

Consultation on the future of tobacco control

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Contact details	Tobacco Consultation Department of Health Room 712, Wellington House 133–155 Waterloo Road London, SE1 8UG tobaccoconsultation@dh.gsi.gov.uk
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Consultation on the future of tobacco control

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Executive summary

Smoking remains the main cause of preventable morbidity and premature death, accounting for 87,000 deaths a year in England alone. It is the primary reason for the gap in healthy life expectancy between rich and poor. However, progress is being made in decreasing rates of smoking.

As a result of the Government's focused action on tobacco, overall adult smoking prevalence has been reduced in England over the past decade from 26% in 1998 to 22% in 2006. In England, tobacco control activity is led by the Department of Health. The Department is on target to reach the Public Service Agreement (PSA) objective of reducing adult smoking rates to 21% or less by 2010. Its six-strand strategy to reduce smoking rates has focused on:

- supporting smokers to quit;
- reducing exposure to secondhand smoke;
- running effective communications and education campaigns;
- reducing tobacco advertising, marketing and promotion;
- effectively regulating tobacco products;
- reducing the availability and supply of tobacco products.

Although we have seen reductions in tobacco use among the general population, slower progress has been made in reducing tobacco use among routine and manual groups, and the use of tobacco remains the single greatest contributor to health inequality.

This consultation is the first step in developing a new national tobacco control strategy and covers four main areas:

- **Reducing smoking rates and health inequalities caused by smoking:** including trends in smoking prevalence, regional patterns and health inequalities and tackling the supply of cheap illegal tobacco in our communities.
- **Protecting children and young people from smoking:** reducing young people's access to tobacco, reducing exposure to tobacco promotion, and protecting children from secondhand smoke to prevent future generations suffering poor health caused by tobacco.
- **Supporting smokers to quit:** including NHS stop smoking support, increasing access to, and take-up of, quit services among high smoking prevalence groups, supporting young smokers to quit, supporting pregnant smokers to quit, and how best practice can be best shared.
- **Helping those who cannot quit:** considering the potential of a harm reduction approach in tobacco control to help people whose addiction to nicotine makes it extremely difficult to quit altogether.

Part A: Reducing smoking rates and health inequalities caused by smoking

Smoking and health inequality

Reducing health inequalities is a priority for the Government. According to the National Institute for Health and Clinical Excellence (NICE), tobacco use is the primary reason for the gap in healthy life expectancy between rich and poor.¹ Reducing smoking rates in our more deprived communities represents one of the greatest challenges in public health, but is key if we are to make progress on closing the inequalities gap in health.

Smoking rates are highest among people who earn the least, and lowest among people who earn the most. However, this represents only a part of the link between tobacco use and disadvantage. The chances of being a smoker are substantially greater among people living in rented housing, receiving state benefits, who don't have access to a car, are unemployed or living in overcrowded accommodation. The reasons why this should be the case are not well understood.

Despite the considerable progress that has been made in the past decade in implementing tobacco control, marked social inequalities remain. In the future these could actually get worse if smokers from more deprived groups continue to quit smoking at a slower rate than those from more socially advantaged groups.

Tackling illicit trade in tobacco

A significant amount of tobacco worldwide is sold illegally, avoiding tax. Illicit tobacco products are available in our communities at less than half the price of their duty-paid equivalent. Unfortunately, a proportion of the health gain achieved by reducing smoking rates through high taxes on tobacco in the UK is lost through smuggling. Tobacco smugglers also undermine law-abiding businesses and have been known to use the proceeds to fund other forms of organised crime.

Large seizures prior to and at point of entry to the UK by HM Revenue and Customs (HMRC) clearly remain crucial in reducing the availability of smuggled tobacco. However, inland enforcement also remains a vital component of the Government's strategy to reduce the illicit share of the UK tobacco market. Tackling tobacco smuggling effectively requires action at international, national and local levels. There are real opportunities for tackling the inland sale of smuggled cigarettes through collaborative working between HMRC and other local enforcement agencies such as Trading Standards. Tackling the availability of illicit tobacco in our communities needs to remain a key aspect of our tobacco control strategy. Feedback from stakeholders is especially sought on how collaboration between agencies might be enhanced to contribute to inland enforcement to reduce the availability of illicit tobacco.

Part B: Protecting children and young people from smoking

Reducing the impact of smoking on health and well-being in our communities means we need to support smokers to quit, but we need to do as much as we can to protect young people from starting to smoke in the first place. Youth smoking is a serious public health problem, and over eight in ten current smokers say they started smoking regularly before the age of 19.² Over the past decade, the Government has taken significant action to reduce smoking uptake by young people, and to support young people who want to quit, but more still needs to be done to prevent future generations suffering poor health caused by tobacco.

Controlling the display of tobacco in retail environments

Since the implementation of a comprehensive ban on tobacco advertising in the UK, concern has been expressed about how prominently tobacco products are now displayed in newsagents, supermarkets and corner shops. The number and size of tobacco displays appears to have grown in many premises.

The main reason for controlling the display of tobacco products at the point of sale is to protect children and young people from the promotion of tobacco. Research shows that young people are highly receptive to tobacco promotion and can be influenced to take up smoking as a result. Tobacco promotion familiarises potential customers with the product and can stimulate impulse purchases among those not intending to buy cigarettes and, importantly, among smokers who are trying to quit.

Limiting young people's access to tobacco products

While tobacco vending machines account for only 1% of the overall UK market in tobacco sales, a disproportionate number of young people under the minimum legal age for sale of tobacco obtain cigarettes from this source. Tobacco vending machines are 'self-service', which means that currently there are no routine age checks carried out prior to purchase. There are a number of ways in which access to tobacco from vending machines can be limited to ensure that only people aged 18 or over can purchase from the machines. A number of countries have already prohibited or restricted the sale of tobacco from vending machines.

Packing of tobacco products: the potential of plain packaging

Plain packaging involves the removal of all promotional aspects from tobacco packaging and a requirement for the pack to be plain coloured and to display only the information required by law and health warnings. Research shows that this may reduce the attractiveness of cigarettes and further 'denormalise' the use of tobacco products. Studies show that plain packaging reduces the brand appeal of tobacco products, especially among youth, with nearly half of all teenagers believing that plain packaging would result in fewer teenagers starting smoking.

Packing of tobacco products: pack size

Currently, cigarettes sold from a retail business must be sold in pre-packed quantities of 10 or more. Packs of 10 cigarettes, often referred to as ‘kiddie’ packs, are widely available for sale. Packs of 10 are cheaper than larger packs of cigarettes and as a result are more likely to be bought by young people. The majority of 11–15 year olds who smoke say they bought a pack of 10 cigarettes the last time they made a purchase. An increasing number of countries have prohibited the sale of packs of 10 as part of wider tobacco youth prevention strategies.

Protection of young people from secondhand smoke

Smokefree legislation was implemented in England in July 2007, providing protection from exposure to secondhand smoke in virtually all enclosed work and public places, including public transport. Exposure to secondhand smoke is a serious health hazard, and the health of children is particularly at risk.

The Government has made a commitment to undertake a review of smokefree legislation in England in 2010, in which stakeholders will be asked to participate. Views on what more can be done to protect children and adults from exposure to secondhand smoke at home and in private cars are also invited within this consultation.

Part C: Supporting smokers to quit

Stop smoking support

The NHS Stop Smoking Service is one reason why the UK is considered a world leader in tobacco control and smoking cessation. Stop smoking support from the NHS is available to all smokers free of charge and is available in all communities across England. NHS Stop Smoking Services are extremely cost-effective compared with other healthcare interventions, and smokers who use NHS support are up to four times more likely to quit successfully than if they try to go it alone ‘cold turkey’. Advice and support in quitting is also available to smokers through NHS national helplines and websites.

However, more needs to be done to improve the impact of treatment provided. Even though seven smokers in ten say they want to quit, too many remain reluctant to seek NHS support, seeing this as a ‘last resort’. Introducing new kinds of smoking cessation support or providing support in different settings that are more convenient to smokers, especially from high smoking prevalence groups, may be ways to ensure that all smokers who want support in quitting have ready access to the most appropriate treatment.

To further assist the NHS in supporting smokers to quit, the Department of Health will provide nationally accredited training for NHS Stop Smoking advisers and other healthcare professionals. We will also continue to support research into new ways of supporting smokers to quit, making smoking cessation more effective and finding new ways to reduce smoking prevalence.

Marketing and communications

In recent years, the Department of Health's tobacco control marketing campaigns have played an important role in changing public attitudes towards smoking and secondhand smoke, and encouraging smokers to make quit attempts.

A new marketing and communications strategy is being implemented across England, focusing on routine and manual smokers. Future campaigns will seek to continue to motivate smokers to quit, trigger quitting actions and increase the proportion of successful quits by encouraging smokers to make use of NHS support.

Supporting smokers to quit and health inequalities

The more disadvantaged the smoker, the greater the burden high-cost tobacco imposes on their household income and the greater the impact smoking has on their family. Stop smoking support therefore needs to be made as accessible as possible to less advantaged groups in order to reduce health inequalities.

We know that around half of England's smokers fall within the routine and manual social economic grouping. This is why stop smoking support needs to be targeted and accessible to this group.

Another priority for the Government is to reduce the proportion of women who smoke during pregnancy. Smoking is one of the few remaining modifiable risk factors in pregnancy. Pregnant women who smoke are most likely to be in the key high smoking prevalence groups. While NHS support is already available for all mothers to quit smoking during pregnancy, the Department of Health seeks feedback from stakeholders on what more could be done to support pregnant women to quit smoking.

Part D: Helping those who cannot quit

We know that some smokers are so heavily addicted that they find it very difficult to quit, even though they have made serious quit attempts many times and failed. This consultation seeks feedback from stakeholders on how the needs of this group of smokers can be addressed, and how the harm caused by smoking can be reduced.

One option is to encourage the wider use of medicinal nicotine products and to make them more widely available as alternatives to cigarettes. Medicinal nicotine and the alternative nicotine products now available deliver nicotine more slowly than cigarettes and are probably not as appealing to smokers as tobacco. However, there could be considerable scope for developing faster delivery and more effective nicotine products.

