

3.19 As they were completed within a relatively close timeframe, the MTR and FR unsurprisingly arrived at broadly similar conclusions, highlighting that although the 2020 targets were missed, smoking prevalence had still reduced across all target groups. Both also acknowledged the continuing high socio-economic inequalities around smoking prevalence, with stakeholder engagement during the FR also flagging this up as a key ongoing issue and with stakeholders considering that a sufficiently clear model had not yet been developed to meet targets for this priority group.

3.20 Taking account of the strategy's limited remaining lifespan, and the latest evidence, the initial February 2020 MTR had compiled 17 recommendations which it believed could be progressed immediately, including the measures outlined at **Figure 15**.

Figure 15: Key recommendations from the mid-term review of the Tobacco Control Strategy

TCS objective	Recommendations
Priority groups	Develop action plan and targets around smokers with mental health issues.
Fewer people starting to smoke	Further work required around: • HSC providers interfacing with children • developing family and community programmes • refreshing design and delivery of school-based programmes • establishing mechanisms for engaging with HMRC around illicit tobacco.
More people quitting	Give further consideration to: • expanding stop smoking interventions within HSC settings, given current success rates there • progressing workplace-based programmes • further training and skills development for smoking cessation service providers, reflecting effective UK and RoI practice • adopting best practice and actions applied in the rest of the UK (particularly Scotland) around disadvantaged communities • monitoring UK and RoI developments around e-cigarettes.
Protecting people from tobacco smoke	Further work to: • explore potential of third level education establishments and local prisons adopting smoke free policies • developing evidence relating to expansion of smoke free policy and regulations (including UK and RoI best practice), along with learning from current smoke free legislation, to assess applicability to NI.

Source: DOH mid-term review of Tobacco Control Strategy.

3.21 However, the subsequent FR highlighted that whilst a revised action plan issued in 2022 had attempted to reflect these recommendations, they were not all integrated into this, and that implementation of the recommendations had generally not been at the pace envisaged, citing the disruption caused by COVID-19. It stated that a successor strategy would need to revisit recommendations from both the MTR and the subsequent FR. This however means that the implementation of planned improvements remains behind schedule.

In addition to considering its response to vaping, DoH is assessing if any new strategy will also have to address smokers with mental health issues and whether a target date should be set for NI to become totally smoke-free

3.22 In addition to the groups prioritised within the TCS, both reviews flagged up the high smoking prevalence amongst people with mental ill-health issues. They highlighted evidence that probable clinical depression was four times more common among current smokers than those who had never smoked, and 2022-23 Health Survey findings that respondents with a high GHQ12 score (which indicates a possible psychiatric disorder) were more likely to be current smokers (24 per cent) than those with low scores (10 per cent).

3.23 The MTR had recommended formulating a short-term action plan and potential targets for the group and considering if it should be designated as a further priority group in any successor strategy. However, given the lack of progress in implementing these recommendations, DoH commissioned the IPH to complete further research during the FR. This confirmed evidence of a strong relationship between mental-ill health and smoking in NI. DoH now intends using the available information to support decision making on actions required, and considering if the group should be afforded priority status within a future strategy.

3.24 The high prevalence of mental ill-health in NI (around 20 per cent of the adult population) means that it likely includes sizeable numbers of smokers. Using available information, we estimate this could amount to around 85,000 people aged 16 and upwards. As such, effective measures to address this group offers scope to contribute to further reducing the overall local smoking prevalence.

3.25 The FR also highlighted how many tobacco targets elsewhere are now based around `end-game approaches' involving achieving smoke-free status by specific target dates, rather than incremental smoking reduction targets. Such targets, which aim to reduce prevalence to 5 per cent or lower, have already been set across Great Britain (GB) and the RoI. Although the TCS's key objective was to deliver a tobacco-free society in NI, it fell short of achieving this. Whilst DoH will now consider setting `end game' targets, this alone does not guarantee success, with latest trajectories suggesting England, Scotland and Wales may struggle to achieve their target dates. The RoI (with a current 18 per cent prevalence) will also almost certainly not achieve this by its 2025 target date (**Figure 16**).

Figure 16: Smoke-free status targets set in rest of UK and RoI

Country	Date target set and nature of target	Most recent recorded smoking prevalence
England	Target set in 2019 to achieve a smoking prevalence of 5 per cent or less by 2030.	Awaiting latest data
Scotland	Target set in 2013 to achieve a smoking prevalence of 5 per cent by 2034.	15% (2022)
Wales	Target set in 2021 to achieve a smoking prevalence of 5 per cent or less by 2030.	13% (2022-23)
Ireland	Target set in 2013 to achieve a smoking prevalence of 5 per cent or less by 2025.	18% (2022)

Source: NIAO, based on UK and Ireland targets and published prevalence data.

3.26 With the previous smoking reduction targets now lapsed, and the overall NI smoking prevalence having reduced to 14 per cent, DoH and the PHA must assess what updated targets need to be set, including whether these should focus on achieving a tobacco-free society. Whilst the last decade has seen progress, working towards this objective would likely prove challenging and require further success amongst groups which have traditionally proved hardest to influence, including people from disadvantaged areas and manual workers. A new strategy will also have to set out a strategic roadmap for addressing the emerging issues around vaping.

3.27 Work is now ongoing on developing a revised strategy, with an anticipated publication date of late 2024. DoH highlighted that in extending the TCS, it is still working to achieve improvements. However, development of the new strategy needs to proceed as a priority, given that for various reasons, previous deadlines have slipped:

- The 2003-08 plan was extended until 2012 pending development of a new strategy.
- Development of the action plan for the 2012-22 TCS was protracted, and an MTR of it was not completed until 2020, with limited subsequent progress to date in implementing its recommendations.
- The most recent strategy was scheduled to expire in 2022 but was extended until early 2024 pending development of a replacement document.

Recommendation 3

Alongside updated tobacco control measures and targets, any new strategy should also give coverage to the rapid emergence of vaping , including assessing benefits in assisting adult smoking cessation whilst also discouraging non-smokers and children from vaping. The strategy should also clearly outline how and when the success of the various interventions will be evaluated and reported on and be subject to a timely interim progress review.

Recommendation 4

In addition to setting revised smoking reduction targets, including considering if a smoke-free date should be set for NI, new targets for reducing vaping amongst children should be considered as more information on health impacts becomes available. Arrangements for flexibly monitoring emerging evidence on vaping and developing timely responsive actions, including potentially enhancing school education programmes, should be established.

