

# AIMING HIGH: WHY THE UK SHOULD AIM TO BE TOBACCO-FREE



A REPORT BY CANCER RESEARCH UK AND THE UK HEALTH FORUM

MARCH 2016



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Thanks also to the independent experts who helped to peer review the modelling outputs and colleagues who contributed to the development of the project. Cover image: fotologic (flickr).



### ABOUT CANCER RESEARCH UK

Cancer Research UK is the world's largest independent cancer charity dedicated to saving lives through research. We support research into all aspects of cancer through the work of over 4,000 scientists, doctors and nurses. In 2014/15, we spent £434 million on research institutes, hospitals and universities across the UK – including a £41 million contribution we made to the Francis Crick Institute. We receive no funding from the Government for our research. This project has been commissioned by the Cancer Research UK Policy Research Centre for Cancer Prevention. To learn more about this research centre, please [click here](#).

Cancer Research UK is a registered charity in England and Wales (1089464), Scotland (SC041666) and the Isle of Man (1103).



### ABOUT THE UK HEALTH FORUM

The UK Health Forum is a charitable alliance of professional and public interest organisations working to reduce the risk of avoidable non-communicable diseases (NCDs) by developing evidence-based public health policy and supporting its implementation through advocacy and information. Working with and through our members, we are a centre of expertise in policy research and development, epidemiological and economic modelling of NCDs, and information provision.

UK Health Forum is a registered charity (803286).

## EXECUTIVE SUMMARY

Smoking is still the biggest preventable cause of cancer in the UK, and the biggest cause of premature mortality and health inequalities. The single best thing a smoker can do for their health is quit. And the best thing a Government can do for the health of the country is to reduce the number of people who smoke.

Tobacco control policy has been successful in supporting individuals to quit and to reduce uptake. Smoking prevalence in the UK has decreased over the past 35 years, largely as a result of a range of evidence-based tobacco control policies including comprehensive restrictions on tobacco marketing, the tobacco duty escalator and smoke-free workplaces.

But it is not a given that smoking rates will continue to decrease. Latest data from the Office for National Statistics (ONS) points to smoking rates having stalled across the UK in 2014<sup>1</sup>, whilst the Smoking Toolkit Study for England shows that smoking rates in England did not decline in 2015 – the first time since the survey started in 2007<sup>2</sup>.

The report by Action on Smoking and Health (ASH) 'Smoking Still Kills'<sup>3</sup>, endorsed by Cancer Research UK and the UK Health Forum, sets a clear plan of action that the Government should follow over the next five years to maintain progress on tackling tobacco. In the Department of Health's new Tobacco Control Strategy for England, we want to see a comprehensive approach which protects people from the lethal grip of tobacco. This approach must include an ambition for a 'tobacco-free' UK by 2035, where less than 5% of the population smoke across all socio-economic groups

– a core recommendation of the Smoking Still Kills report.

We believe that quantifying the impact of further tobacco interventions is an important lever for change. This study uses a state of the art simulation model to measure dynamic changes in smoking prevalence over time by age, gender, sex and socio-economic status. It tested the impact of achieving a tobacco-free UK on the future burden of smoking-related diseases and cost savings to the NHS and society.

It should be noted the assumptions in this report are based on a continued decline in smoking. In recent years there have been substantial reductions to public health funding for Stop Smoking Services and mass media quit campaigns in particular, which could seriously jeopardise the progress that has been made. This has the potential to make the baseline assumptions in the report optimistic.

## KEY FINDINGS

### **EVEN IF CURRENT TRENDS OF DECREASING SMOKING PREVALENCE CONTINUE:**

- Tobacco could still cause 1.35 million new cases of disease over the next twenty years<sup>1</sup>. This includes 580,600 cases of cancer.
- A radical upgrade in prevention is needed to achieve our tobacco-free ambition by 2035 for the UK. If current

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<sup>1</sup> Values are derived by estimating the avoidable costs and diseases resulting from a 100% reduction in the prevalence of smoking below the predicted trend. This difference provides an estimate of the total directly attributable impact of smoking over the period of 2015 and 2035.

trends continue, smoking prevalence could decrease from 18% and 17% among men and women in 2015 to 10% in 2035 – missing our ambition.

- The poorest in society would increasingly bear the disease burden caused by smoking over the next twenty years. 2.4% of men and 2.6% of women from the least deprived income quintile are predicted to smoke in 2035, compared to 15.7% of men and 14.3% of women from the most deprived income quintile. The prevalence of smokers is projected to drop most markedly among the highest two income groups.
- Tobacco-related diseases could cost an additional £3.6bn per year in 2035. This includes £542m in direct NHS costs and £3.03bn in indirect societal costs.

#### ACHIEVING A TOBACCO-FREE UK WOULD DRAMATICALLY IMPROVE THE NATION'S HEALTH:

- Compared to the current trend of decline, achieving a tobacco-free UK by 2035 could avoid around new 97,500 cases of disease, including around 36,000 cancers over the next 20 years.
- In the year 2035 alone, this is equivalent to avoiding around 12,355 new cases of disease across the UK, including around 5,100 cancers.
- Achieving a tobacco-free ambition would avoid around £615m in costs in the year 2035 alone. These include

£67m in direct NHS costs, and £548m in indirect societal costs.

