

MID-TERM REVIEW OF THE TEN-YEAR TOBACCO CONTROL STRATEGY FOR NORTHERN IRELAND

CONTENTS	PAGE
SECTION 1 - INTRODUCTION	3
SECTION 2 - BACKGROUND TO THE REVIEW	4
SECTION 3 - METHODOLOGY	16
SECTION 4 - PROGRESS TO DATE	18
SECTION 5 - STRUCTURE AND IMPLEMENTATION	22
SECTION 6 - CONTEXT AND LATEST DEVELOPMENTS	25
SECTION 7 - EVIDENCE REVIEW ON TOBACCO CONTROL	_ 34
SECTION 8 - STAKEHOLDER VIEWS	41
SECTION 9 - CONCLUSIONS AND RECOMMENDATIONS	46
APPENDIX 1- REVIEW GROUP MEMBERSHIP APPENDIX 2- REFERENCES	
RELATED DOCUMENTS: APPENDIX 3- TOBACCO CONTROL STRATEGY: PROGRESS TO DATA APPENDIX 4- TOBACCO CONTROL STRATEGY IMPLEMENTATION S GROUP ACTION PLAN APPENDIX 5- SMOKING CESSATION SERVICES DATA	
APPENDIX 5- SMOKING CESSATION SERVICES DATA APPENDIX 6- AGE OF SALE: SUMMARY OF ENFORCEMENT ACTIVIT APPENDIX 7- FIXED PENALTY NOTICES- TOBACCO RETAILERS ACTIVITY OFFENCES APPENDIX 8- FIXED PENALTY NOTICES- SMOKING IN SMOKE-FREE VEHICLES	T (NI) 2014

SECTION 1 – INTRODUCTION

Purpose of the Review

1. In February 2012, the Department of Health published a ten-year tobacco control strategy for Northern Ireland. While the strategy document does not commit the Department to undertake a mid-term review, there have been a number of significant developments in the area of tobacco/nicotine control since 2012. In light of this, the Department, working with colleagues from TSISG, initiated a formal review of the strategy in December 2017. A review group was established to take this forward (membership is outlined at Appendix 1).

Review terms of reference

- 2. The aim of this review is to ensure that the remaining term of the strategy takes account of the latest evidence and developments. The review is intended to examine progress made to date in relation to the achievement of the objectives of the tobacco control strategy. It also considers the relevance of the strategy, going forward, in the context of the latest developments in terms of research, evidence and the political/policy landscape.
- The review makes recommendations for the way forward taking account of the need for new actions, objectives, priority groups and/or targets. Only areas of tobacco control which are within the remit of the Department are considered for further action.

Outputs of the review

- 4. It was agreed by the Review Group that the review would provide:
- an assessment of the progress and impact of the Strategy against its objectives, targets and Action Plan;
- an assessment of the relevance of the Strategy's objectives, targets and actions in the context of the latest research and published information and the broader political/policy landscape;
- an assessment of the implementation frameworks, structures and processes;
 and
- recommendations relating to the way forward including any new/revised objectives, targets and/or actions that may be necessary.

SECTION 2 – BACKGROUND TO THE REVIEW

Smoking and ill health

- 5. Smoking is the main cause of preventable illness and death in Northern Ireland, killing around 2,400 people each year. It is not only the primary factor in 80% of lung cancer deaths, but is also estimated to be responsible for 80% of deaths from emphysema and bronchitis and 14% of deaths from heart disease. Other illnesses for which smoking is known to be a major risk factor include strokes, asthma and cancer of the mouth, lip, throat, pancreas, bladder, stomach and liver.
- 6. According to Cancer Research UK². Lung cancer is the 3rd most common cancer in the UK, accounting for 13% of all new cancer cases (2015). In males in the UK, lung cancer is the 2nd most common cancer (13% of all new male cancer cases). In females in the UK it is the 2nd most common cancer (12% of all new female cancer cases). Lung cancer incidence in Northern Ireland (80.9 incidences per 100,000 population) is similar to the UK average (78.1 incidences per 100,000 population).
- 7. Second-hand smoke (SHS), a combination of mainstream smoke exhaled by smokers and side stream smoke which is given off by the burning end of a tobacco product, is also carcinogenic to humans. In addition to the immediate health effects felt by people who are exposed to SHS such as reduced lung function, increased respiratory problems, sore throats, headaches and nausea there are also serious long-term impacts on health, particularly with continued exposure over time. These include higher risk of lung cancer, coronary heart disease, chronic respiratory symptoms and asthma. Children are particularly vulnerable to the effects of SHS. A number of reports, including those by the US Surgeon General and the Scientific Committee on Tobacco Control have concluded that there is no safe level of exposure to SHS.
- 8. Smoking while pregnant can lead to a number of complications for both the mother and the unborn child. In addition to the normal health risks every smoker will be exposed to, pregnant women risk suffering from conditions such as deep vein thrombosis and placenta praevia, while their baby is at increased risk of premature delivery; lower birth weight; breathing difficulties; and Sudden Infant Death Syndrome. ³
- 9. In 2016/17 the estimated hospital costs for treating smoking related diseases in Northern Ireland were £172m.

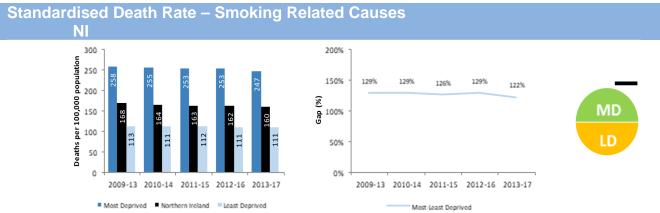
Smoking and inequalities

10. Smoking is one of the leading causes of health inequalities with considerably more people dying of smoking-related illnesses in disadvantaged areas than in more affluent areas.

Deprivation and standardised death rates

11. The latest Health Inequalities Annual Report (2019) shows that death rates from smoking related causes have decreased since 2009-13 in Northern Ireland. However, the inequality gap has remained unchanged between 2009-13 and 2013-17, with death rates in the most deprived areas consistently more than double the rates seen in the least deprived areas.⁴

Figure 1- standardised death rate- smoking related causes 2009/13- 2013/17

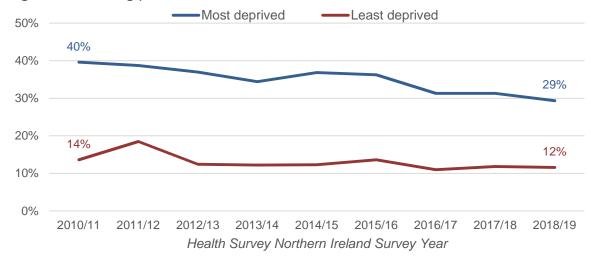


Deprivation and adult smoking prevalence

12. The latest Health Survey Northern Ireland⁵ results reveal that, whilst cigarette smoking prevalence in the most deprived areas has fallen since 2010/11 (40%) and the proportion in least deprived areas has remained at a similar level, smoking in the most deprived areas remains around **two** and a half times (29%) that in the least deprived areas (12%).

Figure 2- Cigarette Smoking prevalence by level of deprivation

Cigarette smoking prevalence in Northern Ireland



13. The legacy of this pattern is evident in respect of the excess risk of lung cancer, premature death and smoking-related illness in disadvantaged areas. The standardised incidence of lung cancer is two and a half times higher in the most deprived areas than the least deprived areas (54 per 100,000 of the population in least deprived areas versus 138 per 100,000 in the most deprived areas).⁴

Mental health and smoking prevalence

14. The Health Survey NI⁵ captures information on the GHQ12 which is a measurement tool designed to detect the possibility of psychiatric morbidity in the general population. A score of 4 or more is classified as a respondent with a possible psychiatric disorder, and referred to as a 'high GHQ12 score'. In 2018/19, respondents with a high GHQ12 score were two and a half times more likely to report being a current smoker (33%) than those with a low score (13%).

Table 1- GHQ12 score by cigarette smoking status

Cigarette smoking status	GHQ12 score			
	0	1-3	4+	Total
Current smoker	13%	19%	33%	18%
Used to smoke regularly	21%	23%	18%	21%
Used to smoke but not regularly	9%	12%	9%	10%
Never smoked	56%	46%	40%	51%
Total	100%	100%	100%	100%

15. Severe mental illness (SMI) refers to people with psychological problems that are often so debilitating that their ability to engage in functional and occupational activities is severely impaired.⁶ People with SMI are over three times more likely to have a physical health problem and may die 10–20 years earlier than others in the general population. Although suicide contributes to excess mortality rates, particularly in younger people, the majority of premature deaths in people with SMI are caused by potentially modifiable health-risk behaviours, such as tobacco smoking, alcohol and addictions, lack of exercise and obesity and social factors such as poverty, homelessness, and unemployment.⁷

Deprivation and smoking in pregnancy

16. Smoking in pregnancy has one of the most notable inequality gaps across all areas of health. 2017 figures show almost 5 times as many women smoking during pregnancy in the most deprived areas compared to the least deprived areas (5% in the least deprived areas as opposed to 26% in the most deprived areas).⁴

The Strategy

- 17. The strategy was developed by a multi-sectoral working group and replaced the previous five-year Tobacco Action Plan.
- 18. The strategy, which was launched by the Health Minister in February 2012, identifies one overall aim and 3 key objectives.
- 19. The overall aim of the strategy is to create a tobacco-free society.

Objectives

- 20. The key objectives, which were carried forward from the Tobacco Action Plan 2003-2008, are:
- fewer people starting to smoke;
- more smokers quitting; and
- protecting people from tobacco smoke.

Targets

21. Five aspirational targets have been set in the strategy, each to be achieved by 2020.

The targets are to:

- reduce the proportion of 11-16 year old children who smoke to 3% (from a baseline of 8%) currently 4%;
- reduce the proportion of adults who smoke to 15% (from a baseline of 24%) currently 18%;
- reduce the proportion of pregnant women who smoke to 9% (from a baseline of 15%) – currently 14%;
- reduce the proportion of smokers in manual groups to 20% (from a baseline of 31%) – currently 27%; and
- ensure that a minimum of 5% of the smoking population in Northern Ireland accesses smoking cessation services annually.
 - 22. The Northern Ireland Statistics and Research Agency (NISRA) has been gathering information on adult smoking prevalence rates on an annual basis throughout the lifetime of the strategy, and the baseline for these targets was established through the 2010/11 Health Survey Northern Ireland. Please note that in 2018/19, as part of an ongoing methodological review, a revised weighting methodology has been adopted. For comparison purposes, findings from previous years' Health Surveys have been updated to reflect the revised methodology.