Recommendation 5

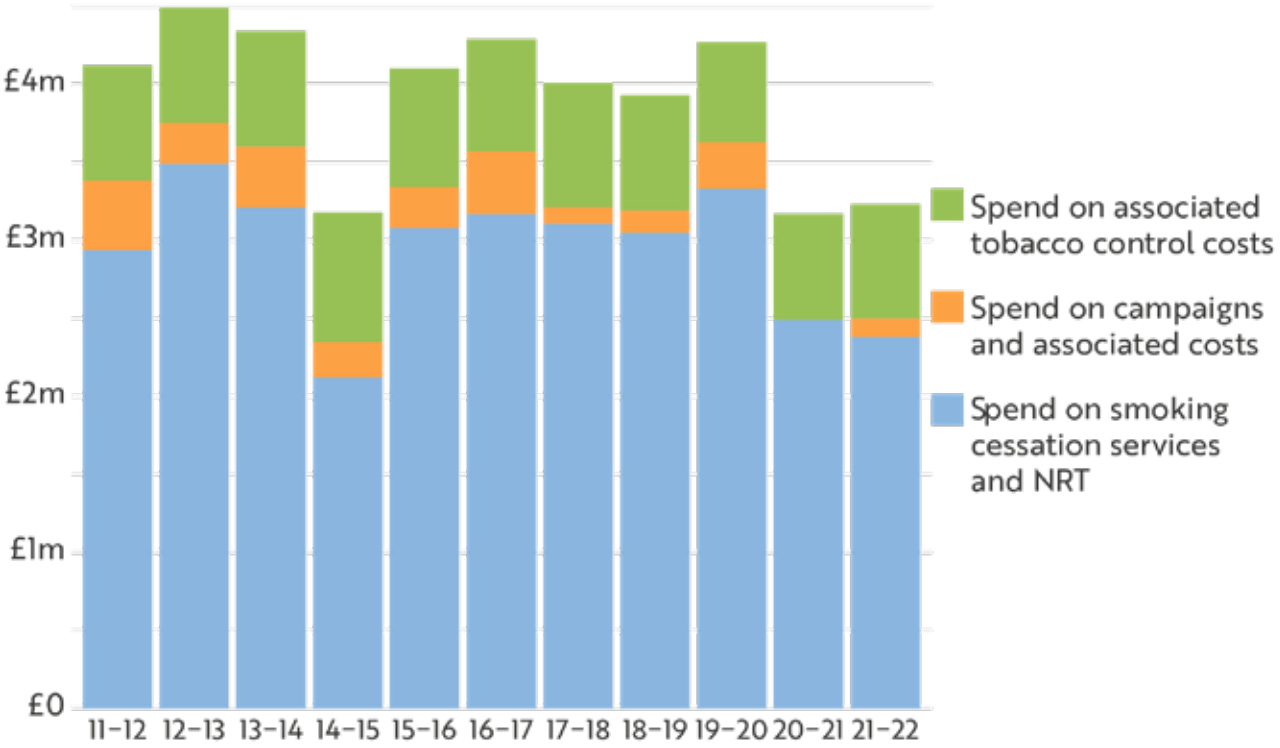
Future initiatives to reduce smoking levels must be heavily prioritised towards addressing socially disadvantaged areas and, as there may be significant crossover, people with mental ill-health. DoH and the PHA should assess which aspects of ongoing work are proving successful and need to be continued or expanded, and also: identify best practice interventions elsewhere which have demonstrably proved effective in addressing these groups; assess their suitability for local implementation; and prioritise measures which could deliver greatest impact.

The PHA has spent between £3.2 and £4.5 million annually on tobacco control over the last decade, but a very high proportion of this is directed towards encouraging existing smokers to quit, with much lower spend on media campaigns and prevention measures

3.28 Whilst DoH allocates the PHA an overall annual budget, the PHA internally determines its spend on tobacco control measures. The PHA's annual tobacco control budget between 2011-12 and 2021-22 has fluctuated between £3.2 and £4.5 million. The many public health priorities mean that it has significant competing demands, and the £3.2 million allocated in 2020-21 represented just 2.4 per cent of its overall £131.1 million net expenditure and 3.9 per cent of its net commissioning expenditure. Whilst this is a small proportion of its budget, benchmarking this with funding levels for tobacco control elsewhere in the UK is problematic, due to differing delivery structures.

3.29 Since 2011-12, the PHA has typically spent between 71 and 78 per cent of its tobacco control budget on specialist smoking cessation services and the associated use of Nicotine Replacement Therapy (NRT), which aim to encourage existing smokers to quit (**Figure 17**). However, the support directed at current smokers is even higher as some funding from other streams (associated tobacco control costs and campaign costs) is also aimed at them. Precise analysis is not feasible as these figures cannot be disaggregated, but if half of the other expenditure supports existing smokers, 87 per cent of the 2021-22 budget would have been spent on this group.

Figure 17: PHA expenditure on tobacco control 2011-12 to 2021-22



Source: PHA.

3.30 Despite receiving a large share of the budget, uptake and the number of people successfully quitting through smoking cessation services has fallen steeply over the last decade (Part 4 further examines this). Whilst the current budget also supports other activities, including local council enforcement of tobacco control regulations, primary school education programmes, and carbon monoxide monitoring for pregnant women, limited funding is usually available for measures aimed at discouraging people from starting smoking. The PHA told us that spend on cessation services largely reflects the high smoking prevalence in NI but also stated that it is committed to reviewing spending levels on preventative strategies targeted at young people.

3.31 In contrast to the sustained support provided to smoking cessation services, funding allocated towards tobacco-focused media and publicity campaigns has been reducing significantly in recent years. Aside from 2019-20 when £0.3 million was allocated, this area generally received only £0.1 to £0.14 million of annual funding between 2017-18 and 2021-22. No funding was provided in either 2020-21 or 2023-24 (with the latter year reflecting a spending freeze imposed on mass media campaigns). Part 4 of this report highlights evidence that, when deployed, these campaigns have impacted strongly with the smoking public, in terms of recognition and behavioural influence. During the FR, stakeholders expressed the view that insufficient resources meant social marketing campaigns were underpowered.

3.32 DoH's FR highlighted that as development of a successor strategy is commencing when considerable pressures remain on public funds, it is likely that, at least in the short-term, prioritisation of measures will be inevitable. However, in our view, the need for any revised local strategy to properly consider the issues and potential concerns around vaping, whilst still maintaining a focus on further reducing smoking prevalence, calls into question whether current funding levels will be sufficient to support the development and delivery of such an expanded strategy.

Recommendation 6

In developing a potentially enhanced strategy which addresses both key tobacco control work and vaping, DoH and the PHA should cost the funding required to fully deliver all the proposed measures and determine if this area merits increased support to try and achieve further progress. They should also reassess the continued merit of allocating such a high proportion of budget funding to the specialist smoking cessation services and NRT, and whether increased support should be provided to advertising campaigns. Proposed actions should be ranked and prioritised so that if funding constraints prevent full implementation, areas of greatest priority and impact can be progressed.

Part Four:

Key tobacco control activities

4.1 This final section considers some key activities which aim to support local tobacco control efforts:

- the use of brief intervention advice by the HSC sector to encourage existing smokers to quit;
- specialist smoking cessation services;
- the PHA stop smoking website and use of `quit kits'; and
- enforcement of tobacco and vaping control legislation by local councils.

