All Party Parliamentary Group on Smoking and Health

Inquiry into the effectiveness and cost-effectiveness of tobacco control:

Submission to the 2010 Spending Review and Public Health White Paper Consultation process

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ISBN : 978-1-872428-84-0

Copies of the full report can be downloaded from the ASH website at: www.ash.org.uk/APPGoct2010
The executive summary is available at: www.ash.org.uk/APPGoct2010sum

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Foreword

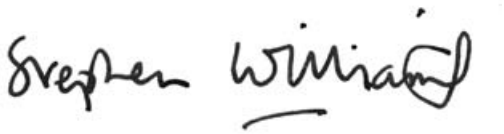
I took on the role of Chair of the All Party Group following the general election earlier this year because of a strong personal commitment to reducing health inequalities and premature death from preventable illnesses. As a child I witnessed the death of my father from bowel cancer and respiratory failure. The public health agenda around diet, addiction, and other lifestyle factors is thus for me deeply personal as well as political.

It is a truism to say that if smoking were invented today it would be banned. It is the only legal substance which, when used as intended, is deadly both to its users and to those around them. Not only that, but it is highly addictive and, worse still, an addiction of childhood and adolescence.

Smoking remains deeply ingrained in our society, and it is not feasible to ban it. However, because smoking is so harmful and so addictive, there is a strong cross-party consensus that government has a responsibility to regulate the sale and use of tobacco. Government has not always led the way; a vigorous public campaign and determined action by politicians of all Parties and in both Houses of Parliament was essential in passing a comprehensive smokefree law.

The APPG welcomes the commitment by the Government to consult widely on its proposals for the Spending Review and would like to submit the evidence set out in this report to inform that process.

When my father became a smoker the help he needed to quit was not available. It is today, as a result of government action. Measures put in place over the last decade have ensured that the UK is a world leader in tobacco control and we need to ensure that this is sustained. The evidence received by our Inquiry shows that such intervention by government is not only effective in health terms, but also provides a positive return on investment to the Exchequer as well as to society as a whole.



Stephen Williams MP for Bristol West
Chair, All Party Parliamentary Group on Smoking and Health
September 2010

About the All Party Parliamentary Group on Smoking and Health

The All Party Parliamentary Group (APPG) on Smoking and Health is a cross-party group of Peers and MPs which was founded in 1976 and is currently chaired by Stephen Williams MP. Its agreed purpose is to monitor and discuss the health and social effects of smoking; to review potential changes in existing legislation to reduce levels of smoking; to assess the latest medical techniques to assist in smoking cessation; and to act as a resource for the groups' members on all issues relating to smoking and public health. The Secretariat of the group is provided by Action on Smoking and Health, which is funded by the British Heart Foundation and Cancer Research UK for carrying out this work.

About smoking and health

Smoking, the most harmful form of tobacco use, remains the major preventable cause of premature death and disease in this country and as such the pre-eminent issue for any government public health strategy. There are nearly 9 million smokers in England.[1] More than 80,000 people die each year from active smoking[2] and possibly up to 10,000 from secondhand smoke,[3] killing more people than alcohol, obesity, road accidents and illegal drugs put together.[4] One half of long-term smokers will be killed by their addiction, losing on average 10 years of productive life.[5]

Although smoking rates in the general population have fallen by a quarter in the last decade and by a half in young people, one in five adults are self reported smokers at the current time, with smoking rates amongst the most disadvantaged in society much higher than this.[1] The vast majority of smokers get hooked before they are legally old enough to smoke. This is an addiction of childhood with over 200,000 children starting smoking each year, many if not most going on to be addicted for life.[6]

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About the Inquiry

The All Party Parliamentary Group on Smoking and Health launched this Inquiry in response to two government initiatives. Firstly, the announcement by the Chancellor of the Exchequer, George Osborne and Chief Secretary to the Treasury, Danny Alexander, of the Spending Review. The Spending Review framework included starting a *'period of external engagement between the Government and all parts of society…. in order to obtain the best ideas from those most involved in and affected by public services'*. And secondly the announcement by the Secretary of State for Health that later this year there would be a White Paper on public health and that he would consult on its development.

There is a great deal of evidence-based policy expertise on the impact of smoking both on health and the economy, and also on how smoking prevalence can be driven down most effectively, and cost-effectively, using a range of public health interventions. This expertise has been enshrined in recommendations set out in the world's first global health treaty, the WHO FCTC, to which the UK is a Party. The APPG wanted to ensure that such expertise was properly taken into account in government spending decisions for the period 2011-12 to 2014-5 and in the development of its public health strategy.

The APPG subsequently held two oral evidence sessions during July 2010 during which the Group heard from ten expert witnesses. The report sets out the conclusions and recommendations of the APPG to the Coalition Government, supported by written evidence submitted by the expert witnesses. The timing has been very tight as the Spending Review is due to be published in October and the consultation took place over the summer, so there has been a rapid turnround and the evidence contained in this report has been provided to the relevant Government departments in advance of publication.

Executive Summary

Summary

Smoking remains the major preventable cause of premature death and disability and as a result reducing tobacco use is the single most effective means of improving public health. Smoking is the major cause of the differences in life expectancy between the richest and poorest in society, so that if we are to succeed in reducing health inequalities it is essential to continue to drive down smoking prevalence, particularly amongst the most disadvantaged in society. Because tobacco is so harmful and so addictive, it is accepted that Government has a responsibility to regulate its sale and use. Measures put in place over the last decade have ensured that the UK is a world leader in tobacco control and the Government needs to ensure that this is sustained in the future.

Smoking prevalence in the 1990s was not declining despite annual increases above inflation in tobacco taxes. It was only when a comprehensive tobacco control programme was put in place that smoking prevalence began to decline.

Following the implementation of this programme the proportion of adults smoking has declined by a quarter and the proportion of children smoking has declined by a half. Today there are over 2 million fewer smokers than there were a decade ago. Furthermore the market share of illicit cigarettes has declined from a peak of 21% in 2000 to 12%.

The cost of this programme is currently a maximum of £300 million a year, primarily spent on the anti-smuggling strategy, NHS Stop Smoking Services and mass media. **The most significant finding for the Spending Review from this Inquiry is that Government expenditure on tobacco control is excellent value for money and provides a net annual revenue benefit of £1.7 billion.**

This does not include the additional tax revenues as a result of the decline in the market share of illicit tobacco, which has increased revenues by as much as £1.2 billion a year. It also does not take account of additional revenues which could accrue from increasing tobacco taxation. Recent research suggests tax revenues would increase by around £430 million following a 5% real terms increase in tobacco retail prices. This makes the case for combining increased tax with a renewed commitment to tobacco control policy even stronger.

Conclusions

When it comes to the Government's investment in tobacco control, the answer to the key Spending Review questions is clear. This activity is essential to meet the Government's public health priorities. **Furthermore the Government needs to fund this activity, indeed it is in its interest to do so as it provides substantial economic value and a positive return on investment. Cutting back on expenditure in this area would almost certainly result in net revenue losses rather than gains to the Exchequer.**

Set out below are the recommendations from the APPG Inquiry, in the light of the evidence it has received, about how the effectiveness and cost-effectiveness of the Government's tobacco control programmes can be sustained and improved.

Recommendations

Funding

1. Government funding for tobacco control should be held at 2009-10 levels and sustained for the future in real terms.
2. Directors of Public Health should allocate resources from their ring-fenced public health budgets to tobacco control in line with the evidence about how to ensure better public health outcomes for their communities.

Structural

3. Tobacco control must be a central plank of the Government's new public health service and public health strategy.
4. The new ring-fenced public health funding must include specific funding for tobacco control programmes.
5. Government should adhere to its obligations under the World Health Organization Framework Convention on Tobacco Control (WHO FCTC). In line with these obligations the tobacco industry should not be a partner in any initiative linked to the setting or implementation of public health policies.
6. The Cabinet sub-committee on public health should act as the national coordinating mechanism for tobacco control, in line with our obligations under the WHO FCTC.
7. When Directors of Public health transfer to local authority control their professional independence should be safeguarded.

Policy

8. Tobacco taxes should be increased year on year above inflation, as part of a comprehensive strategy to motivate and empower smokers to quit and prevent young people taking up smoking.
9. Government should continue to discourage smoking and encourage smokers to use the Stop Smoking Services through sustained public education campaigns of the kind which have proven so effective over the last decade.
10. Stop Smoking Services should be a commissioning priority for the public health service and funding should be sustained.
11. Cost-effectiveness of the Stop Smoking Services could and should be increased by greater adoption of national standards for delivery and monitoring; better and more consistent training for staff; and better systems of referral from the rest of the healthcare system, particularly secondary care.
12. The Government's anti-tobacco smuggling strategy should continue to be evaluated and updated and should include outcome measures to reduce the market share of illicit cigarettes to 5% or below, in line with the illicit market for other products attracting excise duty such as alcohol.
13. The Government should implement the Health Act 2009 regulations to prohibit point of sale display of tobacco products and sale of tobacco from vending machines.

Monitoring and Evaluation

14. Smoking rates are important indicators of health inequalities and life expectancy and should be key public health outcomes at national, regional and local level.
15. Good quality data on smoking prevalence and the effectiveness of tobacco control interventions must continue to be collected in order that tobacco control programmes can be properly evaluated and improved over time.
16. Government at national, subnational and local level should continue to evaluate, update and improve tobacco control policy as the evidence base develops.

APPG Inquiry Panel Findings, Conclusions and Recommendations

Background

1. In his speech to the Faculty of Public Health in July this year the Secretary of State for Health set out his vision for a new Public Health Service that would *"release all of society to work together to get healthy and live longer"*. The APPG supports this vision and in particular his conclusion that *"The emphasis we put on protecting from risk and treating illness, is not matched by the emphasis we put on preventing illness in the first place"*.
2. The Secretary of State for Health talked of reforms which would empower health professionals to *"commission services that work - to apply the best technology and the best new insights of social psychology and behavioural economics to achieve real improvements in public health"*.
3. He set out a framework for empowerment which included:
   - A new responsibility deal between government and business built on shared social responsibility and not state regulation;
   - A new ring-fenced public health budget;
   - A new 'Health Premium to target public health resources towards the areas with poorest health;
   - Clear outcomes and measures to judge progress alongside NHS and social care outcomes;
   - An enhanced role for Public Health Directors so they have the resources and authority to improve the health of their communities; and
   - A new Cabinet Sub-Committee on Public Health, chaired by the Health Secretary, to tackle the drivers of demand on the NHS.
4. This is a vision which we can all support in principle, but what does it mean in practice? In the light of the current Spending Review, and the forthcoming Public Health white paper, how can improvements in public health be carried out in the most effective, and cost-effective manner? These are the questions which this Inquiry has set out to answer. Set out below are the findings, conclusions and recommendations of the APPG Inquiry, organised as responses to the specific questions set out in the Spending Review.

Reducing smoking prevalence: providing substantial economic value

5. **This section addresses the Spending Review questions:**
   - *Does the activity provide substantial economic value?*
   - *How can the activity be provided at lower cost?*

Findings and Conclusions

6. Evidence presented to the Inquiry shows that the true societal cost of smoking is not recovered by current levels of taxation and that increases in taxation are justified in order to ensure that tax levels cover externalities and that the 'polluter pays' principle of Pigovian taxation is met.

7. There is good evidence that a comprehensive Government strategy to reduce smoking prevalence can be effective and cost-effective. Funding at current levels has also been shown to produce immediate net revenue gains to government as a result of:
    - NHS cost savings
    - Extra tax revenue from additional years of working life
    - Extra tax revenue from reduced workplace absenteeism
    - Reduced disability benefits
8. The net annual revenue gain to government of the decline in smoking prevalence since 1998 stands at £1.7 billion per year. In addition the anti-smuggling strategy has helped deliver a further £1.2 billion a year in increased tax revenues as a result of the significant decline in market share of illicit tobacco. These revenue benefits far outweigh the annual cost of the tobacco control strategy of around £300 million.
9. Tobacco tax increases have also been shown to be effective in improving public health by reducing smoking prevalence. However, to be effective they need to be combined with a range of policy measures designed to reduce uptake, increase quitting and to control the illicit market. Recent research suggests that tax revenues would increase by around £430 million following a 5% real terms increase in tobacco retail prices. This makes the case for combining increased tax with a renewed commitment to tobacco control policy even stronger.
10. Longer-term there are significant wider benefits to society from reducing smoking prevalence. A one percentage drop in smoking prevalence gives a net present value of £27.6 billion over 50 years in addition to preventing 2,900 deaths a year.
11. In conclusion, investment by Government in a comprehensive tobacco control strategy has provided substantial economic value and net revenue gains in addition to significant public health gains. The Government has already made cuts to the tobacco control budget and further cuts are possible as a result of the Spending Review. Evidence to the Inquiry shows that such cuts are inadvisable and are likely to result in net revenue losses, rather than gains, to the Exchequer.

Recommendations

- Government funding for tobacco control should be held at 2009-10 levels and sustained for the future in real terms.
- Tobacco taxes should be increased year on year above inflation, as part of a comprehensive strategy to motivate and empower smokers to quit and prevent young people taking up smoking.

Smoking in our society: the role of Government in tobacco control

12. **This section addresses the Spending Review questions:**
    - *Is the activity essential to meet Government priorities?*
    - *Does the Government need to fund this activity?*

Findings and Conclusions

13. Smoking is a key driver of demand for the NHS, causing the majority of respiratory diseases, around 30% of cancers, and nearly one in five cases of cardiovascular disease, as well as being a contributory factor in diabetes and many other diseases and disorders. Smoking costs the health service alone over £2.7 billion a year and the revenue savings

to Government from the reductions in smoking prevalence over the last decade have significantly exceeded the costs of Government spending to reduce tobacco use. Stopping smoking has been proven to significantly improve healthcare outcomes, even amongst those with pre-existing smoking-related diseases.

14. Reducing tobacco use, in particular amongst the most disadvantaged in society, remains the single most effective method of improving public health and reducing health inequalities. Reducing tobacco use is, therefore, essential to meet Government priorities, as well as being both effective and cost-effective.
15. Regulation of tobacco to reduce the harm it causes is justified not just for public health reasons, but also for reasons of market failure, linked to the highly addictive nature of the product. Most smokers want to quit but are trapped by addiction. Government has a moral responsibility, if it is to allow the continued sale and use of such a dangerous and addictive product, to limit or counteract the influence of tobacco marketing, particularly to young people.
16. The responsibility deal set out by the Secretary of State for Health is not appropriate in relation to tobacco. This is the only legal product which is deadly when used as intended both to smokers and to those around them. Smoking is an addiction of childhood and adolescence, not an adult choice, with two out of three lifelong smokers hooked before they are old enough to smoke legally.
17. Partnership with the tobacco industry in all its forms would also be in contravention of our obligations as a Party to the international health treaty, the WHO FCTC. Under the FCTC it is Government's responsibility to coordinate the development and implementation of a comprehensive set of measures relating to both the supply and demand for tobacco products which are designed to reduce the harm caused by its use. This includes not only measures to control the advertising and promotion of the product, but its design, how it is priced and where and how it is sold.
18. Increasing price through taxation (with attendant controls on illicit supply) is an effective lever in driving down prevalence and brings in substantial Government revenues. High tax levels on tobacco are supported by the public. However, tobacco tax is strongly regressive and for those smokers who don't quit can increase health inequalities, particularly for less affluent smokers. This places a further moral responsibility on Government to make the greatest possible efforts to motivate and assist smokers to quit in response to increases in taxation.
19. High levels of public support for smokefree laws and other tobacco control measures demonstrate that these moral responsibilities are recognised by the majority of the public, including smokers. There is strong support for Government to use a range of public health interventions to prevent young people from getting addicted, to protect people from the harm caused by tobacco and to empower smokers to quit.

Recommendations

- Tobacco control must be a central plank of the Government's new public health service and public health strategy.
- The new ring-fenced public health funding must include specific funding for tobacco control programmes.
- Government should adhere to its obligations under the WHO FCTC. In line with these obligations, the tobacco industry should not be a partner in any initiative linked to the setting or implementation of public health policies.
- The Cabinet sub-committee on public health should act as the national coordinating mechanism for tobacco control, in line with our obligations under the WHO FCTC.