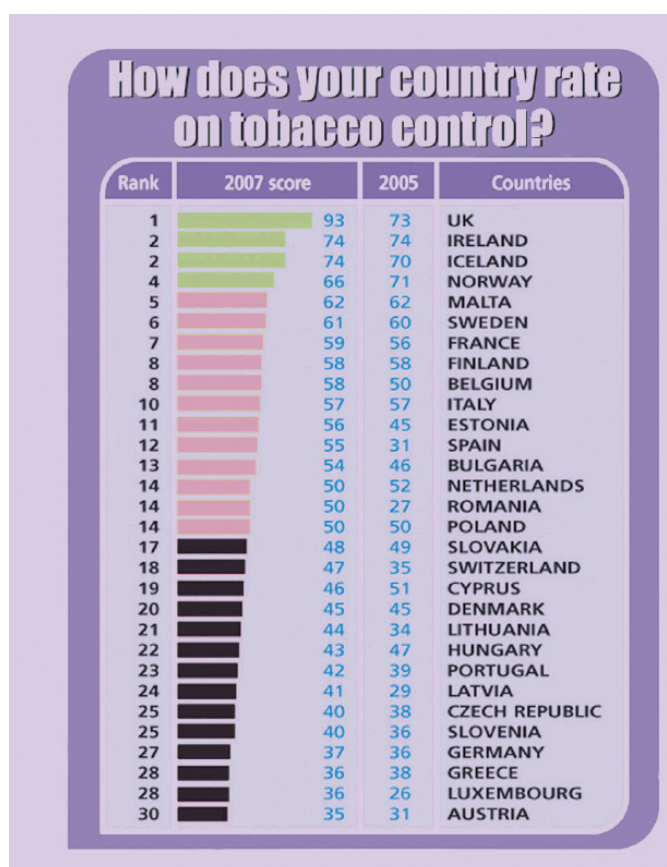
While nicotine replacement therapy products are strictly regulated, other nicotine products, including cigarettes, can be sold with relatively few restrictions. The regulation of nicotine products is therefore another area that could be further considered with a view to either relaxing or tightening the restrictions on products, depending on how harmful they are to a person's health.

1. Introduction

- 1.1 For the past decade, eliminating premature death and disease caused by tobacco use has been a foremost public health priority for the Government. But, as smoking-related diseases continue to cause the premature death of over 87,000 people each year in England alone, more needs to be done. The Government remains especially concerned about the uptake of smoking by young people and the perpetuation of smoking and poor health into future generations.
- 1.2 The Government has announced a commitment to develop a new national tobacco control strategy to build on our achievements and further reduce smoking rates. This consultation is the first step in developing a national strategy, and is made up of four primary areas:
- **Further action to reduce smoking rates and health inequalities caused by smoking:** including new targets for a reduction in smoking prevalence, regional differences and health inequalities, and ways to tackle the supply of cheap illegal tobacco in our communities.
 - **Protecting children and young people from smoking:** reducing young people's access to tobacco, reducing exposure to tobacco promotion, and protecting children from secondhand smoke.
 - **Helping smokers to quit:** including NHS stop smoking support, increasing access to and take-up of quit services among high smoking prevalence groups, supporting young smokers to quit, supporting pregnant smokers to quit and how best practice can be best shared.
 - **Helping those who cannot quit:** considering the potential of a harm reduction approach in tobacco control to help people whose addiction to nicotine makes it extremely difficult to quit altogether.
- 1.3 Ten years after the publication of the *Smoking Kills* White Paper in 1998, the UK has developed a reputation as a leader in Europe and across the world in effective tobacco control. In 2007, an independent academic survey of tobacco control activity across 30 European countries ranked the UK as being most effective, as *figure 1* shows.³
- 1.4 Over the past decade, the Government has delivered an ambitious programme of tobacco control, with achievements including:
- introducing laws to provide protection from the harm caused by exposure to secondhand smoke in enclosed work and public places;
 - comprehensively banning advertising of tobacco in print, on billboards and on the internet;
 - limiting tobacco advertising at the point of sale to a maximum space of an A5 sheet of paper;

- raising the age of sale for tobacco products from 16 to 18 years;
- introducing legislation into Parliament to substantially increase sanctions for retailers who persistently sell tobacco to people under the age of 18;
- passing laws to require hard-hitting pictorial health warnings on all tobacco products produced for the UK market from October 2008;
- setting up an extensive network of local NHS Stop Smoking Services in communities across the country to support smokers who want to quit. Today, smokers who quit with the support of the NHS are up to four times more likely to quit long term than are smokers who try to quit by going ‘cold turkey’;
- continuing high levels of investment in the NHS Stop Smoking Services means that we have the most comprehensive and fully resourced smoking cessation support programme in the world;
- making pharmaceutical stop smoking aids more widely available, including on prescription from the NHS;
- running a world class marketing and communications programme that has reached out to millions of smokers with information on and support in quitting.

Figure 1: Luk Joossens and Martin Raw’s Tobacco Control Scorecard 2007³



Purpose and scope of this consultation

- 1.5 The Government's intention to consult on the next steps in tobacco control was set out in the *Cancer Reform Strategy*, published in December 2007. The Department of Health hopes that, through this consultation, stakeholders can play a key role in the development of our future strategy to control tobacco use. The Government recognises that reducing the impact of tobacco within our communities requires a multi-faceted approach at local, regional, national and international levels, and that a wide range of stakeholders from across local government, the NHS, industry and the third sector have valuable contributions to make in shaping the new strategy.
- 1.6 The purpose of this consultation is to provide a basis for discussion and to encourage feedback. This consultation:
- outlines progress over the past decade in tobacco control;
 - sets out challenges for the future;
 - presents and analyses a number of specific options on tobacco display in retail environments and the sale of tobacco from vending machines;
 - seeks feedback on a variety of questions about what more can be done to reduce smoking prevalence and the impact of tobacco use in our communities.

Status of this document

- 1.7 This document does not present government policy, but rather seeks views from stakeholders and members of the public on a wide range of questions concerning the future of tobacco control. Feedback from stakeholders will contribute to the development of a new national tobacco control strategy and enable informed decisions to be made by the Government on the proposed options set out for the display of tobacco products in retail environments and the sale of tobacco from vending machines.

Application of the consultation

- 1.8 This consultation will be published in England, Wales and Northern Ireland. It applies in its entirety to England, and certain sections apply to Wales and Northern Ireland. Welsh and Northern Irish stakeholders are specifically asked to comment on sections within Part B of the consultation on controlling advertising and the display of tobacco products in retail environments and limiting young people's access to tobacco products (questions 7, 8 and 9), aspects of which are the responsibility of the UK Government. The other elements of the consultation are relevant to England only, but stakeholders from all three countries are welcome to comment on all aspects of this consultation. Where comments are received that are appropriate to Wales and Northern Ireland, we will share these comments with the relevant Devolved Administration. There has already been a consultation on tobacco control in Scotland, which considered issues similar to the ones raised in this document.

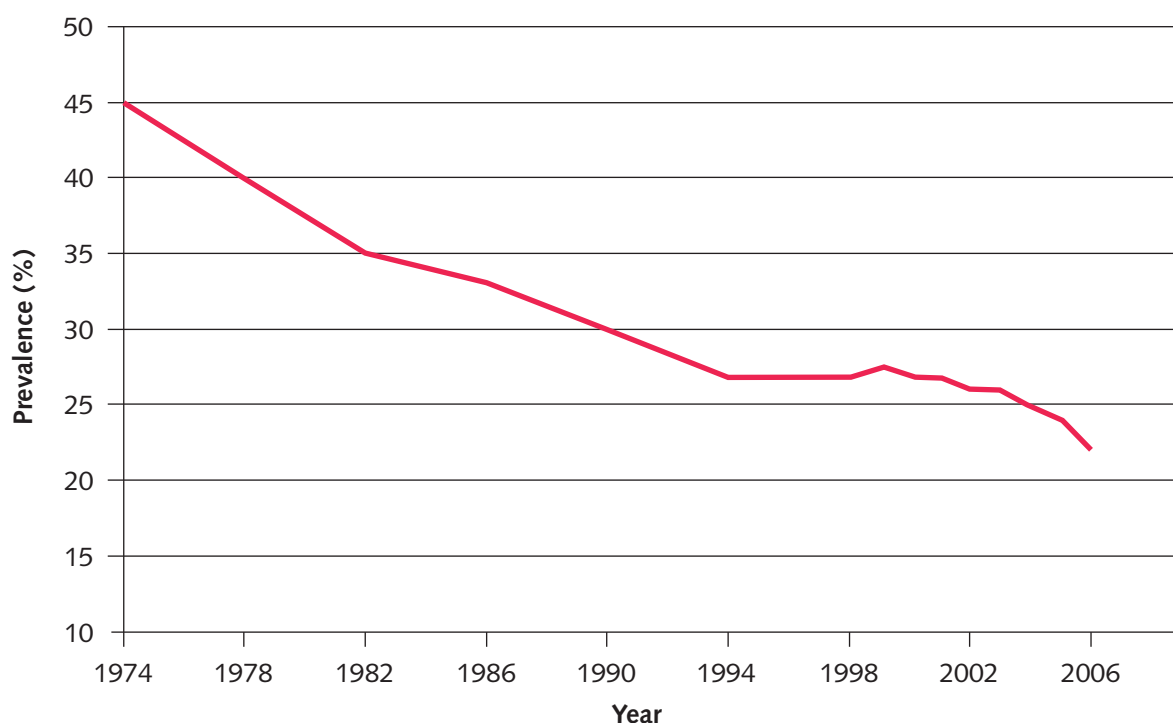
How and when to respond to the consultation

- 1.9 The consultation document has been made available to a wide range of stakeholders, including health organisations, the NHS, local government, young people's organisations, retail organisations and the tobacco industry. Nevertheless, any group or member of the public with an interest in tobacco control or the proposals presented within the document is welcome to provide feedback. The Department of Health requests that, wherever possible, responses are accompanied by references to research or other evidence.
- 1.10 A list of the questions asked within this consultation is included in Annex 1. While questions are posed to assist stakeholders in developing their responses, feedback is welcome on any aspect of the consultation. Feedback and further information to elaborate the consultation-stage impact assessments included within this document is also sought. Stakeholders may wish to read the document as a whole before answering any questions.
- 1.11 The consultation will be open to responses for 12 weeks. Responses to this consultation must be received by 8 September 2008. Responses can be submitted online to tobaccoconsultation@dh.gsi.gov.uk or by post to:
- Tobacco Consultation
 Department of Health
 Room 712, Wellington House
 133–155 Waterloo Road
 London
 SE1 8UG
- 1.12 All responses received during the consultation period will be carefully considered. A summary of consultation responses will be made available on the Department of Health website at: www.dh.gov.uk/en/Consultations/Responsestoconsultations/index.htm as soon as possible after the completion of the consultation, and in any event no later than three months after the consultation closes.
- 1.13 This consultation adheres to the Cabinet Office Code of Practice on Consultations. Please see Annex 2 to this document for information on the Code of Practice and confidentiality of information, and for details of how to comment on the consultation process itself.