As well as ensuring people do not start smoking, measures to help existing smokers to quit are required

4.2 The nine per cent increase between 2010-11 and 2022-23 in the proportion of people who have never smoked in NI demonstrates important progress in persuading people not to start. However, measures which support existing smokers to stop are also key. Surveys indicate that around three-fifths of local current smokers want to quit[9]. The 2022-23 Annual Health Survey found that 78 per cent of current smokers have tried stopping at some stage. Less positively, 40 per cent of smokers either knew they should stop but didn't really want to (20 per cent), or simply don't want to quit (20 per cent). The highly addictive nature of nicotine means most smokers require several attempts before successfully quitting.

Arrangements for delivering brief opportunistic advice to smokers and reporting outcomes need to be strengthened

4.3 One measure aimed at existing smokers involves healthcare staff providing them with `brief opportunistic advice' (BOA) during their routine contact with them (including when treating illnesses unrelated to smoking). It generally involves guidance on stopping, assessing the individual's commitment to quitting, providing self-help material, and potentially referring patients to more intensive support including specialist cessation services.

4.4 The PHA recognises the merits of BOA but has incomplete information on its local roll-out. Data between 2013-14 and 2017-18 indicates that an annual target for 2,080 HSC staff to be provided with brief intervention training was mainly exceeded, with over 3,700 trained in 2017-18. However, a key underlying annual target for training 1,040 staff from defined groups including GPs, specialist nurses, practice midwives and health visitors (who interact significantly with high prevalence smoking groups) was not met in any year during this period, with only 367 and 683 staff trained in 2016-17 and 2017-18. Available 2017 records also indicate that training for specialist cancer nurses had then stalled at 50 per cent. The PHA is currently seeking to compile updated data on staff training. Cancer Focus NI told us that it is aware of issues arising around HSC bodies being reluctant to release staff to complete training to deliver BOA due to workforce and capacity pressures, and pointed out that such training is not currently mandatory within the HSC sector.

4.5 There is also limited data on the number of people being provided with BOA. The PHA highlighted that the trusts have faced challenges in delivering this advice, with the Southern Trust reporting in 2023 that "staffing pressures and a lack of opportunity for delivery" had stymied the ability to ensure patients were receiving it.

9 Health Survey Northern Ireland: Smoking Trends 2010-11 to 2019-20.

4.6 The PHA acknowledges that arrangements for providing BOA, and for recording outcomes, need to be strengthened. Its current Corporate Plan advocates rolling out a best practice smoking cessation model developed in Ottawa across the Trusts which it believes would bring a renewed focus to this area. This model has already been successfully implemented by Wythenshawe Hospital in Manchester.

Recommendation 7

A revised tobacco control strategy should clearly set out proposals for enhancing the planning, delivery and oversight of brief opportunistic advice to smokers, and for reporting outcomes.

The PHA commissions specialist smoking cessation services from around 550 local providers

4.7 The PHA's longstanding main measure aimed at existing smokers involves people engaging with specialist smoking cessation services. **Figure 18** sets out the background to these services.

Figure 18: Stop smoking services commissioned by PHA

The PHA currently commissions specialist smoking cessation services from around 550 accredited local providers.

Trained specialists deliver the services via individual or group clinics in various local settings, including GP practices, community pharmacies, hospitals, workplaces and community and voluntary providers. Around 80 per cent of providers are currently based in community pharmacy settings, and this sector manages around 66 per cent of participants.

At their initial appointment, smokers are offered a test which measures carbon monoxide levels in their body. They also receive behavioral advice and information around preparing to stop, coping with withdrawal, and maintaining smoking cessation. The main objective of the services is to encourage smokers to set a quit date. Over two-thirds of people who engage with the services also avail of Nicotine Replacement Therapy (NRT).

As Figure 17 set out, the amount spent annually on smoking cessation services and NRT has fluctuated between £2.4 million and £3.5 million since 2011-12. The PHA pointed out that NRT is a demand-led service and the customer preferences and quantities of NRT used explain budget and expenditure fluctuations over this period.

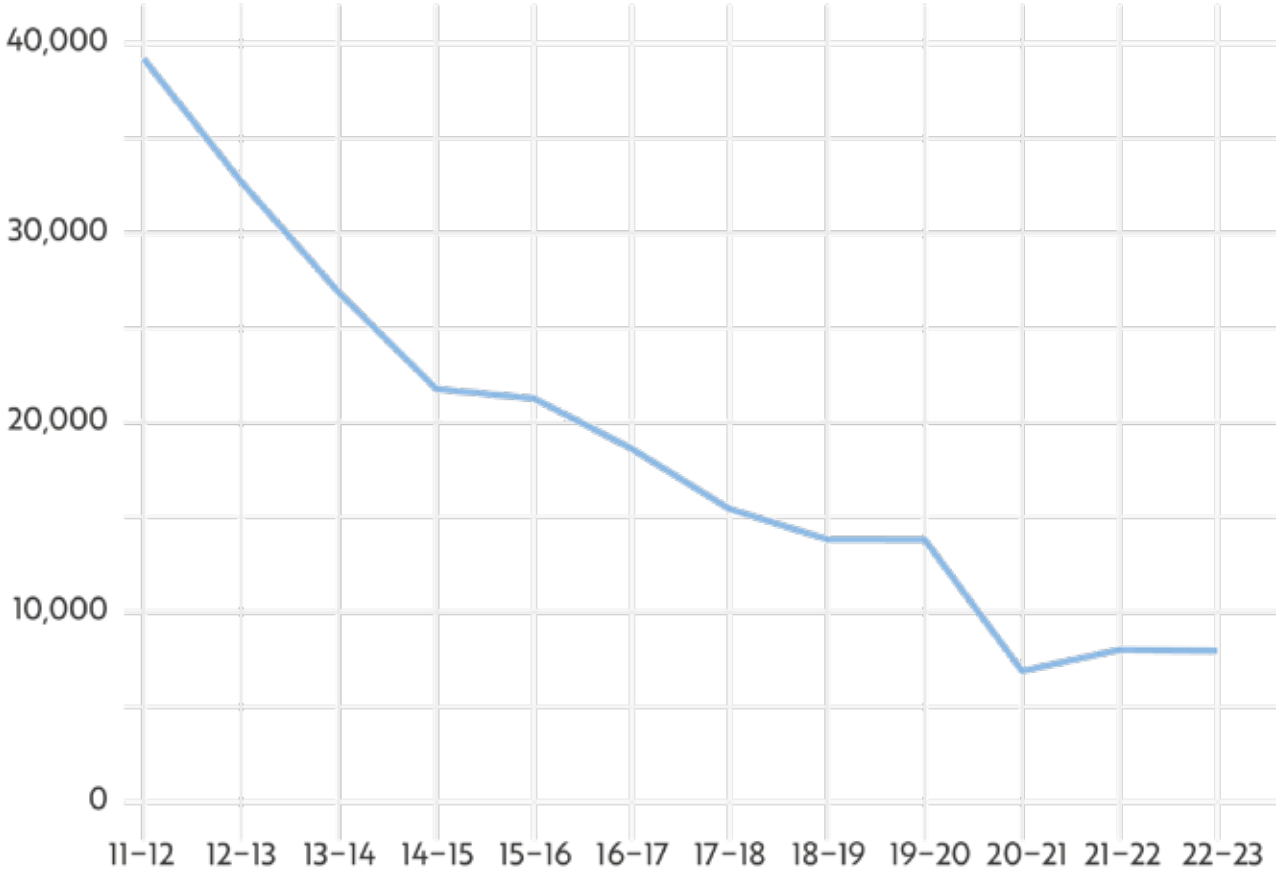
Source: NIAO based on PHA information.