Priority groups

- 23. While the strategy is aimed at the population as a whole, 3 groups have been identified as requiring particular attention and these are:
- children and young people;
- disadvantaged people who smoke; and
- pregnant women, and their partners, who smoke.

Implementation

24. A Tobacco Strategy Implementation Steering Group (TSISG) was established by the PHA to take forward an action plan for the strategy. Members of the implementation group are drawn from a range of sectors

and organisations. The group is chaired by the PHA and meets every four months to report progress against the action plan.

Smoking prevalence rates

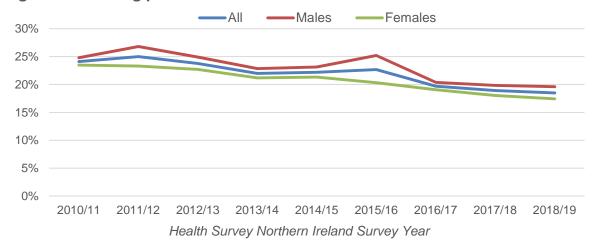
25. While significant inroads have been made into reducing smoking prevalence in recent decades, adult prevalence rates in Northern Ireland remain high at 18%.⁵ This equates to almost one in five adults smoking, with the rate rising to 27% for those working in routine or manual occupations. Prevalence rates among children are decreasing at a steadier pace with a recent survey revealing 4% of 11-16 year olds to be current smokers compared to 15% in 2000.⁸ Ever use of tobacco amongst this age-group has also decreased significantly over recent years. Current smoking prevalence rates amongst pregnant women in Northern Ireland are around 14%.⁴

Adult cigarette smoking status 2010/11-2018/19

26. The proportion of adults currently smoking cigarettes has fallen from 24% in 2010/11 to 18% in 2018/19.

Figure 3- smoking prevalence trends 2010/11 -2018/19

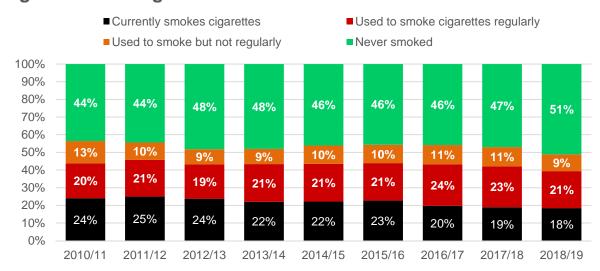
Cigarette smoking prevalence in Northern Ireland



27. During this time the proportion of those who have never smoked has increased.

Figure 4- cigarette smoking status in NI 2010/11-2018/19

Cigarette smoking status in Northern Ireland



Health Survey Northern Ireland Survey Year

Adult cigarette smoking status by sex 2010/11-2018/19

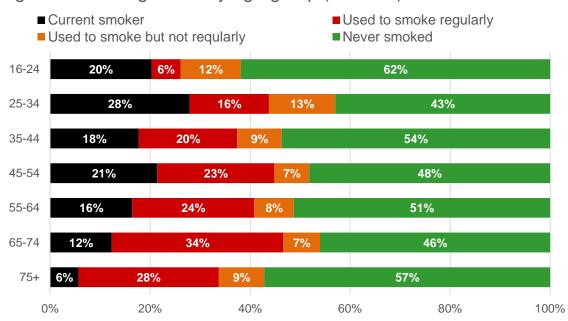
- 28. In respect of males, the proportion of current smokers has fallen since 2010/11 (from 25% to 20% in 2018/19) and the proportion of ex-smokers is unchanged. The proportion who have never smoked has increased from 39% in 2010/11 to 46% in 2018/19.
- 29. The proportion of female smokers has fallen from 2010/11 (23% to 17% in 2018/19) and the proportion who have never smoked has increased (from 48% in 2010/11 to 56% in 2018/19). The proportion of female ex-smokers has remained at a similar level (17% in 2010/11 and 19% in 2018/19).

Adult cigarette smoking status by age-group 2018/19

30. Adult smoking status is highest in the 25-34 age group with 28% of this group reporting that they are a current smoker.

Figure 5- cigarette smoking status in NI by age 2018/19

Cigarette smoking status by age-group (2018/19)



31. The proportion of current smokers amongst the routine and manual occupations has fallen from 35% in 2010/11 to 27% in 2018/19.

Table 2- Smoking by Socio-economic classification 2010/11-2018/19

Survey Year	All Adults	Manual Workers	Routine & Manual
2010/11	24%	31% (baseline in original strategy)	35%
2011/12	25%	32%	34%
2012/13	24%	32%	33%
2013/14	22%	30%	32%
2014/15	22%	-	32%
2015/16	23%	-	31%
2016/17	20%	-	28%
2017/18	19%	-	28%
2018/19	18%	-	27%

Please note that health survey figures by NSSEC are provisional and may be subject to revision. Due to changes in classifications, the 2010/11 baseline, in relation to routine and manual workers, no longer directly equates to that used in the original strategy (which referred to the old classification of manual workers).

Source: Health Survey Northern Ireland

Children and young people

- 32. Since 2000, there has been a decline in both the proportion of young people ever having smoked and in the proportion of current smokers.
- 33. In 2016, 4% of young people (aged 11-16) were current smokers⁸ with no significant difference between boys (4%) and girls (5%). Comparing 2016 with the previous findings in 2013, whilst the rate overall and the rate for girls has remained level, the rate for boys has fallen from 6% to 4%.

Figure 6 Proportion of young people reporting ever having smoked 2000-2016

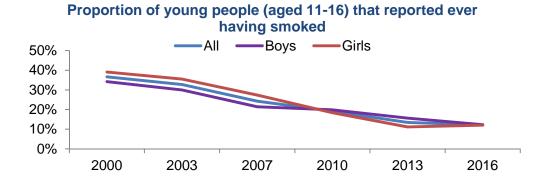
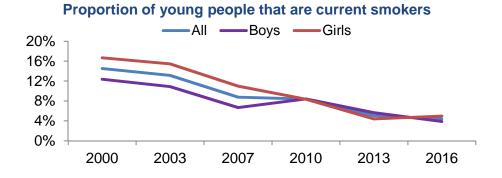
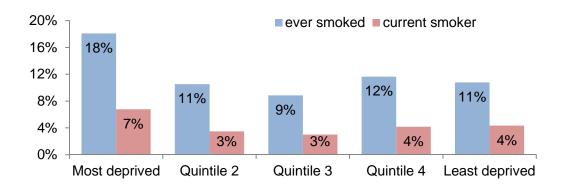


Figure 7 Proportion of young people that are current smokers 2000-2016



34. Young people in the most deprived areas of Northern Ireland were more likely to report ever having smoked than those in any other deprivation quintile.

Figure 8- smoking status of young people in NI by deprivation quintile



Smoking in pregnancy

35. Smoking in pregnancy increases infant mortality by around 40%. In Northern Ireland, approximately 14% of women continue to smoke throughout their pregnancy – this equates to approximately 4,000 women.⁴

Table 3- Smoking in pregnancy in NI 2005-2017

YEAR	%	YEAR	%
2005	20.4%	2012	16.5%
2006	19.5%	2013	15.7%
2007	18.2%	2014	15.0%
2008	17.8%	2015	14.1%
2009	17.2%	2016	13.4%
2010	17.1%	2017	13.8%
2011	17.1%		

The proportion of all live births that were to mothers that reported smoking during pregnancy. Information is gathered at the 'booking in' appointment and therefore represents mothers at the end of the first trimester. As this indicator is self-reported, it may be subject to a degree of under-reporting.⁹

Black and Minority Ethnic (BME) smoking status

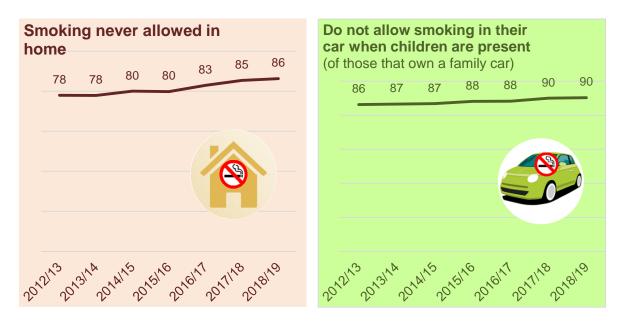
36. Whilst the health survey captures information on ethnicity, analysis is limited as the sample size of around 4,000 respondents means that a very small proportion of respondents identify as an ethnicity other than 'White'.

Domestic smoking habits

37. Since the introduction of the current Tobacco Control Strategy in 2012, the number of respondents in Northern Ireland stating that smoking is

prohibited in the family home or in the family car when children are present has increased.⁵

Figure 9- Domestic smoking habits



UK Comparisons and Official Prevalence Rates

- 38. Publications referring to smoking prevalence sometimes refer to different sources of statistical information which can cause confusion.
- 39. The table below outlines cigarette smoking prevalence in the UK countries. The figures are taken from the respective health surveys of England, Scotland & Northern Ireland and from the National Survey for Wales. These are the official estimates of cigarette smoking prevalence in the devolved countries.

Table 4- Smoking prevalence rates across the UK 2018/19

Smoking	NI 2018/19	England 2018	Scotland 2018	Wales 2018/19
	%	%	%	%
Current cigarette smoking - all	18	17	19	17
Current cigarette smoking – males	20	18	21	18
Current cigarette smoking - females	17	15	17	16

Respondents aged 16+

40. The Office for National Statistics (ONS) publish an annual report 'Adult Smoking Habits in the UK'. ¹⁰ This report describes smoking data for the United Kingdom and its constituent countries from the Annual Population Survey, the Northern Ireland element of which is sourced from the Northern Ireland Labour Force Survey. This is a Department for the

Economy survey that provides information on employment and economic activity whilst also capturing some general classificatory variables such as smoking.