2. Part A: Reducing smoking rates and health inequalities caused by smoking

- 2.1 As a result of the Government's action on tobacco, overall adult smoking prevalence has been reduced in England over the past decade from 26% in 1998 to 22% in 2006. This means that since 1998, the number of smokers in England has fallen by 1.9 million. While there has been good progress on reducing smoking in Great Britain since the mid-1970s, as shown in *figure 2*, over one adult in five still smokes today.

Figure 2: Prevalence of smoking in Great Britain²

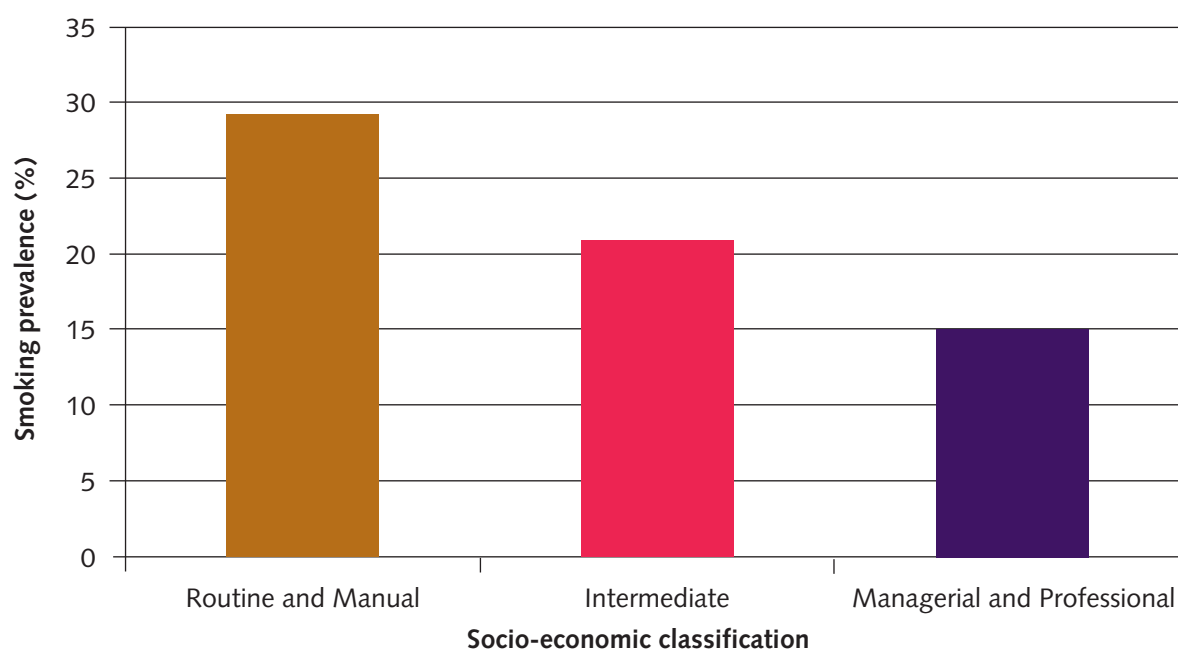


- 2.2 In Public Service Agreement (PSA) Delivery Agreement 18 'Promote better health and wellbeing for all',⁴ the Government set out a commitment to deliver the best possible health and well-being outcomes for everyone, to help people live healthier lives, empower them to stay independent for longer and to tackle inequalities. This PSA, together with the Department of Health's 'Better health and well-being for all' strategic objective, focuses on prevention and on promotion of health and well-being. PSA Delivery Agreement 18 includes the following national target for the Department of Health on smoking in England:

To reduce adult (16+) smoking rates to 21% or less by 2010, with a reduction in prevalence among routine and manual groups to 26% or less.

2.3 The Department of Health is well on target to reach the PSA objective of reducing adult smoking rates to 21% or less by 2010.⁵ However, slower progress has been made in reducing smoking among routine and manual groups,⁶ even though smoking prevalence remains highest in this group, as *figure 3* shows. Today, the routine and manual group constitutes around half of all smoking adults in England, making it a priority group for action.

Figure 3: Prevalence of cigarette smoking by socio-economic classification in England, 2006²

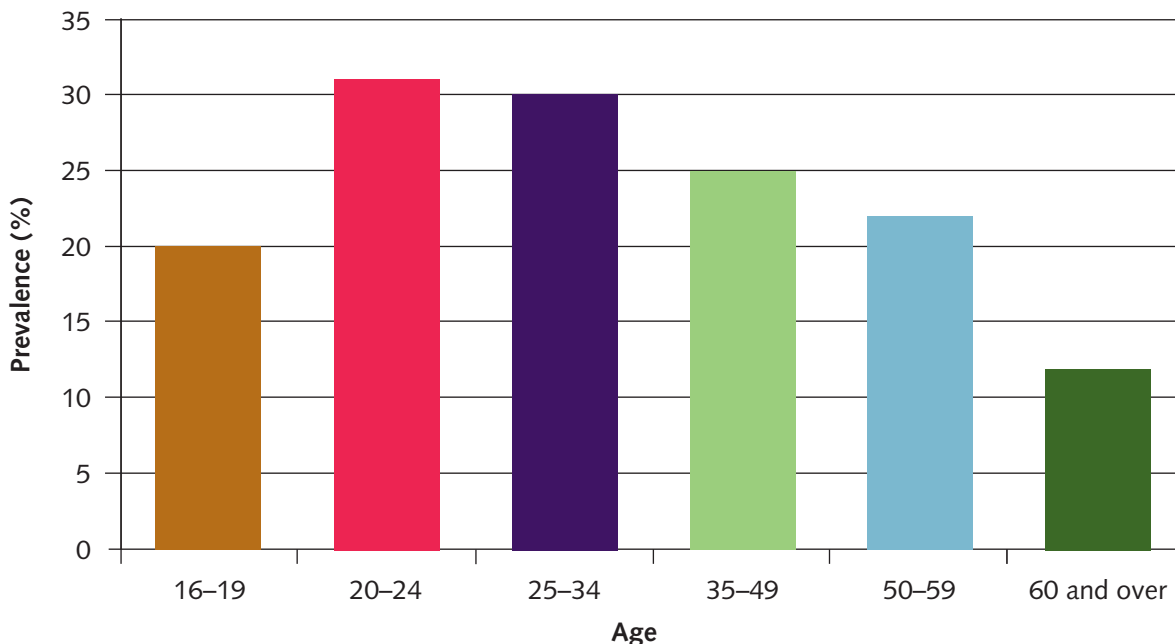


2.4 Even with the decline in rates of smoking prevalence, over 9 million people still smoke in England. Smoking remains the main cause of preventable morbidity and premature death, accounting for 87,000 deaths a year in England alone. Smoking-related conditions and diseases cost the NHS an estimated £1.5 billion per year. This does not include the cost of sickness and invalidity benefits, the costs to industry of lost productivity or the costs for the individual who smokes.⁷

2.5 There is now a substantial body of evidence that smoking causes serious harm to health. In England, it is estimated that 87% of deaths from lung cancer are attributable to smoking, as are 73% of deaths from upper respiratory cancer and 86% of chronic obstructive lung disease. Smoking is also a major factor in deaths from many other forms of cancer and circulatory disease.⁸ A higher proportion of deaths attributable to smoking are seen among men than among women.⁹

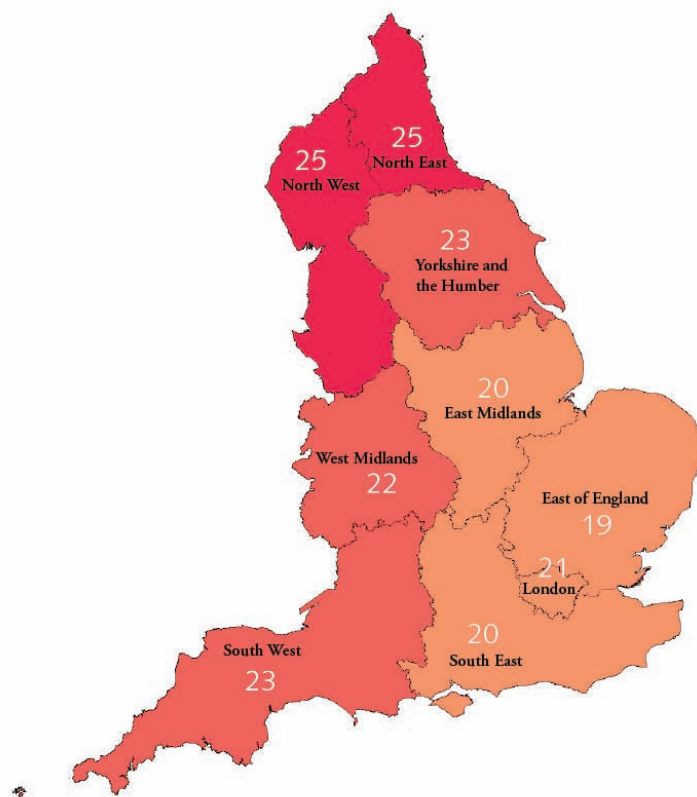
2.6 In 2006, smoking rates were highest among people aged 20–24 years, and lowest among people aged 60 and over, as *figure 4* shows. While fewer young people are taking up smoking than was the case a decade ago, the current rate of uptake of smoking by young people across all social classes is a cause for concern. Around eight in ten of all regular adult smokers began as older children or teenagers, and those who start smoking when young are three times more likely to die of a smoking-related disease.¹⁰ A discussion on smoking and young people is to be found in Part B of the consultation.