The numbers setting quit dates have sharply reduced over the last decade

4.8 When the TCS was published in 2012, it highlighted that the number of smokers setting quit dates in NI had increased significantly, from 8,700 in 2005-06, to 34,400 in 2010-11. It concluded that this activity needed to be maintained if an impact was to be made among hardcore smokers.

4.9 However, over the last decade, the numbers setting dates have instead fallen very sharply. The 13,847 people doing so in 2019-20 was 65 per cent lower than in 2011-12 (39,200). The impact of COVID-19 on service accessibility then saw only 6,900 set dates in 2020-21, and this has only recovered to 8,000 people in 2021-22 and 2022-23 (80 per cent fewer than 2011-12) (**Figure 19**).

Figure 19: The number of people setting quit dates through PHA-funded smoking cessation services has fallen dramatically over the last decade



Source: DOH Smoking Cessation Database.

4.10 The numbers setting quit dates within the TCS's three key target groups have also reduced very steeply between 2011-12 and 2022-23:

- **people from least deprived quintile** – by 76 per cent, from 10,165 to 2,489. In 2011-12, the deprivation status was unknown for 14 per cent of people setting quit dates compared to only 1 per cent in 2022-23.
- **children and young people (aged 11-17 years)**– by 96 per cent, from 921 to only 34 .
- **pregnant women** – by 58 per cent, from 1,424 to 591.

4.11 Although the falling uptake partly reflects the reduced local smoking prevalence, and the more recent impact of the pandemic, demand for the services had also been dropping significantly even before this. As research shows that people accessing specialist support are four times more likely to quit, this will have stymied efforts to further reduce local smoking prevalence.

4.12 Reflecting NICE recommendations, the PHA has a target that the services should reach at least 5 per cent of the local smoking population. In 2013-14 it reported coverage of 8.4 per cent but this had fallen to 5.2 per cent by 2018-19. In 2020-21, this further reduced to 3.1 per cent, well below the target level. DoH highlighted that this reflects similar patterns elsewhere in the UK, with the more recent reductions also influenced by COVID-19. The PHA has not yet formally calculated coverage achieved from 2021-22 onwards, but the participant data indicates this remains below 5 per cent.

Steps taken to try and increase service uptake have largely been unsuccessful

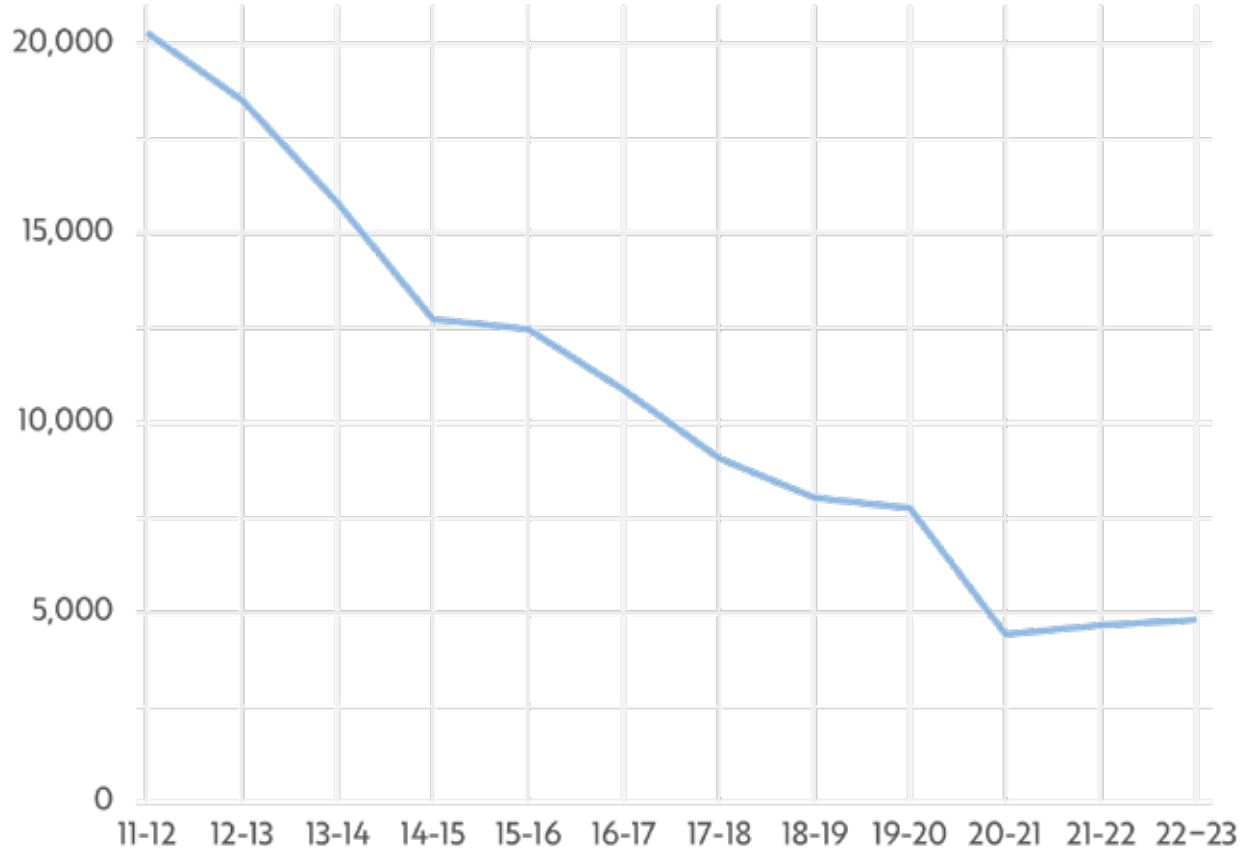
4.13 The PHA has tried to increase service uptake. In early 2019, it re-branded the services, refreshed its stop smoking website (which provides advice on quitting and signposts smokers to advice), and delivered a mass media campaign. Other actions taken include consulting with service providers and users on service improvement, a revised training framework to increase the number of specialist advisers, and providing enhanced promotional materials to pharmacists. However, these measures have not reversed the significant fall in uptake.