Delivering value for money: an evidence based approach to tobacco policy

20. **This section addresses the Spending Review questions:**
    - *How can the activity be provided more effectively?*
    - *Can the activity be provided by a non-state provider, or by citizens, wholly, or in partnership?*
    - *Can non-state providers be paid to carry out the activity according to the results they achieve?*
    - *Can local bodies, as opposed to central government, provide the activity?*
    - *Can the activity be targeted to those in most need?*

Findings and Conclusions

21. The Secretary of State for Health said in his speech to the Faculty of Public Health that, *"In the current fiscal climate we have to see a new standard of evidence"*. Such an evidence base already exists for tobacco control and it is important that it is taken into account in determining not just what, but how government can achieve better health outcomes.
22. The Secretary of State for Health has said that one of the critical measures of success must be a demonstrable reduction in health inequalities in local areas. Smoking rates are a key indicator of life expectancy and health inequalities and should be sustained as outcome measures at national, regional and local level. Smoking is an important early predictor of long-term life expectancy and parental smoking is a major causal factor in infant mortality.
23. High smoking rates are independently linked to every indicator of disadvantage and are a key predictor of health inequalities. The least affluent never-smokers have much better life expectancy than even the most affluent smokers. Unless smoking continues to reduce, particularly amongst the most disadvantaged in society, the Government will not achieve its public health vision of increases in life expectancy, reduction of inequality in life expectancy, and decreases in infant mortality.
24. The evidence presented to the Inquiry, based on experience in the UK and elsewhere, is that if a comprehensive strategy to drive down smoking prevalence is not sustained then smoking prevalence will not fall and could start rising again. Such action, consisting of elements that have been tried and tested and proven to be effective, is an essential element in any public health strategy, if it is to succeed.
25. In the 1990s, when taxes were raised year on year above inflation, smoking prevalence did not decline, particularly amongst poorer and more disadvantaged smokers. This apparent paradox, given that raising the real price of tobacco has been shown to be the most effective means of driving down smoking prevalence, is explained by the absence of a supporting comprehensive strategy and, in particular, supplementary government action to tackle tobacco smuggling.
26. In the last decade this country became a world leader in tobacco control as the Government implemented a strategy to reduce tobacco use. A comprehensive range of measures were implemented, in line with World Bank recommendations:
    - Reducing exposure to secondhand smoke.
    - Communications and education.
    - Reducing the availability and supply of cheap tobacco.
    - Support for smoking cessation.
    - Reducing tobacco promotion.
    - Tobacco regulation.

27. A comprehensive strategy including all the above elements has been highly effective with smoking rates in England falling by a quarter amongst adults and by a half amongst children since 1998.
28. Some of the measures that form part of such a strategy are largely self sustaining once implemented, for example the health warnings on tobacco packs and smokefree public places. But many others require continued government intervention, for example, raising taxes and reducing tobacco promotion. Still others require continued funding as well, for example communications and education campaigns, tackling illicit tobacco and provision of smoking cessation support.
29. Reducing the illicit market in tobacco is a priority as high prices are a major disincentive to taking up smoking and incentive to quit, and illicit tobacco also results in significant Government revenue losses. Access to cheap and illicit tobacco is concentrated in poorer and more disadvantaged communities, so reducing the illicit market is key to tackling health inequalities.
30. The Government's strategy to tackle tobacco smuggling has been effective. Since 2000 the market share of smuggled cigarettes has fallen from over 20% and rising, to 12% and on a declining trajectory. However, it is still the case that more than one in 10 cigarettes smoked is smuggled and the figure for handrolled tobacco is nearly one half, resulting in over £2 billion in losses to the Exchequer each year. Therefore sustaining a strong and comprehensive strategy to tackle the illicit trade is essential.
31. The NHS Stop Smoking Services, delivered in line with NICE guidance, provide one of the most cost-effective healthcare interventions available. Furthermore they are one of the only healthcare interventions that have the capacity to reduce inequalities in health. Whether commissioning of the services is through the GP commissioning process or through the ring-fenced public health budget administered by Directors of Public Health, funding must be sustained.
32. However, the effectiveness and reach of the services could be improved. Usage of the services could be increased, if, in line with NICE recommendations, all healthcare professionals gave smokers brief advice to quit and encouraged them to get specialist help. Better links between hospital and community services and the NHS Stop Smoking services would also increase the number of smokers using them.
33. Non-state providers can and are paid to carry out to do this work and piloting of payment by results is being undertaken. However, it is essential that whoever carries out the activity works to appropriate standards based on evidence of what is effective of what works; that there is auditing and monitoring of results; and that ineffective providers are brought up to standard or replaced in a timely manner.
34. There is currently considerable variability across services in the quality of support provided to smokers. The NHS Centre for Smoking Cessation and Training has been set up to raise the standards of behavioural support offered to smokers by stop smoking services through a programme of training and assessment and its role could be broadened to include an auditing role.
35. Communications and education campaigns by Government have been found to be effective in encouraging smokers to quit and discouraging young people from taking up smoking. In the UK they have also been effective in encouraging smokers to seek help from the NHS Stop Smoking Services, which increases their likelihood of successfully quitting. Government should recommence funding for such communications and education campaigns. Commissioning such campaigns at local level is much more expensive and less cost-effective than on a wider geographical footprint so responsibility for these should continue to rest at national and regional level.
36. The legislation prohibiting advertising, promotion and sponsorship of tobacco has curtailed the tobacco industry's opportunities to make their products attractive to young people.

The impact of the legislation has, however, been undermined by industry efforts to get round it, for example by using the tobacco pack in point of sale displays to promote its products, particularly to young people. The regulations passed into law under the Health Act 2009 to prohibit point of sale display and the sale of tobacco from vending machines address legislative loopholes in tobacco regulation, and should be implemented.

37. Historically a much higher proportion of more affluent smokers quit than poorer and more disadvantaged smokers, and this has been a major contributor to the widening health inequalities gap. However, government action can ensure that tobacco control measures such as the NHS Stop Smoking Services and communications campaigns effectively target the least affluent smokers, who are most in need of help and support. Less affluent smokers are most likely to buy cheap and illicit tobacco so the Government's anti-smuggling strategies are particularly effective at reaching poorer and more disadvantaged smokers.
38. Development of effective and cost-effective tobacco control policies needs to be led by Government at national level. However, while some policy measures are best implemented at national level, others are better implemented locally and local support can increase effectiveness.
39. Areas which have collaborated to increase the funding for tobacco control, in particular the South West, the North East and the North West have been able to show better smoking cessation outcomes. There is, therefore, also a key role for Directors of Public Health at local level. They will need to ensure effective implementation and enforcement of national policies in line with local needs and priorities if they are to improve the health of their communities.
40. Following the disappearance of the Primary Care Trusts and transfer of Directors of Public Health to Local Authorities, it is essential that the latter should retain their professional independence. Directors of Public health should at all times be required to act in the interests of public health and not come under political pressure to shape their advice in any given way or to take any particular action that might be expedient but not in the public interest. This is in line with the terms of reference of the Chief Medical Officer at national level, who provides leadership to all public health staff and in particular to Directors of Public health.

Recommendations

- Smoking rates are important indicators of health inequalities and life expectancy and should be key public health outcomes at national, regional and local level.
- Government should continue to discourage smoking and encourage smokers to use the stop smoking services through sustained public education campaigns of the kind which have proven so effective over the last decade.
- Stop smoking services should be a commissioning priority for the public health service and funding should be sustained.
- Cost-effectiveness of the stop smoking services could and should be increased by greater adoption of national standards for delivery and monitoring; better and more consistent training for staff; and better systems of referral from the rest of the healthcare system, particularly secondary care.
- The Government's anti-tobacco smuggling strategy should continue to be evaluated and updated and should include outcome measures to reduce the market share of illicit cigarettes to 5% or below, in line with the illicit market for other products attracting excise duty.
- Directors of Public Health should allocate resources from their ring-fenced public health budgets to tobacco control in line with the evidence about how to ensure better public health outcomes for their communities.

- When Directors of Public Health transfer to local authority control their professional independence should be safeguarded.
- The Government should implement the Health Act 2009 regulations to prohibit point of sale display of tobacco products and sale of tobacco from vending machines.
- Good quality data on smoking prevalence and the effectiveness of tobacco control interventions must continue to be collected in order that tobacco control programmes can be properly evaluated and improved over time.
- Government at national, subnational and local level should continue to update and improve tobacco control policy as the evidence base develops.

Annexes

Annexes 1 to 10 contain the written submissions of the expert witnesses to the Inquiry of their evidence. The annexes are split into three groups, which relate to the sections of the Inquiry report which the submissions address.

Annexes:

Balancing tobacco income and costs in society

Dr Henry Featherstone
Head of Health and Social Care, Policy Exchange

Synopsis

1.0 A societal based analysis of smoking suggests that the UK market for cigarettes is currently inefficient. The true societal cost of smoking includes negative externalities such as healthcare costs, lost productivity, absenteeism, lost years of productive output, costs of passive smoking, environmental costs and fire costs and amounts to nearly £14 billion per annum. These costs are not recovered by current levels of taxation which amount to around £10 billion per annum. One way to redress this burden on UK Plc is to levy a 'Pigovian tax' such that the revenue raised covers the negative externalities, which would be in line with the principle that the 'polluter pays'. In order to balance the income and costs of smoking, we believe that tobacco duty should be progressively increased over the course of the next Parliament until the full societal costs of smoking are recovered through taxation.

Introduction

1.1 Smoking remains a controversial issue in our society. Despite tobacco being the only consumer product that kills half of its regular users,[1] smoking is an addiction that many people continue to enjoy. However, 65% of smokers want to quit their habit, but are unable to do so;[2] therefore smoking remains the single largest cause of preventable mortality - over 83,000 deaths in England in 2008[3] - and a major driver of health inequalities in our society, since poorer people are more likely to smoke.[4]

1.2 There has been a significant amount of anti-smoking legislation enacted in recent years: smoking has been banned in enclosed public places;[5] the legal age at which tobacco may be bought has increased from 16 to 18[6] and the display of tobacco products are to be removed from the point of sale.[7] These measures have been well received[8] and public opinion favours further measures.[9] We have reached a tipping point in our attitudes to smoking.

1.3 Although tobacco tax in the UK is relatively high compared to other countries, cigarettes are much more affordable today than they were in the 1990s because tobacco duty rates have failed to keep pace with rises in income. Indeed, the duty escalator introduced in 1993 was removed in 2001 following concerns about high rates of tobacco smuggling and was only reintroduced for the short to medium term in the Spring budget this year at a lower level than was previously the case. However, data now shows that tobacco smuggling has been in steep decline following the introduction of a targeted strategy: since 2000 the market share of smuggled cigarettes has fallen by 50%.[10,11]

1.4 Taxation of tobacco contributes £10 billion[12] to HM Treasury annually; however, we calculate that the costs to society from smoking are much greater at £13.74 billion.[13] Every cigarette smoked is costing us money. These societal costs comprise not only the cost of treating smokers on the NHS (£2.7 billion) but also the loss in productivity from smoking breaks (£2.9 billion) and increased absenteeism (£2.5 billion); the cost of cleaning up cigarette butts (£342 million); the cost of smoking related house fires (£507 million), and also the loss in economic output from the deaths of smokers (£4.1 billion) and passive smokers (£713 million).

1.5 In order to balance the income and costs of smoking, we believe that tobacco duty should be progressively increased over the course of the next Parliament until the full societal costs of smoking are recovered through taxation. Currently a packet of cigarettes costs

£6.29,[14] whereas we believe the cost should be at least £7.42. Cigarettes are being under-taxed by £1.13 per packet which amounts to £2.47 billion in lost revenue for HM Treasury. We believe that this increase in tax should be recovered through the duty escalator; but in the first instance, tobacco tax should be increased by at least 5% at the next Budget.

1.6 Health England, the national reference group for health and wellbeing established by the Department of Health, has concluded that a 5% increase in tobacco taxation is one of the most cost-effective public health interventions.[15] A 5% tax increase would decrease tobacco consumption by approximately 2.5%, and increase annual tobacco revenue by approximately £400 million. However, so that this tax increase is not unduly regressive, we believe that a proportion of the additional revenue generated should be targeted towards helping people quit, particularly hard to reach groups such as pregnant teenagers.

The true cost to society of a packet of cigarettes

1.7 According to the Tobacco Manufacturers Association (TMA) the most popular packet of cigarettes can be bought for £6.29.[16] However, this is just the price that is deemed acceptable between the retailer, consumer, and the government which takes some £4.83 in taxation. We believe that the cost of a packet of cigarettes should also take into account wider measures of the actual costs to society. It should include the cost of treating the illnesses caused by the tobacco it contains; it should include the costs of clearing the cigarette butts littering our streets; the loss of productive output caused by premature death and so forth. These costs are referred to by economists as 'externalities'.

1.8 When considering the total cost of a packet of cigarettes, studies in the US have calculated results as diverse as $40[17] and $222.[18] The main reasons for the disparity between values are the decisions on which externalities to include when making a calculation. In this report we adopt a societal point of view because it takes the broadest outlook and is, from an economic perspective, always considered relevant.[19] We have used official data from the Office for National Statistics (ONS), NHS Information Centre, peer-reviewed scientific journals as well as sources such as the Royal College of Physicians and the Tobacco Manufacturers Association. The assumptions and detailed workings of the calculation are presented in Appendix 1 of the Policy Exchange report, Cough Up.[13] Below we summarise the items we have included, and the estimates for their costs.

Cigarette production, shipping and retail costs

1.9 The price the Tobacco Manufacturer's Association quote for the production, shipping and retail of a packet of cigarettes is £1.46. A proportion of this cost will include a profit for the tobacco company, distributor and retailer.

Healthcare costs

1.10 One of the most direct ways in which smoking drains the economy is through the provision of healthcare to patients' suffering from illnesses caused, or predisposed to by smoking. These costs tend to increase at a rate higher than inflation as expensive new therapies become available, and are estimated to be between £2.7 billion and £5.2 billion. It is worth noting that these costs do not include the treatment of those non-smokers exposed to environmental smoke, which is considered later.

Loss of productivity

1.11 Direct measurement of worker productivity is difficult. However, a number of studies have investigated workers taking breaks in order to smoke, and have tried to quantify this time at between £915 million and £3.2 billion per annum.

Absenteeism

1.12 Smokers have been demonstrated to have an increased rate of absenteeism from illness. The cost of this is between £1.1 billion and £2.5 billion. This gives a good indication of the amount of money the country loses annually due to smokers' excess illness causing them to miss work. These costs are borne by businesses, consumers, and the taxpayer.

Loss of productive output

1.13 A loss of output refers to the loss of economic activity that is caused by smokers of working age dying early. We use the human capital approach[20] to calculate the expected life time output that would have been realised had each death caused by smoking been avoided. Using this methodology we calculate the loss of productivity to cost £4.1 billion.

1.14 We should be clear that the human capital approach does not attempt to measure the value of a life; rather, it is purely a means to capture the loss of economic output. Any financial calculation based on early mortality is overshadowed by the impact on the individuals, and their friends and families of this loss of life.

Costs of passive smoking

1.15 Smokers are not the only people exposed to the harmful effects of tobacco. Passive smoking – the inhalation of environmental smoke – has, for some time, been recognised to have significant effects on health. It was these effects that led to calls for smokefree legislation.

1.16 We estimate that the productivity loss of lives lost as a result of passive smoking is £713 million. This value does not, however, include the costs of NHS care and absenteeism due to illness caused by passive smoking. These are likely to be less than the direct costs incurred by active smokers.

Environmental costs

1.17 Cigarette butts are the most common type of litter found in the UK. According to an Environmental Campaigns (ENCAMS) local environmental quality study, smoking related litter was found in 78% of locations investigated.[21] The cost of clearing these cigarette butts is estimated at £342 million each year.[22]

Fire costs

1.18 Smoking is a common cause of fire throughout the world. Notable disasters attributed to smoking materials include the 1988 King's Cross station fire, the 1999 Mont Blanc tunnel fire and numerous Californian wildfires. We calculate the costs of smoking related fire at £507 million annually. This cost is likely to be conservative as it is based on the 2004 value for costs of fire and completely excludes costs of fires other than those within the dwelling.

Total societal costs of smoking

1.19 We calculate the approximate cost of smoking to our society is £13.74 billion, whereas smoking currently contributes £10 billion to the Exchequer. Each cigarette smoked is currently costing the country money.

The true cost of a packet of cigarettes

1.20 Currently a packet of cigarettes costs £6.29,[23] whereas we believe the true cost underpinned by our analysis is £7.42. This means that cigarettes are being under-taxed by £1.13 per packet which amounts to £2.47 billion in lost revenue for HM Treasury. In order to balance the income and costs of smoking, we believe that tobacco duty should be progressively increased until the full societal costs of smoking are recovered through taxation. This increase in tax should be recovered through the mechanism of a duty escalator which increases taxation on tobacco above inflation year on year.

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The impact of tobacco control measures on government revenues

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Synopsis

2.0 Tobacco control policies are justified for public health reasons but they also pay for themselves many times over in revenue terms. The total cost of tobacco control policy measures in the UK is currently around £300 million per year. A one percentage point drop in smoking prevalence is estimated to produce a net revenue gain of around £240 million per year through NHS cost savings, increased tax revenue due to extra years of working life and reduced workplace absenteeism and reduced payments of disability benefits. Smoking prevalence in Great Britain only began falling again after a comprehensive strategy was implemented in 1999 and since then has fallen by seven percentage points, delivering net annual revenue benefits of £1.7 billion. There are also additional tax revenues as a result of the success of the anti-smuggling strategy in reducing the illicit market, which could amount to £1.2 billion per year. Losses in revenue from tobacco taxation through reductions in the volume of tobacco products purchased can be offset through increased tobacco tax rates, which also contribute to driving down smoking prevalence. Currently, a five percent real terms tax-induced increase in the retail price of tobacco is estimated to increase tobacco tax revenue by around £430 million per year. Overall, tobacco control policies are extremely cost-effective health interventions which deliver revenue benefits to the public finances as well as wider social benefits. Cutting back on tobacco control expenditure would almost certainly result in net revenue losses rather than gains to the Exchequer.