Figure 4: Prevalence of cigarette smoking in England, by age in 2006²



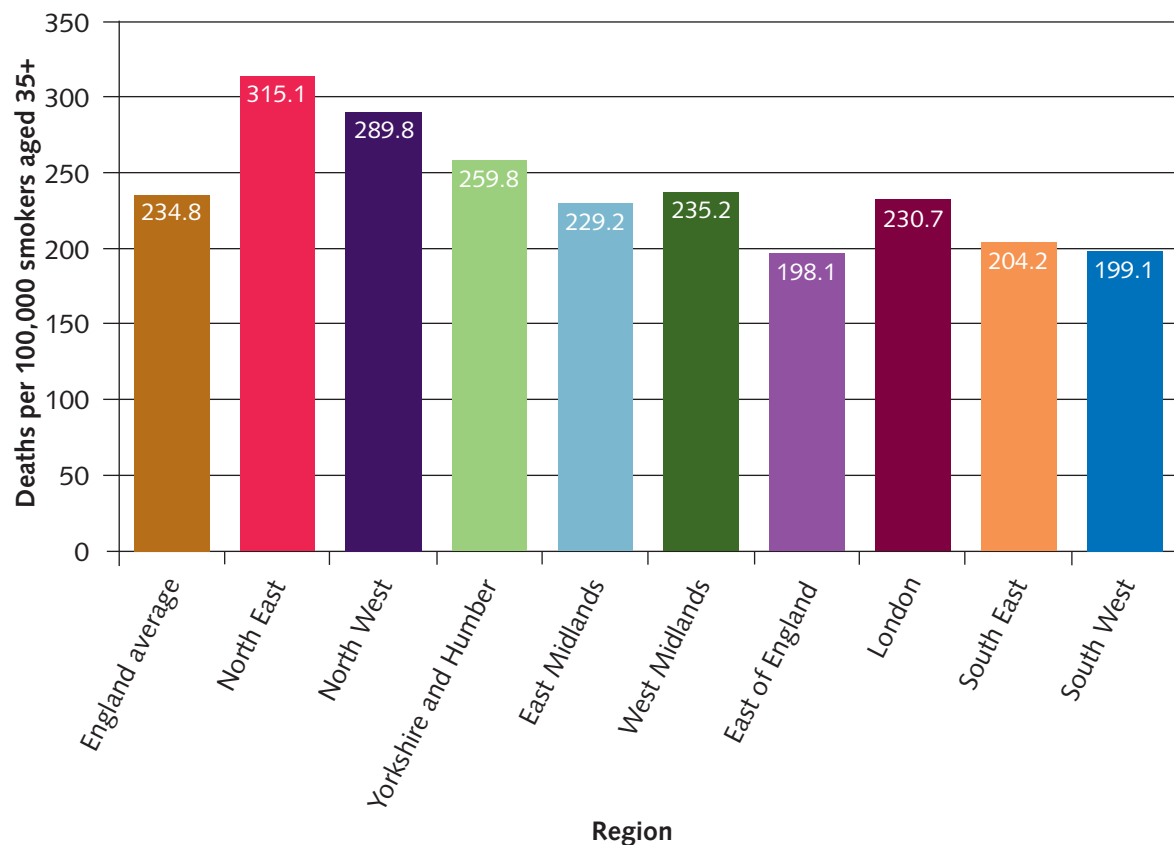
2.7 Smoking prevalence varies across regions within England, as is shown in *figure 5*, with smoking rates highest in the North East and North West. These regions also experience the highest rates of death from smoking. In the North East there are 315.1 deaths from smoking per 100,000 people aged over 35, compared to the England average of 234.8 deaths per 100,000 people aged over 35, as *figure 6* shows.

Figure 5: Cigarette smoking prevalence (%) by Government Office Region in England, 2006²



2.8 Cigarettes (including roll your own) are by far the most popular form of tobacco smoked in the UK. In Great Britain in 2006, 3% of men over the age of 16 said they smoked cigars and 1% said they smoked a pipe. Smoking of cigars or pipes by women is negligible.

Figure 6: Deaths from smoking among people aged 35+ in England, 2005¹¹



2.9 The Government wants to sustain progress in reducing smoking rates and do all it can to protect future generations from smoking-related disease and early death.

Question 1: What smoking prevalence rates for all groups (children, pregnant women, routine and manual workers and all adults) could we aspire to reach in England by 2015, 2020, and 2030, and on what basis do you make these suggestions? What else should the Government and public services do to deliver these rates?

Smoking and inequalities

2.10 Addressing health inequalities is a high priority for the Government. Reducing smoking rates in our more deprived communities represents one of the greatest challenges in public health, but is key if we are to make progress on closing the inequalities gap in health.

2.11 A strong relationship exists between tobacco use and inequalities. There was no social gradient in cigarette smoking prevalence in the UK in the late 1950s, when smoking rates were uniformly high, but subsequent decades have seen smoking become ever more tightly linked with indicators of social disadvantage. From the 1960s onwards, more affluent groups increasingly responded to the emerging evidence on the effects of smoking on health by

quitting, while rates of giving up smoking remained relatively low in deprived groups. This contributed to a substantial widening in health inequalities in the latter part of the twentieth century, with smoking emerging as the single factor responsible for 50% or more of the difference between male professional and manual groups at risk of premature death in middle age. According to the National Institute for Health and Clinical Excellence (NICE), tobacco use is the primary reason for the gap in healthy life expectancy between rich and poor.¹

2.12 The association between smoking and social disadvantage is most frequently documented by the gradient with occupational status. In 2006, cigarette smoking prevalence was 15% in professional and managerial groups, and almost double that, at 29%, among those in routine and manual groups. Smoking rates are highest among people who earn the least, and lowest among people who earn the most, as *figure 7* shows.

Figure 7: Smoking prevalence by net income quintile in England, 2006²



2.13 However, this represents only a part of the link between tobacco use and disadvantage. The chances of being a smoker are substantially increased in people living in rented housing, receiving state benefits, without access to a car, who are unemployed, or living in crowded accommodation. Above and beyond this, there is a gradient by educational level, and an increased risk in those who are divorced or separated or who are lone parents. Cigarette smoking prevalence is particularly high in patients with mental illness. In groups with an extreme clustering of deprivation indicators (such as prisoners or homeless people sleeping rough), rates of smoking prevalence as high as 85–90% have been observed.

2.14 The association between smoking and social disadvantage begins in infancy. Babies from deprived backgrounds are more likely to be born to smoking mothers, and they suffer much greater exposure to secondhand smoke in infancy and childhood. Growing up as they do in homes where smoking by adults is the norm, such children are more likely to take up smoking themselves and to become smokers at an earlier age than are children from more affluent backgrounds, resulting in a substantial social gradient in smoking by age 16. The social gradient

becomes markedly steeper from early adulthood onwards, as smokers from more affluent backgrounds start to give up smoking, while those in deprived circumstances are less able to achieve this for a range of reasons.¹²

- 2.15 Differences in motivation to give up smoking do not account for the observed differences in prevalence – at any given point in time about 70% of smokers in all social groups express a desire to give up smoking. Part of the explanation for the persistence of smoking in more deprived groups may lie in the fact that socially disadvantaged smokers show higher levels of nicotine dependence than do smokers from more affluent backgrounds. This is evident from questionnaire indicators (time to first cigarette of the day; perceived difficulty of going for a whole day without smoking) and from cotinine measures quantifying nicotine intake from smoking. Since nicotine dependence is a major determinant of the ease of quitting, these findings suggest an important reason for lower rates of cessation in those who are disadvantaged.
- 2.16 The reasons why those in poorer socio-economic groups are drawn to smoking are not well understood. One suggestion is that smoking can serve as a form of self-medication, to regulate mood, manage stress, and help cope with the stresses and strains resulting from material deprivation. However, it is uncertain whether these perceived effects are real, or, rather, reflect a ‘treadmill-like’ effect caused by a smoker’s experience of the withdrawal-relieving effects of continued smoking. Another possibility is that nicotine ‘rewards’ (whether positive or negative) are felt more powerfully by people living in difficult circumstances or whose lives tend to lack other rewards.^{13,14} In any event, it is clear that smokers from deprived backgrounds have been less able to successfully quit, compared to smokers from more affluent groups.
- 2.17 There have been a number of policy initiatives in the past 10 years that have had the specific aim of reducing social inequalities in smoking. *Smoking Kills* introduced smoking cessation services to the NHS, focusing initially on Health Action Zones as a means of reaching socially disadvantaged groups.
- 2.18 Other initiatives have been introduced more widely. Nicotine replacement treatment was made available free, leading to the subsequent NICE guidelines recommending full reimbursement of nicotine replacement therapy (NRT) and other medicines, including bupropion and, most recently, varenicline as effective aids to cessation. A ban on tobacco advertising came into effect in 2004, and smokefree legislation was implemented in July 2007. Both of these legislative actions have the potential to impact on the social acceptability of smoking, and the smoking behaviour across all social groups, although the full effects in terms of smoking prevalence and cessation may take some years to emerge.
- 2.19 Despite the progress that has been achieved in tobacco control across the population, marked social inequalities remain. Inequalities could be exacerbated if future declines in smoking occur predominantly in more socially advantaged groups.
- 2.20 Smoking prevalence is particularly high among Bangladeshi men (40%) and Irish men (30%), as reported in the 2004 Health Survey for England (HSE). The smoking rates of men in these two communities are significantly higher than the 24% smoking prevalence of men in the general population.¹⁵

- 2.21 The pattern of smoking among women in black or minority ethnic (BME) groups is very different from that of men, according to the HSE. Among women in BME groups, reported smoking in 2004 was lowest among Bangladeshi women (2%), and highest among Irish women (26%) and black Caribbean women (24%).
- 2.22 The HSE survey shows that chewing tobacco is used relatively widely among some BME groups. Use of chewing tobacco was most prevalent among Bangladeshi groups, with 9% of men and 16% of women reporting that they used this form of tobacco.

Question 2: What more do you think could be done to reduce inequalities caused by tobacco use?