#### POLICY RECOMMENDATIONS

The Government should set an ambition to achieve a 'tobacco-free UK' by 2035, where less than 5% of the UK population smoke across all socio-economic groups.

Achieving this will require a range of policy measures. There should be a crucial focus to promote and fund services to help smokers quit, where the largest gains are to be made year on year. These measures should:

- Sustainably fund Stop Smoking Services and mass media campaigns to encourage and support people to quit.
- Introduce a levy on the tobacco industry of £500m per year, with the funds used for tobacco control. This ensures sustainable funding for Stop Smoking Services. The tobacco industry should be made to pay for the damage caused by their products.



1.35m

If current trends continue, tobacco could cause 1.35 million new cases of disease over the next twenty years



£615m

Achieving a tobacco-free UK could avoid around £615m in costs to the NHS, social care and societal costs in 2035 alone

## AIMS AND METHODS

This study examined the effect of future trends in smoking prevalence on incidence of non-communicable disease such as cancer, coronary heart disease (CHD), chronic obstructive pulmonary disease (COPD) and stroke. It updates and builds on previous studies to review the latest trends in smoking prevalence to predict prevalence in twenty years. We have also sought to quantify the impact of achieving a tobacco-free ambition relative to this predicted trend, in terms of disease incidence and health costs in the UK.

A full breakdown of the methodology used in this analysis can be found in the accompanying technical report.

### EXPLANATION OF THE MODEL

This report uses a dynamic microsimulation model to predict the future health and economic impact of smoking prevalence by 2035. This model examines data on risk factors, specifically historical and current smoking prevalence, reported by age, sex and income quintile to create longitudinal projections of smoking prevalence.

The microsimulation method has been cited as the best method for modelling non-communicable diseases because of its capacity to simulate entire populations at an individual level. Data has been generated to be analysed by gender and income quintile.

### DISEASES INCLUDED IN THE MODEL

The smoking-related diseases included in the model are fourteen different cancers (colorectal, larynx, liver, oesophageal, oral,

bladder, cervical, acute myelogenous leukaemia (AML) and chronic myelogenous leukaemia (CML), gallbladder, ovarian, kidney, lung, pancreatic), CHD, COPD and stroke. Proxy data were not generally required, but appropriate proxies used where morbidity, mortality or survival data was incomplete or unavailable.

### DATA SOURCES

Smoking prevalence data and socioeconomic status data were extracted from the General Household Survey (GHS)/General Lifestyle Survey (GLS), following issue by special license from the UK Data Service for years 2000 to 2012.

National population distribution data, stratified by age and sex, were used in conjunction with national mortality distribution data. Principal projections data and mortality distribution data were obtained from the ONS, and were pre-processed to render them into a form acceptable to the model. Migration of individuals in and out of the country was modelled. Mortality distributions were used to compute the probability of death for the diseases of interest as well as other unspecified causes of death. Total fertility rates, stratified by the mothers' age, was used to project increases in the population over time.

Direct NHS cost data were based on healthcare expenditure data obtained from the NHS England programme budgeting cost database. Indirect societal costs resulting from a loss of economic productivity as a result of morbidity and mortality were calculated from a range of

data sources including ONS, the Annual Survey of Hours and Earnings (ASHE) and the Labour Force Survey. The number of days off work for a given disease was obtained using modelled outputs from a previous health economic modelling project overseen by the Centre for Health Economics at the University of York and the School of Health and Related Research (SchARR) at Sheffield University.

Table 1: Data input into the model

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#### RISK FACTOR DATA

1. Historical and current prevalence of smoker status (never smoker, ex-smoker and smoker) by age, sex and income quintile

(Obtained from General Household Survey and General Lifestyle Survey)

#### DISEASE DATA

2. Most recent incidence, mortality and survival of the diseases of interest by age and sex
3. Relative risk of acquiring the diseases of interest, stratified by age and sex, where available

(Identified by Cancer Research UK)

#### DEMOGRAPHIC DATA

4. Most recent UK population, stratified by age and sex
5. Most recent mortality and fertility rates of the UK population

(Obtained from Office of National Statistics)

#### HEALTH ECONOMIC DATA

6. Mean utility weights of the diseases of interest prior to treatment intervention
7. Most recent direct NHS cost associated with the diseases of interest
8. Most recent indirect societal cost associated with the diseases of interest

(Obtained from a range of sources including the Office of National Statistics, Annual Survey of Hours and Earnings (ASHE) and the Labour Force Surveys)

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## DEFINITIONS

This research explored adult smoking prevalence, with adults defined as those between 18-100 years old.

'Direct NHS costs' are comprised of costs to: prevention and health promotion; primary care and prescriptions; secondary inpatient and outpatient care; urgent and emergency care; community care and social care.