- 41. The 2018 results indicated that 14.4% of adults (aged 18 years and above) in England smoked; for Wales, this figure was 15.9%; Scotland, 16.3% and Northern Ireland, 15.5%.
- 42. Although the smoking data for the UK reported in the ONS report allow for comparisons to be made across each constituent country due to the consistent methodology, official estimates of smoking prevalence in the devolved countries should be taken from the respective health surveys of Northern Ireland, England, Scotland, and Wales. The devolved health surveys should be used to track progress against each country's targets to reduce smoking.
- 43. The difference between the smoking prevalence from the Health Survey Northern Ireland (18% in 2018/19) and that contained in the ONS publication (15.5% in 2018) may in part be attributed to the different survey source. The Health Survey Northern Ireland and the Northern Ireland Labour Force Survey employ a different survey methodology, with the former accepting personal interviews only while the latter contains a mixture of personal and proxy interviews (this is where responses are provided by another adult in the household). This means that results are not directly comparable. Additionally, smoking information captured as part of a dedicated health survey may show differences to that captured as part of a survey focusing on the labour market.

SECTION 3 – METHODOLOGY

44. The key tasks and methodology employed in the review were agreed with the review group and included:

A Review of relevant information including:

Progress to date

- 45. The action plan developed by TSISG to deliver on the strategy is a live document which is updated in advance of each group meeting, with relevant actions closed and removed once they have been completed. The actions in the plan are categorised under the five workstreams set out in **section 5** and progress is recorded according to a RAG (red, amber, green) rating system.
- 46. In order to assess how effective implementation of the strategy has been, a mapping exercise has been carried out of each action which has been included since the plan was first developed. This exercise has formed the basis of **section 4** progress to date, in which the key outcomes and activity are summarised (with further detail at Appendix 3).

Evidence Review

- 47. A key component of the review is to consider what has changed in the area of tobacco control since the strategy was published in terms of policy and research, and furthermore, how any political or social changes in that time have changed the landscape in which the strategy is being delivered. The Review Group tasked the Institute of Public Health in Ireland (IPH) to take forward a rapid review of the evidence, which has emerged over the last 6 years, relating to tobacco control policy.
- 48. With particular reference to the strategy's priority groups, the evidence review was required to address:
 - What evidence informed approaches should be considered to further reduce the number of people in NI starting to smoke?
 - What evidence informed approaches should be considered to further support engagement with stop smoking services delivered under the strategy?
 - What evidence informed approaches should be considered to further reduce exposure to tobacco smoke in NI?
- 49. A summary of the findings is set out at **section 7**.

Engagement with key stakeholders

- 50. The IPH produced a stakeholder engagement proposal which took account of existing information from stakeholder engagement exercises which had recently been completed by the PHA.
- 51. Further engagement took the form of a facilitated workshop with the Strategy Steering Group members and its sub-groups.
- 52. A further on-line survey gathered feedback from a wide range of stakeholders who had been involved in the delivery and implementation of the strategy as well as those stakeholders who were unable to attend the workshop. Representation was achieved from parties involved at both strategic and operational level. Most respondents reported some direct involvement in providing or delivering smoking cessation services and there was significant representation from respondents involved in enforcement of tobacco control legislation.
- 53. A summary of the findings is set out at **section 8.**

Interpretation

54. Evidence was interpreted in the context of actions delivered under the strategy to date, based on assessment of progress reports alongside engagement with key implementation stakeholders. The consensus recommendations of the mid-term review group are set out in **section 9** of this report.

SECTION 4 – PROGRESS TO DATE

Overall Aim: To create a tobacco-free society

Objectives:

- Fewer people starting to smoke
- · More smokers quitting and
- Protecting people from tobacco smoke
 - 55. While the Tobacco Control Strategy for NI has an overall aim of creating a tobacco free society, the strategy identifies a number of priority groups within the overall smoking population; children and young people (aged 11-16 years); disadvantaged people who smoke (routine and manual workers) and pregnant women and their partners who smoke. In addition the strategy has set specific targets for reducing prevalence within these priority groups by 2020.

Progress in relation to Target Groups:

Table 5- progress in relation to targets

TARGET GROUP	POSITION IN 2010/11	TARGET BY 2020	CURRENT POSITION (based on latest available figures)
Population of Northern Ireland	24%	15%	18%
Children and young people (11-16 years)	8%	3%	4%
Manual groups	31%	20%	27%
Pregnant Women	15%	9%	14%

An additional target was to ensure that a minimum of 5% of the smoking population in Northern Ireland accesses smoking cessation services annually: In 2018/19 this figure was 5.2%.*

56. Progress and activity in relation to the strategy objectives is set out in detail at Appendix 3 and key elements are summarised below.

^{*} Data provided by PHA Health Intelligence

Table 6- Summary of progress to date

Objective 1: Fewer People Starting to Smoke

Objective 1: Fewer Peop			
Strategic priority	Target Group: Children and young people		
Preventing those	There have been a number of key legislative achievements		
under the legal age of	during the lifetime of the strategy including:		
sale from accessing	 Legislation to ban tobacco sales from vending machines; 		
tobacco products	 A ban on the display of tobacco products at point of sale; 		
through legislative	 Standardised packaging of tobacco products; and 		
measures	 The Tobacco Retailers Act (NI) 2014 which introduced a 		
	requirement for tobacco retailers to register, created a		
	number of new offences, and provided for the application		
	of fixed penalties and banning orders.		
Ensuring that	A number of programmes have been developed and delivered		
educational	including:		
establishments, from	 Smokebusters- delivered to 9-11 year olds and in 600 		
primary through to	schools (annually);		
tertiary level, are	Smoke Free School Gates- to encourage parents and		
educating and/or	guardians to refrain from smoking and protect their		
appropriately	children from the harmful effects of smoking- offered to all		
supporting awareness	primary schools across NI;		
raising amongst	Dead Cool- smoking prevention programme aimed at		
children/young people	Year 9 pupils and delivered by teachers;		
as to the harm caused	The ASSIST intervention which is designed to train		
by tobacco	influential pupils to encourage others not to smoke; and		
	Smoking awareness sessions offered by HSCTs during		
	fresher events and no smoking days/months at		
	further/higher education colleges and university		
	campuses. Stop smoking services also funded where		
	there is a demand.		
	Target Group: General population		
Further reducing the	Legislative developments outlined above.		
impact of tobacco	Key Campaigns have included:		
marketing either	2011/12- Things to do before you die/Never give up on		
through (a) legislation	giving up;		
or (b) public	 2013/14- Make them proud/Stop for good; 		
information	2015/16- 1 in 2 smokers will die from a smoking related		
campaigns aimed at	illness/You can quit, we can help;		
negating messages	2016/17- Gerry Collins campaign;		
put out by the tobacco	2017/18- Continuation of Gerry Collins campaign; and		
industry	March 2019- Launch of new identify for stop smoking		
	services.		
Raising public	Many new approaches to targeting audiences have been		
awareness as to the	developed, including increased use of social media and a		
harm caused by	newly launched website; and		
smoking, through	 A variety of educational and campaign support materials 		
traditional methods as	are available and the Quit Kit (aimed at those preferring a		
	are available and the wait fall faillied at those preferring a		

well as exploiting new	self- help approach) was updated in 2016.	
media such as		
Facebook, Twitter etc.		

Objective 2- More smokers quitting

Objective 2- More smokers quitting			
	Target Group: General population		
Increasing the numbers of people accessing smoking cessation services	 Target Group: General population The PHA continue to commission a range of specialist stop smoking services from 581 providers which include GPs, community pharmacies, hospitals, workplaces and community/voluntary settings; There has been a steady decline in the numbers accessing services in recent years (most recent figures showed a 10% reduction on the previous year). This is a pattern observed across the UK. The NI service reach figure in 2018/19 (5.2%) surpassed the 5% target of the strategy (which is the figure recommended by the National Institute for Clinical Excellence); Innovative approaches to increase the numbers accessing services have included: the roll out of brief intervention to as many groups as possible to trigger quit attempts; consultation with service providers and service users on how to improve services; a revised training framework to increase numbers of specialists; enhanced marketing/promotional materials provided to pharmacists; and work with the Healthy Living Centre Network to provide service in low socioeconomic areas; The PHA provide funding to enable HSC Trusts to deliver No Smoking Day events; and Pilot projects such as Stop Smoking Bus Campaign and 		
Ensuring effective referral systems across the HSC to smoking cessation services	 Mobile Stop Smoking Service have provided stop smoking support in convenient geographical locations. Care pathways and electronic care: a smoking cessation referral pathway has been incorporated into the NI Electronic Care Record which will enable seamless referral to smoking cessation services. This is currently being piloted with a view to regional implementation; and The PHA support dentists to refer to cessation services 		
Expansion of Brief	or to provide in house stop smoking services.Brief intervention training is aimed at triggering a quit		
Intervention training to other professionals	attempt regardless of an individual's current quitting intention. It is particularly recommended for professionals in regular contact with the Strategy's priority groups. The PHA commission HSC Trusts to deliver this training and the annual training target of 2080 is usually exceeded.		
	Target Group: Children and young people		
Increasing awareness	The PHA and HSC Trusts have promoted stop smoking		
of specialist cessation	services and messages at a variety of venues:		

services	 GAA smoke free touchlines: the PHA fund the Healthy Club project to provide resources, promotion of quit services, brief intervention training and signage for clubs; and The PHA commission a youth focused smoking reduction and awareness programme: this is currently delivered by Cancer Focus NI and aligns with No Smoking Day activity.
Undertaking research to determine how to increase the uptake of cessation services by young people	 The PHA commissioned research to explore attitudes, knowledge and behaviours of young smokers which showed that whilst this group acknowledged some risk, the majority did not accept that this was relevant to them. The research also highlighted the importance of family behaviours on young people's smoking activity.
	Target Group: Disadvantaged adults
Increasing cessation rates amongst manual workers and those with mental health issues, taking into consideration the particular needs of these groups	 A workplace settings approach has been used to encourage and support quit attempts amongst manual workers for whom prevalence rates remain high; and The PHA provide funding to assist HSC Trusts to further develop stop smoking services within maternity services, mental health services, for patients receiving treatment for long term conditions or cancer and preoperative patients.
	Target Group: Pregnant women and their partners who smoke
Increased signposting to cessation services for pregnant women and their partners who smoke	 All pregnant women now have their carbon monoxide levels measured in their booking clinic/ante natal care: whilst they can refuse, the programme has almost 100% compliance; The PHA is currently working with Queen's University on research relating to smoking cessation incentives in pregnancy; and Carbon monoxide testing is to be extended from 2019, to test women prior to hospital discharge which will improve postnatal smoke free support.