Tobacco control in England

- 2.23 In England, tobacco control activity has been guided by the Department of Health's six-strand strategy, based on international evidence that a co-ordinated and multi-faceted response is required to effectively tackle tobacco use. The six-strand strategy addresses the following key areas:
- supporting smokers to quit;
 - reducing exposure to secondhand smoke;
 - running effective communications and education campaigns;
 - reducing tobacco advertising, marketing and promotion;
 - effectively regulating tobacco products;
 - reducing the availability and supply of tobacco products.

Question 3: Do you think the six-strand strategy should continue to form the basis of the Government's approach to tobacco control into the future? Are there other areas that you believe should be added?

International tobacco control

- 2.24 Tobacco control is also carried out at an international level. The Framework Convention on Tobacco Control (FCTC) has been ratified by 154 countries, including the UK. Treaty guidelines have been agreed on protecting people from exposure to secondhand smoke and on labelling tobacco products. Guidelines on the advertising and promotion of tobacco products have been developed, to be agreed by the third conference of the parties to the treaty later in 2008. The EU also plays an important role, with regulation of tobacco product labelling and ingredients, and tobacco advertising, sponsorship and promotion covered by EU legislation. The UK ratified the treaty in December 2005. The treaty sets out standards for tobacco control across a wide range of areas, from restricting tobacco promotion and exposure to secondhand smoke to regulation of tobacco ingredients and reducing illicit trade. It is being implemented by the parties through guidelines and binding protocols. The FCTC sets a 'gold standard' in tobacco regulation by laying down best practice in each area.

Tackling illicit trade in tobacco

Current situation: trends in taxation and illicit trade

- 2.25 A significant amount of tobacco worldwide is sold illegally, avoiding tax. The result is a continuing supply of very cheap cigarettes, which undermines the benefits of high taxation in reducing tobacco use and ultimately presents a significant threat to public health in many countries, including the UK.¹⁶ This consultation looks at the public health impacts of the illicit trade in tobacco at the local level. Feedback from stakeholders is especially sought on how collaboration between agencies might be enhanced to contribute to inland enforcement and so reduce the availability of illicit tobacco.
- 2.26 Tobacco smuggling is not a victimless crime carried out by latter-day ‘Robin Hoods’. It harms health in our communities by creating a cheap and unregulated source of tobacco, undermining the Government’s targets for reducing smoking prevalence, especially among young people and those in routine and manual groups. It damages legitimate businesses, which are undercut by those evading tax, and it encourages wider criminality. Smuggling is estimated to cost taxpayers as much as £3 billion per year in lost revenue – money that would otherwise be spent on funding schools, hospitals and other important public services – and so increases the burden on them in the process.¹⁷
- 2.27 Cigarette consumption and smoking cessation are both responsive to changes in the price of tobacco products. The price mechanism is generally accepted to be the most effective population-level policy lever available to government to combat smoking. High levels of taxation of tobacco products, resulting in high prices, have been a feature of tobacco policy in the UK. The UK has some of the most expensive cigarettes in the world. Evidence from the World Bank shows that price has a greater impact on consumption of tobacco than any other factor, suggesting that a 10% rise in price can lead to a 4% fall in prevalence.¹⁸ Price responsiveness is considered to be even greater among young people and more deprived groups.
- 2.28 Illicit tobacco products are available in our communities at less than half the price of their duty-paid equivalent. Unfortunately, a proportion of the health gain achieved through high taxes on tobacco in the UK is lost through smuggling.
- 2.29 Despite significant success in reducing smuggling in recent years, the UK market is still characterised by high levels of illicit tobacco use. The Government’s latest estimate is that the illicit share of the tobacco market in the UK is between 8 and 18%. That means that today, of all cigarettes smoked in the UK, one in six is either counterfeit or smuggled. Over half of all hand-rolled tobacco (HRT) is smuggled.
- 2.30 Illicit tobacco products are available at a number of locations in communities across the UK, including in the workplace, in pubs, in street markets, at car boot sales and on the street. Smuggled tobacco is also made available in some communities from people’s own homes. This creates a completely unregulated distribution network, and makes tobacco far more accessible to children and young people.
- 2.31 Illicit tobacco is linked to organised crime and smuggling of other illicit goods such as drugs, alcohol and weapons. Some of the organised criminal gangs responsible for drug smuggling into the UK are also engaged in the illicit trade in tobacco products.

- 2.32 There is no conclusive evidence that smoking smuggled tobacco is any more harmful to health than smoking legal, duty-paid tobacco. Research shows that emissions of tar and carbon monoxide from counterfeit tobacco are comparable to those from their legal equivalents. There is some indication that emission of heavy metals could be higher.¹⁹ There is a danger that a false message might be sent out that smuggled or counterfeit products are more of a threat to health than their duty-paid counterparts, so lulling people into a false sense of security about the safety of legitimately purchased products.

Illicit trade and inequalities

- 2.33 The availability of cheap illicit tobacco is thought to have a major impact on social inequalities. Increased tobacco prices particularly affect the poorest groups, which have higher rates of smoking. They are less able to afford to pay higher prices and therefore have the greatest incentive to reduce their consumption or give up as a result of high prices. This also means, however, that they also have the greatest incentive to source tobacco products from the illicit market. If all smokers had to pay the same price for their tobacco, the impact on socially disadvantaged smokers, who currently pay least for their tobacco, would be greatest, with resulting higher rates of quitting smoking.
- 2.34 Evidence presented in May 2008 by the health charity ASH to the Health Select Committee hearing highlights how tobacco smuggling exacerbates health inequalities and may also be discouraging younger smokers from quitting. Research commissioned by ASH reveals that one smoker in twenty in professional groups admits to buying smuggled tobacco, but among poorer smokers the figure rises to one in five. There is also a strong association with age, with one in three of the youngest smokers in the sample (16–24 year olds) reporting buying cigarettes from illicit sources.²⁰
- 2.35 The bulk of the market in HRT, used more by less well-off smokers, is smuggled. This means that smokers of smuggled HRT pay much less to sustain their addiction to nicotine than smokers of manufactured cigarettes, and as a result they can find it more difficult to quit.

Fighting illicit trade

- 2.36 The Government has made significant progress since 2000 in reducing the illicit tobacco market and has invested more than £200 million in new staff and new technology to tackle tobacco smuggling. Since the launch of the *Tackling Tobacco Smuggling* strategy in 2000, HMRC has seized nearly 20 billion illicit cigarettes. Recognising that smugglers constantly change their tactics to avoid interception, HMRC has regularly introduced new measures and redeployed resources to tackle new and growing risk areas. For example, provisional figures show a significant increase in seizures of counterfeit tobacco products in parcel post from China and elsewhere. In the 2008 budget, the Chancellor of the Exchequer announced that tackling tobacco smuggling would be a priority for the newly established UK Borders Agency, which is taking over HMRC's responsibilities for detecting tobacco smuggling at the UK border.
- 2.37 Smuggling of tobacco remains a problem throughout the world, regardless of the levels of tobacco tax in force. Research suggests that reducing levels of tax on tobacco alone is unlikely to reduce the smuggled tobacco market. Spain and Italy are cited as examples of countries where

smuggling is a major problem, despite their relatively low tobacco taxes.²¹ In the 1990s, Canadian cigarette tax was reduced in response to the smuggling of cheap cigarettes from the US, but smuggling continued despite the tax reduction.^{22,23} Likewise, research also suggests that significantly increasing the levels of tax on tobacco could increase the smuggled share of the tobacco market. The Government's strategy on tobacco tax needs to take these issues into account.

Multi-agency working

- 2.38 There is much potential for tackling illicit trade through collaborative working between HMRC and other agencies at the local level, including local authorities, the police, the NHS, local tobacco alliances, local businesses and community leaders. Enforcement action in local communities can have a significant deterrent value and can generate much publicity, but it needs to be underpinned by a longer-term programme of education and awareness raising, as well as encouragement for local communities to tackle the issue directly. Local authorities, for example, could make work on tackling tobacco smuggling a priority, particularly if trading standards departments supported Customs in enforcement. Highlighting the consequences for businesses of selling illicit tobacco on their premises is also important.
- 2.39 Research about local demand for illicit tobacco in our communities can also be valuable. Research already conducted in areas like Islington and Tyneside has yielded insight into the attitudes of people who use smuggled tobacco. The Department of Health encourages local communities to undertake research, to understand the market in illicit tobacco in their own areas. Effective marketing and publicity is also important, and there needs to be strong, clear and consistent messaging about smuggled tobacco, while local communities need to know how to go about reporting where illicit and counterfeit tobacco is being sold.

Question 4: How can collaboration between agencies be enhanced to contribute to the inland enforcement against illicit tobacco?

Question 5: What more can the Government do to increase understanding about the wider risks to our communities from smuggled tobacco products?