'Indirect societal costs' are comprised of a loss of economic productivity as a result of premature morbidity (illness) and mortality (death).

## ASSUMPTIONS

As with any predictive modelling research, a series of assumptions are applied to ensure that the microsimulation model can produce robust and reproducible outputs. In generating findings, the following assumptions have been made:

- This report looks at cigarette smoking prevalence only, as is consistent with previous academic literature<sup>4,5</sup>. In calculating prevalence data, the model makes considerations about the role of both 'non-uptake' and 'cessation' in reducing smoking prevalence.
- This report has used risk factor data for England, adjusted for the UK population, to estimate disease outcomes. The England-only General Lifestyle Survey was used for projecting smoking prevalence, as this was the most available and plentiful data source on smoking prevalence in the UK, despite smoking rates recorded as

being slightly higher in Wales (19.2%), Scotland (20.3%) and Northern Ireland (18.2%)<sup>6</sup>. More in-depth comparison would be necessary to ensure data from different health surveys can be similarly compared.

- Establishing a baseline trend for tobacco control makes an assumption that existing tobacco control policies are sustained. As a result, existing duties and taxes, including any escalators are projected forwards over a twenty-year period.



## WHAT THIS REPORT ADDS TO THE EVIDENCE BASE

A number of reports have sought to calculate the disease and economic burden of smoking to society and quantify the impact of the tobacco industry.

### NATIONAL

Smoking is estimated to have cost the NHS £1.4-1.7bn in England in 1996, predicted to have increased to £2.7bn in 2006<sup>7</sup>. The latter calculation includes £1bn in smoking-attributable hospital admissions, £530m in general practitioner (GP) consultations, £900m in GP prescriptions, £190m in outpatient attendances and £50m in practise nurse consultations.

The ASH Ready Reckoner calculates the local or regional economic impacts of smoking and tobacco use, using up-to-date smoking prevalence data. It estimates the cost to the NHS of treating diseases caused by smoking in England to be approximately £2bn a year<sup>8</sup>. The ASH Reckoner is a static tool that considers the effects of smoking at the current time. In contrast, the microsimulation model is a dynamic (stochastic) model that enables future projections of disease burden and costs.

The way the two models estimate costs are fundamentally different. The ASH Reckoner tool estimates the economic burden of smoking by multiplying a population attributable fraction (PAF) with the total cost of disease, whereas this microsimulation model attaches the average disease cost per case to every individual in the model who has developed a disease. These two models should be considered as complementary but

different.

### GLOBAL

As well as local and national analyses about the cost burden of tobacco, there have been attempts made at a global level to quantify the financial gains achieved by tobacco control. The McKinsey Institute estimates the global cost of tobacco to be \$2.1 trillion, the costliest social burden caused by humans alongside armed violence, war and terrorism<sup>9</sup>. The World Health Organization has estimated that smoking causes over \$500bn in economic damage every year, exceeding total annual health expenditures in many low-and-middle-income countries<sup>10</sup>.

Research has also sought to quantify the profits of the tobacco industry, finding that at \$44.1bn in 2013 the profits of the top six tobacco companies are equivalent to the combined profits of The Coca-Cola Company, Walt Disney, General Mills, FedEx, AT&T, Google, McDonald's and Starbucks in the same year<sup>11</sup>.

### HOW THIS REPORT DIFFERS

This report does not seek to provide an explicit analysis of cost-effectiveness or quantify the vast global burden of the tobacco industry. Instead, it seeks to identify the opportunities for tobacco control policies in the UK and identify the 'size of the prize' that could be gained following decisive and evidence-based policy interventions as part of the Government's tobacco control strategy.

The report is to our knowledge the first piece of research that looks into the next twenty years to understand the potential disease and economic burden of tobacco. It is also the first research project of this type to our knowledge focused on UK smoking prevalence that has sought to break down smoking by age, gender and income quintile to understand the differential impact of smoking.

## RESULTS

### 1. IF CURRENT TRENDS CONTINUE, A TOBACCO-FREE AMBITION WILL NOT BE ACHIEVED BY 2035

#### KEY STATISTICS

Smoking prevalence could fall from 17% among men and women in 2015 to 10% in 2035.

Broken down by gender, smoking prevalence is projected to decrease from 18% to 10% in males and from 17% to 10% in females.

The prevalence of male smokers is projected to decrease amongst all age groups, most markedly among 18-29 year olds, decreasing from 24% in 2015 to 11% in 2035. This decline in prevalence across all age groups is also shown in female prevalence, again with the most prominent decline among 18-29 year olds, decreasing from 25% in 2015 to 15% by 2035.

The oldest age group (adults aged 80+) is projected to comprise the lowest proportion of smokers by 2035, with just 2% prevalence for males and 4% prevalence for females.

Even with this decline the disease burden is striking. If current trends continue, tobacco could still cause 1.35 million new cases of disease over the next twenty years<sup>2</sup>. This includes 580,600 cases of cancer.

Furthermore, the economic impact of this projected trend is significant. Tobacco-related diseases could cost an additional £3.2 billion/year to the NHS (£542m) and wider society (£3.03bn) in 2035 alone.