Objective 3: Protecting People from Tobacco Smoke

Strategic Priority	Target Group: General population
Further awareness raising around harm caused by exposure to second hand smoke in areas not covered by smoke-free legislation	From March 2016 smoking was not permitted in the grounds of any HSC Trust facility in Northern Ireland.
Encouraging organisations to voluntarily expand their smoke free areas	 Some councils have been preparing to move towards smoke free parks and smoke free grounds of leisure centres.

SECTION 5 – STRUCTURE AND IMPLEMENTATION

Tobacco Strategy Implementation Group (TSISG)

- 57. The Public Health Agency (PHA) lead on the implementation of the tobacco control strategy for Northern Ireland. To facilitate this role the PHA set up a multi-sectorial group (The Tobacco Strategy Implementation Steering Group or TSISG) and five work streams. Together they produced, and have continued to develop, a comprehensive action plan to work towards achieving the strategy objectives (see appendix 4). This group is chaired by the PHA and meet three times a year. The group is responsible for overseeing and co-ordinating the implementation of the tobacco strategy and for sharing progress made with the Department through regular reporting mechanisms.
- 58. The overall aim of TSISG is the implementation of the tobacco strategy within the agreed timeframe and the specific objectives are:
- To provide advice and strategic direction to the PHA to assist with the development of an implementation plan for the Tobacco Strategy.
- To monitor progress in implementation and identify any areas needing specific attention.
- To agree the content of progress reports for submission to the Department of Health

Action Plan

59. The action plan is developed in line with the MPOWER model. The MPOWER model is a policy package that builds on the measures of the WHO Framework Convention on Tobacco Control. This package has been proven to reduce smoking prevalence (WHO 2008)¹¹. The MPOWER package is an integral part of the WHO Action Plan for the Prevention and Control of Non-communicable Diseases.

There are six main components of the MPOWER model package:

- Monitor tobacco use.
- Protect people from tobacco smoke.
- Offer help to stop smoking.
- Warn about the dangers of smoking.
- Enforce bans on tobacco advertising and promotion.
- Raise taxes on tobacco products.

Work Streams

- 60. The five work streams as identified in the Strategy are:
- (i) Research & Information
- (ii) Protection & Enforcement
- (iii) Services & Brief Intervention
- (iv) Communication & Education
- (v) Policy & Legislation

Structure

- 61.TSISG includes representation from the Department of Health as well as a number of other NICS departments and district councils. It also includes representation from the health, education and voluntary sectors with a particular interest or role in tobacco control.
- 62. Each work stream is chaired by a member of the implementation group, and seeks advice, support or expertise from other individuals and organisations as required.

Roles

- 63. While TSISG is responsible for overseeing and co-ordinating the implementation of the tobacco strategy, the PHA works closely with the work stream chairs to monitor progress of the group against the activities in the action plan. Regular updates are provided to the PHA co-ordinator who subsequently presents a status assessment to the group using RAG designations; Red, Amber or Green. Progress against the action plan is discussed at each steering group meeting.
- 64. Members of the implementation group serve as the nominated representative for their respective organisations, and are responsible for taking forward actions within their organisations as required.

Reporting and monitoring

65.TSISG reports to the Agency Management Team in the PHA via the Director of Public Health. The action plan is reviewed at every implementation group meeting for progress against key milestones. Any issues or areas of concern are reported back to senior management as they arise on an ad-hoc basis. Annual progress reports are provided to the Department of Health.

Funding

- 66. The PHA funds the implementation of the strategy. A budget of £4,203,334 was allocated in 2019/20. The funding covers the costs of:
- Stop smoking services across Pharmacy, GP, community and voluntary settings;
- The purchase of Nicotine Replacement Therapy (NRT), Carbon Monoxide (CO) monitors etc;
- Training of stop smoking specialists and the development of training resources;
- The implementation of brief interventions across all sectors;
- The ongoing support of smoke free across all HSC Trust campuses;
- The monitoring of tobacco enforcement; and
- The purchase and development of resources.

Evaluation of structure and focus of TSISG

67. As part of the mid-term review, existing members of TSISG and work streams were asked for their views on whether the current structure and focus of the group was fit for purpose for the remaining term of the strategy. Most respondents considered the current structures and reporting mechanisms within TSISG to be effective. The most notable comments were in relation to connectivity between work streams, where there was some perception that this could be improved, possibly through periodic meetings of the entire TSISG and work stream membership. In addition, there were some suggestions in relation to membership such as: the potential for enhancement; increased flexibility; and potential restructuring of work streams. These suggestions are considered further in the recommendations at section 9.

SECTION 6 – CONTEXT AND LATEST DEVELOPMENTS

Policy Context for the Strategy and Related Strategies

68. There have been a number of strategic, political and technological developments since the publication of the tobacco control strategy. This section makes reference to some of these. It is not an exhaustive list and is meant to be illustrative of the context in which the strategy has sat during recent years.

Making Life Better

69. Making Life Better, which was published in 2014, sets a clear direction for actions to improve health and reduce inequalities. Through this strategic framework, the Northern Ireland Executive has committed to creating the conditions for individuals, families and communities to take greater control over their lives and be enabled and supported to lead healthy lives. Making Life Better is structured around 6 themes, one of which is empowering healthy living. A key outcome of this theme is improving health and reducing harm, and a reduction in the number of people who smoke is included as an action under this theme.

Outcomes Delivery Plan

70. In the absence of a Northern Ireland Executive, the Outcomes Delivery Plan gives effect to the previous Executive's objective of improving wellbeing for all by tackling disadvantage and driving economic growth. Outcome 4 – we enjoy long, healthy, active lives – relates directly to the aim and objectives of the tobacco control strategy. A key element of delivery is partnership working, not just between government departments but also with local government, the private sector and the voluntary and community sectors.

Health and Wellbeing 2026: Delivering Together

71. Health and Wellbeing 2026: Delivering Together was launched in October 2016, and sets out a vision for the transformation of Health and Social Care (HSC) in Northern Ireland. In line with the aspirations of the Outcomes Delivery Plan, the overarching aim in Delivering Together is that people in Northern Ireland lead long, healthy and active lives. Improving the health of the population is included as one of the four key aims of the document and there is a focus on prevention, early intervention and wellbeing which are themes reflected in the tobacco control strategy.

NI Cancer Strategy

72. The anticipated growth in the incidence of cancer in the community is directly attributable to the fact that people are living longer and that this trend is expected to continue in the years ahead. Compared to 2009-13 averages, projections show that the number of lung cancer cases diagnosed among men are projected to increase 26% by 2020 and 74% by 2035. Amongst women the projected increases are 32% and 91% respectively. The Department of Health recently announced the development of a 10 year Cancer Strategy for Northern Ireland. Whilst this is in the early stages of development, a key theme will be prevention and the new strategy is likely to complement existing tobacco control work.

Illicit Tobacco

- 73. UK wide, the cigarette illicit market share is estimated at 9% in 2017-18. This resulted in an estimated loss of £0.8 billion in duty and a further £0.2 billion in VAT, giving a total loss of £1 billion. The hand-rolling tobacco illicit market share is estimated at 32% in 2017-18. This resulted in an estimated loss of £0.7 billion in duty and a further £0.2 billion in VAT, giving a total loss of £0.9 billion.¹³
- 74. In 2015, HM Revenue and Customs (HMRC) and Border Force published their joint strategy, Tackling Illicit Tobacco: From Light to Leaf. A key focus is on reducing the perception that tobacco fraud is a victimless activity. The strategy notes that: "Even when consumers of illicit product suspect duty evasion has affected the price, they might not understand the extent of criminality beyond that, or how the profits they are contributing to may be used." The Strategy undertakes to work with other stakeholders to target media and educational campaigns using behavioural levers to expose the true nature of the fraud and the consequences for those involved in it and to ensure that media messages are aligned with operational activity and resonate with local communities.
- 75. Locally, the Organised Crime Taskforce, which includes HMRC and Border Force representatives, report a number of large scale seizures of illicit cigarettes including, in February 2018, the seizure of 8 million Richman cigarettes in Belfast port and a further 4.8 million in October 2019. Intelligence suggests that illicit tobacco products continue to be imported, distributed and sold in Northern Ireland by Organised Crime Groups (OCGs) based in Northern Ireland, mainland UK and Ireland. Tobacco products continue to be imported into Northern Ireland via postal services and fast parcel post in packages varying from 200 to 1500 cigarettes and up to 1.5kg of hand rolling tobacco.¹⁵

Political Landscape

EU Exit

- 76. At the end of the EU Exit Implementation Period the UK will no longer be bound by the EU acquis. This means that EU tobacco legislation, including the Tobacco Products Directive (TPD), will no longer apply in Great Britain. The implications for Northern Ireland, under the Northern Ireland Protocol, are still to be established.
- 77. The UK domestic law that implements the relevant EU directives remains in force, but minor amendments have been necessary in order to ensure it continues to function effectively after EU exit. These amendments have been brought in through regulations made under the EU (Withdrawal) Act powers. The UK government has committed to an assessment of tobacco and related products legislation following EU exit. In doing so the UK Government will seek to explore whether the regulation has achieved its desired effect, whilst offering the highest possible protection to public health. There will be ongoing engagement with devolved administrations in relation to the implications of EU exit.

NI Assembly

78. This report outlines the legislative developments that have taken place during the life time of the strategy. In practical terms, the implementation of the strategy continued during the absence of the NI Assembly. However, there has been a notable delay in relation to making regulations relating to smoking in private vehicles (with children present) and restricting the age of sale of nicotine inhaling products. Both these sets of regulations are subject to the draft affirmative resolution procedure which requires them to be debated by the NI Assembly. It is expected that, subject to the necessary approvals, these regulations will be progressed at the earliest opportunity.