4.14 The TSISG has also acknowledged that services could be better aimed at disadvantaged areas with high smoking prevalence. The PHA told us that its monitoring had reaffirmed a future need to target commissioning based on greatest need around smoking prevalence and health inequalities, and is considering introducing new delivery models, including a shared service model, or small grants schemes targeted at disadvantaged communities. Other potential reasons for the falling uptake include the number of service providers having reduced over the last decade from 650 to 550, providers now potentially dealing with the most committed smokers, and smokers vaping as a self-help approach to quitting rather than accessing services.

The reduced service uptake means that the number of people successfully quitting annually at four weeks has fallen dramatically from 20,300 to 4,800

4.15 After someone sets a quit date, service providers attempt to monitor success levels at four and 52 weeks. Although the proportion stopping at four weeks has risen from 52 per cent in 2011-12, to 60 per cent in 2022-23, and this exceeds established NICE guideline requirements of a 35% quit rate the far lower participation means that the numbers quitting has fallen by 76 per cent, from 20,300 to just over 4,800 during this period. A sizeable proportion of four-week outcomes (18 per cent in 2022-23) are also lost in follow-up, which hinders measurement of programme effectiveness (**Figure 20**). The PHA told us that providers experience difficulties in making contact with clients at four weeks and beyond, as this is usually based on a telephone call. Providers are expected to attempt to contact a client three times before the case can be recorded as lost in follow-up. This is an area the PHA is seeking to improve in future services.

Figure 20: The proportion of people quitting at four weeks through smoking cessation services has remained fairly consistent but reduced participation means the numbers quitting has fallen considerably



Source: DOH Smoking Cessation Database.

Variable outcomes are apparent across HSC trust areas and service provider settings

4.16 Four-week success rates also vary across HSC trusts and provider settings. In 2022-23:

- the South Eastern Trust reported a 67 per cent quit rate, compared to 54 per cent in the Northern Trust;
- hospitals achieved a 66 per cent quit rate compared to 59 per cent for pharmacies[10] (these settings combined account for around 85 per cent of service users); and
- the South Eastern trust achieved a 71 per cent quit rate amongst pregnant women compared to 48 per cent at the Northern Trust.

10 `Other' settings recorded a 74 per cent success rate in 2021-22, but accounted for only 5 per cent of participants.

4.17 The PHA believes that differing staffing complements and delivery models contribute to the variable success rates. For example, people are directly referred to HSC services and these are delivered by HCS staff employed full time for this purpose, whilst community pharmacies rely on people approaching them, and service provision is only one aspect of their business. The MTR had recommended potentially expanding cessation services in HSC settings, but implementation of its recommendations has been limited. We noted that a workplace smoking cessation service delivered by Cancer Focus NI in the Belfast and South Eastern Trust areas between 2019 and 2023 achieved a 74 per cent four-week success rate. This is notably higher than the current overall 60 per cent for the cessation services and there may be merit in further investigating the reasons for this.

Recommendation 8

Specialist smoking cessation services will only achieve their full potential if the decline in take-up is arrested and reach amongst the smoking population increased. The PHA needs to definitively establish why service uptake has reduced so steeply and consider how delivery models could be redesigned to try and increase demand, and if outcome tracking can be improved, possibly by commissioning an independent review. The PHA should further assess if best practice evident in HSC settings can be rolled out across other provider settings.

Recent quit rates fall very significantly from 60 per cent at four weeks to 23 per cent at 52 weeks, as many people restart smoking

4.18 Unfortunately, many smokers who quit after four weeks restart. In 2022-23 , just over 2,900 people (36 per cent) who set quit dates had previously used smoking cessation services. Identifying if people who had stopped at four weeks have still quit at 52 weeks helps measure longer-term success. Data for 2021-22 (the latest year for which 52-week outcomes are available) shows how the success rate drops from 60 per cent at four weeks to 23 per cent at 52 weeks. Of the 8,273 people who initially set quit dates, only 1,921 had maintained their smoking cessation, which is a sharp reduction on the 6,742 who did so in 2011-12 (**Figure 23**). In considering these trends, the challenges associated with permanently stopping smoking and service providers having to increasingly deal with committed smokers must be recognised, as well as the fact that some progress is still being achieved.

Figure 21: Quit rates at the 4-week and 52-week stages achieved by smoking cessation services 2011-12 to 2021-22

Year	Number setting quit date	Successfully quit - 4 weeks no and %	Followed up - 52 weeks	% unable to follow-up at 52 weeks	Successfully quit - 52 weeks no and %
2011/12	39,629	20,776 (52%)	12,490	40%	6,742 (17%)
2012/13	32,943	18,810 (57%)	12,038	36%	6,857 (21%)
2013/14	27,062	16,059 (59%)	11,068	31%	6,605 (24%)
2014/15	21,869	12,868 (59%)	8,636	33%	5,079 (23%)
2015/16	21,525	12,673 (59%)	7,830	38%	4,552 (21%)
2016/17	18,908	11,195 (60%)	6,844	39%	3,980 (21%)
2017/18	15,875	9,528 (60%)	5,904	38%	3,548 (22%)
2018/19	14,214	8,426 (59%)	4,778	43%	2,843 (20%)
2019/20	14,342	8,287 (58%)	4,734	43%	2,805 (20%)
2020/21	6,907	4,431 (64%)	2,686	39%	1,652 (24%)
2021-22	8,273	4,961 (60%)	3.068	38%	1,921 (23%)

Source: DoH Smoking Cessation Database.

4.19 The very high proportion of people again lost in follow-up at 52 weeks (sometimes over 40 per cent) (**Figure 21**) further hinders monitoring. Generally, service providers are unable to follow up well over 40 per cent of the total participants at either 4 or 52 weeks. As the predominant service provider, enhancing tracking in community pharmacy settings offers most scope for improved outcome reporting. Currently pharmacies can claim £30 for people confirmed as having quit at four weeks but only receive a further £7.50 for monitoring 52-week outcomes, which may provide little incentive for following cases up. Stakeholder engagement completed within the FR highlighted underdeveloped systems for monitoring smoking cessation service outcomes as a relevant issue.

Available evidence suggests local services perform well compared to the rest of the UK but the reduced uptake means the PHA is achieving a diminishing return on its investment

4.20 Despite the reduced demand, the latest available comparative data for 2018-19 indicates that local cessation services perform favourably compared with the rest of the UK:

- NI had the second highest UK uptake (5.2 per cent of its smoking population), behind Scotland (5.9 per cent), but ahead of England (3.1 per cent) and Wales (3.6 per cent).
- At 58 per cent, NI had the highest four-week quit rate compared to England (52 per cent), Wales (43 per cent) and Scotland (39 per cent).