See the next page for relevant tables and graphs.

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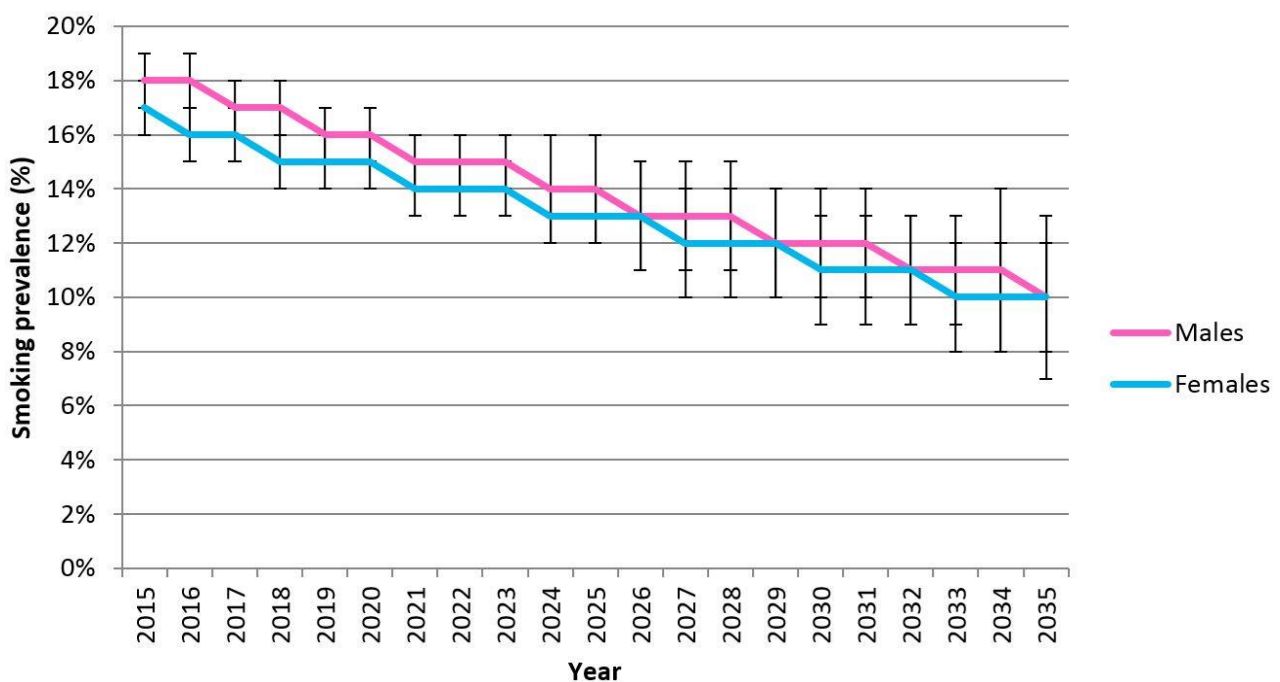
<sup>2</sup> Values are derived by estimating the avoidable costs and diseases resulting from a 100% reduction in the prevalence of smoking below the predicted trend. This difference provides an estimate of the total directly attributable impact of smoking over the period of 2015 and 2035.

## TABLES AND GRAPHS

Table 2: Prevalence of smokers (18-100 years olds): baseline current trend scenario, males and females

Year	Male				Female				Both			
	Non-smoker	95% CL	Smoker	95% CL	Non-smoker	95% CL	Smoker	95% CL	Non-smoker	95% CL	Smoker	95% CL
2015	0.82	0.01	0.18	0.01	0.83	0.01	0.17	0.01	0.83	0.01	0.17	0.01
2016	0.82	0.01	0.18	0.01	0.84	0.01	0.16	0.01	0.83	0.01	0.17	0.01
2017	0.83	0.01	0.17	0.01	0.84	0.01	0.16	0.01	0.84	0.01	0.16	0.01
2018	0.83	0.01	0.17	0.01	0.85	0.01	0.15	0.01	0.84	0.01	0.16	0.01
2019	0.84	0.01	0.16	0.01	0.85	0.01	0.15	0.01	0.84	0.01	0.16	0.01
2020	0.84	0.01	0.16	0.01	0.85	0.01	0.15	0.01	0.85	0.01	0.15	0.01
2021	0.85	0.01	0.15	0.01	0.86	0.01	0.14	0.01	0.85	0.01	0.15	0.01
2022	0.85	0.01	0.15	0.01	0.86	0.01	0.14	0.01	0.86	0.01	0.14	0.01
2023	0.85	0.01	0.15	0.01	0.86	0.01	0.14	0.01	0.86	0.01	0.14	0.01
2024	0.86	0.02	0.14	0.02	0.87	0.01	0.13	0.01	0.86	0.01	0.14	0.01
2025	0.86	0.02	0.14	0.02	0.87	0.01	0.13	0.01	0.87	0.02	0.13	0.02
2026	0.87	0.02	0.13	0.02	0.87	0.02	0.13	0.02	0.87	0.02	0.13	0.02
2027	0.87	0.02	0.13	0.02	0.88	0.02	0.12	0.02	0.87	0.02	0.13	0.02
2028	0.87	0.02	0.13	0.02	0.88	0.02	0.12	0.02	0.88	0.02	0.12	0.02
2029	0.88	0.02	0.12	0.02	0.88	0.02	0.12	0.02	0.88	0.02	0.12	0.02
2030	0.88	0.02	0.12	0.02	0.89	0.02	0.11	0.02	0.88	0.02	0.12	0.02
2031	0.88	0.02	0.12	0.02	0.89	0.02	0.11	0.02	0.89	0.02	0.11	0.02
2032	0.89	0.02	0.11	0.02	0.89	0.02	0.11	0.02	0.89	0.02	0.11	0.02
2033	0.89	0.02	0.11	0.02	0.90	0.02	0.10	0.02	0.89	0.02	0.11	0.02
2034	0.89	0.03	0.11	0.03	0.90	0.02	0.10	0.02	0.90	0.02	0.10	0.02
2035	0.90	0.03	0.10	0.03	0.90	0.02	0.10	0.02	0.90	0.03	0.10	0.03