Environmental concerns

79. An increased focus on pollution and governments' environmental responsibilities, has added to the debate on cigarettes and their impact on health. Cigarette butts or filters are the most littered item on the planet. An estimated 5.6 trillion cigarettes are smoked each year, out of which two-thirds are improperly disposed of. Cigarette butts are composed of thousands of cellulose acetate fibres and, although biodegradable, take years to disappear from the environment. Used filters also contain thousands of chemicals that can kill plants, insects, rodents, fungus

and other life forms, and some of which are known carcinogens. There are many reports of young children and pet dogs accidentally swallowing cigarette butts, and they've even been found in wild animals such as seabirds and turtles.¹⁶

Smoke-free Prisons

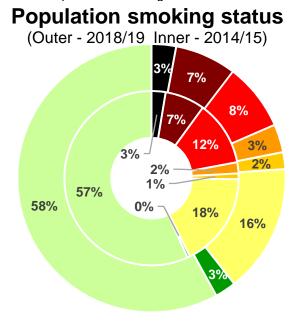
80. Smoke-free prisons have been a key development in other parts of the UK in recent years. The Isle of Man Prison became smoke-free in March 2008 in a bid to protect staff and prisoners from second-hand smoke. Following air quality testing in prisons in 2015, HM Prison and Probation Service (HMPPS), with NHS England and PHE, implemented a project to move to a smoke free environment in all closed prisons in England and Wales through a staged process.¹⁷ This process was completed in July 2018. On 30 November 2018, all prisons in Scotland became smoke free, where tobacco is banned and is a prohibited item. A service specification sets out the services and support that will be offered in all prisons in Scotland, to help individuals cope without tobacco.¹⁸ In Northern Ireland work is being undertaken by the NI Prison Service with the aim of implementing smoke free prisons by the end of September 2020.

Electronic cigarettes (e-cigarettes)

E-cigarette use

81. Since 2011, the popularity of nicotine inhaling products, the most popular of which are e-cigarettes, has grown rapidly. The 2018/19 Health Survey NI showed that 18% of adults here have tried e-cigarettes at least once and that **7% of the population currently use them**. This is an increase from 5% in 2014/15. Reasons given for using them vary from health reasons (to quit smoking or to reduce the number of cigarettes smoked) to financial reasons (they are cheaper than cigarettes). Around two fifths (41%) of e-cigarette users are current cigarette smokers while around half (48%) used to smoke on a regular basis. 3% of all adults have never regularly smoked but have used e-cigarettes.⁵

Figure 10- Population Smoking Status



- Current smokers currently using e-cigarettes
- Current smokers who ever used e-cigarettes
- Current smokers who never used e-cigarettes
- Ex-smokers who currently use ecigarettes
- Ex-smokers who ever used ecigarettes
- Ex-smokers who never used ecigarettes
- Non-smokers who ever / currently use e-cigarettes
- Non-smokers and never used ecigarettes
- 82. E-cigarette use is higher in the most deprived areas (10%) compared with the least deprived areas (7%). Since 2014/15, e-cigarette use has remained at a similar level in the most deprived areas while it has increased from 4% to 7% in the least deprived areas.
- 83. In Northern Ireland, **5% of 11-16 year olds currently use e-cigarettes**, with **3% using them on a regular basis** (at least once a week).⁸
- 84. The majority of children (94%) have heard of e-cigarettes. Of these, 76% of boys and 84% of girls have never used them.

Table 7- 11-16 year old use of e-cigarettes 2016

Of those who had heard of e-cigarettes, the proportion that had			
	BOYS	GIRLS	
Used in the last week	7%	4%	
Used in the last month	12%	8%	
Used in the last year	20%	14%	
Ever used	24%	16%	
Never used	76%	84%	

Regulation of e-cigarettes

- 85. The revised EU Tobacco Products Directive (TPD), which was implemented across the UK from May 2016, introduced a number of requirements for e-cigarettes in order to ensure that they are safer for use by consumers. Key measures in the EU Directive relate to unlicensed nicotine inhaling products and include:
- a limitation on the nicotine content of e-liquids;
- a requirement for manufacturers and importers to report on ingredients in, and emissions resulting from, the use of e-cigarettes and provide toxicological data;
- a requirement for the provision of information to consumers, including a health warning on packaging; and
- restrictions on cross-border advertising and promotion including a ban on advertising on television, radio and the internet.
- 86. Under the revised TPD all e-cigarettes containing 20mg/ml nicotine or more are required to come under medicines regulations.
- 87. The Department of Health included provisions in the Health (Miscellaneous Provisions) Act (Northern Ireland) 2016 to introduce powers to prohibit the sale of e-cigarettes to under 18s and it is expected that these regulations will come into effect once a Health Minister and Assembly are in place. Similar restrictions have been in force in England and Wales since October 2015 and in Scotland since April 2017. Similar legislation is planned in the Republic of Ireland.

Research and opinions on e-cigarettes

- 88. E-cigarettes have prompted one of the most intense global public health debates in recent times, with conflicting evidence and reports being published on a regular basis.
- 89. For example, an evidence review published by Public Health England (PHE) in 2015 concluded that e-cigarettes are around 95% less harmful than smoking and have the potential to help smokers to quit. It also found that there was no evidence that e-cigarettes are acting as a route into smoking for children or non-smokers. A follow-up report in February 2019¹⁹ proposed that combining e-cigarettes (the most popular source of support used by smokers in the general population), with stop smoking service support (the most effective type of support), should be a recommended option available to all smokers. The report also recommended that local stop smoking services and healthcare

professionals should provide behavioural support to those smokers wanting to quit with the help of e-cigarettes. PHE also reports that there is compelling evidence for licensed e-cigarettes to be available on prescription.²⁰

- 90. The evidence used to inform the 2015 PHE report on e-cigarettes was questioned by an article in the British Medical Journal²¹ which recommended that, until better evidence is available, public health strategies should adopt a precautionary approach.
- 91. In relation to Electronic Nicotine Delivery Systems (ENDS) such as ecigarettes, the World Health Organisation state that, "The evidence on the use of ENDS as a potential cessation aid is still being debated. Some evidence has suggested 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. ENDS should therefore not be promoted as a cessation aid until adequate evidence is compiled on specific types of ENDS products and the public health community can agree upon the effectiveness of those specific products."²²
- 92. A 2018 report by the House of Commons Science and Technology Committee²³ concluded that there was clear evidence that e-cigarettes are substantially less harmful than conventional cigarettes, but also recognised that there are uncertainties, particularly around any long-term health effects, and that further evidence is needed on the relevant risks involved. The report recommended that the Government should maintain its planned annual evidence review on e-cigarettes and extend it to also cover heatnot-burn products. The Government accepted this recommendation.
- 93. In relation to effects on bystanders, Cancer Research state that, "Unlike second-hand smoke from cigarettes which is known to cause cancer there's no evidence that second-hand e-cigarette vapour is dangerous to others."²⁴
- 94. The British Medical Association, having originally proposed a precautionary approach by restricting e-cigarette use in all enclosed public and workplaces, published a position statement in 2017 in which it proposed a softer regulatory approach than exists for smoking in public.²⁵
- 95. In contrast, the World Health Organisation recommends that all designated indoor smoke-free areas should also be vape-free areas.²⁶ The Chartered Institute for Environmental Health also urged caution over a rush to

- embrace vaping as being safe following publication of the 2018 Science and Technology Committee report, citing a lack of knowledge about long-term effects and contradictory evidence.²⁷
- 96. Further afield, some countries have banned the sale of all types of ecigarettes including Argentina, Qatar, Saudi Arabia, Thailand, United Arab Emirates and Uruguay. Others such as Australia, Costa Rica, Jamaica, Japan, Sri Lanka and Switzerland have banned the sale of nicotine containing products. The use of all e-cigarettes is banned in countries such as Cambodia, Jordan, Nepal, Panama, Syrian Arab Republic, Turkmenistan and United Arab Emirates.¹⁹
- 97. While health experts around the world struggle to reach a consensus on ecigarettes, most parties agree that there is a need for further evidence on their use, particularly the long-term health implications which, given the relative newness of these products, are currently unknown.
- 98. The UK E-Cigarette Research Forum (UKECRF) is an initiative developed by Cancer Research UK in partnership with Public Health England (PHE) and the UK Centre for Tobacco and Alcohol Studies (UKCTAS). The Forum brings together policy-makers (including officials from the Department of Health), researchers, practitioners and other non-governmental organisations to discuss the emerging evidence and knowledge gaps about e-cigarettes. The group aims to provide independent assessment of the evidence relating to electronic cigarettes and seeks to identify research priorities, generate ideas for new research projects and enhance collaboration between forum participants. To complement this work, Cancer Research UK has increased its investment in harm reduction and e-cigarette-related research.
- 99. In the Republic of Ireland, The Department of Health has commissioned the Health Research Board to develop an evidence review on the role of ecigarettes in relation to harms, gateway effects and use as a quit tool. The review, expected in early 2020, will inform a policy decision and subsequent recommendations.
- 100. The National Institute for Health and Care Excellence (NICE) is currently updating and amalgamating its tobacco guidelines relating to prevention, cessation and treating dependence. The aim is to bring the guidelines together to form a single coherent set of guidance. Key areas in which new evidence will be reviewed include the impact of e-cigarettes on the smoking behaviours of children and young people and the use of e-

cigarettes in smoking cessation. The updated guidelines are expected to be published in early 2021.

Department of Health position

- 101. In Northern Ireland, the Department of Health has expressed concern over e-cigarettes. While it is recognised that they may have a role to play in harm reduction, their long-term health effects are still unknown and there are a number of concerns around their rising popularity particularly their increased awareness and use among children and young people and the potential for their growing public use to renormalise smoking behaviours. The Public Health Agency advises smokers who choose to use e-cigarettes as a means of stopping smoking to seek the support of a local stop smoking service, as they are four times more likely to succeed with specialist support.
- 102. Together with the PHA, the Department will continue to monitor and review the position on e-cigarettes as further evidence emerges, with a view to ultimately establishing a definitive policy position on this issue. This may require a separate, dedicated, piece of work at a later date. In the meantime, the Department will continue to support, through the PHA specialist smoking cessation services, those smokers who choose to use e-cigarettes to help them quit.

SECTION 7: EVIDENCE REVIEW: TOBACCO CONTROL

Parameters of the evidence review

- 103. The evidence review examined review level evidence published from the date of the Strategy launch to mid-2018 according to an agreed study protocol. A full copy of the evidence review including technical details on the research questions, methods and findings alongside strategy considerations will be published on the Institute of Public Health in Ireland website.
- 104. There were two notable exclusions from the review. Firstly, legislative tobacco control measures of a non-devolved nature along with legislative measures taken forward on a UK wide basis, such as tobacco taxation, product manufacturing, labelling and packaging and certain components of broadcast marketing/advertising, were not considered. Secondly, evidence on e-cigarettes was not considered (as discussed in the previous section, a number of other evidence reviews are underway on this issue).