Introduction

2.1 The wider public health benefits of tobacco control policies are covered elsewhere in this report. Here we examine only the revenue impact of tobacco control policies. Tobacco control policies affect government revenue through three channels:

1. The costs of implementing and maintaining measures;
2. Revenue raised from tobacco taxation (and in particular, the impact of an increase in taxation on revenues);
3. To the extent that tobacco control policies result in a drop in the number of smokers (smoking prevalence) in the UK, this will affect the public finances indirectly through several routes detailed below in the section ‘other net revenue effects of reduced smoking prevalence’.

The costs of tobacco control measures

2.2 Tobacco control measures range from those which require significant public spending commitments on an ongoing annual basis (e.g. NHS services, anti-smuggling initiatives) through to those which require limited, if any, ongoing expenditure (e.g. advertising bans). Table 1 gives a summary of the available evidence on the cost of the various measures in the UK requiring significant annual expenditure at the date of the latest smoking prevalence figures, which are for 2008.

Table 1. Costs of tobacco control measures

Measure	Estimated Cost	Year of Estimate	Geographical Scope
NHS Stop Smoking Services	£74m	2008/09	England
NHS pharmacotherapies	£61m	2007/08	England
Anti-smuggling measures	£100m	2008/09	UK
Mass media campaigns	£20-25m	Various	England & Wales
Enforcement of other restrictions (e.g. ban on sale of tobacco products to children)	unknown	n/a	n/a

Notes:
Figures taken from ASH briefing, "UK Tobacco Control Policy and Expenditure – An Overview", March 2010. Online at www.ash.org.uk/files/documents/ASH_667.pdf.
Sources:
NHS Stop Smoking services : NHS Statistics on Stop Smoking Services in England, Apr 2008 – Mar 2009
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Other information – parliamentary questions.

2.3 Total identified expenditure on tobacco control is in the region of £250m per year, but this is an underestimate because some of the figures apply to England only. Also, no reliable figures are available for expenditure on enforcement of sales restrictions of tobacco at the local level. After making some upward adjustment for these omissions, a maximum figure of £300 million per year for the level of expenditure on tobacco control policy at the time of the latest smoking prevalence data seems like a reasonable estimate.

Revenue from tobacco taxation

2.4 Figures for overall current revenues from tobacco taxation are published by HMRC: in 2009-10 revenue from tobacco duty was just under £9 billion.[1] When combined with VAT paid on tobacco products this results in total tobacco tax revenue of around £10.5 billion. However, in terms of the choices policymakers are currently considering, a more important figure is how much revenue from tobacco taxation would increase if the rate of tobacco taxation were increased. A research report by Landman Economics for ASH[2] looked at what the impact of an increase of taxation which raised the retail price of cigarettes by five percent in real terms would be on revenues.

2.5 This depends crucially on the *elasticity of demand for tobacco products* – how responsive tobacco consumers are to a change in tobacco prices. The balance of evidence from previous research is that demand for tobacco is inelastic. This implies that increases in tobacco taxation raise revenue. The Landman Economics research used an estimate of -0.5 for the price elasticity of tobacco following previous research.[3] Under this assumption, a 5% real terms increase in tobacco prices would raise revenue from tobacco tax by around £430m per year, and would result in a fall in UK smoking prevalence of just under 0.4 percentage points. The research used a prevalence elasticity of -0.35, based on the assumption (derived from previous research)[4] that the prevalence elasticity is around 70% of the price elasticity.

Other net revenue effects of reduced smoking prevalence

2.6 Reductions in smoking prevalence – whether brought about through increases in tobacco taxation, or other tobacco control policies – have revenue effects on the public finances, most of which are likely to be positive. The Landman Economics research uses an econometric model of the effects of changes in smoking prevalence on the wider economy to estimate the following impacts on the public finances:

- **Savings to the National Health Service** – the most recent estimates suggest that in 2006, £2.7 billion[5] was spent by the NHS on treatment of smoking-related diseases in England. As the risk of developing diseases falls (due to lower smoking prevalence and decreasing risks for ex-smokers), so does the cost of treatments.
- **Increased tax receipts from additional working life** – people of working age whose deaths are averted through giving up smoking (or not starting smoking) due to the tobacco tax increase will have longer working lives and hence pay more in income tax and National Insurance contributions (NICs) to the Exchequer. They will also spend at least some of their additional disposable income and hence pay more VAT.
- **Increased tax receipts from reduced absenteeism** – the extra output from reduced absenteeism among people who stop smoking (or never take up smoking) following the tax increase leads to increased income tax, NICs and VAT receipts.
- **Reduced spending on benefits related to sickness and disability** – smoking is associated with increased ill-health in the population as well as increased mortality. The model estimates the reduction in expenditure on benefits for people of working age with long-standing health conditions (such as Employment and Support Allowance and Disability Living Allowance) which would result from a reduction in smoking caused by the tax increase.
- **Increased spending on benefits for retired people** – increased longevity as a result of reductions in smoking leads to some increased spending on state benefits for people over 65 – the State Retirement Pension and Pension Credit – because of reduced working-age mortality.

2.7 We have not included the impact of increased longevity **end-of-life healthcare costs** in this analysis. There are a number of reasons for this. Firstly , there is a lack of data on overall end-of-life costs and about whether increased life expectancy leads to increased end-of-life healthcare costs or simply transfers those costs in time. Furthermore there is uncertainty about how the burden of end-of-life healthcare costs will be shared between the individual and the state in the future, given the Government's announcement of a Commission to look at the future of long-term care policy.

2.8 Table 2 gives estimates of the aggregate cost to the public purse in 2010 arising from current levels of smoking prevalence, relative to a situation in which no-one in the UK smoked. The Table suggests overall aggregate costs to the public purse of £9 billion – coincidentally, similar to current aggregate revenues from tobacco taxes which are about £10.5 billion.

2.9 However, this does not mean that if there were no smoking at all in the UK, the public finances would be worse off than at present, because consumers would presumably buy other products instead of tobacco and there would be additional revenues accruing to the Exchequer from these purchases (admittedly the revenue stream would not be as large as that from tobacco products because most other goods are not as heavily taxed). Furthermore it is not the same as the total burden to society of tobacco use which has separately been calculated to be significantly more than this, at just under £14 billion.[6]

Table 2. Estimates of the overall cost of smoking to the public purse

Positive numbers = cost, negative numbers = benefit

Cost/benefit	Revenue loss/gain (2010)
Costs to the NHS	£3.3 bn
Reduced tax revenue from premature mortality	£1.9 bn
Reduced tax revenue from workplace absenteeism	£1.5 bn
Increased disability benefit payments due to poor health	£3.2 bn
Reduced pensioner benefit payments as a result of premature mortality	-£0.9 bn
TOTAL	**£9.0 bn**

Source: extrapolation from Reed (2010), *The Effects of Increasing Tobacco Taxation: A Cost Benefit and Public Finances Analysis*.

2.10 Table 3 uses the calculations from the Landman Economics research to estimate the impact of a one percentage point decrease in smoking prevalence on net revenues. The figures shown are annual estimates averaged over a five-year period, presented in 2010 prices. In total, the results show a net revenue gain of £240m from a one percentage point drop in prevalence. These figures do not include the reduction in revenue from tobacco taxation resulting from a fall in the volume of tobacco products purchased. However, as noted in the previous section, any potential revenue losses from tobacco taxation could be offset by an increase in the rate at which tobacco products are taxed.

Table 3: Estimated net revenue gains from a 1 percentage point drop in smoking prevalence

Positive numbers = net revenue gain, negative numbers = net revenue loss

Cost/benefit	Revenue gain/loss
NHS cost savings	£74m
Extra tax revenue from extra years of working life	£40m
Extra tax revenue from reduced workplace absenteeism	£45m
Reduced disability benefits	£90m
Increased pensioner benefits	-£10m
TOTAL	**£240m**

Source: extrapolation from Reed (2010), *The Effects of Increasing Tobacco Taxation: A Cost Benefit and Public Finances Analysis*.

Wider benefits of reductions in smoking prevalence

2.11 As well as the revenue benefits to the Exchequer, Landman Economics (2010) uses a cost-benefit analysis framework to estimate the following wider benefits to society from a reduction in smoking prevalence:

- **NHS savings** – as calculated above.
- **Output gains from reduced mortality** – the fact that people who stop smoking (or never take up smoking) live longer implies they will have a higher probability of surviving and being in work until the average age of retirement. Therefore, a reduction in smoking prevalence would result in output gains due to reduced mortality.
- **Output gains due to reduction in absenteeism** – there is evidence that smokers are more prone to absenteeism from work than non-smokers. As more people stop

smoking, their output would increase due to reduced absenteeism.

- **Years of life gained** – the fact that people live longer (healthier) lives is in itself a benefit for those individuals and society as a whole. The model uses UK government departments' preferred estimate of the 'human value' of prevention of a fatality (just under £1 million) to calculate the value of extra years of life to people who give up smoking (or never take up smoking) because of the price increase.

2.12 Table 3 shows Landman Economics' estimates of the wider benefits to society from a 1 percentage point reduction in smoking prevalence over 50 years (measured in Net Present Value terms). Obviously this is a much longer timescale than governments would normally be looking at when making decisions about net revenues, but these figures are included to demonstrate that the net benefits of such a fall in smoking prevalence are estimated to be very substantial, at just under £28 billion.

Table 3: NPV of wider benefits from a 1 percentage point drop in smoking prevalence (50 year timescale)

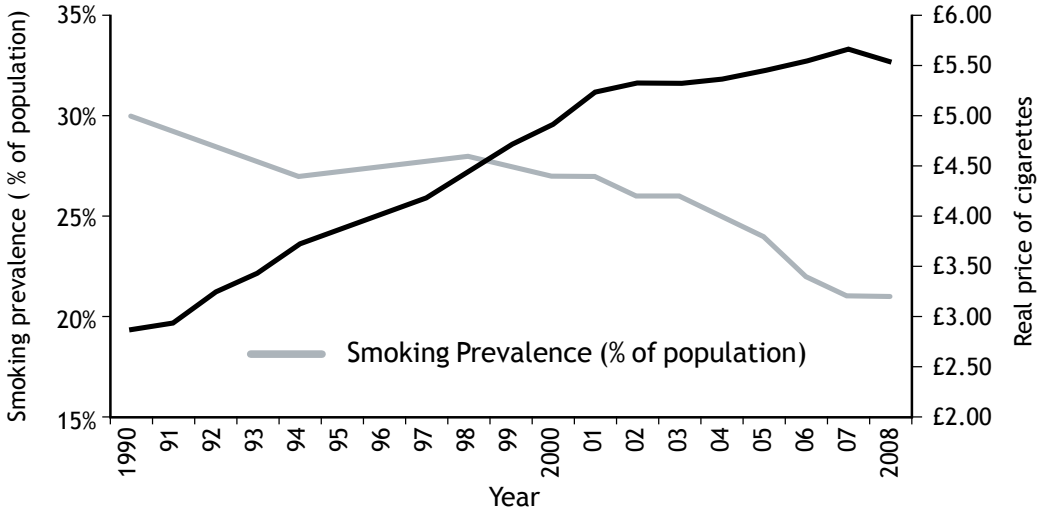
Benefit	NPV
NHS cost savings	£5.3 bn
Extra output from additional years of working life	£3.1 bn
Value of lives saved	£15.5 bn
Extra output from reduced absenteeism	£3.7 bn
TOTAL	**£27.6 bn**

Source: extrapolation from Reed (2010), *The Effects of Increasing Tobacco Taxation: A Cost Benefit and Public Finances Analysis*.

The relationship between tobacco control measures and smoking prevalence

2.13 How effective has UK tobacco control policy been over the last two decades? Figure 1 shows the relationship between UK smoking prevalence (on the left-hand vertical axis) and the retail price of cigarettes (on the right-hand axis) between 1990 and 2008 (the latest year for which we have smoking prevalence data).

Figure 1. UK smoking prevalence and the retail price of cigarettes (in 2010)



Source: Smoking prevalence – General Household Survey/General Lifestyle Survey. Cigarette prices: Tobacco Manufacturers' Association.

2.14 Figure 1 shows the evolution of smoking prevalence in the UK over the last twenty years. During the 1990s, the real price of cigarettes rose rapidly in real terms. This was driven to a large extent by increases in taxation (which rose from around 74% of the retail price of a typical packet of cigarettes to 80% over the decade). Smoking prevalence

decreased from 30% to 27% in the first half of the 1990s but then the decline stalled for the rest of the decade.

2.15 Since 2001, the real price of cigarettes has risen much more slowly, largely because increases in tax during the 2000s were much more modest than in the 1990s. However, despite this, after 1998 smoking prevalence in the UK population began to fall again, reaching 21% by 2007.

2.16 On the face of it, these patterns present something of a paradox. Given that recent research suggests that increases in cigarette taxation have a negative impact on prevalence, why did prevalence flatten out in the 1990s when prices were rising fast, and then start falling again in the 2000s when price rises were much more modest? The answer can be attributed to two factors:

- **Increased smuggling during the 1990s**, which led to an increase in the share of the tobacco market accounted for by illicit products, and encouraged increased consumption.
- **The successful expansion of tobacco control policies after the *Smoking Kills* White Paper of 1998**. In particular, three factors helped reduce smoking prevalence:
  1 The launch of the Tackling Tobacco Smuggling Strategy and a range of other anti-smuggling initiatives, which have reduced the size of the UK's illicit market in cigarettes by almost half since 2001.[7]
  2 The roll-out across the UK of NHS Stop Smoking Services offering access to medication and behavioural support by trained advisers in GP practices, pharmacies and a range of other settings. (see chapters by Bauld and West in this submission).
  3 Successful mass media campaigns encouraging smokers to quit.[8]

The overall effectiveness of tobacco control policy

2.17 Because several new tobacco control initiatives were introduced at the same time from 2000 onwards, it is hard to estimate the exact contribution of individual components of tobacco control policy to the fall in prevalence which occurred in the UK after 1998. However, comparing the pattern of prevalence in the 1990s (when prices were raised but other components of tobacco control policy weren't prioritised) with the pattern in the 2000s (when tobacco control policy became much more of a priority), it seems very likely that at least a substantial proportion of the fall in smoking prevalence was due to some combination of the effects of anti-smuggling initiatives, NHS Stop Smoking Services, mass media campaigns and other legal measures such as bans on smoking in workplaces and in pubs and restaurants. This is backed up by evaluations of each individual strand of policy (see references above), which show high levels of effectiveness in each case.

2.18 If we were to assume that better tobacco control policies were responsible for the entire seven percentage point drop in smoking prevalence since 1998, we can work out the cost-effectiveness of tobacco control policies as follows. By extrapolation from the estimates of the benefits of a one percentage point drop in prevalence shown earlier, a six percentage point fall in smoking prevalence could be expected to deliver net revenue benefits in the region of £1.7 billion per year.

2.19 On top of this, the proportion of tobacco products sold illicitly has declined in recent years as more effective anti-smuggling initiatives have been introduced. Illicit cigarette sales declined from a high point of 21 percent of the market in 2000-019 to 12 percent in 2007-08,[10] while hand-rolling tobacco declined from 61%[9] to 48%[10] of the market over the same period. We calculate that this decline in the illicit market share resulted in additional revenue to the Exchequer of £1.2 billion compared to a situation in which the illicit market shares for tobacco products remained at their 2000-01 levels.

2.20 Without further research it is impossible to say exactly how much of this reduction in the size of the illicit market is due to more effective anti-smuggling measures. However, given that the illicit market was on a rapid upward trajectory and in the absence of government action was projected to rise from around one in five cigarettes smoked in 1999 to one in three within a few years,[11] it seems likely that at least a substantial proportion of the reduction is a result of policy changes.

2.21 In contrast, the total annual spend on tobacco control policies in the UK is currently only a maximum of £300 million. It seems clear that tobacco control policies pay for themselves many times over in revenue terms. And this is before we have even considered the additional revenues from increased tobacco taxation, which make the case for combining increased tax with a renewed commitment to tobacco control policy even stronger.

The need to maintain good data sources

2.22 This paper draws on high quality research on the effectiveness of tobacco control measures and their revenue effects. It would have been impossible to do this research without good quality data – both on the prevalence of smoking in the UK and the impact of individual tobacco control policies. In the current climate of fiscal austerity, it would be a huge mistake to abandon or scale back survey data collection or the funding of evaluation evidence on smoking interventions. Without good quality data on the impact of tobacco control policies, there would be no way to evaluate policy effectiveness and future tobacco control strategy would be based more on guesswork than science.

Conclusion

2.23 The analysis in this paper shows that tobacco control policies are extremely cost-effective interventions which deliver revenue benefits to the public finances as well as large-scale wider social benefits. Cutting back on tobacco control expenditure would almost certainly result in net revenue losses rather than gains to the Exchequer. Obviously there is no room for complacency in policy design or implementation, and if the UK is to achieve further cuts in smoking prevalence in the future year, researchers need to build on the current evidence base to produce more nuanced and sophisticated models of the effectiveness of individual tobacco policies and variations on different policies. But to do that, good quality data are essential. Therefore the quality of data on smoking prevalence and the effectiveness of anti-smoking interventions needs to be at least maintained at its current level, and if possible increased.