Graph 1: Prevalence of smokers (18-100 years olds): baseline current trend scenario, males and females



## 2. TOBACCO WILL CONTINUE TO BE AN ISSUE OF HEALTH INEQUALITIES

### KEY STATISTICS

Whilst the prevalence of smoking is predicted to decline across all income quintiles, this decline will not occur equitably.

For males, 2.4% of those in the highest income quintile are predicted to smoke in 2035 compared to 15.7% of the lowest income quintile. For females, 2.6% of those in the highest income quintile are predicted to smoke in 2035 compared to 14.3% in the lowest income quintile.

For both men and women, the prevalence of smoking is projected to drop most markedly among the highest two income groups, with proportionally slower rates of decline in the lowest two income groups. The findings from this research suggest tobacco disproportionately affects more socially deprived groups compared to those who are better off, and will continue to do so.

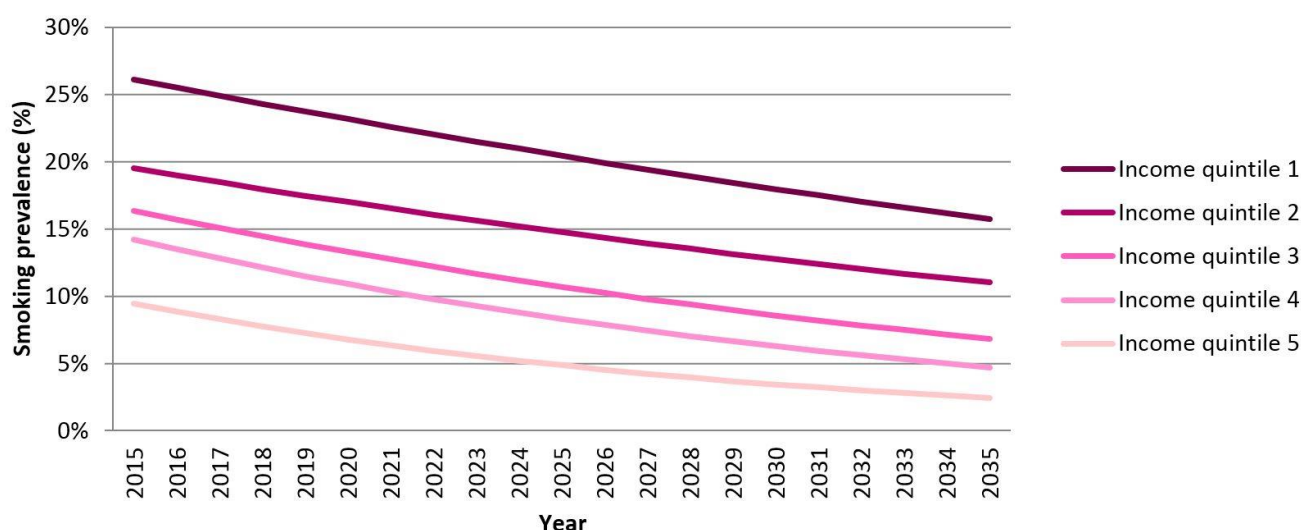
See the next page for relevant tables and graphs.