3. Part B: Protecting children and young people from smoking

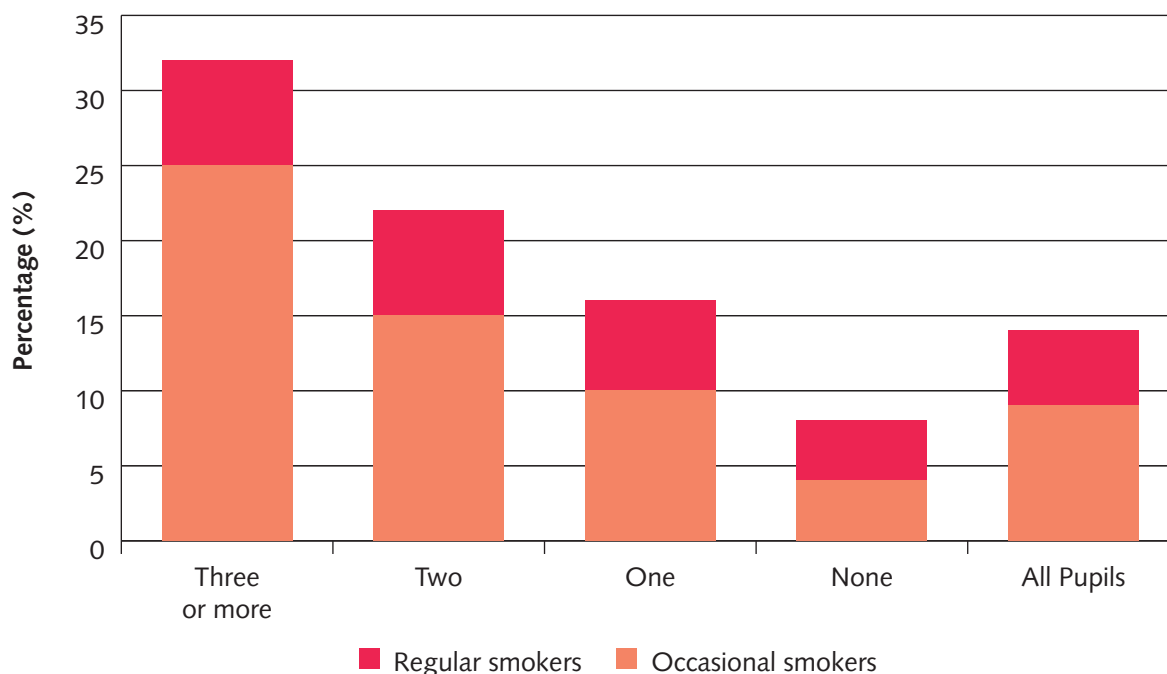
- 3.1 Part B of the consultation addresses trends in smoking among young people and explores options for reducing smoking uptake. Specific proposals are presented on the way tobacco products are displayed in retail outlets and on the sale of cigarettes from vending machines. Stakeholder views are also invited on additional initiatives to reduce smoking uptake by young people. Views on protection from secondhand smoke within the home are also invited.

Smoking by young people

- 3.2 Progress has been made in meeting objectives for reducing smoking among children. Prevalence of smoking among 11–15 year olds is down from 13% in 1996 to 9% in 2007,²⁴ thus exceeding the *Smoking Kills* target of 11% smoking prevalence in this group four years ahead of time. The Government nonetheless remains concerned about the uptake of smoking by young people, which perpetuates tobacco use and subsequent poor health in our communities.
- 3.3 While smoking by young people has declined over the last decade, latest figures show:
- 9% of 11–15 year olds smoke regularly;²⁴
 - 20% of 16–19 year olds smoke;²
 - 31% of young people aged 20–24 smoke, which is 9% above the national adult average and is the highest smoking rate of any age group.²
- 3.4 The rate of smoking prevalence among children (under 16) has remained constant, at 9%, for the last four years. We need to understand better the reasons underlying the continued take-up of smoking among some children and young teenagers, and why smoking prevalence in this age group appears resistant to further reductions, while the all-adult smoking rate is steadily dropping year after year. We are confident that raising the age of sale, strengthening sanctions against retailers for persistent sale to under-18s and action on reducing the availability of cheap illicit tobacco will help to reduce smoking among children into the future.
- 3.5 We do know that the tobacco industry needs to recruit over a hundred thousand new smokers every year in England to replace those that die or quit, and that any promotion of tobacco encourages children to start smoking and reinforces the social acceptability of the habit among adults.²⁵ This section will examine proposals for deterring children from starting smoking by reducing exposure to cigarettes and ‘denormalising’ the activity among adults.
- 3.6 To reduce the impact of tobacco on health and well-being in future generations, we must do more to prevent young people from taking up smoking in the first place. The Government is committed to doing more to protect young people from the harm of smoking.

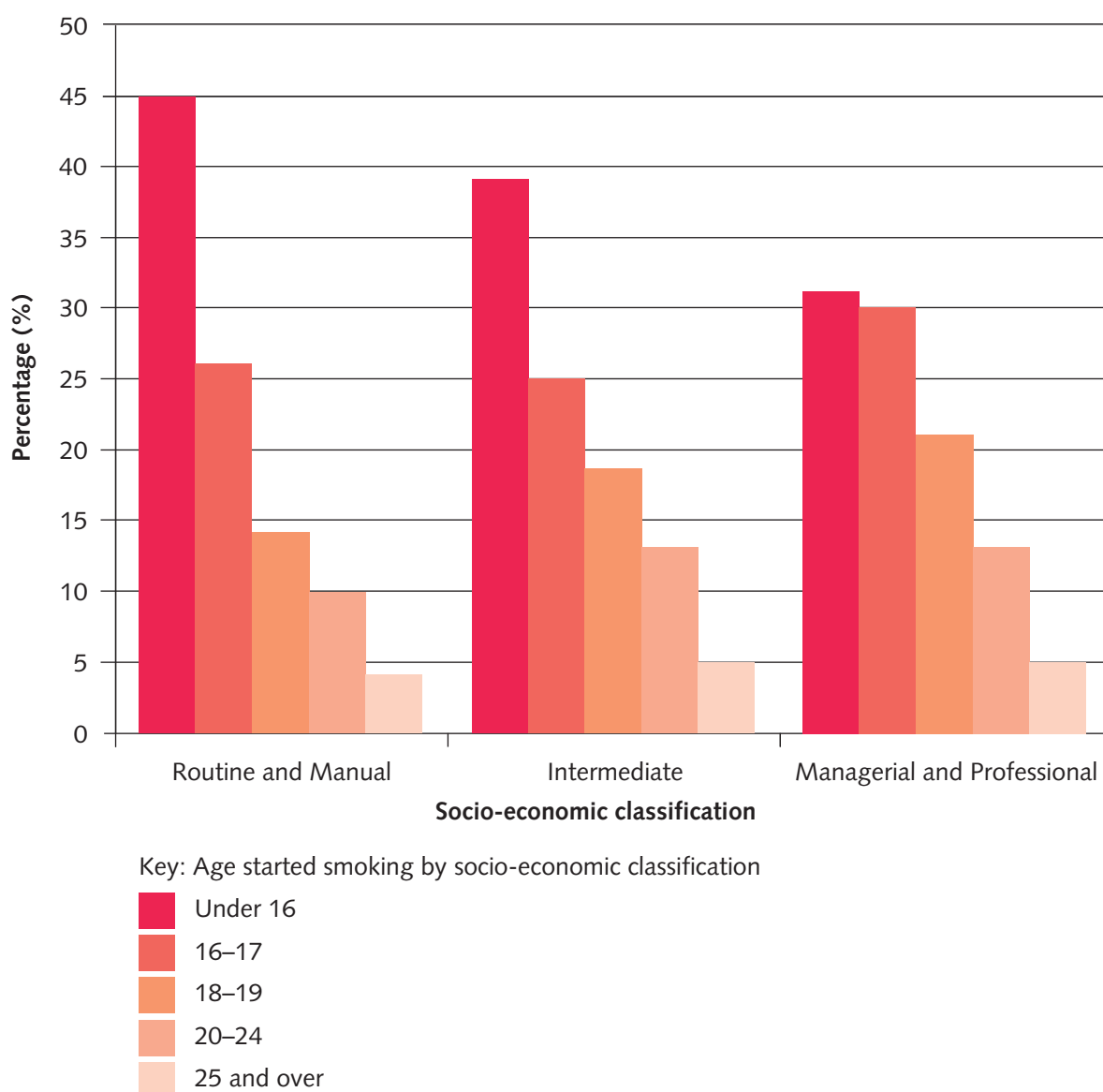
- 3.7 Youth uptake of smoking is a serious public health problem, considering that, in the 2006 General Household Survey, of those respondents who were either current smokers or who had smoked regularly at some time in their lives, over eight in ten said they had started smoking before they were 19.² Young people can quickly develop nicotine dependence. A four-year prospective study of a cohort of 1,246 students in the United States found that the first inhalation of tobacco is the most important tobacco-use milestone, and that some young people experienced the first symptoms of tobacco dependence within a day of smoking for the first time. Half of those who reported being ‘hooked’ were smoking as few as seven or eight cigarettes a month.²⁶
- 3.8 Predictors of regular smoking among young people include:²⁴
- **Age and sex:** 11–15 year old girls are more than 2.5 times more likely to be regular smokers than are boys. The reasons for this are not fully understood, but may relate to the nature of their social relationships, activities and concerns and the meaning they attach to smoking.²⁷ Older children are more likely to smoke regularly, with 1% of 11 year olds saying they smoke at least one cigarette a week, compared to 20% of 15 year olds.
 - **Home environment:** an 11–15 year old who lives with at least one other person who smokes is more than twice as likely to be a regular smoker as someone who lives in a household where no one else smokes. Children aged 11–15 who live with smokers are much more likely to be regular smokers themselves, as *figure 8* shows.
 - **Drug use and drinking alcohol:** Smoking by young people correlates to their use of alcohol and drugs. Among 11–15 year olds, the odds of being a regular smoker increase with the number of units of alcohol consumed in the previous week. Those 11–15 year olds who have taken drugs at least once in the last year are eight times more likely to be regular smokers than those who have never taken drugs.
 - **Truancy and exclusion from school:** 11–15 year olds who report having at some time been excluded from school or having truanted are twice as likely to be regular smokers as those who do not.

Figure 8: Smoking among children aged 11–15, by number of smokers they live with, England, 2006²⁴



3.9 Smokers in the routine and manual occupational grouping take up smoking regularly at a younger age than smokers in other groups. The age at which people started smoking is broadly the same across the socio-economic classifications, with the exception that far more smokers from the routine and manual grouping say they started smoking regularly under the age of 16, as is shown in *figure 9*. People under the age of 16 are less likely to be able to make informed choices around smoking or other behaviours that put their health at risk.

Figure 9: Age started smoking regularly, by socio-economic classification in Great Britain, 2006²



Action already taken by the Government to reduce youth smoking

3.10 Over the past decade, the Government has taken action to reduce smoking uptake by young people, and to support young people who want to quit. Specific youth-targeted action complements the wider population measures to reduce smoking prevalence and the impact of smoking on others, such as smoking education and marketing campaigns, the introduction of pictorial health warnings on tobacco packs from October 2008 and smokefree legislation. Youth-targeted action has included:

- **Increase in the age of sale for tobacco:** The age of sale for tobacco products was increased from 16 to 18 on 1 October 2007. By increasing the age of sale, the Government aims to communicate the serious health risks associated with tobacco use, as well as taking another step towards ‘denormalising’ smoking among young people.