4.21 However, the PHA has for some time been allocating around three-quarters of its tobacco control budget to the cessation services and NRT, and the falling demand for these mean that the return on its investment has been diminishing. Costs of £75 per quit date set and £429 per successful 52-week quit incurred in 2011-12 have risen to £360 and £1,296 in 2020-21[11]. Even with this, the services may still deliver value for money, particularly as people quitting through them may be less prone to developing chronic illnesses, but quantifying this would be difficult. In any case, as Part 3 highlighted, the PHA may have to reassess the merits of continuing to direct such significant funding to this activity.

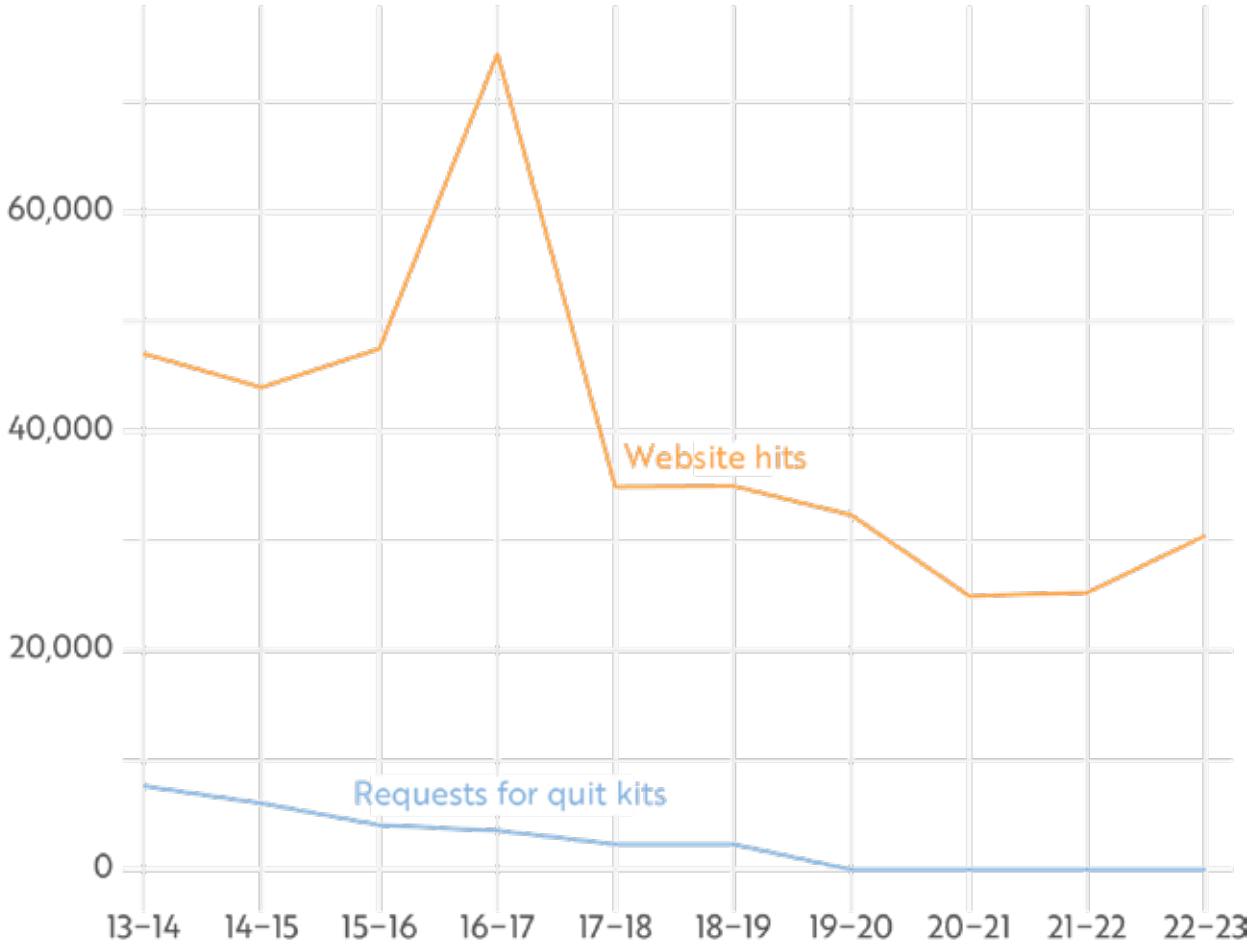
Usage of the PHA's stop smoking website and `quit kits' has also reduced considerably and the quit kit initiative was suspended in 2019-20

4.22 The PHA has further sought to encourage existing smokers to stop through hosting a stop smoking website which provides advice and guidance on quitting. Between 2011 and 2019, it also issued `quit kits' to smokers, which included practical tools and tips to help people stop smoking and were particularly aimed at supporting a self-help approach to quitting.

4.23 However, there has been a notable decline in the reach achieved by these measures in recent years. The number of website `hits' increased from 47,000 in 2013-14 to 74,400 in 2016-17, but has consistently fallen since then, to 30,500 in 2022-23. Furthermore, over 19,000 quit kits were issued between January 2011 and September 2012, before demand fell to 7,600 kits in 2013-14. Despite being refreshed in 2016, demand continued falling, and only 2,300 kits were issued in 2019-20 (almost 70 per cent lower than 2013-14 levels) (**Figure 22**). The PHA suspended the quit kit initiative in 2019, pending a planned further review of its contents and compliance with best practice, but this has not yet been completed due to internal capacity issues.

11 The analysis in this paragraph is based on the funding directed towards specialist smoking cessation services and the number setting quit dates in that year, and the number of successful 52-week quits reported the following year.

Figure 22: The number of hits on the PHA stop smoking website and requests for quit kits have fallen significantly in recent years



Source: NIAO, based on PHA records.

4.24 PHA research in 2012 found that almost 65 per cent of smokers viewed the kits as helpful in trying to stop or reduce smoking, with 40 per cent considering them very or extremely helpful, but updated measurement of their impact was not undertaken. The website and quit kits are relatively low-cost initiatives but still have potential to help reduce local smoking levels if more effectively delivered. Alongside the much-reduced uptake of smoking cessation services, the withdrawal of the main self-help aid can only have limited efforts to assist existing smokers to stop.

Recommendation 9

Any revised strategy should clearly articulate if and when the merits of redesigning and relaunching the quit kit initiative will be reviewed, or whether alternative measures to support a self-help approach to quitting smoking may deliver greater impact.

Media campaigns have had a strong impact on influencing the behaviour of the smoking public, but have received relatively little funding

4.25 Analysis between April 2013 and May 2017 shows that in periods when the PHA combined television with other advertising to promote anti-smoking messages, website visits and demand for quit kits increased substantially. The average monthly numbers of website visits and quit kits issued increased by 317 per cent and 127 per cent respectively compared to periods when no advertising was used (**Figure 23)**.