## TABLES AND GRAPHS

**Table 3:** Prevalence of smoking by income quintile, males

QUINTILE	YEAR	NON-SMOKER	LOWER CI	UPPER CI	SMOKER	LOWER CI	UPPER CI
1 (LOWEST INCOME)	2015	0.7388	0.7217	0.7559	0.2612	0.2441	0.2783
	2035	0.8427	0.8087	0.8768	0.1573	0.1232	0.1913
2	2015	0.805	0.7911	0.819	0.195	0.181	0.2089
	2035	0.8899	0.8648	0.9151	0.1101	0.0849	0.1352
3	2015	0.8363	0.825	0.8475	0.1637	0.1525	0.175
	2035	0.9317	0.9166	0.9468	0.0683	0.0532	0.0834
4	2015	0.8581	0.8486	0.8676	0.1419	0.1324	0.1514
	2035	0.9528	0.9427	0.9629	0.0472	0.0371	0.0573
5 (HIGHEST INCOME)	2015	0.9054	0.8979	0.9129	0.0946	0.0871	0.1021
	2035	0.9757	0.9698	0.9816	0.0243	0.0184	0.0302

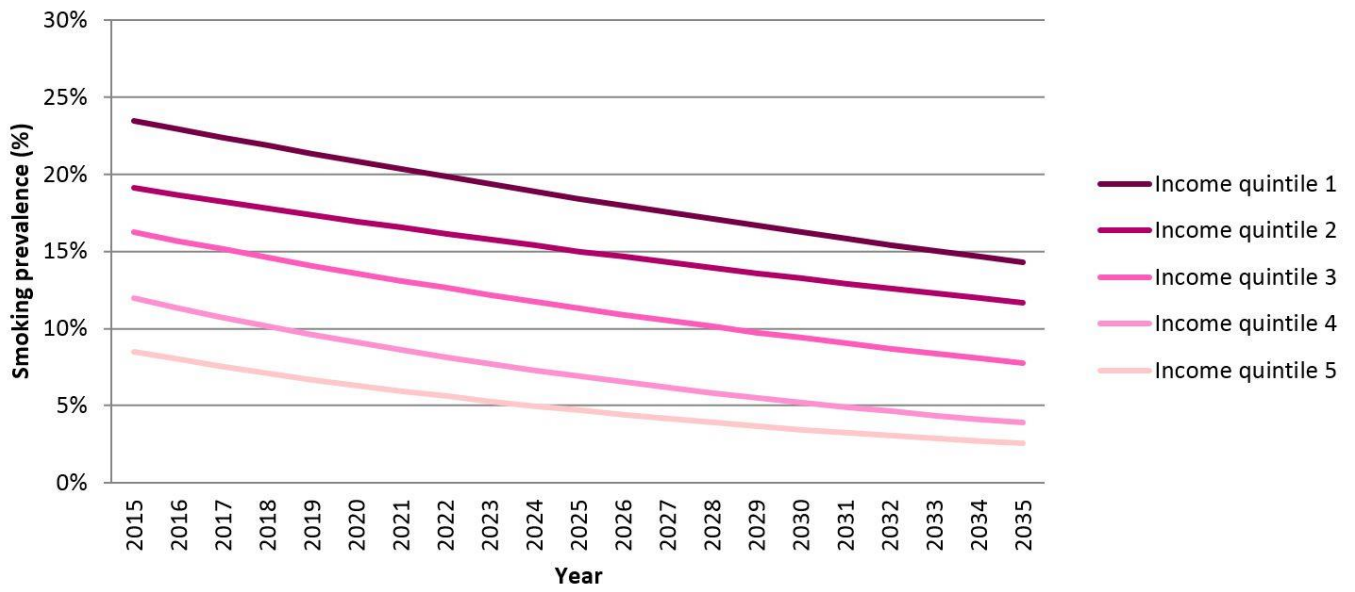
**Graph 2:** Projected prevalence of smoking by income quintiles, males



**Table 4:** Prevalence of smoking by income quintile, females

QUINTILE	YEAR	NON-SMOKER	LOWER CI	UPPER CI	SMOKER	LOWER CI	UPPER CI
1 (LOWEST INCOME)	2015	0.7649	0.7515	0.7784	0.2351	0.2216	0.2485
	2035	0.8572	0.8309	0.8836	0.1428	0.1164	0.1691
2	2015	0.8088	0.7969	0.8206	0.1912	0.1794	0.2031
	2035	0.8833	0.8604	0.9061	0.1167	0.0939	0.1396
3	2015	0.8375	0.8271	0.8479	0.1625	0.1521	0.1729
	2035	0.9223	0.9064	0.9382	0.0777	0.0618	0.0936
4	2015	0.8804	0.8717	0.8891	0.1196	0.1109	0.1283
	2035	0.9611	0.9522	0.97	0.0389	0.03	0.0478
5 (HIGHEST INCOME)	2015	0.9153	0.9081	0.9225	0.0847	0.0775	0.0919
	2035	0.9745	0.9679	0.9812	0.0255	0.0188	0.0321

Graph 3: Projected prevalence of smoking by income quintiles, females



### 3. ACHIEVING A TOBACCO-FREE UK CAN DELIVER BENEFITS ABOVE AND BEYOND THE PREDICTED TREND

#### KEY STATISTICS

Compared to this predicted trend, achieving a tobacco-free UK could avoid the following:

- a) 97,346 cases of disease including 35,901 cancers over the next 20 years.
- b) This would also result in 12,353 new cases of disease, of which 5,087 are cancers in the year 2035 alone.
- c) Around £615m in costs to the NHS and wider society in the year 2035 alone. This is comprised of around £67m in direct NHS costs, £32m of which are linked to cancer, and around £548m in indirect societal costs.