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Smoking and health inequalities

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Synopsis

3.0 Cigarette smoking is closely and pervasively linked to a wide range of markers of socio-economic and personal disadvantage. The resulting impact on health is devastating – smoking by itself is responsible for at least half of the excess risk of death in middle age experienced by men in unskilled occupations by comparison with professional groups. As cigarette smoking has declined among affluent people over the past 30 years, health inequalities have widened, due to rates of smoking cessation in disadvantaged groups lagging far behind. The link between smoking and disadvantage poses perhaps the greatest challenge to future progress in reducing smoking prevalence and smoking related disease, and in particular to reducing health inequalities. In order for the Government to succeed in its ambition to increase life expectancy and reduce inequality continued investment in reducing smoking prevalence and increasing cessation, especially in disadvantaged groups, will be essential.

Smoking disadvantage and the lifecourse

3.1 Smoking disproportionately impacts poor people throughout the lifecourse. Babies born into poorer households are significantly more heavily exposed to passive smoking throughout infancy and childhood, and non-smokers living in more deprived circumstances remain more heavily exposed to other people's smoke throughout life.[1] Being born into an environment where smoking is modelled as the norm inevitably leads to higher rates of smoking uptake in adolescents from poor backgrounds.

3.2 In adulthood, poorer smokers gravitate to higher levels of nicotine intake from their smoking and are substantially more nicotine dependent than more affluent smokers. This means that they also take in greater quantities of the whole range of tobacco smoke toxins and are consequently at higher risk of smoking-related disease, an effect that is amplified by factors such as poorer diet and worse housing conditions.

3.3 Smoking directly exacerbates poverty, by taking up a substantial proportion of disposable income and pre-empting expenditures on basic necessities such as food and clothing. The effect of smoking on health inequalities arises not so much through socio-economic differences in smoking uptake, as through the marked differences in rates of smoking cessation.

3.4 From early adulthood onwards poorer smokers are less likely to succeed in becoming ex-smokers than their more affluent counterparts. This reflects not so much differences in motivation to quit (which appears to be similar across the socio-economic range), as higher nicotine dependence and a greater difficulty in quitting through higher stress and an environment that offers fewer alternative rewards.

Smoking and markers of disadvantage

3.5 Official data on smoking and socio-economic position have focused on occupational class. By this measure, from 1998 to 2007 prevalence in non-manual occupational groups fell from 22% to 16%, and from 33% to 25% in the manual population.[2] When professionals are compared with routine and manual groups the contrast is greater, 14% versus 28% in 2007.

3.6 However, this doubling of prevalence by occupational class tells only a part of the story of the association between smoking and disadvantage. Cigarette smoking is also predicted by a range of other markers of socio-economic disadvantage. These include: living in rented accommodation; having no educational qualifications; being unemployed; not having access to a car; receiving income support ; as well as personal factors such as mental illness, lone parenthood and separation and divorce.[3]

3.7 All of these independently of one another predict current cigarette smoking among adults, and in several instances the association is stronger than that with occupational class. It follows that in groups characterised by extreme deprivation, such as homeless people and prisoners, very high rates of prevalence of 80% and above are observed.[4-5]

3.8 When cigarette smoking prevalence and cessation are examined in relation to an index of deprivation that combines occupation, housing tenure, education , and unemployment, a marked social gradient is apparent (see figures 1 and 2). In the most affluent groups prevalence has declined sharply in the past 30 years, from 40% in the early 1970s to about 13% in 2006, while among the most deprived the prevalence of over 60% seen in the 1970s has changed little. Over 60% of ever-smokers in affluent groups had quit smoking by 2006, a huge increase over the figure of 25% seen in the early 1970s, but among the most deprived only 10% of ever-smokers had quit in 1973, with essentially no increase in that figure over the next 30 years.

Socio-economic gradient in nicotine dependence

3.9 In addition to being much more likely to smoke, there is clear evidence that poorer smokers take in substantially more nicotine from their cigarettes than do more affluent smokers, indicating higher levels of nicotine dependence. This phenomenon has been reliably documented in successive yearly sweeps of the Health Survey for England, which incorporates measures of cotinine, the principal metabolite of nicotine and an objective biomarker of nicotine intake.

3.10 The socio-economic gradient in nicotine intake in smokers emerges in adolescence and remains of similar magnitude throughout adult life. It has important implications for understanding both risks of smoking related disease and the difficulty of achieving cessation.

3.11 Higher intakes of nicotine in smokers imply similarly raised intakes of the wide range of toxins found in cigarette smoke and consequently raised risks of incurring smoking related disease, since dose-response relationships are apparent for all the main categories of diseases caused by smoking (lung cancer, respiratory and cardio-vascular disease).

3.12 Since the degree of nicotine dependence is one of the main obstacles to achieving successful cessation, the socio-economic gradient in nicotine intake in smokers indicates that poorer smokers will find it harder to quit, and are likely to need additional support and assistance to overcome their addiction.

The contribution of smoking to health inequalities

3.13 Using data on cause of death and occupation recorded on death certificates, and a validated methodology for determining the proportion of deaths from each cause attributable to smoking Jha and colleagues have estimated the contribution of smoking to deaths in middle age in men in England and Wales.[6]

3.14 They found that at least half of the excess risk of death observed in unskilled manual workers by comparison with professionals was attributable to smoking. Similar smoking effects on health inequalities were also found in the USA, Canada and Poland.

3.15 Prospective data looking at survival over the following 25 years after baseline assessment in 1978 in a cohort of men and women in the Paisley and Renfrew study have produced confirmatory findings.[7] In this study, the least affluent never-smokers had much better

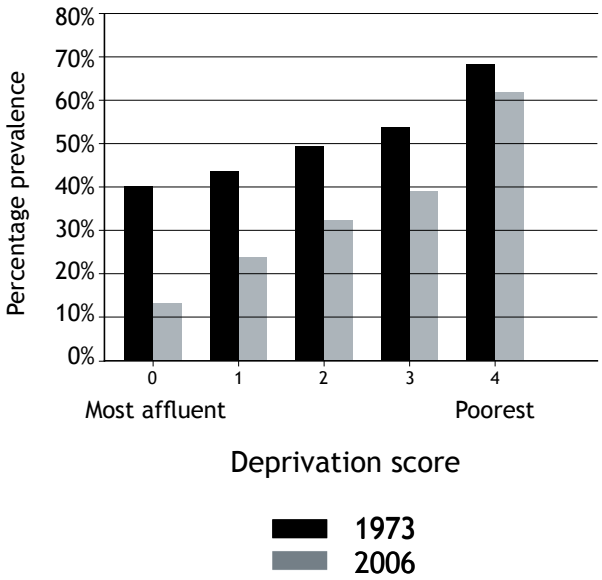
survival than even the most affluent smokers, and taking smoking out of the equation, the differences in survival between the best and the least well off were relatively small, especially for women. The findings strongly implied that even if the socio-economic circumstances of less well-off smokers were to improve, their health gain would be likely to be minimal if they continued to smoke.

Implications for tobacco control policy

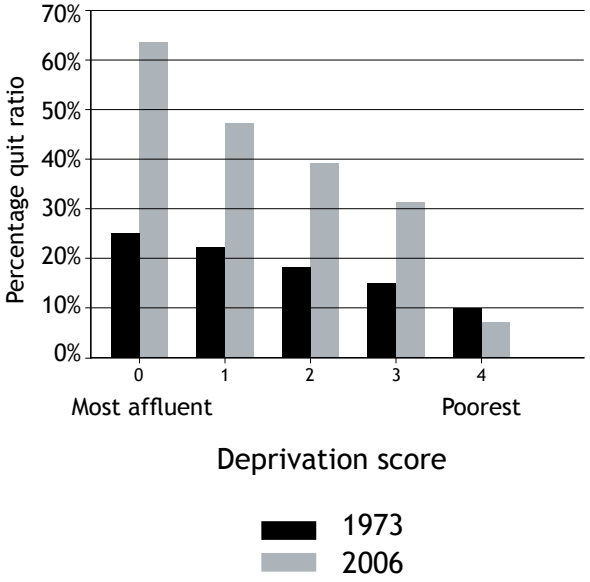
3.16 The Secretary of State for Health in the incoming coalition government set out his vision for public health in a speech delivered in July this year. Increases in life expectancy, and reduction of inequality in life expectancy were explicitly identified as key aims of policy. Given the overwhelming impact of smoking as the single largest determinant of inequality in life expectancy, it is clear that continued investment in reducing smoking prevalence and increasing cessation, especially in disadvantaged groups will be crucial if this vision is to be realised.

3.17 The Marmot Review, published earlier this year,[8] specifically identified investment in evidence-based smoking cessation services targeted at disadvantaged smokers as a central recommendation.

Cigarette smoking by deprivation in Great Britain: GHS 1973 & 2006



Smoking cessation by deprivation in Great Britain: GHS 1973 & 2006



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Cigarette addiction: choice and responsibility

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Synopsis

4.0 Most smokers want to quit but their ability to do so is seriously undermined by their addiction. To give smokers a real choice, Government has a moral responsibility to intervene to help them overcome their addiction, and this responsibility is acknowledged by the general public, including smokers. The Government supports using the best evidence from social psychology and behavioural economics to enable behaviour change to achieve better health outcomes. The evidence of what has worked to help smokers to quit is that a range of interventions is needed from simple provision of information to enabling, guiding and restricting choice. These interventions require Government action at many levels.

The nature of addiction

4.1 Effectively intervening to give smokers a real choice to quit requires understanding the nature of addiction. Cigarettes are addictive because they deliver nicotine rapidly to the brain.[1] This creates powerful urges to smoke that undermine and overwhelm attempts at restraint by creating

1 strong impulses to smoke in the presence of smoking cues,

2 a kind of 'nicotine hunger' – a drive to smoke when central nervous system (CNS) nicotine concentrations are depleted,

3 unpleasant mood and physical symptoms such as increased aggression, depression and anxiety linked to low CNS nicotine concentrations, and

4 a false and lasting belief that smoking helps with stress.[2] Most smokers become addicted in adolescence.[3] After a few years of smoking, most smokers want (and 'choose') to stop but find that they succumb to the addictive urges.[2] Therefore once an adolescent has started smoking, nicotine from cigarettes undermines future decisions (choices) to stop smoking.

Do smokers have a choice?

4.2 More than 70% of smokers want to stop smoking.[4] Quitting is the choice they have made. However, that choice is undermined when their capacity to stop smoking is impaired by their addiction. They are not on a level playing field, but facing a steep uphill incline. Neither do they have a free choice when it is shaped by marketing tactics. For example, smokers queuing at the till may succumb to the attractive packaging of cigarettes that are often prominently displayed above the counter.

4.3 The question public health policy-makers are faced with is how best to help smokers make and enact a free choice, given their addiction and the accessibility and continued marketing of cigarettes.

The UK Government Response:

4.4 In a recent speech to the Faculty of Public Health,[5] Andrew Lansley, Secretary of State for Health, discussed how best to intervene to help people change their behaviour to achieve better health outcomes. He addressed both the issue of effective interventions and the need for evidence to demonstrate effectiveness. In relation to addictive behaviours, he stated that people will reduce addictive behaviours

*"not because we tell people to do it, but because people are **in control** and **less dependent** [my emphasis]… nudging individuals in the right direction . . . making people feel empowered".*

4.5 This raises the question of how to best help people have more control and be less dependent. Gaining control over addiction and overcoming dependence are extremely difficult things to achieve. Lansley recognises the importance of behavioural science in developing effective interventions to help people achieve their behavioural goals:

> "The latest academic research in social psychology and behavioural economics is suggesting new ways of helping people to change their behaviour, and achieve what we all want to achieve…… greater health and well-being throughout life"

4.6 The Secretary of State for Health states that intervening should not be by "lecturing or nannying …. but that our job should be to provide the ***right information***, create the ***right environment***, ***incentivise*** healthy options and ***build social momentum*** behind behaviour change" [my italics].

Evidence-based interventions

4.7 The Secretary of State for Health is very clear about the need for tobacco control policies to be based on national and international evidence, and recognises the existence of a range of possible effective interventions and policies to draw on:

> "We should be learning the lessons of what's worked in this country and around the world. There are numerous examples of how technology can be used as a cheap, effective tool for promoting public health

- smarter incentives, particularly for disadvantaged groups
- be smarter about how information is presented to ensure that messages really hit home
- telling smokers their 'lung age' makes them more likely to quit smoking
- advertising social norms can snap people out of the fantasy that their smoking habits are the same as everyone else's."

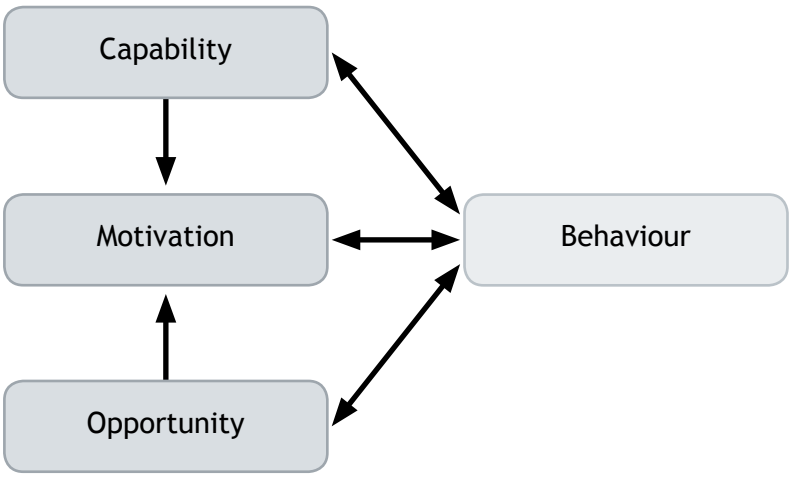
4.8 In this speech, The Secretary of State for Health mentioned six separate behaviour change interventions and policies - this is the range and scale of intervention that are needed to help smokers overcome their addiction. Multi-level interventions, that is, intervening simultaneously at population, community and individual levels, have been found to be the most effective ways of helping people change health-related behaviours.[6]

Understanding behaviour

4.9 In order to decide which interventions to use, we need to understand the nature of the behaviour, be aware of the range of effective interventions that can be applied and consider the ethical imperative for the behaviour in question.

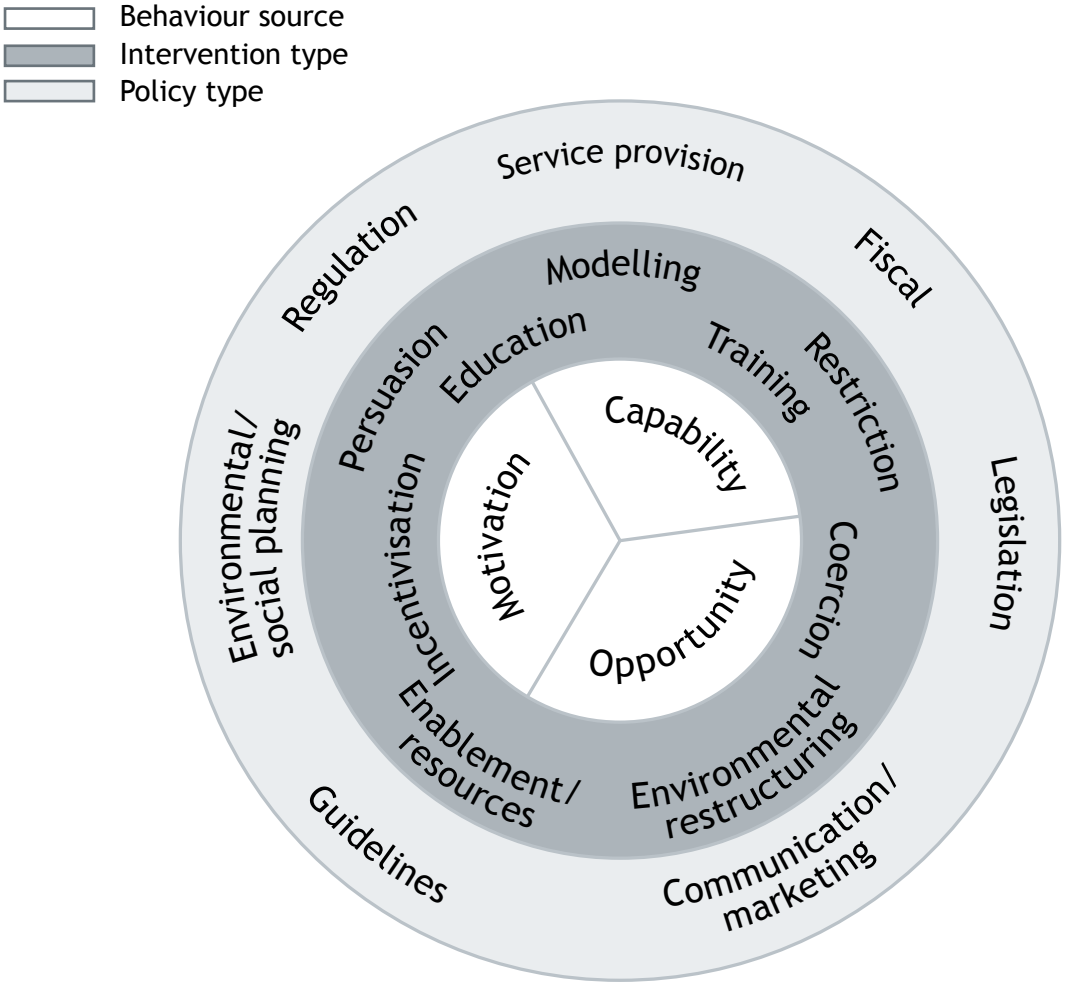
4.10 As has been recognised in the legal system when attempting to prove guilt of a crime, for any behaviour to occur, there are three necessary conditions: **capability (means), motivation (motive)** and **opportunity**[7] (Figure 1). The importance of every element of the system is evident in both uptake and cessation of smoking. Therefore a potentially wide range of interventions addressing these factors is likely to be required as part of a comprehensive strategy to reduce smoking prevalence.