Alignment between the current strategy and review level evidence

- 105. A number of highly significant regulatory and programme developments were delivered in the first five years of this strategy. Many of these are at the forefront of global tobacco control. Review level evidence is just emerging or not yet available. In this regard, Northern Ireland can create the evidence to inform future reviews as well as use review level evidence to guide practice.
- 106. Several other evidence reviews and evidence synthesis processes inform the implementation of the strategy. Two evidence reviews were commissioned as part of the Strategy implementation examining school-based programmes (Murray, 2016) and delivery of evidence-informed smoking cessation in pregnancy (McCullough et al, 2014). In addition, smoking cessation practice in Northern Ireland is guided by the UK-wide system of evidence review informing NICE guidelines.

Fewer people starting to smoke - insights from review level evidence

- 107. Findings from the evidence review suggest that overall the current approach is supported by review level evidence. Review level evidence supports the use of regulatory restrictions on age of sale, advertising and smoke-free places as levers to reduce the appeal and accessibility of tobacco products. Review level evidence is not yet available on the specific outcome of smoking prevention from more recent regulatory measures like plain packaging, banning vending machines or limiting point of sale display.
- 108. While there is no review level evidence available on the impact of restricting smoking in cars on the specific outcome of smoking prevention, the impact from delays in the enactment of key UK-wide legislature such as that relating to banning smoking in cars with children represents 'lost ground' on changing social norms around tobacco use in Northern Ireland.
- 109. There is very limited evidence to guide approaches to reducing underage sales or on the impact of these measures on reducing youth smoking. However, the actions being delivered under the strategy to date (including new sanctions, test purchasing, training and enforcement) are aligned with the evidence. Evaluation of the additional 'untested' innovations developed through the Northern Ireland strategy is recommended.
- 110. Family-based interventions, with an encouraging authoritative parenting style, were effective in reducing the likelihood of young people starting smoking. Family and community based programmes and healthcare based programmes have comparable evidence of effectiveness and effect size as school-based programmes in the prevention domain, but do not feature as heavily in the current strategy and action plans. There is sufficient evidence to support enhanced engagement with health and social care providers interfacing with children and providing additional resources to support brief advice and motivational interviewing from a prevention perspective.
- 111. The design and delivery of school-based programmes in Northern Ireland could be refreshed in light of the significant contextual changes in the tobacco and e-cigarette retail environment, rising cannabis use and the changing landscape of youth mental health. Review level evidence finds that policies adopting a whole school approach with clear rules on smoking

and consistent enforcement alongside interventions with a focus on problem solving, decision making, developing coping strategies, dealing with peer pressure and resisting offers of tobacco were most effective in smoking prevention. In view of the rising age of smoking initiation and good quality evidence of effectiveness in setting-based approaches, enhancing comprehensive approaches in third level institutions warrant exploration.

112. In a rapidly changing media environment, a bespoke communications strategy for children and young people which is youth-led and encompasses both prevention and support/cessation approaches may also warrant consideration.

More smokers quitting – insights from review level evidence

- 113. The roll-out of NICE guidance in Northern Ireland ultimately continues to guide the offer provided by stop smoking services in the region, but there are significant differences in the design, delivery, commissioning and monitoring of stop smoking services across the UK and across the island of Ireland. Quit rates achieved in Northern Ireland through engagement with the stop smoking services are at least as good as those achieved in other UK jurisdictions.
- 114. The review level evidence offers little insight into the relative effectiveness of recruitment strategies to smoking cessation programmes. Personal, tailored messages that are proactive and intensive enhance recruitment to smoking cessation programmes.
- 115. Review level evidence concludes that combined pharmacological and behavioural approaches are more effective than either alone. Medication compliance and the use of sufficiently high doses of NRT are important success factors for quit attempts. This evidence could be incorporated into service development schemes as well as monitoring and quality management of stop smoking services. The extent of using varenicline for relapse prevention in Northern Ireland shows some promise.
- 116. While e-cigarettes were not included in the evidence review for the reasons mentioned above, it is evident that they are commonly used in the context of a quit attempt as well as for harm reduction.
- 117. Review level evidence on psychosocial interventions comprising counselling, motivational techniques and behavioural therapies was

examined. There are challenges in the interpretation of the review level evidence but motivational interviewing delivered by GPs, performs better than brief advice or usual care. Psychosocial interventions delivered by nurses increased the likelihood of smoking abstinence among both primary and secondary care patients.

- 118. The review level evidence points to systems which support a range of health and social care professionals to systematically identify smoking patients and provide brief intervention and signposting which is very much in line with the current approach in Northern Ireland. Interventions delivered by oral health professionals in the dental or community setting are effective in increasing smoking cessation and may be worth expansion. System level interventions like electronic reminders in the clinical setting, led to improved documentation of smoking status, provision of counselling and referral to smoking cessation services.
- 119. There is consistent evidence that individual counselling increases smoking cessation compared to less intensive support, such as brief intervention. The appropriate deployment of the 'ladder' of behavioural and psychosocial support offered to smokers engaged with stop smoking services in Northern Ireland should be kept under close review.
- 120. Review level evidence suggests that mobile phone messaging can be effective in achieving smoking cessation on a short-term basis, with mixed evidence for smoking cessation at longer follow-up. Evidence on telephone quit lines was mixed and automated telecommunications systems was limited in line with the decision to conclude investment in these domains. There was no evidence that internet-based approaches were more effective than other smoking interventions.
- 121. The existing focus in the strategy on integration of stop smoking approaches across a range of services including chronic disease management is strongly supported by evidence. The evidence review points to potentially exploring the feasibility of expansion to both substance misuse and HIV/AIDS health and social service settings. Smoking cessation interventions prior to surgery are effective. This evidence supports the case for investment and development of the service and comparing practice and outcomes with other services operating across the UK and Ireland.
- 122. Financial incentives enhance the effectiveness of stop smoking services, including among pregnant women, principally in terms of

attracting people to make and sustain a quit attempt. The integration of financial incentives into NI stop smoking services should now be considered.

- 123. Evidence supports the effectiveness of workplace based approaches, but the applicability of international evidence, principally from the US to the local context warrants further consideration. It would appear that financial incentives boost smoking cessation while they are in place, but sustained abstinence beyond the reward schedule is dependent on substantial cash payments. Deposit-refund schemes generally have lower uptake, but may achieve greater success in quitting than reward-only schemes. The evidence presented in this review may be useful in the future design, delivery and monitoring of workplace based approaches operating in Northern Ireland.
- 124. Review level evidence concludes that investments in training and skills deliver results, particularly in the primary care setting. This evidence supports the case for ongoing investment and development of training and a comparison of practice and outcomes with training schemes operating across the UK and Ireland.
- 125. The extent of population level behaviour change as a result of mass media campaigns is unclear and understandably difficult to capture and quantify. Duration and intensity are important campaigns and follow-up periods need to be sufficient to detect changes in smoking behaviour.

Protection from second-hand smoke – insights from review level evidence

- 126. Actions delivered under the strategy to date are supported by evidence of effectiveness and underpinned by UK wide comprehensive smoke-free legislation.
- 127. Evidence supports the expansion of smoke-free regulations in third level campuses and prisons. However, evidence also highlights significant implementation challenges. In light of this, enhanced communities of practice, knowledge sharing and use of strategies and research based in implementation science may be beneficial.
- 128. Smoke-free legislation has been effective in reducing second hand smoke exposure and improving health outcomes for children and adults. There is convincing evidence of significant benefits from smoking bans in

institutions such as hospitals, universities and prisons in terms of reduced exposure to SHS as well as some reduction in active smoking.

129. Supporting parents, including expectant parents, to quit smoking is theoretically sound as a potentially powerful approach to reducing SHS exposure among children but there is little evidence on 'what works' for this group. There is limited review level evidence of 'what works' in terms of interventions to support 'mitigation' behaviours around exposing others to second-hand smoke in non-regulated and home environments. The Department could reasonably maintain a watching brief on findings from published evaluations of interventions and approaches in these areas.

Inequalities in smoking – insights from review level evidence

- 130. The equity impact of stop smoking services in the UK and a comprehensive review of the equity dimension of stop smoking interventions has been published during the first term of the Northern Ireland strategy. This concluded that inequalities in smoking rates have not reduced in the UK as a whole but that Scotland had achieved some success through a strategy of intensive targeting coupled with a service-based equity target and reporting mechanism.
- 131. Review level evidence concludes that lower socio-economic smokers were less likely than higher socio-economic smokers to quit successfully using state supported stop smoking services. There was no specific intervention, or blend of interventions, that delivered equal or better quit rates for disadvantaged smokers. Quit rates among lower socio-economic groups in Northern Ireland, as highlighted in the strategy target, may be enhanced by a sustained focus on enhancing the reach and accessibility of services to disadvantaged communities similar to the Scottish approach.

Pregnancy and smoking – insights from review level evidence

- 132. The evidence for 'what works' in reducing smoking in pregnancy coupled with evidence on the state of implementation of evidence-based guidelines in Northern Ireland (McCullough, 2014) has developed during the first term of the Northern Ireland strategy.
- 133. Findings from a significant trial of the roll out of financial incentives in Northern Ireland will further guide practice. The roll-out of carbon monoxide monitoring in maternity services is in line with evidence. A repeat of the McCullough study could be useful in the final year of the

strategy to inform the content of any future strategy in the region and reveal trends in the policy-implementation gap over time.

134. Although 'pregnant women and their partners' forms a priority group in the strategy, there is little evidence to guide best practice in how to reduce smoking among partners and enhance the quit rate for both members of the expectant couple. Similarly, there was little guidance in review level evidence on the best ways to support reductions of second-hand smoke exposure for pregnant women in domestic settings.