- **Strengthened sanctions against retailers who sell to people under the legal age:** In 2008, legislation was passed to strengthen the sanctions available against retailers found to persistently sell tobacco to people under the legal age. These provisions will help to reinforce the duty that retailers have to sell tobacco products responsibly.
- **Support for enforcement:** Local authorities will this year be able to access additional funding to carry out enforcement of tobacco-related legislation, including advising retailers about compliance.
- **NRT restrictions lifted:** Since 2006, nicotine replacement therapy (NRT) has been available on prescription to 12–18 year olds. Young people can also get support to quit smoking from their local NHS Stop Smoking Service.
- **Focusing the National Healthy Schools Programme on smoking:** This year the programme, which engages with 94% of schools, will seek to do more to promote local initiatives that have been shown to work in preventing smoking take-up and in encouraging smoking reduction among school-age young people. The aim will be to raise awareness of different approaches and to encourage schools to give higher priority to smoking within their health-education provision.
- **National Curriculum:** Much has already been done to warn children and young people of the dangers of smoking through personal, social and health education in the school curriculum – from Key Stage 2 onwards. There will be consideration of whether this needs to be strengthened following the advice of the Drugs and Alcohol Advisory Group’s review of drug education, which will cover smoking.

Further reducing smoking uptake by young people

- 3.11 The Department of Health is seeking feedback on specific options for controlling the display of tobacco products in retail environments and for the sale of tobacco from vending machines as measures to reduce uptake of smoking by young people.
- 3.12 This part of the consultation also asks for feedback on other initiatives with the potential to reduce smoking among young people, such as the use of plain packaging for tobacco products and an increased minimum pack size. Questions are also asked about protecting young people from secondhand smoke in their home environments.
- 3.13 Part C of this consultation also seeks feedback on action to help adults (including pregnant women) to stop smoking. Reducing the number of adult smokers can help prevent smoking uptake by young people by increasing the number of non-smoking households and reducing the visibility and acceptability of smoking.
- 3.14 The Department of Health also seeks feedback from stakeholders on what other measures should be considered in developing plans to reduce uptake of smoking by young people across age groups from teens to young adults.

Question 6: What more do you think the Government could do to:

- a. reduce demand for tobacco products among young people?
- b. reduce the availability of tobacco products to young people?

Controlling advertising and the display of tobacco products in retail environments

Current situation

- 3.15 The Tobacco Advertising and Promotion Act 2003 (TAPA) introduced a ban on advertising and the publication of tobacco advertisements. Section 8 of TAPA makes it an offence to display tobacco products in a place if the display is against rules prescribed by the Minister:
- A person who in the course of a business displays or causes to be displayed tobacco products or their prices in a place or on a website where tobacco products are offered for sale is guilty of an offence if the display does not comply with such requirements (if any) as may be specified by the appropriate Minister in regulations.*
- 3.16 Point of sale regulations that came into force in December 2004 limit tobacco advertising at the retail point of sale to a maximum space of the equivalent of an A5 piece of paper. These regulations also require the display of a health warning about the dangers of smoking and the NHS Smoking Helpline number. Retailers are also required to display a notice on the age of sale of tobacco products. Specialist tobacconists or shops where the sale of specialist tobacco products like cigars or pipe tobacco account for at least half the trade of the retailer are exempt from the restriction on advertising.
- 3.17 ‘Display’ is treated as a form of advertising in TAPA but is not specifically defined in the Act. However, the dictionary definition of display is useful. Display could be considered a form of advertising, encompassing any way of showing tobacco products with a view to promoting their sale. However defined, display can cover a wide spectrum, from very large stacks of cigarette cartons to a small discreet gantry. Today, display of tobacco products takes the form predominantly of gantries behind the cash till or, particularly in duty free outlets, in stacks of merchandise at any point in the retail premises.
- 3.18 Display of advertising on tobacco vending machines was also restricted by point of sale regulations to a picture of the packet of a tobacco product for sale from that vending machine no larger than the surface area of the face of the actual product. Vending machine advertisements must also carry a health warning.
- 3.19 Advertising of smoking accessories, such as cigarette papers or pipes, is not covered by TAPA because the restrictions on advertising are limited to products consisting wholly or partly of tobacco.²⁸ Although there is no hard evidence on the issue, it may be that advertising of smoking accessories encourages young people to smoke. There are also wider concerns about the use of these products for the smoking of cannabis either on its own or mixed with tobacco.

Question 7: Do you believe that there should be restrictions on the advertising and promotion of tobacco accessories, such as cigarette papers?

- 3.20 The point of sale regulations were challenged by a group of tobacco manufacturers by way of an application for judicial review in the High Court in 2004. The court dismissed the application, ruling that the Government's restrictions on tobacco advertising could be justified on the basis of evidence of their effectiveness in deterring young people from smoking. Much of the reason for the successful outcome of this case lay in the strength of expert evidence, drawn not only from experts in the field of medicine, addiction and marketing, but also from the experience of other countries around the world that had implemented similar, and in some cases more restrictive, legislation on tobacco advertising and promotion.
- 3.21 A report from LACORS²⁹ in 2006 found that compliance with the point of sale regulations has been generally good. However, it noted the increasingly frequent use in the retail environment of counter-top devices such as clocks and counter mats to draw attention to tobacco products. In addition, many retailers were found to have been stacking multi-packs of cigarettes in a way that creates large virtual advertisements that contravene the spirit, if not the letter, of the point of sale restrictions.³⁰
- 3.22 Cigarettes and other tobacco products are often displayed on large gantries or shelving units behind the cash tills of retail outlets. In larger supermarkets, tobacco is also sold from separate kiosks or sales areas, generally sited close to the store entrance, along with other items like newspapers and sweets. Point of sale restrictions allow gantries to display specific brand advertising within the A5 size restrictions. In some cases, brands are advertised by creating arches of cigarette packs at the top of the gantry. While this is technically legal, it does have the effect of enhancing the promotion of tobacco products. Retailers suggest that storing products in this way is necessary for security reasons. As with other small compact items like batteries, storage behind the till can help to prevent shoplifting.

Rationale for further control on the display of tobacco products in retail environments

- 3.23 Several reasons are advanced for further restricting point of sale advertising and promotion, including:
- protecting children and young people from the promotion of tobacco;
 - providing an environment that supports smokers who are trying to quit;
 - denormalising tobacco use;
 - ensuring that health messages about the dangers of tobacco use are not undermined.
- 3.24 Stakeholders in the public health community argue that the key rationale in controlling the display of tobacco products at the point of sale is the protection of children and young people from the promotion of tobacco. For as long as tobacco is promoted through display on large gantries, there is a danger that new generations of smokers will be recruited.

- 3.25 Since the implementation of a comprehensive ban on tobacco advertising in the UK, stakeholders have expressed concern about the prominence of the display of tobacco products within the retail environment, including the apparent growth in the size of tobacco displays. Given the common positioning of the gantry behind the till, it is inevitable that tobacco will be noticed by customers. Increases in the size or prominence of display of tobacco products since TAPA came into force have yet to be confirmed by research.
- 3.26 Across the world, an increasing number of jurisdictions have either taken action to limit or prohibit the display of tobacco products, or have plans to do so, including:
- Iceland (2001);
 - Thailand (2005);
 - British Virgin Islands (2007);
 - Canada (provinces of Saskatchewan, Manitoba, Nunavut, Prince Edward Island, British Columbia, New Brunswick, Northwest Territories, Nova Scotia, Ontario, Quebec, Alberta, Yukon Territory);
 - The Canadian federal government has consulted on introducing regulations for a national display ban;³¹
 - Australia (states of Victoria, New South Wales, Queensland have consulted on legislation and Tasmania is due to introduce a ban in 2011);
 - New Zealand (undertaken consultation with a view to implementing changes in 2009);
 - Norway (draft regulations awaiting approval by EU Member States).

Impact of point of sale display: research findings

- 3.27 Evidence shows that children and young people are more receptive to tobacco advertising than are adults³² and that young people exposed to tobacco advertising and promotion are more likely to take up smoking. A survey of over 2,000 students in California aged 11–14 years found that exposure to tobacco marketing in convenience stores was associated with a 50% increase in the odds of ever smoking, even after controls for social influences to smoke were taken into account. Several subsequent studies have confirmed these findings, including a recent large study of Californian young people in their early teens.³³ A major study of nine cohort studies found ‘a positive, consistent and specific relationship’ between exposure to tobacco advertising and later take-up of smoking among teenagers.³⁴
- 3.28 Display and the limited amount of advertising still allowed at the point of sale have become more important methods of promoting tobacco products as other promotional methods have been closed.³⁵ Since bans on tobacco sponsorship and advertising on television, radio, print and the internet, point of sale promotion has become vital as virtually the only route for tobacco promotion – persuading existing smokers to keep smoking and encouraging young non-smokers to start.³⁶
- 3.29 While the evidence about the impact of the display ban in Iceland, introduced in 2001, is not definitive, it does point to the potential benefit in reducing prevalence among young people. The number of 16–17 year olds who had smoked in the last 30 days was 32% in 1995 (six years

prior to the implementation of the display ban), 28% in 1999 and 20% in 2003. When asked if they had ever smoked cigarettes, the percentage of 16–17 year olds who reported that they had fell from 61% in 1995 to 46% in 2003.³⁷

- 3.30 The recruitment of young people as new smokers is enhanced by point of sale display simply because children are exposed to the prominent cigarette gantries throughout their childhood, on every store visit. Recent research from the Australian state of Victoria found that cigarette advertising and bold displays in stores predisposed young teenagers to smoke.³⁸
- 3.31 Research suggests that prominent displays of tobacco products can convey the impression, particularly to young people, that smoking is a common and socially acceptable activity.³⁹
- 3.32 Display of cigarettes within stores can have an added advantage for retailers. Research suggests that retailers in Canada, Australia and the United States receive substantial payments from tobacco companies for displaying their products in an advantageous way or for attaching brand imagery or devices to gantries or counters. Evidence from industry documents shows that it is standard practice for tobacco companies to enter into contracts with retailers to ensure that their brands are displayed to the best advantage.³⁵ About two-thirds of California retailers reported receiving display fees from tobacco companies. The Tobacco Manufacturers' Association is not willing to provide information on these practices in the UK, for reasons of commercial confidentiality. The Department of Health has requested similar information from Philip Morris International, but no response has been received. In the absence of evidence to the contrary, it is reasonable to assume that there are similar financial incentives made available by the tobacco industry to retailers in the UK.⁴⁰ Evidence from Saskatchewan is that these payments have continued despite the introduction of a ban on display in that Canadian province.⁴¹
- 3.33 There is also evidence that point of sale displays can stimulate impulse purchases among those not intending to buy cigarettes and, importantly, among adult smokers who are trying to quit.⁴² The Point-of-Purchase Advertising Institute, a marketing industry trade group in the USA, has argued that the chief rationale for point of sale promotion is to target shoppers at the place where they will buy the product, drawing attention to particular brands when the consumer is in a buying mood. Research has shown that tobacco impulse purchases increase by as much as 28% when there are displays of tobacco products at point of sale⁴³ (although it is important to note that the research was carried out in the United States, where there are few restrictions on in-store advertising).
- 3.34 A recent Australian study on the effect of retail cigarette pack displays on impulse purchase found:⁴²
- When shopping for items other than cigarettes, 25% of smokers purchased cigarettes at least sometimes on impulse as a result of seeing the cigarette display.
 - Some 38% of smokers who had tried to quit in the past 12 months and 34% of recent quitters experienced an urge to buy cigarettes as a result of seeing the retail cigarette display.
 - One smoker in five who was trying to quit and one recent quitter in eight avoided stores where they usually bought cigarettes in case they might be tempted to purchase them.