Figure 23: Number of PHA website hits and quit kits ordered in periods when no advertising used and when advertising was used (April 2013 to May 2017)

	No of months used April 2013 – May 2017	Average monthly number of website visits and % increase compared to when no advertising used	Average monthly number of quit kits ordered and % increase compared to when no advertising used
No advertising	15	1,908	288
TV and other forms of radio, press, outdoor and online advertising	20	7,958 (+317 %)	651 (+127%)

Source: NIAO, using PHA data.

4.26 The significant impact of advertising is further highlighted by two high profile PHA-funded media campaigns, with research finding that:

- 81 per cent of smokers recalled TV and radio advertisements for a 2015-16 anti-smoking media `you can quit / we can help' campaign which highlighted that half of smokers die from a smoking related illness, with almost 33 per cent of these changing their smoking behaviour.
- Almost three quarters of respondents recalled at least one element of a 2019 mass media campaign featuring a local young mother who quit through accessing smoking cessation services, with 60 per cent agreeing or strongly agreeing that the advertising would encourage them to think about stopping smoking.

4.27 The funding allocated towards these campaigns has reduced significantly since 2016-17, with no support allocated in either 2020-21 or 2023-24, reflecting a spending freeze imposed on mass media campaigns for that latter year. These funding constraints mean that limited campaigns have been commissioned in recent years despite clear evidence that this approach demonstrates effectiveness. Despite the reduced expenditure, the PHA told us that a smoking campaign had still been deployed during 2019-20. It also highlighted that all mass media work in 2020-21 had to be entirely directed towards COVID-19 given the significant focus this area required.

The PHA funds district councils to enforce compliance with tobacco and vaping control legislation

4.28 Given that smoking brings very significant risks to health and wellbeing, regulations are needed to safeguard people from avoidable premature death and disease, and these need to be properly enforced to maximise their effectiveness. The PHA provides the 11 district councils in NI with around £0.75 million of funding annually to enforce local legislation, including regulations which:

- prohibit smoking in various public places, public transport, and in work vehicles used by more than one person (the 2007 smoke-free regulations).
- ban retailers from selling tobacco to anyone aged under-18 (from September 2008).
- require retailers selling tobacco to centrally register and take other reasonable steps[12] , and ban the display of tobacco products (from April 2016).
- ban the sale of vaping products to people aged under 18 and prohibit smoking in private vehicles carrying children (from February 2022).

4.29 Council staff liaise with businesses and retailers, investigate complaints, and carry out `spot checks' to assess compliance with legislation, including making `test purchases' to proactively identify if tobacco or vaping products are being sold to children. Breaches of legislation can be penalised through written warnings, cautions, Fixed Penalty Notices (FPNs), or prosecutions. The PHA sets annual Key Performance Indicators (KPIs) for required enforcement activity levels. In reviewing this area, we found readily available data for 2011-12 to 2018-19, but none for 2019-20. COVID-19 meant that activity was largely suspended in 2020-21 and 2021-22.

High compliance with the 2007 smoke-free legislation means that enforcement of this area could be reduced and resources redirected to other priorities

4.30 Since the 2007 smoke-free legislation was introduced, local councils have consistently identified very high compliance levels within premises covered by it (95 per cent upwards). The number of FPNs issued for smoking in smoke-free commercial vehicles under these regulations has also reduced by 82 per cent, from 661 in 2011-12 to 121 in 2018-19. The PHA considers that this high compliance mainly reflects societal change.

4.31 A 2015 review of these regulations also concluded that stakeholders "*have been very successful in terms of the introduction of smoke-free legislation in the workplace and in supporting ongoing monitoring and enforcement*". DoH told us that the progress made means there may be benefits in redirecting enforcement resources away from this area towards other key pressures. We acknowledge the potential merits in this approach, provided that some form of watching brief over the area is still maintained. An issue highlighted in this area during our review was the increasing development of large outdoor smoking areas mainly within hospitality venues where entertainment is often staged, and where both smokers and non-smokers (including customers and staff) can spend prolonged periods. Whilst permissible under the 2007 regulations, these have potential to expose people to considerable levels of SHS.

12 Examples may include: Develop a written policy for sale of tobacco and vaping products, and ensure staff understand and sign it; carry out formal and regular staff training on their knowledge of the law and responsibilities; display a poster at point of sale stating that it is illegal to sell tobacco products to under 18s; keep records of any challenges regarding age, including refusals to sell age-restricted products; and regular staff supervision to ensure policies and procedures are being implemented.

4.32 In addition, the Department's FR of the TCS had identified improvements still required at overall population level. Despite the overall proportion of local homes where smoking is permitted having reduced, it highlighted that children in deprived areas remain over-exposed to the impact of SHS within the home, and that concerns remain over how domiciliary care staff continue to suffer such exposure.

Around 13 per cent of test purchases between 2011-12 and 2018-19 resulted in tobacco being sold to children, and recent enforcement activity remains well below pre-pandemic levels

4.33 Selling tobacco to persons aged under 18 has been illegal since September 2008. Available information shows that council monitoring and enforcement of this legislation and of retailers' wider responsibilities had generally increased between 2011-12 and 2018-19 (**Figure 24**):

Figure 24: District council enforcement activity – tobacco age-of-sale legislation 2011-12 to 2018-19

Council work	Annual trends: 2011-12 to 2018-19
Premises written to highlighting re-sponsibilities on underage sales	Increased from 2,007 (2011-12), to between 2,376 and 3,337 (between 2012-13 and 2018-19).
Premises visited to check compliance with regulations	Increased from 1,007 (2011-12), to between 1,120 and 2,410 (between 2012-13 and 2018-19).
Test purchases conducted	Reduced from 449 (2011-12) to 417 (2012-13) and 326 (2013-14), before increasing to between 554 and 709 (between 2014-15 and 2018-19).

Source: NIAO based on available PHA data.

4.34 Despite this increasing activity, the KPI for the required 4,800 annual visits was not met in any year during this period and the 600 annual test purchases required was only achieved in four of the eight years. More recently, the 357 tobacco test purchases made when enforcement resumed following COVID-19 in 2022-23 remained well below both pre-pandemic and required KPI levels.

4.35 Overall, the 5,068 tobacco test purchases conducted between 2011-12 and 2018-19 identified 570 age-of-sale offences (i.e., a 13 per cent offence rate). These non-compliance levels and the importance of ensuring that children are challenged for proof of age if they attempt to purchase tobacco products underlines why ongoing enforcement, enhanced to reflect the required KPI levels, is important.

Retailers selling vaping products do not currently have to register and initial test purchasing has identified sales to children in 25 per cent of cases, with a 50 per cent offence rate identified in Belfast

4.36 Although selling vaping products to people under 18 has also been prohibited since February 2022, local businesses stocking these do not currently have to register with councils in the way tobacco retailers have had to since April 2016. In our view, this can only hinder council enforcement of this area, particularly as a review of the tobacco retail register found it has helped assist such action. Whilst individual councils have been manually trying to compile lists of vaping retailers, these are unlikely to be fully accurate, given that growing numbers of businesses, including hairdressers and mechanics, appear to be selling e-cigarettes. As compiling these lists requires considerable time and resources, a mandatory register has clear potential to better assist enforcement activity. In Scotland, mandatory registration for both tobacco and vaping retailers was introduced in April 2011.