#### TABLES

**Table 5:** Cumulative incidence cases avoidable in the UK from 2015 to 2035, by a 'tobacco-free UK' smoking scenario

Cumulative incidence avoidable	CANCER	CHD	COPD	STROKE	TOTAL
2035	35,901	7,594	28,997	24,854	97,346

**Table 6:** Incidence cases avoidable in the UK in 2035, by a 'tobacco-free UK' smoking scenario

Incidence avoidable	CANCER	CHD	COPD	STROKE	TOTAL
2035	5,087	727	3,633	2,907	12,354

**Table 7:** Direct NHS costs avoided in 2035 alone as a result of achieving a tobacco-free UK by 2035, reported by disease type

Direct costs avoidable	CANCER	CHD	COPD	STROKE	TOTAL
£ (millions)	32	7	13	15	67

Figures rounded to the nearest unit

**Table 8:** Direct NHS and Indirect Societal costs avoided in 2035 alone as a result of achieving a tobacco-free UK by 2035

Costs avoided	DIRECT NHS COSTS	INDIRECT SOCIETAL COSTS	TOTAL
£ (millions)	67	548	615



## POLICY DISCUSSION

In the context of the Government's consultation on a new tobacco strategy for England, this report makes the case for the gains to be made from achieving a bold ambition to ensure this rate of decline in smoking prevalence does not stall

### SUPPORT FOR A 'TOBACCO-FREE' AMBITION

The findings of the report strengthen the case to set bold targets on long term declines in smoking prevalence of a tobacco-free ambition of less than 5% smoking prevalence in the UK across all income quintiles by 2035.

The ambition is a core recommendation of the the ASH 'Smoking Still Kills' report. The recommendations of this report have been endorsed by Cancer Research UK and the UK Health Forum, as well as a range of UK charities, health bodies and civil society organisations to establish a 'tobacco-free' target.

In addition, the Cancer Strategy for England sets out the ambition to reduce smoking prevalence to less than 5% by 2035, and states 'it is imperative that we maintain a focus to drive down smoking rates further and target these groups with the worst outcomes'<sup>12</sup>.

This ambition is shared by many other countries, which have developed their own strategies for achieving the goal of a tobacco-free future to reduce both a disease and economic burden. This includes: Ireland<sup>13</sup> and New Zealand<sup>14</sup>, who aim to become tobacco-free by 2025; and Scotland, whose tobacco control strategy<sup>15</sup> sets the goal of a tobacco-free generation by 2034.

These three nations also explicitly

acknowledge the importance of smoking cessation services to achieve this ambition, as demonstrated in quotations from the respective plans below:

New Zealand: *'Smoking cessation support services have been strengthened and cessation aids have become more accessible... The quit rate is further improved by the provision of effective cessation therapies'*<sup>16</sup>.

Scotland: *'If we are to achieve our aspiration of a tobacco-free Scotland, smoking cessation services need to be of the highest possible quality'*<sup>17</sup>.

### FISCAL MEASURES ARE AN EFFECTIVE WAY TO DECREASE SMOKING PREVALENCE

Raising tobacco taxes is one of the most effective ways of reducing tobacco consumption, something the tobacco industry itself admits<sup>18</sup>. There is strong evidence that increasing the price of tobacco products has a pro-equity effect on smoking behaviour in adults and children<sup>19,20</sup>. Tobacco prices in the UK are the second highest in the EU, after the Republic of Ireland<sup>21</sup>.

This report expresses concern by the tobacco industry's continuing role in tobacco smuggling through oversupplying tobacco products, which hinders efforts to tackle the illicit trade<sup>22 23</sup>. And as well as cheating the UK of tax revenue, tobacco smuggling undermines tax and pricing strategies that are an important part of the country's strategy for reducing tobacco's deadly toll.

## MASS MEDIA CAMPAIGNS ARE EFFECTIVE WITHIN A COMPREHENSIVE TOBACCO CONTROL STRATEGY

Mass media campaigns can play an important role in helping smokers quit as part of a comprehensive tobacco control strategy. They have been associated with changing smoking behaviour<sup>24</sup>, reductions in smoking prevalence and cigarette consumption in England<sup>25</sup>, and have been shown to be value for money<sup>26</sup>. When these campaigns have been suspended, engagement with smoking cessation information has also been shown to decrease<sup>27</sup>.

## STOP SMOKING SERVICES SHOULD BE PROTECTED

Smoking kills more than 100,000 people in the UK each year and causes fourteen types of cancer – and research shows around two-thirds of smokers want to quit<sup>28 29</sup>. Smokers are three times more likely to quit using a Stop Smoking Service compared to an unaided quit attempt: they are the most effective way to quit<sup>30</sup>.

A major review of the impact of Stop Smoking Services in England has found they have an increasing impact and reach in helping smokers to quit in their first ten years of operation, but considerable variation in outcomes exists across local areas<sup>31</sup>. This complements evidence which suggests smokers from lower socioeconomic groups are less likely to be successful in stopping smoking than more affluent smokers, even after accessing cessation programmes<sup>32</sup>.