Figure 1: The basic elements required for behaviour



4.11 The full range of intervention and policies available in changing behaviour is shown in Figure 2. This shows the behaviour system described above at the centre, surrounded by possible intervention types and then the policies that can enact and support those interventions. Lecturing and nannying form no part of any intervention that would be proposed by expert behavioural scientists and it is apparent that education and persuasion, which might sometimes be construed in this way, form only a small subset of the interventions available.

Figure 2: The possible categories of intervention and policy to change behaviour[7]



Who is responsible for helping people achieve their choice to stop smoking?

4.12 The Nuffield Council on Bioethics published an influential report, Public health: ethical issues[8] that addressed the question of "Whose job is it to ensure we lead a healthy life?" Their conclusion was that

> "Any state that seriously aims to promote and implement public health policies has to accept a stewardship role. [It has the] responsibility to look after important needs of people, both individually and collectively … taking into account different needs arising from factors such as age, gender, ethnic and socio-economic status."

4.13 The report developed a "Ladder of interventions", with interventions ordered according to degree of intervention and choice restriction (Figure 3). The more serious the health consequences, the higher the rung on the ladder at which the policy-maker should intervene. Circled are interventions mentioned by The Secretary of State for Health in his 7 July speech and beside the rungs are examples of smoking interventions for which we have evidence of effectiveness.

Figure 3. Nuffield Ladder of Public Health Interventions

	What has worked
Eliminate choice. Introduce laws that entirely eliminate choice, for example compulsory isolation of people with infectious diseases.	
Restrict choice. Introduce laws that restrict the options available to people, for example, removing unhealthy ingredients from foods, or unhealthy foods from shops or restaurants.	Banning smoking in public places, age of sale
Guide choice through disincentives. Introduce financial or other disincentives to influence people's behaviour, for example, increasing taxes on cigarettes, or bringing in charging schemes to discourage car use in inner cities.	Increasing price by taxation & controlling illicit suppy
Guide choices through incentives. Introduce financial or other incentives to influence people's behaviour, for example, increasing taxes on cigarettes, or bringing in charging schemes to discourage car use in inner cities.	Incentives for pregnant smokers to stop
Guide choices through changing the default policy. For example, changing the standard side dish restaurant from chips to a healthier alternative, with chips remaining as an option available.	
Enable choice. Help individuals to change their behaviours, for example, providing free 'stop smoking' programmes, building cycle lanes or providing free fruit in schools.	NHS Stop Smoking Services
Provide information. Inform and educate the public, for example, campaigns to encourage people to walk more or eat five portions of fruit and vegetables a day.	DH communication and campaigns
Do nothing or simply monitor the current situation.	

The Current Situation

4.14 Markets use sophisticated methods of behavioural control to promote smoking including attractive packaging whose visual themes are insidiously associated with other attractive goods and identities for young people. Government allows this. Government's responsibility (defined as "duty, obligation or liability for which someone is held accountable") to the electorate is to limit or counteract this influence if the items being marketed are dangerous.

What do the public think and want?

4.15 Taking the tobacco control intervention at the top of the Ladder of interventions, banning smoking in public places, the majority of the public wanted this, but it required the Government to make it happen. In 2005, after five years of a voluntary agreement with the hospitality trade there were only ***seven*** smoke-free pubs and bars in Britain.[9] Since the legislation, public support, from both smokers and non-smokers, has continued to grow.[10]

4.16 Because smoking is so deadly and addictive the public want government to intervene to help them implement their choices[10]

- 74% want increased support for NHS Stop Smoking Services
- 80% want smoking cessation medication made easier to acquire
- 86% want retailers to be required to have a licence to sell tobacco and to lose it if they sell to underage smokers

And a more recent survey found that 73% of the public want tobacco put out of sight in shops to protect children and 77% supported getting rid of cigarette vending machines completely.[11]

Conclusion

4.17 We have good evidence for the effectiveness for the following interventions: mass media campaigns, restricting access (e.g. smoke-free), price rises with smuggling controlled and NHS Stop Smoking Services. We also have interventions that can restrict the continuing promotion of these lethal and addictive products, such as the ban on advertising and promotion and the prohibition of display at point of sale. These interventions require Government intervention at many levels. When asked, the public welcome such interventions. To give smokers a real choice, Government has the responsibility to intervene to give smokers a real choice and help them overcome their addiction.

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The tobacco industry and its status as a stakeholder

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Synopsis

5.0 Tobacco, which kills when used exactly as the manufacturer intends, is not like any other consumer product and there are good public health and economic reasons for regulating the market in tobacco products. There is also overwhelming evidence that` the tobacco industry will do whatever it can to prevent effective policies, encourage ineffective policies and promote the use of its products. Notably, there is evidence that working in partnership with the tobacco industry will be detrimental to public health, despite industry efforts to argue otherwise. This evidence is sufficient to indicate that, in the words of the World Health Organization,"the tobacco industry is not and cannot be a partner in effective tobacco control."[1] Strict international guidelines in the form of Article 5.3 of the FCTC now exist to this effect. As a party to the WHO FCTC the government has an obligation to continue to implement these guidelines.

Introduction

5.1 Elsewhere in this report regulation of tobacco is justified on public health grounds because it is effective and cost-effective in improving health, and reducing mortality, morbidity and health inequalities. In this chapter we explore the economic rationale for implementing such regulations.

The economic rationale for regulating tobacco

5.2 Regulation is justified on economic grounds in order to address market failures.[2] Smoking is a cause of considerable externalities (most notably through the exposure of non-smokers to other people's tobacco smoke) and there is overwhelming evidence of information failure both about the risks and addictiveness of smoking. In short, smokers do not adequately assess their risks and significantly underestimate risk of addiction.[2] The industry has also actively misled the public about the health risks and addictive potential of smoking (for example see *The cigarette papers*[3]).

5.3 A key issue is children. Adults do not start smoking, children do: the latest UK data show that two out of three smokers start before they are old enough to smoke legally[4] and the vast majority while they are still teenagers (see box 1), yet there is clear evidence that the young grossly underestimate the future costs of smoking.[2] The young age of smoking uptake is in line with evidence that the tobacco industry assiduously targets young people. In the words of RJ Reynolds *"Young smokers represent the major opportunity group for the cigarette industry.*[5]*"* The rationale for this is outlined clearly in another RJ Reynolds document (see Box 1).[6]

Box 1: Why young smokers are important to the tobacco industry

The importance of younger adult smokers

Younger adult smokers have been the critical factor in the growth and decline of every major brand and company over the last 50 years. They will continue to be just as important to brands/companies in the future for two simple reasons:

- The renewal of the market stems almost entirely from 18-year-old smokers. No more than 5% of smokers start after age 24.
- The brand loyalty of 18-year-old smokers far outweighs any tendency to switch with age.

Table 1: Cigarette market shares (%) by Global Brand Owner for the major cigarette markets#, 2008

Company	Brazil	Canada	China	Germany	India	Indonesia	Italy	Japan	Russia	UK	USA
Philip Morris International Inc	9.7	21.3	0.1	36.2	12.1	22.6	52.9	24.4	25.4	6.3	
British American Tobacco Plc	86.3	59.0	0.6	20.0		2.7	24.1	10.2	19.6	8.1	
Japan Tobacco Inc		10.8	0.2	5.0	1.3		16.2	64.9	36.9	38.8	0.4
Imperial Tobacco Group Plc				25.6			2.9		9.2	43.9	4.0
China National Tobacco Corp (CNTC)			98								
ITC Group *					58.3						
Golden Tobacco Ltd					10.9						
VST Industries Ltd					9.2						
Godfrey Phillips India Ltd**					0.4						
Gudang Garam Tbk PT						28.3					
Djarum PT						13.8					
Bentoel Internasional Investama Tbk PT						5.9					
Nojorono Tobacco Indonesia PT						5.5					
Philip Morris USA Inc											48.4
Reynolds American Inc*											26.5
Lorillard Inc											10.1
Liggett Vector Brands Inc											1.8
Société Industrielle des Tabacs du Cameroun SA	1.4										
Donskoi Tabak OAO									3.7		
Private label			9.9							1.7	
Others	2.6	8.9	1.2	3.3	7.8	21.2	4	0.5	5.2	1.3	8.8
Total	100	100	100	100	100	100	100	100	100	100	100
No. of companies with market share >10%	1	3	1	3	3	3	3	3	3	2	3
No. of companies with market share over 25%	1	1	1	2	1	1	1	1	2	2	2
3-firm concentration ratio (cumulative share of market of 3 biggest companies by market share)	97.4	91.1	98.8	81.8	81.3	64.7	93.2	99.5	81.9	90.8	85

Source: Taken from Gilmore et al Tobacco Control in Press. Based on Euromonitor data from trade sources/national statistics. Data obtained: 23/09/2009.

Data given for the world's largest cigarette markets (China, Russia, US, Japan, Indonesia, Ukraine, Brazil, India), plus the 2 largest European markets (Italy and Germany) and the UK. NB – where companies other than those listed have a market share of 1% or less, their share has been added to the 'other' category.

*Part owned by BAT **Part owned by Philip Morris International.

The tobacco industry

5.4 A further reason for regulating tobacco is the highly concentrated nature of the tobacco market in most major markets including the UK (Table 1).[7] In the UK Imperial Tobacco and Gallaher (now part of Japan Tobacco) each hold around 40% of the market making it one of the most highly concentrated sectors.

5.5 This market concentration is likely to explain their considerable profitability which is approximately double that of most other European consumer staple companies (see Table 2). Importantly, these profitability figures concern these corporations' global operations, yet it is known that Europe is the tobacco industry's most profitable region and the UK one of the (if not the) most profitable market.[8] Thus profitability figures for the UK alone would be considerably higher.

Table 2: Profitability (measured using EBITA Margin (%)) for Europe's two major tobacco companies and comparator European consumer staple companies

Company	2004	2005	2006	2007	2008*	2009*	2010*	2011*
Tobacco Companies								
British American Tobacco	24.0	28.1	28.7	30.0	30.7	31.1	32.1	33.7
Imperial Tobacco Group	40.2	41.5	42.9	45.0	28.2	37.7	39.4	39.5
Food Companies								
Cadbury	15.6	15.9	14.4	13.5	12.0	13.0	13.8	14.9
Danone	12.7	13.1	13.3	12.1	14.4	16.9	15.7	15.9
Nestle	12.7	12.9	13.5	14.0	14.3	14.4	13.0	13.2
Premier Foods	12.9	13.7	13.8	12.5	11.9	12.0	11.9	11.7
Consumer Products Companies								
Unilever NV	15.5	14.8	14.3	14.5	14.6	14.7	14.9	15.1
Henkel	9.4	9.7	10.2	10.5	10.3	9.0	10.6	11.6
L'Oreal	15.3	15.6	16.4	16.6	15.5	14.3	14.9	15.5
Reckitt Benckiser	19.3	20.1	21.5	22.6	23.4	23.9	23.2	23.6
Beverage Companies								
Heineken NV	13.6	13.1	13.0	14.8	13.2	13.5	14.0	14.4
SABMiller	18.1	20.2	16.9	16.8	16.6	16.8	17.3	18.5
Carlsberg	8.8	8.7	9.6	11.5	13.2	16.0	16.3	17.1
Diageo	28.7	29.0	28.2	28.3	28.5	28.9	31.5	31.8

Source: Gilmore et al Tobacco Control in press. Data taken from various Citigroup 'Consumer Central' business analyst investment reports.

* Estimated values.

5.6 Finally, the need for binding tobacco control regulation is underpinned by evidence on the tobacco industry's conduct. Research on the tobacco industry is further advanced than that on probably any other industry by virtue of the internal industry documents the major companies were required to release as a result of litigation in the US. The release of these documents launched a novel area of research which in turn has provided unique insights into the conduct of the tobacco companies. Such evidence (now totalling over 600 papers and reports, see http://www.library.ucsf.edu/tobacco/docsbiblio) shows, inter-alia that the tobacco industry has sought to:

- Influence the science behind and confuse public understanding of the impacts of smoking & passive smoking on health.[9]
- Created confusion over the impact of tobacco control measures.[10]
- Created, funded and used credible front groups to lobby on the industry's behalf.[11,12]
- Sought to defeat, delay and destroy binding legislation and where it has passed, to undermine legislation.[10,13,14]
- Sought to encourage voluntary measures because they are ineffective and help preclude the implementation of effective, binding measures.[15]

5.7 It is impossible to summarise all this evidence here, but a useful overview is provided in a recent WHO report on industry interference with tobacco control[1] and the citation it provides from Philip Morris' Senior Vice President of Worldwide Regulatory Affairs:

> *"Our overall approach to the issues is to fight aggressively with all available resources, against any attempt from any quarter, to diminish our ability to manufacture our products .., and market them effectively[1]"*

5.8 One appropriate example of the tobacco industry's efforts to use voluntary measures to preclude binding legislation that is particularly appropriate currently, given the Secretary of State for Health's recent speech encouraging public health programmes to be developed in conjunction with industry partners,[16] is the tobacco industry's so called "youth smoking prevention programmes."[17] These were established by numerous tobacco companies, often in collaboration with governments or other public sectors partners across numerous countries with the publicly stated intention of preventing and reducing youth smoking.

5.9 Yet independent evaluations show that these programmes either had no impact or may be harmful.[18] Moreover, analysis of the industry's own documents indicates that the industry started these programs to forestall legislation that would restrict their activities and has used these programmes to fight taxes, smoke-free laws, and marketing restrictions worldwide.[17] This real, albeit hidden, industry rationale for these programmes is aptly summed in this document from Philip Morris:[19]

> *"As we discussed, the ultimate means for determining the success of this program will be:*
>
> *1) A reduction in legislation introduced and passed restricting or banning our sales and marketing activities;*
>
> *2) Passage of legislation favorable to the industry;"*

The Framework Convention on Tobacco Control (FCTC) and Article 5.3

5.10 The research summarised above provides overwhelming evidence that the tobacco industry cannot be treated like a normal stakeholder. This is a conclusion reached by the World Health Organization.[1] Indeed, in light of the overwhelming evidence of the industry's misconduct, the WHO's Framework Convention on Tobacco Control (FCTC), the WHO's first global public health treaty which the UK is a Party to, included an Article which specifically sought to prevent the inappropriate influence of the tobacco industry on policy.

5.11 This article, Article 5.3, states: *"in setting and implementing their public health policies … Parties shall act to protect these policies from commercial and other vested interests of the tobacco industry."* Guidelines on the implementation of this article were agreed by all Parties in November 2008 and effectively require consultation with the tobacco industry to be limited to that which is strictly necessary, to be transparent and accountable.[20] They also clearly state that:

> *"The tobacco industry should not be a partner in any initiative linked to setting or implementing public health policies, given that its interests are in direct conflict with the goals of public health."*[20]

5.12 The tobacco industry has of course responded aggressively against this Article as well as to the FCTC in general.[21,22] In large part it has done so by arguing that it contravenes existing commitments to Better Regulation and Good Governance and official standards of consultation with such claims being made in the UK, European Union and elsewhere.[23] Yet in making such claims the industry fails to acknowledge that at least one tobacco company, British American Tobacco, played a key role in promoting these concepts.[23]

5.13 Indeed, comprehensive analysis of industry documents reveals that BAT spearheaded a coalition of corporate allies which worked collectively to promote the concept of Better Regulation and its components, successfully making impact assessment and stakeholder consultation obligatory in the European Union.[12] It did so because it believed that their use would help prevent the passage of public health legislation.