4.37 An initial 273 test purchases of vaping products in 2022-23 identified 69 age-of-sale offences (25 per cent), with 40 of the 81 purchases in the Belfast City Council (BCC) area (almost half) resulting in breaches. The very high non-compliance (almost double the level for tobacco sales) provides significant cause for concern, particularly if it is being replicated regularly in retail outlets across NI. Two councils (Fermanagh and Omagh, and Mid Ulster) also carried out very limited vape test purchases in 2022-23. In addition to age-of-sale issues, BCC told us about concerns around the types of vapes being sold. For example, whilst the current legally permitted tank size for disposable vapes is 2ml (roughly equating to 600 'puffs'), its enforcement work has increasingly been identifying and seizing devices with tanks which permit as many as 7,000 'puffs'.

4.38 The February 2022 legislation also prohibits smoking in private vehicles carrying children. Whilst councils have enforcement authority over vehicles, DoH told us that the Police Service of Northern Ireland (PSNI) is best placed to oversee this area given its ability to stop vehicles, and councils have therefore only taken limited enforcement action in this area. Between February 2022 and June 2023, the PSNI has issued 13 FPNs for offences related to this legislation. Whilst this appears low, DoH highlighted that available evidence indicates a similar pattern in other jurisdictions, due to high population compliance.

Recent data shows that a relatively low proportion of retailers who sell tobacco to children are fined, and quality standards for enforcement could ensure a more consistent approach

4.39 The PHA told us that each council has developed individual enforcement policies, and that they have discretion in how to deal with offences. Prior to 2016-17, it was necessary to prosecute retailers identified as selling tobacco to children to fine them, which involved considerable administration. To address this, the option of issuing FPNs was introduced in 2016. As such, NI is ahead of England and Wales, where consultation on introducing FPNs for age-of-sale offences has only recently been undertaken.

4.40 However, locally in 2022-23, only 10 of the 43 identified tobacco age-of-sale offences identified (21 per cent) received FPNs, with no prosecutions brought. The remainder of offences were dealt with by issuing warnings or cautions. Enforcement approaches varied significantly across councils. FPNs were issued for all five tobacco offences identified in Derry and Strabane, but none issued for seven offences in Armagh, Banbridge and Craigavon and only one issued for 11 identified in Mid Ulster. A higher ratio of FPNs (65 per cent) was issued for vaping products sold to children in 2022-23.

4.41 With the eleven councils each having autonomy over enforcement approaches and decisions, we consider that a review of this area would be beneficial. The PHA told us that it regularly examines returns submitted by councils to assess compliance with KPI requirements but acknowledges that this does not represent a collective review of the overall value and impact being provided by the service.

4.42 The need to carry out test purchases of both tobacco and vaping products from 2022-23 may also raise questions around whether councils will have sufficient resources to properly fulfil this dual function. This activity is very important but is time and resource intensive and whilst a combined 630 purchases of tobacco and vapes were made in 2022-23 across all council areas, the 357 tobacco test purchases represented the lowest activity in that area since 2011-12. BCC told us that although it had previously carried out 100 tobacco test purchases annually, it now has to divide this work between tobacco and vapes meaning coverage of the former has halved. Given that the number of complaints it has received about vapes being sold to children has been increasing, and the large number of retailers now selling these, it highlighted that additional resources would be useful going forward. This reinforces our view that it may be necessary to reassess the budgetary requirements for delivering a future combined tobacco and vaping strategy.

Recommendation 10

DoH should assess the merits of introducing mandatory registration for retailers selling vaping products as a priority. The PHA should also work with councils to develop `Quality Standards' which reflect best practice around monitoring and enforcement of tobacco and vaping control legislation, to ensure a more consistent approach across monitoring and enforcement work, including decisions on issuing penalties.

Appendices

Appendix 1: Summary of measures and initiatives delivered by the Tobacco Control Strategy by early 2020 (paragraph 3.8)

Objective 1: Fewer People Starting to Smoke

Target Group - Children and young people:

- Introduction of further legislation, including:
  - banning tobacco sales from vending machines; and banning retailers displaying tobacco;
  - standardised packaging of tobacco products; and
  - registration of tobacco retailers, creating new offences, and introducing fixed penalties and banning orders.
- Developing and delivering schools awareness programmes.

Target Group - General population:

- Legislation outlined above, along with campaigns delivered since 2011, and new audience targeting approaches, including increased use of electronic and social media.
- Launch of various educational and campaign support materials.

Objective 2- More smokers quitting

Target Group - General population:

- Ongoing commissioning of specialist stop smoking services by PHA.
- Brief intervention training by HSC healthcare professionals aimed at triggering quit attempts amongst individuals.

Target Group - Disadvantaged adults:

- Workplace settings approach to encourage and support quit attempts amongst manual workers.
- HSC Trusts further developing stop smoking services within maternity services, mental health services, and for patients with long term conditions.

Target Group – Children and young people:

- Ongoing promotion of stop smoking services and messages by PHA and HSC Trusts.
- Research on young smokers commissioned by PHA.

Target Group - Pregnant women and their partners who smoke:

- Voluntarily measurement of carbon monoxide levels for pregnant women, being extended to test women prior to hospital discharge.
- PHA and QUB undertaking research on smoking cessation incentives in pregnancy.

Objective 3: Protecting People from Tobacco Smoke

Target Group - General population:

- From March 2016 smoking banned in the grounds of any HSC Trust facility.
- Some councils moving towards banning smoking in parks and grounds of leisure centres.

Appendix 2: Summary of latest UK public health advice on e-cigarette usage (paragraph 3.16)

NI – PHA (2018):

- If you choose to use e-cigarettes as a means of stopping smoking, we would advise that you still seek the support of a Stop Smoking service.
- The long-term impacts of vaping are not yet known
- **Updated PHA advice issued in November 2023** young people and people who have never smoked should not vape.

Public Health England (September 2022):

- In the short and medium term, **vaping poses a small fraction of the risks of smoking**, but is not risk-free, particularly for people who have never smoked.
- Evidence is mostly limited to short and medium term effects and studies assessing longer term vaping (for more than 12 months) are necessary.

Public Health Scotland:

- Based on current evidence, **vaping e-cigarettes is definitely less harmful than smoking tobacco**. There is still a lot we do not know about e-cigarettes. Although they contain nicotine, which is addictive, vaping carries less risk than smoking tobacco. It would therefore be a good thing if smokers used e-cigarettes instead of tobacco cigarettes, only as a potential route towards stopping smoking. Further research is required to understand the risks of e-cigarettes.

Public Health Wales:

- If you are not ready to quit, then you should consider switching to electronic cigarettes. **Vaping is less harmful than continuing to smoke**.

NIAO Reports:
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