Stop Smoking Services in England are extremely cost effective. NICE cost-effectiveness evidence indicates that every £1

invested in smoking cessation services saves around £10 in health care costs and wider health gains<sup>33</sup>. The US Surgeon General's report on tobacco control on cost-effective healthcare treatments acknowledges that even minimal clinical interventions are extremely cost-effective, and that regulatory and policy interventions are more cost-effective than interventions to modify individual behaviour<sup>34</sup>. Evidence-based smoking cessation interventions are one of the most cost-effective public health strategies there is, setting a clear incentive for the Government to invest in these services.

Given their cost-effectiveness, it is very concerning that disinvestment in tobacco control measures are threatening the future of smoking cessation services, and undermining their ability to help smokers quit. Recent cuts to public health budgets are forcing councils to reduce investment in Stop Smoking Services. A recent report by ASH and Cancer Research UK show 75% of local tobacco leads identified the pressure on tobacco control and smoking cessation budgets the biggest difficulty of moving to local government – their number one concern from the survey options<sup>35</sup>.

Investigative work conducted by the British Medical Journal has found that pressures on public health are becoming too great to sustain, with millions of pounds stripped from frontline public health services and nearly a third of respondents making cuts to frontline services<sup>36</sup>. Table 6 provides examples of actions taken by local councils in the response to reduced public health allocations.

## THE TOBACCO INDUSTRY SHOULD PAY FOR THE DAMAGE THEIR PRODUCTS CAUSE - AND A LEVY IS A PERFECT SOLUTION

Tobacco use remains the UK's single greatest cause of preventable illness and avoidable death, with 100,000 people dying each year from smoking-related diseases, including cancer. It also presents a huge financial burden, with research from ASH showing that the total cost of tobacco use to society in England is £13.9 billion per year<sup>37</sup>. By comparison, tobacco duty receipts in England in 2014/15 were only £7.5 billion<sup>38</sup>.

**Table 6:** Examples of reductions to Stop Smoking Services: 2014 - Present

COUNCIL / HEALTH BODY	OUTCOME
Cambridgeshire County Council	'Do not take proactive steps to increase uptake of local smoking cessation services'
Medway County Council	'Reduced payments to GPs and pharmacists to provide smoking cessation'
Lincolnshire County Council	Smoking cessation budgets have been cut by 50% in Lincolnshire
Harrow Council	Has put forward a 93% reduction to its £0.3m Stop Smoking Service <sup>39</sup>
Havering Borough Council	Stop Smoking Services recommended for decommissioning <sup>40</sup>
Hull Health and Wellbeing Board	Cutting funding for services by more than £1m <sup>41</sup>
Smokefree South West / Public Health Action	Has been forced to close after its contract was terminated <sup>42</sup>
Manchester City Council	Manchester City Council has decommissioned its Stop Smoking Services entirely <sup>43</sup> , and is considering a replacement wellbeing service.
Milton Keynes Council (Unitary)	'Our allocation for stop smoking work changed in September [2015] when the budget cuts were finalised here at the council and we lost a large amount of money <sup>44</sup>

It is imperative for the Government to find a sustainable funding solution for comprehensive tobacco control services. These include Stop Smoking Services, mass media campaigns, and action to tackle the illicit trade in tobacco.

Investment must be in place to ensure that local authorities are sufficiently resourced to guarantee delivery of smoking cessation services to standards consistent with NICE guidance. This will ensure the two-thirds of smokers who want to quit in England will have the best support to do so.

The funding for these services could be supported through a levy of £500m on the tobacco industry – equivalent to around one penny per cigarette sold in the UK. The message is clear – a levy is a simple solution to a lethal problem.

The tobacco industry makes more than £4,000 in profits for every death caused by smoking<sup>45</sup>. It is not 'normal' for an industry to profit billions of pounds from a product that kills up to two-thirds of long-term users. And this has been recognised by the Government. In the 2014 Autumn Statement, the Chancellor announced that because of the economic burden of tobacco, 'the Government believes it is therefore fair to ask the tobacco industry to make a greater contribution'<sup>46</sup>. This contribution would make the polluter pay and ensure sustainable funding for essential tobacco control.

## KEY POLICY RECOMMENDATIONS

- The Government should set an ambition to achieve a 'tobacco-free UK' by 2035, where less than 5% of the UK population smoke across all socio-economic groups, by 2035.
- Achieving this aim will require a range of policy measures, and must focus on the importance of helping people to quit smoking where the largest gains are to be made.
- Current rates of decline are a result of successive tobacco control measures and sustained funding for public health. A sustainable funding model is required for Stop Smoking Services and mass media campaigns to help people quit and discourage uptake.
- We think the tobacco industry should be made to pay for the damage caused by their products. In order to sustainably secure funding for services, a levy of £500m per year should be introduced on the tobacco industry with the profits used to fund tobacco control.

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