5.14 Moreover, as in other industry campaigns (including recent efforts here in the UK to undermine the ban on point of sale advertising), the tobacco industry deliberately obscured its involvement in the campaign by hiding behind a credible third party, the European Policy Centre, a leading and highly respected European think tank.[11,1]

5.15 David Cameron has himself recently highlighted that *"secret corporate lobbying"* of this nature helps explain why the public are so fed up with politics.[24] This is underlined by a recent Eurobarometer survey on corruption in which the close links between business and politics was the most common cause Europeans give for corruption: 74% of UK respondents believed corruption was a major problem compared with, for example, 81% in Poland, 37% in Sweden and 22% in Denmark.[25]

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Evidence-based tobacco control: Why England still needs it and what it is

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Synopsis

6.0 Cigarette smoking remains the largest preventable cause of premature death and disease in England. Comprehensive tobacco control programmes have proved effective in reducing smoking prevalence both in the UK and other countries. Smoking rates in England have declined by a half in children and a quarter in adults in the decade since such a comprehensive programme was introduced. However, since the recession smoking prevalence has stopped falling and there remain significant upward pressures as smoking is highly addictive and still attractive to many young people. In the absence of a comprehensive tobacco control programme smoking prevalence could well start to increase again. The Coalition Government should sustain and reinforce a comprehensive tobacco control programme in line with the evidence base and with our obligations as a Party to the WHO Framework Convention on Tobacco Control. Failure to do so will lead to considerable loss of life.

Why England still needs evidence-based tobacco control

6.1 Even at its current prevalence, smoking will continue to be the largest single cause of premature death in the UK for decades to come. This is one area of behaviour change where there is strong evidence for what works.

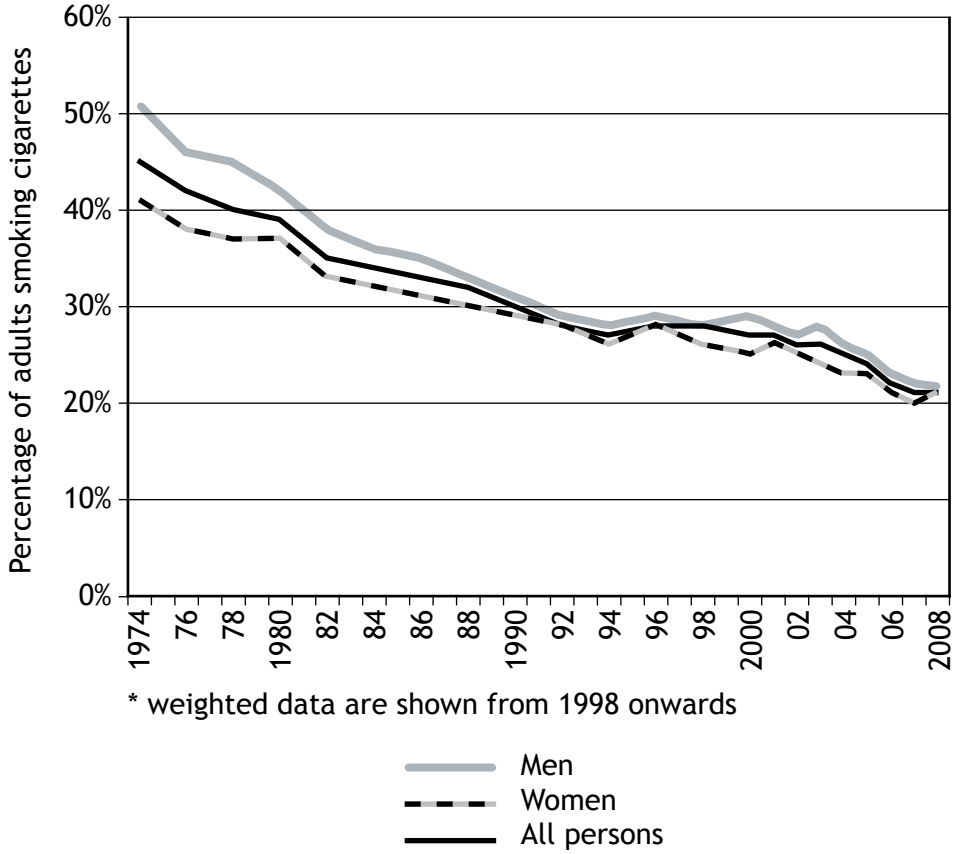
6.2 According to most recent estimates there are currently around 80,000 premature deaths from smoking each year in England[1, 2] more than for all other major preventable causes of premature death. Given the time lag of around 15 years between prevalence falls and changes in smoking-related mortality and the fact that prevalence has fallen by some 25% in the past 15 years we can estimate that the current prevalence of 21% will be associated with some 60,000 deaths per year in the future.

6.3 Every percentage point reduction in smoking prevalence in England can be expected to prevent some 2,900 deaths per year. It is also important to keep in mind the huge burden of morbidity that smoking places on the population and the health service,[2] so much so that the National Institute for Health and Clinical Excellence (NICE) has calculated that most clinical interventions to promote smoking cessation yield a cost-saving to the NHS.[3]

6.4 Figure 1 shows smoking prevalence in Great Britain from 1974 to 2008. Prevalence declined by 50% to 1993. It then rose slightly and did not begin to decline significantly again until 1998. From 1998 to 2008 it fell by 25%.

6.5 The decline in prevalence prior to 1993 mirrored that of many other western countries. The reversal of this trend in 1993 coincided with a decision by the UK government to rely on taxation as the primary means of tobacco control. A price escalator was introduced that raised the tax on licit smoking firstly by 3% then by 5% above inflation for a number of years.

Figure 1: Cigarette smoking prevalence in Great Britain: 1974-2008[4]



6.6 Unfortunately, during that time there was an increase in the rates of smuggling and it is not possible to determine what the true cost of smoking was. However, whether it was the smuggling or the failure to enact other tobacco control policies, what was observed was disastrous for the health and wellbeing of the British population. In effect there were five or more lost years. Had the previous decline continued as it did in some other countries prevalence would now be 16% and among the lowest in the world.

6.7 The downward trend in prevalence only resumed following the introduction of a comprehensive strategy to reduce tobacco use.[5] Starting in 1999 a range of measures were implemented, in line with World Bank recommendations including:

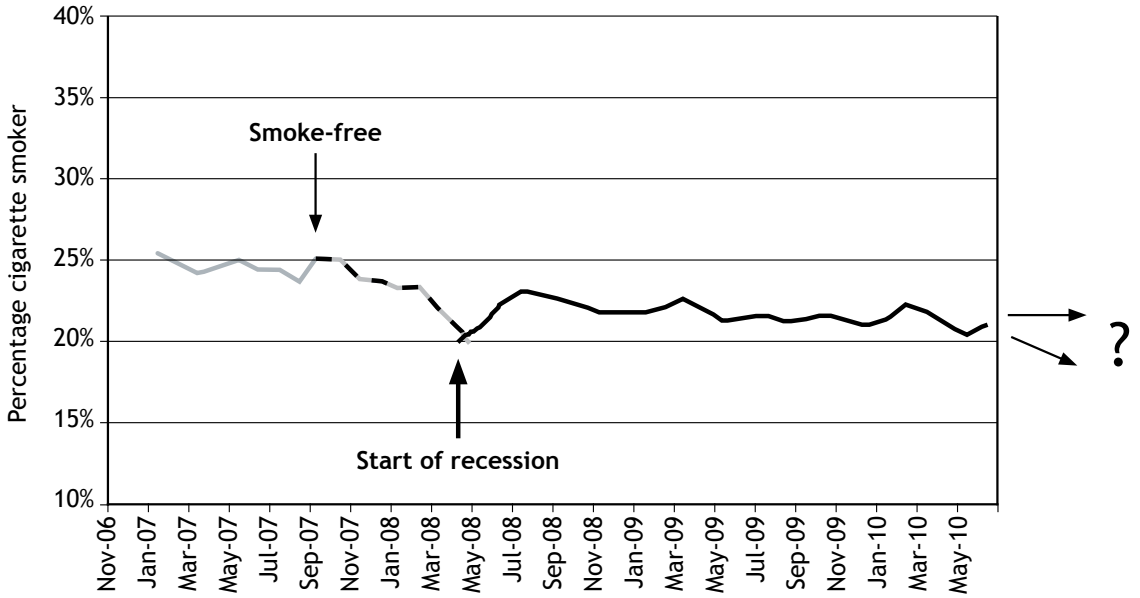
- Reducing exposure to secondhand smoke
- Communications and education
- Reducing the availability and supply of cheap tobacco by increasing price through taxation alongside strong controls on illicit supply
- Support for smoking cessation
- Reducing tobacco promotion
- Regulation of content of tobacco products

6.8 Over the same period the prevalence of smoking in 11-15 year olds fell by 50%.[6] While one can never unequivocally attribute causality in the absence of a controlled experiment, the fact that a substantial downward trend in prevalence resumed within a year of this change of policy must be considered indicative of an effect. This is supported by the evidence from other jurisdictions such as Canada and California, where similar effects have been found following the introduction of such comprehensive tobacco control policies.[7]

6.9 There appears to have been a halt in the downward trend in England in 2008. We have data from an ongoing study, the Smoking Toolkit Study,[8] that allow us to examine this in more detail and obtain prevalence estimates up to June 2010. Figure 2 shows the monthly prevalence rates from November 2006 through to the present. The sampling methods in this survey lead to prevalence estimates slightly higher than the General

Household Survey on which the previous graph was based but the key issue is not the absolute figures but the trend.

Figure 2: Cigarette smoking prevalence: November 2006 to June 2010[8]

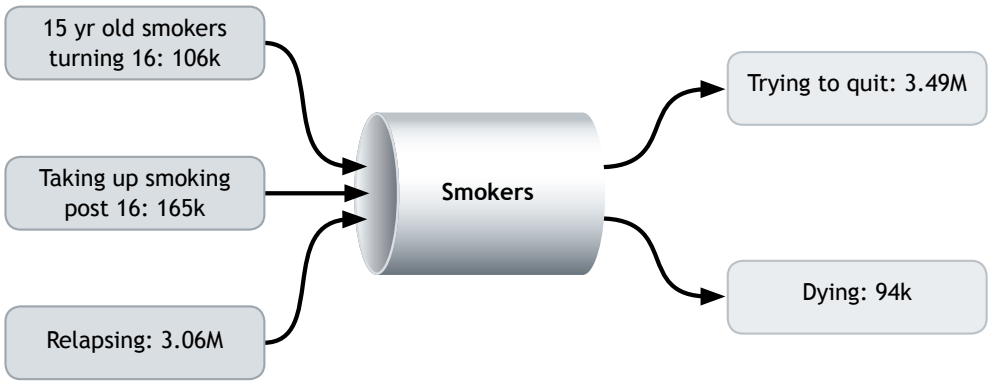


6.10 This shows that there was a sharp decline of approximately 5 percentage points in the months following the introduction of the ban on smoking in indoor public areas in July 2007, but coincident with the start of the recession there was an increase and since that time smoking prevalence has fallen very little. It is difficult to judge what the current trajectory in prevalence is but a linear projection from the past 2 years suggests little change.

6.11 As was seen in 1993, and has been found in countries such as Finland and Ireland, one cannot presume that in the absence of a strong tobacco control policy prevalence will fall and indeed it must be remembered that upward pressures remain. Cigarettes are still attractive to many adolescents and they are highly addictive so that relapse following attempts to stop is the norm. The tobacco industry is still very active in promoting its products and there remain many effective channels for it to do this, for example displays at point of sale.

6.12 It is possible to model changes in smoking prevalence according to factors that create an inflow and outflow. Figure 3 shows the main drivers in the form of a 'smoking pipe'.[9] The model uses data from multiple sources to estimate the numbers of smokers entering the 'pipe' (an ever-changing reservoir of smokers) and leaving it in a given year. A spreadsheet showing all the figures and calculations is available at www.smokinginengland.info. This enables us to identify the relative importance of different factors in a given year. While a majority of current smokers became addicted before they reached 18, the legal age at which they can be sold tobacco,[2] the major drivers of prevalence change at present are the rate at which smokers try to stop and the rate at which they relapse (usually in within the year).

Figure 3: The 'smoking pipe': a model of inflow and outflow of smokers in England in 2009[9]



6.13 The Smoking Pipe model can also be used to explore different scenarios with regard to inflow and outflow. It is easy to show that it would only take small changes in key parameters in the wrong direction for prevalence to rise. In this regard it is noteworthy that there has been a decline in the rate of attempts to stop smoking over the past two years from 42.5% to 37.9% per year which, other things being equal, represents 433,780 additional smokers in the 'pipe'.

What is evidence-based tobacco control?

6.14 'Evidence-based tobacco control' refers to a coordinated set of policies whose aim is to reduce the harm caused by tobacco using interventions that are evidence-based and publically acceptable. In England, reducing the harm caused by tobacco means primarily reducing smoking prevalence and reducing non-smokers' exposure to tobacco smoke. We reduce smoking prevalence by reducing the take-up of smoking and increasing the rate of permanent cessation.

6.15 It is always possible to point to limitations in evidence in science, particularly in the field of public health where findings are often context dependent, proxy measures have to be used and it is usually impossible to carry out controlled experiments. Therefore, one has to accept that there are degrees of confidence relating to findings and judgements always have to be made. However, a considerable amount of research has been carried out into the impact of tobacco control policies using a variety of methods from randomised controlled trials to prospective surveys and time series analyses.[10]

6.16 A range of intervention types are available for effecting behaviour change in general[11] and most of these are applicable to smoking:

- Education: imparting knowledge
- Persuasion: using communication to induce belief or action
- Incentivisation: creating expectation of reward
- Coercion: creating expectation of punishment or cost
- Training: imparting skills
- Restriction: reducing availability
- Environmental restructuring: changing the physical or social context
- Modelling: providing an example
- Enablement/resources: removing barriers/providing means

6.17 The UK is one of 171 Parties to the WHO Framework Convention on Tobacco Control, which entered into force in 2005. This treaty commits the UK to the following policy measures, which fall under many of the types of interventions listed above:[7]

- Establishing a national coordinating mechanism for tobacco control
- Involving civil society in national and international tobacco control efforts

- Preventing the tobacco industry from interfering in the setting of public health policies
- Considering increasing tobacco taxes as a means of reducing tobacco consumption
- Protecting citizens from exposure to tobacco smoke in workplaces, public transport and indoor public places
- Requiring large health warnings on tobacco packaging
- Prohibiting the use of misleading and deceptive terms such as 'light' and 'mild'
- Promoting public awareness of tobacco control issues, including the impact on health, using all available communications tools
- Enacting comprehensive bans on tobacco advertising, promotion and sponsorship
- Including tobacco cessation treatment in national health programmes
- Implementing specific measures to combat tobacco smuggling
- Prohibiting sales of tobacco products to minors
- Considering litigation to make tobacco companies pay for the harm caused by their products
- Developing and promoting research into tobacco control
- Supporting tobacco control in developing countries and countries in transition

6.18 The UK has been a world leader in recent years in most of these policy areas[2] but in all of them more could be done. This involves building on policies that have been found to work and to have public support. The Coalition Government should sustain and reinforce a comprehensive tobacco control programme in line with the evidence base and with our obligations as a Party to the WHO Framework Convention on Tobacco Control.

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The effectiveness and cost effectiveness of NHS Stop Smoking Services

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Synopsis

7.0 The NHS Stop Smoking Services are effective and cost-effective at reducing smoking prevalence and are also effective at reducing health inequalities. They overwhelmingly provide good value for money compared to all other healthcare interventions. But while success rates are good and the services are highly cost-effective, there is significant variability across services and many more smokers could benefit from their help. What is needed is sustained and continued funding for the services; greater adoption of national standards for delivery and monitoring; better and more consistent training for staff; better systems for referral from the rest of the healthcare system – particularly secondary care; and ongoing promotion by mass media campaigns and social marketing.

Introduction

7.1 The UK developed the first and what remains the most comprehensive national stop smoking service in the world. These services were developed following the publication of the 1998 white paper *Smoking Kills*. They were initially piloted in areas of deprivation in England from 1999 and rolled out across the UK from 2000.[1] They provide a combination of behavioural support from a trained adviser (either one to one or in groups) with access to stop smoking medication.

Effectiveness of the Stop Smoking Services

7.2 A series of studies have demonstrated that the services are effective and cost-effective.[2] Smokers have many options when trying to quit. NHS Stop Smoking Services provide the best form of support of any method available – more effective than quitting unaided, advice from a GP or other health professional, or nicotine replacement therapy purchased over the counter, for example.

7.3 The national evaluation of NHS Stop Smoking Services found that the validated one year quit rate for smokers accessing the service was 15%.[3] This equates to a four fold increase in the chances of quitting compared with trying to stop unaided. These results are supported by recent surveys of smokers trying to quit.

7.4 Research has also demonstrated that NHS Stop Smoking Services are effective in reducing inequalities in health. The evidence-base to guide the development of interventions to reduce inequalities is extremely limited, but smoking cessation provides one of the only clear examples of what works.

7.5 Studies have demonstrated that NHS Stop Smoking Services are effective in reversing the inverse care law (that states that health care is more readily available to affluent than deprived groups). They do this by reaching and treating proportionally more smokers in disadvantaged areas than in more affluent areas.[4,5]

7.6 One study examined quit rates amongst the 1.5 million NHS Stop Smoking Service clients that used the services between 2003 and 2006.[6] This found that although smokers from poorer areas were less likely to be successful in quitting, the services were treating a far higher proportion of these smokers. This resulted in a reduction in absolute and relative gaps in smoking rates between disadvantaged and more affluent areas – thereby making a contribution to reducing inequalities in health caused by smoking.