SECTION 8- STAKEHOLDER INPUT

Nature of stakeholder input

- 135. A stakeholder engagement exercise was undertaken by IPH as part of the mid-term review. A separate Stakeholder Engagement Report has been developed. Further detail on methods and findings and considerations for policy will be published on the Institute of Public Health in Ireland website.
- 136. The stakeholder input component of the mid-term review was based on three data sources:
- A workshop with lead implementation stakeholders;
- An online survey of a wider group of implementation stakeholders; and
- An overview of stakeholder engagement reports developed by the PHA during the term of the Strategy
 - 137. The workshop and survey aimed to capture perspectives on strategy implementation. Perspectives were sought on:
- factors supporting and hindering progress;
- progress being made on strategy objectives;
- progress being made in terms of the strategy's priority groups; and
- opportunities and challenges in future implementation
 - 138. Summary tables of insights from five reports developed by the Public Health Agency were produced.

Insights from implementation stakeholders

- 139. Stakeholders identified the following achievements:
- Stakeholders reflected on the success of the Strategy in tackling the appeal, accessibility and affordability of tobacco and a consistent downward trend in smoking uptake among children and young people.
- Stakeholders also referred to ongoing positive shifts in public attitudes, perceptions and social norms driven by public awareness campaigns,

- legislation, education based initiatives and the ongoing dilution of visibility for tobacco promotion.
- Stakeholders reflected on the quality of the smoking cessation service in particular on the accessibility dimension achieved through a structured arrangement with community-based pharmacies. They considered that improvements had been made through the Strategy on service pathways and enhanced collaborative working on delivery models. It was perceived that there was a wider profile of smoking cessation services and better staff knowledge on brief interventions particularly in primary care and acute care.
- Stakeholders identified the ongoing success in compliance and enforcement
 with smoke free legislation as well as developments emerging from banning
 point of sale advertising (2015) and standardised cigarette packaging (2016).
 Test purchasing and the Tobacco Register NI were credited as having created
 increased awareness among retailers regarding enforcement.

140. Stakeholders identified the following challenges:

- Stakeholders reflected principally on the challenges in agreeing, articulating
 and delivering a coherent response to the rise in the use of e-cigarettes,
 which did not feature heavily in the current strategy which was drafted in
 2012. Challenges on the issue were evident at the policy and legislative level
 as well as at the coalface of stop smoking service delivery and enforcement.
 Some were concerned that e-cigarettes could be contributing to a renormalization of smoking especially for vulnerable groups like children.
- Stakeholders reflected on the 'missed opportunity' of underpowered public awareness and engagement campaigns in terms of intensity (i.e. the frequency and 'dose' of campaign funding).
- The challenge of securing additional resources to address inequalities in smoking among disadvantaged or "high use" groups including those with mental illness, the LGBT+ community, and certain geographic communities were also mentioned.
- Challenges were also identified in terms of burnout among those charged with driving and delivering the Strategy and system issues related to limited resources.
- Implementation stakeholders reflected on the absence of an Assembly as a
 major barrier to a progressive tobacco control legislative agenda as well as a
 loss of momentum and discourse at the political level. The example was
 raised around failure to enact legislation aimed at reducing children's
 exposure to secondhand smoke in private vehicles, with concerns about
 'falling behind the rest of the UK'.
- Stakeholders identified an ongoing challenge with making progress on two of the Strategy's priority groups - routine and manual workers as well as pregnant women and their partners - who continue to demonstrate high

- smoking rates in the region. There was an articulated need for better support for policy and programme leads in selecting the best investments to make in enhancing the reach of the service.
- Stakeholders were concerned that more smokers seemed to respond to the stop smoking messaging and signposting by reducing the amount they smoke rather than making a quit attempt, with a shift from regular to occasional smoking at population level. Others raised concerns over an ongoing lack of understanding of the reasons behind the decline in the use of quit kits and whether an effective response was now in place.

Future operating environment

141. Stakeholders identified the following issues as salient to the future delivery of the Tobacco Control Strategy in Northern Ireland.

Table 8- Stakeholder views on salient features to future delivery

Social &	Politics &	Retail	Other
Demographic	Legislation	Environment	
Ageing population Growing cultural & ethnic diversity Growing inequalities Mental illness	 Lack of NI Assembly EU Exit Political divergence New enforcement challenges North/ south relations 	 Innovation in ecigarette offer/market Regulation for ecigarettes Illicit cigarette sales Online sales & advertisements Point of sale protection & control Tobacco industry interference 	Social media/ marketing approach for young people Service user involvement (PPI) Localised engagement models

142. IPH collated the details of PHA stakeholder engagement and produced the summary below.

Summary of insights from stakeholder engagement undertaken by the Public Health Agency

Table 9- PHA summary of stakeholder engagement

	Topic	Year	Stakeholder	Insights
1.	Evaluation of the PHA Smoking	2017	Smokers & Ex- smokers	Recall of the campaign advertisements was 80%

	Campaign; January- March 2017			 (TV), 47.7% (radio), 33.3% (print media) 18.3% (online); and Of those who reported behaviour changes, 26 % reported that this was related to exposure to the campaign. The most common response reported was attempting to reduce the numbers of cigarettes smoked.
2.	Promoting pharmacy based Stop Smoking services	2018	Pharmacy Stop Smoking service providers	Pharmacists suggested improvements to services that appealed to intrinsic/extrinsic motivators for smokers such as self-assessment options, calendars, mobile applications, and improved referrals/recruitment channels from GPs and other healthcare professionals.
3.	Branding workshop: Stop Smoking Services Logo Focus Groups	2018	Smokers & Ex- smokers	Some respondents considered the timeline of the 12 week timeline of the 'Stop Smoking' programme to be too short. Other suggestions to improve services and provide support included: email support, group chats, text services and the introduction of a mobile application.
4.	Quit Kit Resources -Snap Shot Reports	2013- 2018	Smokers	The average numbers of quit kits ordered has substantially declined over the years from 8021 in 2013/14 to 2324 in 2017/18. From 2013/14 women ordered quit kits more frequently than men.

5.	A fieldwork exercise to explore the approaches favoured by smokers to discuss and support their quit attempts	2017	Smokers	 1 in 5 smokers said they had accessed the Stop Smoking Services; Face to face support from the GP or pharmacist was the most preferred method to discuss a quit attempt; and The most beneficial quit supports indicated by participants were: NRT, followed by support from a health prefessional and solf
				health professional and self- help/willpower.

SECTION 9 - CONCLUSIONS AND RECOMMENDATIONS

- 143. The information gathered for the review process highlights the significant volume of work that has been undertaken by all those involved in implementation of the Tobacco Control Strategy. The commitment of those involved in the strategy's implementation and the delivery of services has been instrumental to the progress made.
- 144. There have been encouraging achievements. In particular, the reduction in the number of children smoking to 4% (from 8% in 2010 is a positive indication of the progress that has been made in preventing the uptake of tobacco smoking. It is vital that we continue to reduce smoking rates in relation to young people, and maintain those reductions, if we are to continue to make progress in reducing adult prevalence rates in the longer term. The evidence review confirms that many of the legislative initiatives we have in place to help discourage tobacco appeal and availability amongst children, are at the forefront of tobacco control. Continued enforcement activity is vital in ensuring the maximum impact of that legislation.
- 145. Similarly, Northern Ireland cessation services compare favourably with the rest of the UK in terms of service uptake and 4 week quit rates. It is important that we continue to maximise the opportunities these services provide and continue to develop them in line with evidence of best practice.
- 146. It is clear that, despite good progress in the overall adult prevalence rates, which now stand at 18% of the adult population, the 2020 target of 15% is unlikely to be met. Similarly, particular challenges remain in relation to manual workers and pregnant women: target groups for which smoking prevalence rates (27% and 14% respectively) remain unacceptably high.
- 147. The objectives of: fewer people starting to smoke, more smokers quitting; and protecting people from tobacco smoke are still appropriate approaches to tobacco control and the evidence review identifies the many successes from such approaches. Whilst the target groups also remain relevant, inequalities in smoking prevalence are also a concern in relation to other groups such as people with mental health issues. Effectively addressing the high smoking prevalence rates in deprived areas will have benefits that extend beyond the current targets.
- 148. The structures for delivery of the strategy are considered fit for purpose by those involved in the implementation of the strategy. Members of the

Strategy Implementation Steering Group, and the associated work streams, have made some suggestions in relation to membership and structure that are worthy of further consideration and will be explored further with that group.

- 149. The review group has considered the latest evidence and developments in relation to effective tobacco control, alongside the views of local stakeholders. Taking account of the limited remaining lifespan of the strategy, the review group has prioritised recommendations which can be transposed into actions and progressed immediately. In addition, the evidence review and stakeholder engagement also identify many longer term considerations, which offer a useful basis for the development of any future strategy and should be considered further in that context.
- 150. The original action plan to accompany the strategy was developed by the Public Health Agency (PHA). Actions have been further developed and driven forward by the Strategy Implementation Steering Group (chaired by the PHA). The action plan has evolved over time as various actions have been completed and new ones identified. Recommendations of this midterm review, as presented below, should now be considered by the Strategy Implementation Steering Group with a view to developing appropriate new or revised actions. The PHA remains responsible for implementation of the strategy and, as new actions may have resourcing and delivery implications, the PHA should be in agreement with the actions identified.

RECOMMENDATIONS

151. These recommendations reflect the limited remaining lifespan of the strategy and focus on the development of actions that are achievable by 2022.