Cost-effectiveness of the Stop Smoking Services

7.7 NHS Stop Smoking Services are amongst the most cost effective of any health care intervention. The cost-effectiveness of health care is commonly measured using Quality Adjusted Life Years (QALYs) that illustrate how many extra months or years of life of a reasonable quality a person might gain as a result of a particular intervention.

7.8 To examine the cost-effectiveness of different interventions, treatment cost per QALY is used. The threshold commonly used by NICE to judge whether a treatment can be provided by the NHS on economic criteria alone is £20,000 per QALY.[7] Many health care interventions, including treatments for smoking-related diseases such as cancer and heart disease exceed this threshold.[8]

7.9 In contrast, all smoking cessation interventions fall well below this threshold. A recent economic analysis conducted for NICE found that cessation interventions of the type offered by stop smoking services cost up to £985 per QALY (2005-06 prices) with some forms of support offered by the services being cost neutral.[9]

7.10 Cost-effectiveness was also examined as part of the national evaluation of the Stop Smoking Services.[10] Data from 58 services were used to model both costs and effectiveness. The study took future healthcare savings into account and found an average cost effectiveness of £438 per life year gained (in 2001-02 prices). The results were comparable with studies of other intensive smoking cessation interventions. This analysis and other recent reviews concluded that NHS Stop Smoking Services overwhelmingly provide good value for money.[10,11]

7.11 Despite their effectiveness and cost-effectiveness, expenditure in England on stop smoking services is limited, particularly when compared with spending on other forms of treatment for addictive behaviours. A comparison with expenditure on treating problem drug use (heroin and crack cocaine use) provides one illustration.

7.12 There are estimated to be 350,000 problem drug users in England and £585 million is spent each year on drug treatment services.[12] In contrast, there are nearly 9 million smokers and expenditure on NHS Stop Smoking Services is just £83.9 million per year.[13] The average cost of delivering drug treatment to one user can be in excess of £4,000, whereas the average cost of Stop Smoking Service delivery to one smoker is £224.[13,14]

Future priorities for developing the Stop Smoking Services

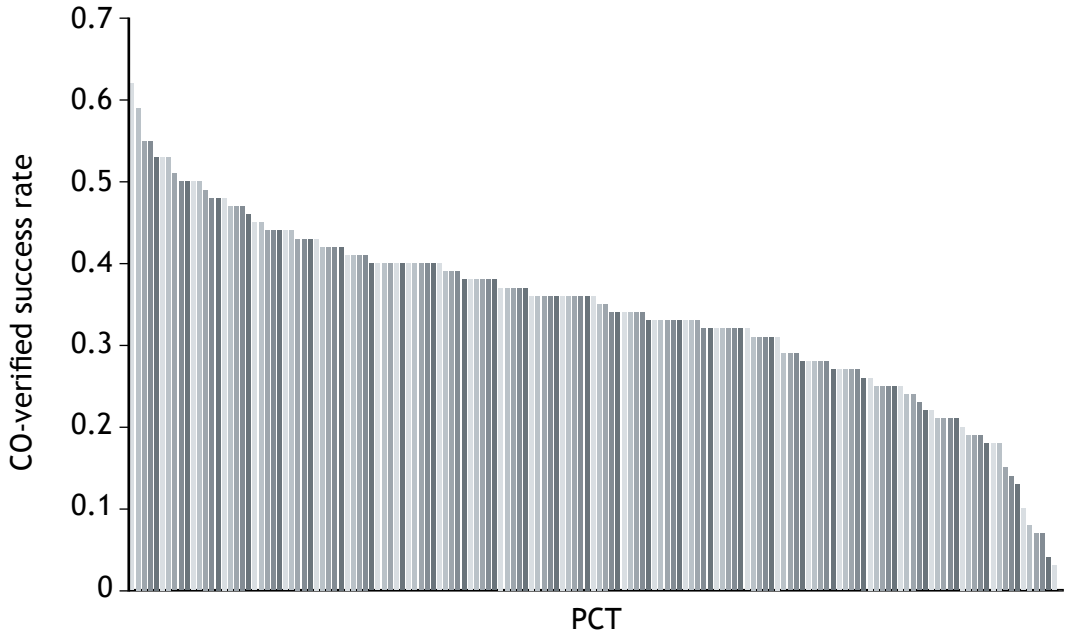
7.13 Current evidence suggests that relatively few smokers use NHS Stop Smoking Services, around 5% of those making a quit attempt every year. Future priorities for developing the services are to increase uptake and maintain effectiveness.

7.14 Mass media campaigns highlighting the dangers of smoking and exposure to second hand smoke, and the benefits of cessation, have an important role to play in raising awareness of the services and encouraging smokers to use them. Social marketing initiatives in local communities can also improve reach. In addition, an important focus for increased uptake is amongst hospital patients or those about to be admitted to hospital.

7.15 Smoking is a risk factor for post-operative complications such as infections and impaired wound healing and smokers have longer lengths of stay, resulting in higher health service costs.[15] Yet referral pathways between NHS Stop Smoking Services both pre and post-operatively are poor in many areas.[16]

7.16 The Department of Health has developed stop smoking in secondary care guidance to assist local services in maximising the opportunity that planned and unplanned admissions to hospital provide for smoking cessation. It is important that this guidance is implemented and that services are resourced to deliver support to stop smoking to hospital patients.

Figure 1: Four week success rates of NHS Stop Smoking Services 2008-2009



Source: Information Centre (2009) - Analysis of routine Stop Smoking Services data by Robert West

7.17 An additional priority for future development is maintaining quality of delivery. This varies between services and areas. Figure 1 illustrates the validated four week quit rates for Stop Smoking Services in England by PCT. Some services have high rates of CO validation and report good outcomes at 4 weeks for their clients whereas others are performing at a level that requires improvement.

7.18 Recent developments such as the establishment of the NHS Centre for Smoking Cessation and Training (NCSCT) aim to provide more comprehensive training for staff and ensure greater adoption of national standards for delivery and monitoring.

Conclusions

7.19 NHS Stop Smoking Services can deliver considerable cost savings to the NHS by assisting their clients to break a powerful addiction that has significant health consequences. They can also deliver savings to society more broadly for example in reducing the costs to the NHS of smoking-related diseases, and improved productivity from reduced smoking-related sickness absences and smoking breaks at work. There is a compelling case for continued and sustained investment in the lifesaving treatment that these services provide.

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The role of mass media campaigns in evidence-based tobacco control

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Synopsis

8.0 Mass media campaigns are used to inform the public about health issues and to maintain awareness so as to promote and facilitate healthy choices. There is good evidence that, as part of a comprehensive tobacco control programme, they are effective in encouraging and supporting smoking cessation. The Department of Health-funded campaigns that have been run in England in recent years have been based on well-established principles and appear to have yielded strong results in terms of generating immediate smoking cessation activity. These have been suspended since April 2010. This moratorium needs to be ended as a matter of urgency.

The role of mass media campaigns

8.1 ***Mass media campaigns still have an important role to play in providing information and maintaining awareness of the need to stop smoking.***

8.2 Mass media campaigns consist of the use of print, broadcast and internet to reach large audiences with communications designed to promote healthy choices by providing information and raising awareness. It includes paid advertising, press releases and news conferences, use of social networking or bespoke internet sites, and mass mailings.

8.3 The first issue that needs to be addressed is whether it is still necessary to provide information about the harms of smoking, the benefits of stopping and the best ways of doing this. Smokers in England are almost all aware of and accept that smoking is harmful to the health and that is the most important motivation for them to stop.[1] Would-be smokers will almost all have been exposed to messages on the harmfulness of smoking from a range of sources including parents and teachers.

8.4 However, it is extremely unlikely that smokers and would-be smokers have accurate information, even now, about key aspects of smoking. For example, are they aware that from the mid-thirties, every year of smoking costs an average of 3 months of life?[2] This makes stopping a matter of urgency from that age onwards – stopping smoking cannot be put off to another day. Are they aware that even light smoking carries a significant risk of heart disease and cancer?[3] This means that even light smokers need to stop to protect their health. Are they aware that the chances of success of an unaided quit attempt are less than 1 in 20?[4] For heavier smokers the chances are even lower. This means that smokers wanting to stop will need to try an average of 20 times before they succeed. Do they know that pure nicotine carries minimal risk and does not cause cancer?[5] And do they know that using nicotine replacement therapy can almost double their chances of success?[6] Do they know about the benefits of using the NHS Stop Smoking Services and that they are free and easily accessible?[7] About half of all quit attempts use no evidence-based method to help them and only 2-6% use the NHS Stop Smoking Services[8] so it would appear that there is a substantial information gap.

8.5 Even if smokers had at some time received all the relevant information about the urgency of quitting, the chances of success of unaided quit attempts and the benefits of different forms of clinical support, there is still the question of 'awareness' at critical moments.

8.6 One way of summarising what we know about human motivation is as follows:

At every moment we act in pursuit of what we most want or need at that moment. Wants and needs involve imagining future possibilities associated with anticipated pleasure, satisfaction or relief from mental or physical discomfort. [see 9]

8.7 Advertisers know how important it is to maintain high levels of awareness of their products and to associate them with pleasure, satisfaction or relief through the power of imagery. The same is true for smoking. The decision to stop smoking can always be put off to another day and statistics about death rates do not necessarily capture the imagination and motivate action. It is all too easy to put uncomfortable thoughts about smoking out of one's mind.

8.8 Mass media campaigns have a potentially important role in acting as an immediate trigger to quitting as well as maintaining feelings of concern about smoking through imagery and offering hope by promoting effective methods of stopping.

8.9 Thus mass media campaigns still have a potential role to play in providing information and raising awareness. The next question is: what evidence is there that they are effective?

Effectiveness of recent mass media campaigns in England

8.10 ***Evidence supports the effectiveness of mass media campaigns to promote smoking cessation and reduce uptake when used as part of a comprehensive tobacco control strategy.***

8.11 In 1995 a large study in the US concluded 'Both taxation and anti-smoking media campaigns are effective means of reducing cigarette consumption. The strength of those effects, however, is influenced by the magnitude of the taxes and the amount of media campaign expenditures.'[10]

8.12 A major study in 2002[11] concluded that campaigns at state level in the US could be shown to have reduced smoking prevalence. A recent study in Australia used a time-series analysis to explain changes in smoking prevalence. It concluded: 'Increases in the real price of cigarettes and tobacco control mass media campaigns broadcast at sufficient exposure levels and at regular intervals are critical for reducing population smoking prevalence'.[12]

8.13 Of direct relevance to England, McVey and Stapleton[13] found in a unique controlled experiment that a TV advertising campaign in England had a significant impact on cessation by encouraging attempts to stop and reducing relapse rates. The authors concluded 'The Health Education Authority for England's anti-smoking TV campaign was effective in reducing smoking prevalence through encouraging smokers to stop and helping prevent relapse in those who had already stopped. The lack of an effect after the first phase of the campaign indicates that if advertising at this intensity is to have an impact, a prolonged campaign is necessary.'

8.14 The National Institute for Health and Clinical Excellence (NICE) undertook a systematic review of studies evaluating the effectiveness of mass media campaigns in reducing uptake. It concluded that '...advertisements which evoke strong negative emotions are effective'.[14] Bala[15] undertook a systematic review of mass media campaigns to promote cessation and this concluded: 'Comprehensive tobacco control programmes which include mass media campaigns can be effective in changing smoking behaviour in adults'.

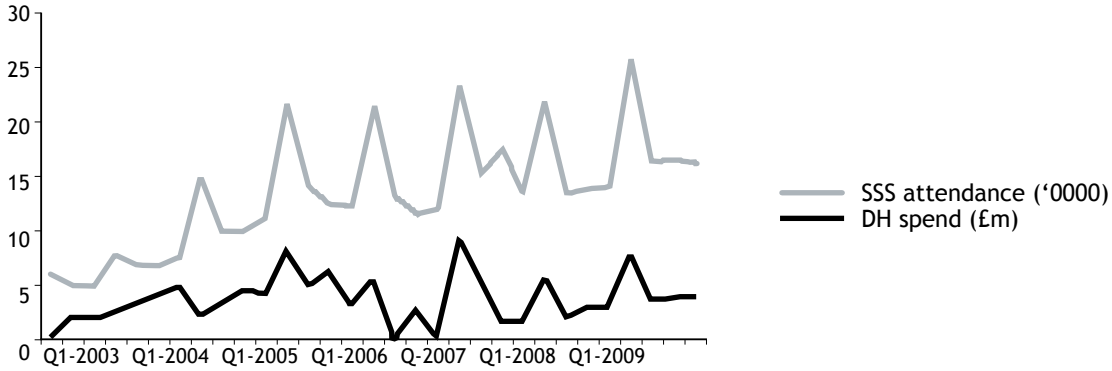
8.15 The National Cancer Institute in the US carried out a major review of the topic and came to similar conclusions[16]: 'Evidence from controlled field experiments and population studies conducted by many investigators in many countries shows that anti-tobacco mass media campaigns can reduce tobacco use.'

8.16 The effectiveness of the campaigns that have been run in England over recent years can be gauged by examining their immediate impact on smoking cessation activity. Three

objective markers of this activity are: rate of attendance at the NHS Stop Smoking Services, calls to the NHS smoking helpline and hits on the smoke-free website.

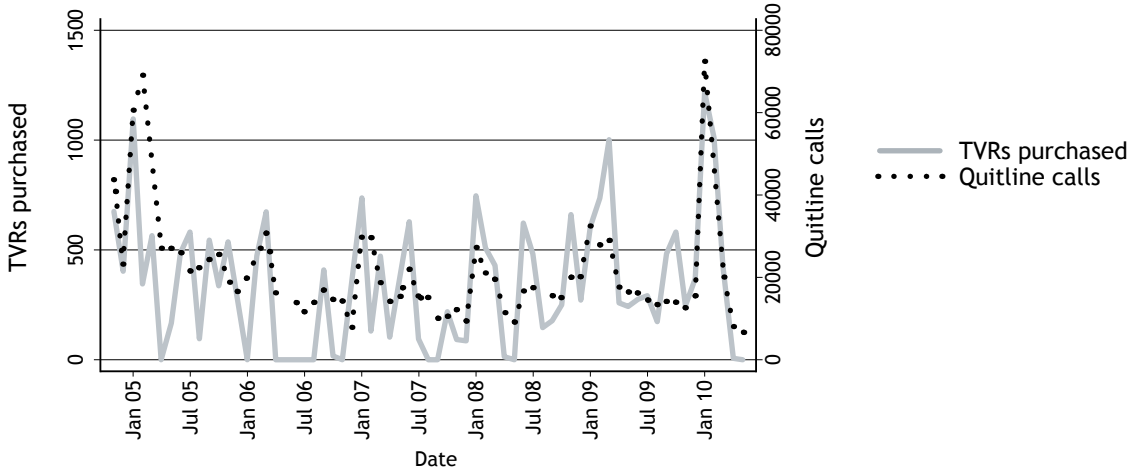
8.17 Figure 1 shows the quarterly attendance at the NHS Stop Smoking Services and the spending by the Department of Health over the same period of mass media campaigns. It shows that there has been growth in attendance over the time period and peaks in the first quarter of each year as well as in the third quarter of 2007 when England introduced its ban on smoking in indoor public areas. Even after adjusting for this, using a time series analysis, we have found a significant association between spending in a given quarter on mass media campaigns and attendance.

Figure 1: Quarterly Department of Health spending on mass media campaigns and attendance at NHS Stop Smoking Services



8.18 Figure 2 shows the anti-smoking 'TVRs' (amount of TV ratings purchased) and calls to the NHS smoking helpline in each month between 2004 and the present. Again it appears that there is a correspondence although this remains to be confirmed by statistical analyses.

Figure 2: Anti-smoking TVRs and NHS Quitline calls, England, November 2004-May 2010 (graph supplied by Professor Sarah Lewis, University of Nottingham)

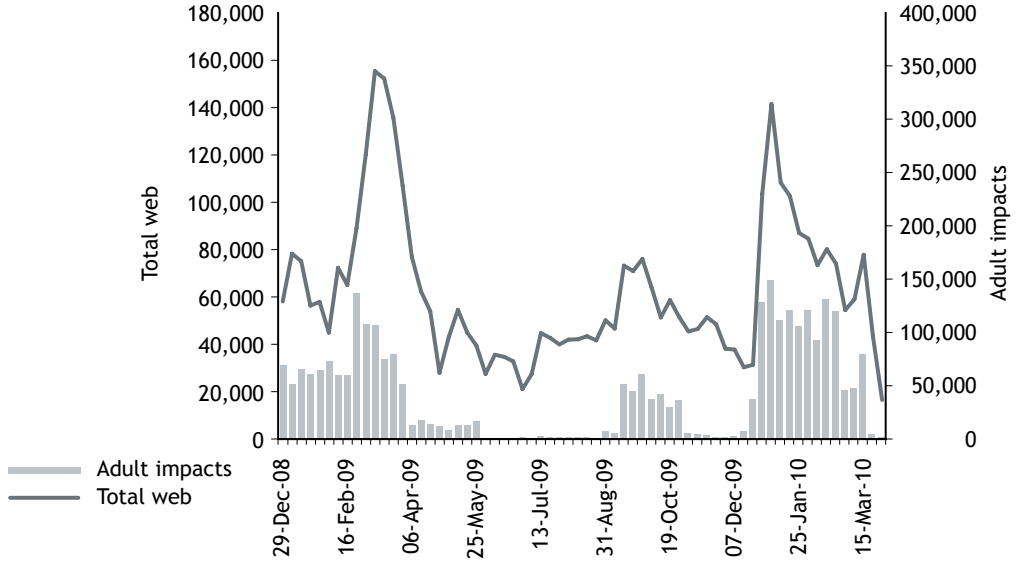


8.19 Figure 3 shows weekly 'TV impacts', a measure of TV reach, and numbers of visits to the NHS Smoke-free website. Again there appears to be a strong correspondence. This would not be surprising to anyone in advertising. The immediate impact of well-targeted and conceived marketing on activity levels is well established.