Table 10- Recommendations

Red	commendation	Evidence	
	PRIORITY GROUPS		
1	TSISG to formulate a plan for	Smoking prevalence is high in relation to	
	the development of actions	people reporting a possible psychiatric	
	and targets in relation to	disorder. In particular, those with severe	
	people with mental health	mental illness are more likely to die	
	issues who smoke. This	prematurely as a result of modifiable health-	
	should consider both short	risk behaviours such as tobacco smoking.	
	term actions and scope the		
	inclusion of people with		

Rec	commendation	Evidence
	mental health issues as an	
	additional priority group in	
	any new strategy.	
	FEWER PEOPL	E STARTING TO SMOKE
2	TSISG to explore	The evidence review supports the extension
	possibilities, and develop	of family and community based programmes
	appropriate actions, to	and healthcare based programmes as
	maximise the prevention	approaches to smoking prevention. In
	opportunities in relation to	addition, it would be beneficial to consider
	health and social care	the evidence in relation to effectiveness of
	providers interfacing with	school based programmes and approaches
	children.	to communications with children (in particular
	T0100 /	peer led initiatives and media). The need to
3	TSISG to explore	explore new media in relation to children and
	opportunities and identify	young people was also a consideration
	appropriate actions to	identified by stakeholders.
	maximise prevention	
	opportunities through family	
4	and community programmes. TSISG to consider actions to	
4	refresh the design and	
	delivery of school based	
	programmes, along with a	
	communications strategy for	
	young people in relation to	
	both prevention and	
	cessation.	
5	TSISG to consider and	The availability of illicit tobacco continues to
	identify most appropriate	cause concern. Work is underway at a UK
	mechanisms for engagement	inter-departmental level to address issues
	with HMRC on challenges	such as demand and communications.
	relating to illicit tobacco.	However, supply issues are primarily a
		matter for HMRC and Border Force. A better
		understanding of local challenges and
		enforcement activities would be beneficial in
		understanding the challenges.
		MOKERS QUITTING
6	Reflecting on the evidence	The existing focus in the strategy on
	review and current successful	integration of stop smoking approaches
	approaches in health care	across a range of services, including chronic
	settings, TSISG to consider	disease management, is supported by the
	feasibility of expanding stop	evidence. The evidence review suggests it

Rec	commendation	Evidence
1100	smoking interventions and	would be beneficial to explore the feasibility
	support in such settings, and develop appropriate actions. Where such services and	of expansion of such approaches to both substance misuse and HIV/AIDS health and social service settings.
	interventions already exist, the group should consider whether expansion is feasible, or beneficial, and develop new or amended actions as appropriate.	Additionally, in relation to young people, it is suggested that it would be beneficial to integrate stop smoking support into sexual and reproductive health services for young people. Similarly, cessation interventions prior to surgery are shown to be effective
		and the evidence supports the further development of this service.
7	TSISG to consider and	The evidence review supports the
	discuss progression of work	effectiveness of work based approaches to
	based programmes taking	smoking cessation.
	account of experiences from	
	recent programmes as well	
	as the evidence presented in	
	relation to the design,	
	delivery and monitoring of	
	such approaches.	
8	TSISG/PHA to consider the evidence relating to medicine compliance and NRT dosage, alongside updated NICE guidance, in service development, monitoring and quality management of cessation services	Medication compliance and the use of sufficiently high doses of NRT are important success factors for quit attempts.
9	TSISG to continue to identify and progress actions relating to training and skills development in relation to smoking cessation interventions, reflecting on effective practice across UK and Republic of Ireland, particularly in primary care.	Investment in training and skills development deliver results, particularly in primary care settings.
10	TSISG to consider the	Financial incentives enhance the
	options in terms of financial	effectiveness of stop smoking services,
	incentives in line with	including amongst pregnant women,

Red	commendation	Evidence		
	evidence and assess the viability of progressing this specifically in relation to pregnant women.	principally in terms of attracting people to make and sustain a quit attempt.		
11	TSISG to consider practices in Scotland in relation to disadvantaged communities and those recommended in UK wide equity impact analysis of stop smoking services. New actions to target areas of high deprivation to be developed.	Disadvantaged people who smoke were considered in the context of health inequalities. The continued high prevalence rates are a clear indication of a need to look specifically at this group. Feedback from stakeholder engagement confirmed the view that targeting smoking cessation services to areas of disadvantage and within the priority group populations is needed. Scotland has reduced inequalities in smoking mainly through a strategy of intensive targeting coupled with a service-based equity target and reporting mechanism. Stakeholder feedback also suggests that an increased focus on health inequalities could be achieved through targeted co-production of services and community based approaches to services.		
12	TSISG Research and Information work stream to continue to provide updates from UK e-cigarette forum. TSISG to develop further actions to provide for the monitoring of developments in relation to e-cigarettes, which take account of consensus/ position statements across the UK and ROI along with recommendations of professional and non-statutory organisations.	The evidence review did not specifically consider e-cigarettes (or other novel tobacco and nicotine containing products) in relation to smoking cessation. However, this is an evolving area of evidence and has implications across all the strategy objectives. The impending updated NICE guidelines, research to be taken forward by the Health Research Board in the Republic of Ireland, and the ongoing research by Public Health England (and Cancer Research UK) will all be relevant considerations.		
	PROTECTING PEOPLE FROM TOBACCO SMOKE			
13	TSISG to consider and	Evidence supports the expansion of smoke		

_	1.4	
Red	commendation	Evidence
	develop actions to explore the possibilities of third level educational establishments adopting a smoke free policy position. Actions to be developed reflecting work with NI Prison Service in relation to smoke free prisons.	free bans and policies in university settings. There is also evidence that smoke free prisons achieve reduced mortality from smoking-related illness. Stakeholders also raised the need for progression in relation to NI smoke free prisons.
14	The Department of Health and TSISG to continue to consider the developing evidence relating to expansion of smoke free policy and regulations (including developments elsewhere in the UK and Republic of Ireland), along with learning from current smoke free legislation, with a view to assessing implications and applicability to NI.	
15	Subject to the necessary approvals, the Department of Health to work towards implementation of legislation restricting smoking in cars when children are present at the earliest opportunity.	There is little evidence as yet on the benefits of legislation aimed at preventing smoking in cars with children present. However, the benefits of this legislation also extend to denormalising smoking.
	STRUCTURE	AND IMPLEMENTATION
16	TSISG to make provision for an annual event bringing together all members of main group and work streams with a view to improving connectivity between the members.	There was some feeling that connectivity between the work streams could be improved (most respondents described it as poor or ok). The suggestion of a periodic meeting of all TSISG, and associated work stream members, would appear to be a positive suggestion in terms of increasing that connectivity.
17	Recommendations relating to	There were several comments made by

Red	commendation	Evidence
	structure and membership	TSISG members relating to current
	should be discussed in	membership. For example: there was some
	further detail by TSISG with a	feeling that membership was too rigid and
	view to reaching a consensus	could include guest speakers; others
	on which suggestions should	suggested that the communication and
	be progressed.	education work stream be split into distinct
		work streams. There was a further
		suggestion that the research work stream
		would benefit from collaborative links with
		other research networks.

Appendix 1 – Review group membership

Gerard Collins – Department of Health (Chair until November 2018)

Bryan Dooley- Department of Health (Chair from November 2018)

Jenny McAlarney- Department of Health (until April 2018)

Karen Oldham – Department of Health (from July 2018)

Nigel McMahon - Department of Health

Bill Stewart - Department of Health

Gareth Wright – Department of Health

Colette Rogers – Public Health Agency

Siobhan O'Brien – Public Health Agency

Helen McAvoy – Institute of Public Health

Diane Herron - Belfast City Council

Gerry McElwee - Cancer Focus NI

Margaret Carr – Cancer Research UK

Caolan Ward – British Heart Foundation (until September 2018)

Denise McAnena- British Heart Foundation (from September 2018)

Terry Maguire – Independent Pharmacist

Vanessa Chambers – Community Pharmacy NI

REFERENCES

https://www.cancerresearchuk.org/about-cancer/lung-cancer/about

- ³ Einarson A and Riordan S. Smoking in Pregnancy and lactation: a review of risks and cessation strategies. European Journal Clinical Pharmacology. 2009 Apr;65 (4): 325-30. Epub 2009 Jan 24
- ⁴ Department of Health. Health Inequalities Annual Report 2019
- ⁵ Department of Health. Health Survey 2018/19
- ⁶ GOV.UK severe mental illness (SMI) and physical health inequalities briefing. September 2018
- ⁷ Improving the physical health of adults with severe mental illness: essential actions A report of the Academy of Medical Royal Colleges and the Royal Colleges of General Practitioners, Nursing, Pathologists, Psychiatrists, Physicians, the Royal Pharmaceutical Society and Public Health England- October 2016
- ⁸ Department of Health. Young People Behaviour and Attitudes Survey Health Modules 2016
- ⁹ Department of Health, NI Health and Social Care Inequalities Monitoring System
- ¹⁰ ONS- Adult smoking habits in the UK: 2018
- World Health Organisation. 2008. WHO Report on the Global Tobacco Epidemic, 2008: The MPOWER Package. Geneva: WHO
- ¹² N.I Cancer Registry Trends 1993-2013 With Projections to 2035
- ¹³ Measuring tax gaps 2019 edition Tax gap estimates for 2017-18 HMRC
- ¹⁴ HMRC and Border Force Tackling Illicit Tobacco: From Light to Leaf 2015
- ¹⁵ Organised Crime Taskforce annual report and threat assessment 2017- 2018
- ¹⁶ Environmental Journal July 2019
- ¹⁷ Public Heath England Successfully Driving Smoke-free Prisons July 2018 https://publichealthmatters.blog.gov.uk/2018/07/18/successfully-delivering-smokefree-prisons-across-england-and-wales/
- ¹⁸ NHS Health Scotland
 - http://www.healthscotland.scot/media/2276/smoke-free-prisons-pathway-a-service-specification-supporting-people-in-our-care.pdf
- ¹⁹ https://www.gov.uk/government/publications/vaping-in-england-an-evidence-update-february-2019/vaping-in-england-evidence-update-summary-february-2019
- ²⁰ https://www.gov.uk/government/news/phe-publishes-independent-expert-e-cigarettes-evidence-review
- ²¹ BMJ 2018;360:k1262
- WHO Report on the Global Tobacco Epidemic 2019 https://apps.who.int/iris/bitstream/handle/10665/326043/9789241516204-eng.pdf?ua=1
- nttps://apps.wno.int/iris/bitstream/nandie/10665/326043/9789241516204-eng.pdf?ua=1

 23 House of Commons Science and Technology Committee E-Cigarettes 7th report of Session 2017-
- 2019
- https://www.parliament.uk/business/committees/committees-a-z/commons-select/science-and-technology-committee/inquiries/parliament-2017/e-cigarettes-17-19/
- ²⁴ Cancer Research UK 2016
 - $https://scienceblog.cancerresearchuk.org/2016/05/17/10-common-questions-about-e-cigarettes-answered/?_ga=2.51822442.2114129248.1568807652-321937327.1562663721$
- ²⁵ https://www.bma.org.uk/collective-voice/policy-and-research/public-and-population-health/tobacco/e-cigarettes
- ²⁶ WHO Bulletin 2017

https://www.who.int/bulletin/volumes/95/7/16-186536/en/

²⁷ Chartered Institute of Environmental Health 2018

https://www.britsafe.org/publications/safety-management-magazine/safety-magazine/safety-management-magazine/safety-

¹ ASH Factsheet Smoking and Disease- June 2016

² Cancer Research UK