8.20 Spending on mass media campaigns was suspended immediately prior to the General Election in May 2010 and the Coalition Government has maintained this suspension. If one is to believe the large body of evidence that mass media campaigns are effective in reducing smoking prevalence and the evidence that smoking cessation activity in recent

years in England has closely followed mass media spending, there is reason for concern that the moratorium on spending is having a serious negative impact on public health

Figure 3: Weekly TV impacts and numbers of visits to the NHS Smoke-Free website
(Graph supplied by the Department of Health)



Conclusions

8.21 Mass media campaigns still have a key role in tobacco control in England. There is good reason to believe that smokers and would-be smokers still require information on the urgency of stopping and best ways of achieving this and it is clear that awareness raising remains an important way of influencing behaviour. Evidence shows that in recent years total spending on government mass media campaigns in a given quarter is associated with smoking cessation activity in that quarter. If, as seems likely, this association is causal the recent suspension of mass media campaigns will lead to significant loss of life and with every month that passes without further activity the death toll will grow.

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Tobacco, Tax and Smuggling

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Synopsis

9.0 Increasing the price of tobacco through taxation to reduce its affordability is an effective lever in driving down smoking prevalence and this has been part of UK Government policy since the early 1990s. This policy has strong cross-party and public support. However, the effectiveness of such a policy is undermined if smokers switch to cheap and illicit sources of tobacco, as happened in the late 1990s. Since 2000 a strong and effective anti-smuggling policy (implemented as part of a comprehensive tobacco control programme) has reduced the illicit market and smoking prevalence has declined significantly. An effective UK tobacco control programme must include a strategy to decrease the affordability of tobacco by putting taxes up and controlling the illicit market. However, tobacco taxes are strongly regressive and for those smokers who don't quit can increase health inequalities, particularly for poorer smokers. Government therefore also has a responsibility to make the greatest possible efforts to motivate and assist smokers, particularly poorer smokers, to quit.

Tobacco Taxation as a policy lever

9.1 The World Bank concluded in the late 1990s that raising taxes significantly reduces the consumption of tobacco and that the impact of higher taxes is likely to be greatest on young people, who are more responsive to price rises than older people. It also concluded that even with this reduced demand, governments' revenues need not be harmed and indeed higher taxes can bring substantially higher revenues in the short to medium term, as demand is relatively inelastic because tobacco is an addictive product.[1]

9.2 Subsequently, Article 6 of the WHO Framework Convention on Tobacco Control, which was ratified in 2005 and to which the UK is a Party states that, *"The Parties recognise that price and tax measures are an effective and important means of reducing tobacco consumption by various segments of the population, in particular young persons"*, and goes on to encourage Parties to use price policies and in particular taxation to reduce tobacco consumption.

9.3 The UK was well in advance on this issue. In 1993 the then Chancellor of the Exchequer, Kenneth Clarke, committed to raise taxes by an escalator of 3% above inflation as a public health measure saying that *"I believe that the approach we are adopting in Britain is the most effective way to reduce smoking."*[2] The incoming government in 1997 continued this strategy and increased the escalator to 5%. Cross party support is also backed up by public support for tobacco taxes, particularly if some of the proceeds are used to help smokers quit and prevent uptake amongst young people.[3]

Impact of tobacco tax rises in the 1990s

9.4 However, the tobacco price increases following the introduction of the tax escalator in 1993 did not lead to significant declines in smoking prevalence as predicted and indeed smoking prevalence remained static during this time.[4] There are a number of likely reasons for this. Firstly the UK did not put in place a comprehensive strategy which in other jurisdictions has proven the most effective means of ensuring that smoking prevalence declines.[5] [6] Secondly, and more specifically, the illicit market for tobacco grew rapidly after the mid-1990s from below 3% market share for illicit cigarettes in 1996-7 to 21% and rising by 2000-01.[7]

9.5 As prices went up smokers were switching to cheap and illicit tobacco rather than reducing consumption or quitting, so smoking prevalence held up while government revenues fell. The tobacco industry had always argued that increasing taxes led to increases in smuggling, but this was a self-fulfilling prophecy.

9.6 In the 1990s the tobacco industry facilitated the growth of the illicit market in the UK by allowing the export of their cigarettes to countries where there was no end market, from whence they were smuggled back into the UK. According to UK customs officials at that time Andorra was the largest source of smuggling in Europe, importing 9m cigarettes a day, half of which were British brands, but officially exporting none. This was enough cigarettes for every man, woman and child to smoke 140 cigarettes a day.[8] Fuelling the cheap and illicit market in this way sustained sales while at the same time supporting the industry's argument that higher taxes led to increases in smuggling.

9.7 Analyses by the World Bank have shown that high availability of illicit tobacco is linked more closely to corruption and tolerance of contraband sales, than to levels of taxation.[9] It concluded that global trade in illicit tobacco occurs in low-tax and high-tax jurisdictions, results from a lack of control on the international movement of cigarettes, is run by criminal organisations with relatively sophisticated systems for distributing smuggled cigarettes,[9] and in addition has been used to fund terrorism.[10]

Government anti-smuggling strategy

9.8 In 1998 the Government launched its first comprehensive strategy to drive down smoking, which included measures to tackle smuggling.[11] Since then the anti-smuggling strategy has been updated and improved a number of times, most recently in a combined UKBA and HMRC strategy.[7] [12] [13] In 2006 the strategy was reinforced by supply chain legislation making it a legal duty for manufacturers not to facilitate smuggling with fines up to £5 million if they fail to comply.

9.9 The Government now spends around £100 million a year tackling smuggling including employing around 2,000 full-time equivalent staff working on detection, investigation and intelligence, the deployment of 19 x-ray scanners at ports to identify illicit tobacco in shipments, and media campaigns to support the anti-smuggling strategy.

9.10 The UK has also signed up to the EU Agreements with PMI, JTI, BAT and most recently Imperial Tobacco which require the tobacco manufacturers to control their supply chains and to make seizure payments to the EU and Member States if their products are found to have been diverted to the illicit market in their jurisdictions.

9.11 This strategy has been effective and the illicit market for cigarettes, which was on a steep upward trajectory, has steadily fallen from a 21% market share in 2000-0113 to 12% in 2007-8. In addition the comprehensive tobacco control strategy put in place has led to significant declines in smoking prevalence.

9.12 However, while much has been achieved, more needs to be done. The market share of illicit cigarettes is still high at 12% of cigarettes and 48% of hand-rolled tobacco compared to only 5% of spirits. The total revenue losses from tobacco smuggling are also much higher at £2.1 billion compared to only £0.1 billion for spirits.[14]

Impact of reducing affordability on health inequalities

9.13 Tobacco taxes are strongly regressive and for those smokers who don't quit can increase health inequalities, particularly for less affluent smokers. On the other hand, real terms price increases do lead some smokers to quit and make very substantial health and welfare gains for those that do succeed in stopping smoking. This poses a dilemma which can only be resolved by Government making the greatest possible efforts to motivate and assist smokers to quit in response to increases in taxation, and to target these efforts particularly at low-income groups.[15]

9.14 Continuing to reduce the availability of cheap and illicit tobacco will not only help reduce smoking prevalence, but also help reduce health inequalities, as poorer smokers are twice as likely as the most affluent to buy illicit tobacco. Reducing the availability of cheap and illicit tobacco will also help reduce uptake amongst young people who are also significantly more likely to get their tobacco from this source.[16]

Next steps

9.15 For the illicit trade in tobacco to be tackled effectively requires action right across government, not just by HM Treasury and HMRC but also the UKBA, the Home Office, DCLG and the DH, and impacts not just on government revenues but also the public health and health inequalities. It would, therefore, seem an ideal issue to be dealt with by the Cabinet sub-committee being set up to look at issues relating to public health.

9.16 The illicit market continues to evolve and change and the Government should continue to regularly update its anti-smuggling strategy as it has done to date. Action is needed to tackle the illicit trade not just at national and sub-national level but also internationally. Supporting the development and ratification of an illicit trade protocol to the WHO FCTC currently under negotiation will help to significantly reduce the illicit market not just globally, but also in the UK.[17]

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How to ensure an effective tobacco control strategy at local level

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Synopsis

10.0 Against the background of strong national commitment, a sub-national programme serves to bring together a potentially disparate collection of independent interventions into a unified and expert programme. Taking this approach drives cost efficiency through enhanced purchasing power, reduced administration and coordination of initiatives to avoid duplication of effort. A central advantage is in actively promoting accelerated quality improvement through supporting standardisation of best practice and sharing expertise and learning. Furthermore organisations such as Smokefree South West, and its counterparts elsewhere in the country, can work effectively to build support for tobacco control issues amongst key partners both within and across local boundaries through galvanising and supporting local alliances of partners to take forward tobacco control. Finally there is potential for greater impact through communicating a clear and unified message which is consistently reinforced by all involved. In other words; 'one vital message: many voices'.Tobacco control offices are operating very successfully in three regions: the North East, North West and South West, with others in development. Delivery of tobacco control programmes at sub-national level has proved very effective and should continue to be encouraged and supported.

Background

10.1 The original business case proposing the establishment of the South West tobacco control office, set up in Spring 2009, was based on recommendations from evidence-based reviews. Such reviews strongly indicate that to achieve optimal impact, individually focussed educational and clinical approaches with a smaller reach should be combined with population-based action at national, regional and local level.

The evidence base for sub-national tobacco control programmes

10.2 International evidence has concluded that investment at sub-national level to drive forward key components of national tobacco control programmes reaps significant benefits that are unlikely to be realised if local delivery evolves in isolation. Enhanced collective investment in comprehensive tobacco control benefits local authorities, local health organisations and other key partners by creating a more robust platform from which to reduce smoking uptake, improve quit rates and enhance protection of local communities from tobacco-related harm.

10.3 The evidence base draws on a large body of work including that undertaken and synthesised by the Centers for Disease Control in USA.[1] Across the developed world the lowest smoking prevalence is in California, which has invested in the longest running comprehensive tobacco control programme in the world. This has reduced adult smoking rates from 22.7% in 1988 to 13.3% in 2006. Lung cancer rates have also declined four times faster in California than the rest of the United States of America. This is a public health policy initiative built on a strong evidence base.

10.4 Following the passage of the 1988 ballot initiative, the State of California implemented a well funded tobacco control programme. Legislation mandated a third of this to be spent on schools-based tobacco-use prevention education activities.The remaining two-thirds

are deployed to support comprehensive anti-tobacco health education efforts comprised of local programmes, state-wide media campaigns, surveillance and evaluation.

10.5 Evaluations of the Californian programme have found that the comprehensive strategy put in place was very effective[2] and that price increases through taxation (which can be implemented at State level in the US) and mass media campaigns were particularly effective elements of such a strategy.[3]

10.6 In recent years funding of the tobacco control programme has been cut back and California has dropped from 1st to 30th in the US in both tax and programme spending.[4] Subsequently both youth and adult smoking rates stopped declining and indeed have begun to increase again, illustrating the importance of sustaining such a strategy if a continued decline in smoking is to be ensured.

The role of the regional tobacco offices

10.7 Smokefree South West, and the other regional tobacco offices, provide the coordination, resources and expertise needed to stimulate coordinated, strategic implementation of effective local community tobacco control delivery. The aim is to create a social and legal climate in which tobacco becomes 'less desirable, less acceptable and less accessible.' A sub-national programme can provide the skills, resources and information needed to stimulate the coordinated, strategic implementation of effective local community programmes.

Mass media in the South West

10.8 Through collective commissioning of effective media, managed through Smokefree South West, all localities across the South West region are able to cost-effectively invest in social marketing and communications expertise to:

- focus on achieving behavioural change
- implement a systematic process of research and programme development
- manage long term programmes informed by relevant target market insights and market intelligence
- procure media at significant discounts

10.9 Such savings are achievable because of the narrow concentration of ownership of local media, for example 98% of local newspapers in the South West are owned by just four publishers, 16 commercial radio stations in the South West are owned by just two groups. Buying across the portfolio offers a much better opportunity for negotiation and pooled regional budgets allow cost effective purchasing via professional media buyers at the COI. This provides access to the benefits of nationally negotiated government rates.

10.10 The level of savings which can be achieved include an average of 43% discount across media types; TV (9% from station average price), radio (60% from Radio Advertising Bureau estimated market price), Cinema (60% from rate card), Press (44% from rate card), Posters (42% from rate card). For example: for NHS Gloucestershire this has meant media of an estimated value in excess of £300,000 was purchased by Smokefree South West on their behalf for an estimated £177,050.

10.11 Publicity generated by, or mentioning Smokefree South West from the beginning of October 2009 to June 2010, has included 294 media clips and an estimated 30 plus stories each month in local or regional media. Analysis of these show that 93% of these were positive, 5% neutral and just 2% negative.

10.12 Smokefree South West has also supported the development of an extensive set of professionally produced case study 'advertorials' on behalf of the whole South West, featuring local success stories, for example, of Cornish or North Somerset people who

have successfully quit with help from NHS Stop Smoking Services. Many of these powerful local stories have subsequently been reused several times over to help generate extensive value for money free ('unpaid') media coverage.

Smoking cessation in the South West

10.13 During the last two years in which the South West has benefited from the advantages of enhanced investment and coordination through Smokefree South West, there has also been a step change in performance of the region's NHS Stop Smoking Services. Following a protracted three year period during which the region did not achieve its regional target for numbers of successful 4 week quitters, performance has improved from -6% in 2007/08 to +9% above target in 2009/10.

10.14 A total of 34,649 people successfully quit using the NHS Stop Smoking Services in the South West during 2009/10. If each of these ex-smokers usually smoked only 20 cigarettes per day then in just one month they will have saved nearly £5million which otherwise would go up in smoke. Such savings make a substantial contribution to the economy and to reducing poverty in many of our most disadvantaged communities.

10.15 There are now three regions with Tobacco Control Offices; the North East, North West and South West, all of which are part funded by the Department of Health, but receive additional per capita funding from their localities and work in collaboration with their local Directors of Public Health. All have the prime objective of driving down smoking prevalence through coordinating comprehensive sub-national tobacco control programmes.

The impact of the regional offices in the North East and North West

10.16 The North East office has been running for over 5 years, having been established in 2004. In the North West the 24 Primary Care Trusts collectively commissioned their Office in 2007. Although considerable care should be taken with interpretation of survey data given the sample sizes at regional level and below, the North East has achieved the biggest drop in adult smoking prevalence (8%) of any English region over the past 5 years, down from 29% (the highest in England in 2004) to 21% (now on par with national average) according to the latest available (2008) General Lifestyle Survey. Over the same period, which preceded the setting up of Smokefree South West, prevalence fell 3% nationally from 24% to 21%.

10.17 The North East office, called FRESH, has achieved an international reputation for its approach in driving tobacco control through the work of one co-ordinated regional office working across health, local government and business to deliver a clear and united approach. In recognition of its work, last year the North East FRESH programme won the 2009 Gold Medal at the CMO Awards for Public Health.

10.18 There is further evidence that sustained investment in sub-national coordination pays dividends over time. Since FRESH was established in 2005, NHS North East Stop Smoking Services have consistently been at the top of the national league table for 4-week quitters per 100,000 population. Over the last 2 years, the proportion of North East smokers making a quit attempt using NHS Services has risen from 10.5% to 12.7% of all the region's smokers. This compares to a rise nationally from 7.7% to an estimated 8.7% by end of 2009/10. This exceeds current DH expectations that services should reach between 5-10% of smokers annually.

Conclusions

10.19 Protecting our children from the harm caused by smoking requires interventions embedded in the community at the individual level (for example NHS Stop Smoking Services, school smoking uptake prevention programmes) and the environmental level, (for example social norm changes making tobacco use less acceptable, less desirable, less accessible) and essentially changing the environment surrounding smokers and non smokers. Of these two types of approaches, the interventions aimed at the environmental level can be the most difficult to initiate at the local level and require national and sub-national interventions for example to increase price through taxation and tackle illicit tobacco. A sub-national programme, in particular, is able to balance the needs of local communities for local autonomy with the advantages of a unified programme to galvanise widespread support for both environmental and individual level changes.

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All Party Parliamentary Group on Smoking and Health

Inquiry into the effectiveness and cost-effectiveness of tobacco control:

Submission to the 2010 Spending Review and Public Health White Paper Consultation process