- Some 31% of smokers thought the removal of cigarette displays from stores would make it easier for them to quit.

Retailer and industry concerns

Loss of sales

- 3.35 Some retail stakeholders have expressed the fear that a prohibition on displaying tobacco products will damage sales, leading to the possibility of staff being laid off or of stores having to close altogether. The Department of Health has received comments from retail industry representatives about the fate of smaller retailers, like newsagents and local convenience shops, where the sale of tobacco products may constitute 20–30% of the store’s total turnover. Tobacco product sales generally account for under 2% of turnover in supermarkets.
- 3.36 With the Government’s objective of reducing smoking prevalence, sales of tobacco products are expected to decline further into the future, and less demand for tobacco products is a factor that retailers will need to plan for. In considering the impact of further controls on the display of tobacco products in retail environments, concerns about loss of sales of tobacco and profitability of the tobacco industry will need to be balanced against potential public health gains in reductions in smoking prevalence, particularly among young people.
- 3.37 Concerns expressed by retail stakeholders about loss of sales of both tobacco and other products from ‘footfall trade’ needs to be supported by evidence. Following the ban on the display of tobacco products in Saskatchewan, there is some evidence suggesting that no shops were forced to close, although this has not been confirmed by figures from the Saskatchewan government or from provincial retail associations.⁴¹ Nevertheless, if all retailers are required to restrict the display of tobacco, a level playing field will be generated, resulting in no competitive disadvantage for any retailer, since regular customers will continue to buy tobacco products, unless they quit smoking altogether.

Distortion of competition and lack of consumer information

- 3.38 The tobacco industry is concerned that a ban on the display of tobacco products in retail environments could restrict trade by making it difficult for brands or products to be promoted. While these concerns are recognised, evidence shows that most smokers make up their minds about which brand of tobacco they will buy long before they reach the shop, with less than 3% of tobacco-purchasing customers deciding to change brand at the point of sale.⁴⁴

Evidence about health benefits of restricting the display of tobacco

- 3.39 Some retail stakeholders have suggested that there is insufficient evidence of the health benefits of restricting the display of tobacco products, and that a full ban on display would be disproportionate. The evidence base shows that tobacco promotion encourages people to take up and continue smoking. An extensive review of the scientific literature undertaken in 1992 found that advertising bans enacted in four countries at that time (Norway, Finland, Canada and New Zealand) had been ‘followed by a fall in smoking on a scale which cannot reasonably

be attributed to other factors'.⁴⁵ Importantly, numerous consumer and marketing studies in the UK and elsewhere have shown that adolescents are more responsive to tobacco promotion than others, and that such promotion influences their propensity to take up smoking.

3.40 Two major US longitudinal studies that tracked groups of young people over time (12–17 years of age and 12–15 years of age) found:

*...clear evidence that tobacco industry advertising and promotional activities can influence non-susceptible never-smokers to start the process of becoming addicted to cigarettes. Our data establish that the influence of tobacco promotional activities was present before adolescents showed any susceptibility to become smokers.*⁴⁶

3.41 Although such studies reflected responses to tobacco advertising in the broadest sense, rather than to the display of cigarettes on gantries specifically, they are still useful in demonstrating young people's greater sensitivity to the promotion and prominent display of tobacco products at point of sale.⁴⁷

3.42 There is a growing body of evidence on the impact of tobacco marketing on smoking among young people. A review of nine cohort studies found 'a positive, consistent and specific relationship' between exposure to tobacco advertising and the subsequent uptake of smoking among adolescents.³⁴ In all the studies reviewed, teenagers who were more aware of tobacco advertising and promotion, or more receptive to it were more likely to be found at follow-up to have experimented with cigarettes or taken up smoking. Based on an analysis of these longitudinal studies, the authors concluded that 'tobacco advertising and promotion increase the likelihood that adolescents will start to smoke. From a policy perspective, attempts to eliminate tobacco advertising and promotion should be supported.'

3.43 Publicly, tobacco manufacturers claim that the purpose of tobacco gantries is merely to inform adult smokers of the price and availability of different brands.³⁹ However, tobacco industry marketing strategy documents have suggested that a more important aim is to attract new smokers.³⁶

3.44 While it is recognised that the introduction of restrictions on tobacco display in retail environments is unlikely to bring an immediate benefit to health or smoking prevalence, evidence suggests that we could expect to see fewer young people starting to use tobacco, and that smoking prevalence among young people could decline at a faster rate than we are currently experiencing. As with all measures in tobacco control, it is difficult to disaggregate the precise benefits of specific changes. A display ban would be one element within the Government's comprehensive and multi-faceted tobacco control programme. In the long run, based on the Department of Health's analysis within the attached consultation-stage impact assessment (see Annex 3), any losses incurred by retailers or the tobacco industry would be more than offset by the benefits accruing from the number of lives saved, reduced levels of smoking-related disease and the wider 'denormalisation' of tobacco use in our communities.

3.45 Although the evidence about the public health benefits of prohibiting the display of tobacco products in retail environments is strong, it is not conclusive. A doubt about the direct causal link between banning display and reduction in tobacco consumption was included in Health Canada's 2006 consultation on the issue. Referring to the recent fall in tobacco consumption in Canada, the consultation document observed that 'it is possible that restrictions on tobacco displays at retail will have an impact on this trend, but this remains very speculative at this time'.³¹

Security

- 3.46 Some retailer stakeholders have expressed concern about the safety of their staff who may be vulnerable to attack if restrictions on the display of tobacco products required them to be stored above or below the counter, as is the case in some jurisdictions that have already implemented display bans. While the Department of Health recognises this as an understandable concern, particularly for shops in areas where crime is a problem, we understand that there have been no reports of increased violence against retailers in the jurisdictions where bans have been introduced. We understand from retail representatives that tobacco products are often the target of theft from shops due to their high financial value. Removing tobacco from display may increase the security of these products in the retail environment.

Re-fitting

- 3.47 Some retailer stakeholders have expressed concern about the cost and difficulty of re-fitting their shops to remove tobacco products from sight. While a range of options in this area need to be explored, should legislation be brought forward to prohibit the display of tobacco products, the Government would seek to introduce proportionate arrangements to limit the burden on retailers.
- 3.48 International experience has shown that, where tobacco display bans have been implemented, costs have been largely borne by the local tobacco wholesalers that supply tobacco products to the retail chain. In some Canadian provinces, retail associations grouped together to support members with the costs of re-fitting shops to comply with legislation.⁴⁸
- 3.49 Where the cost is borne by the retailer, concealing tobacco products need not be expensive. The governments of Saskatchewan and Manitoba did not set specifications for complying with their tobacco display bans, enabling retailers to find the most appropriate solution for their own premises. For example, some retailers maintained pre-existing gantries and covered them with blinds, while others installed drawers or cupboards under the counter. In the Australian state of Tasmania, where there is a voluntary ban, retailers use overhead cabinets. In Thailand, cigarettes are concealed by a screen.
- 3.50 The Department of Health seeks views from stakeholders on further regulation of the display of tobacco products within retail environments. Different approaches have been taken in other countries. In Thailand, Iceland and eight Canadian provinces, there is a complete prohibition on tobacco advertising and display, meaning that tobacco products must be out of sight in stores. In some Canadian provinces, the display of tobacco products is prohibited in stores or premises likely to be visited by children. As all but a small number of retail outlets are accessible to children in England, it is unlikely that this would be a viable option in this country. Limiting a ban to stores or premises likely to be visited by children would also mean that the additional benefits for adults attempting to quit may not extend to adult smokers.
- 3.51 The Department of Health emphasises that detailed proposals involving security and other logistical considerations would be subject to further consultation with retailers if the Government does consider moving ahead with a ban on the display of tobacco in retail environments.

Options

- 3.52 The Department of Health proposes the following options on the display of tobacco products in retail environments. The preferences of stakeholders on these options, or suggestions on preferred alternative options, are sought. In particular, we seek specific information on the costs and benefits of each option, with evidence in support wherever possible. Estimated costs and benefits are set out in the impact assessment accompanying the consultation (see Annex 3). The options are:
- **Option one:** Do nothing, retain current restrictions, maintaining enforcement of relevant legislation.
 - **Option two:** Regulate point of sale display more strictly by further restricting permitted advertising space and/or restricting display space or ways in which tobacco products are displayed.
 - **Option three:** Require retailers to remove tobacco products from display.
- 3.53 Stakeholders may wish to suggest alternative options. Indeed, in each option there could be several alternatives, and we would ask stakeholders to elaborate on these. It would be helpful if stakeholders provided cost estimates and other evidence to support their responses, wherever these are available.

Question 8: Do you believe that there should be further controls on the display of tobacco products in retail environments? If so, what is your preferred option?

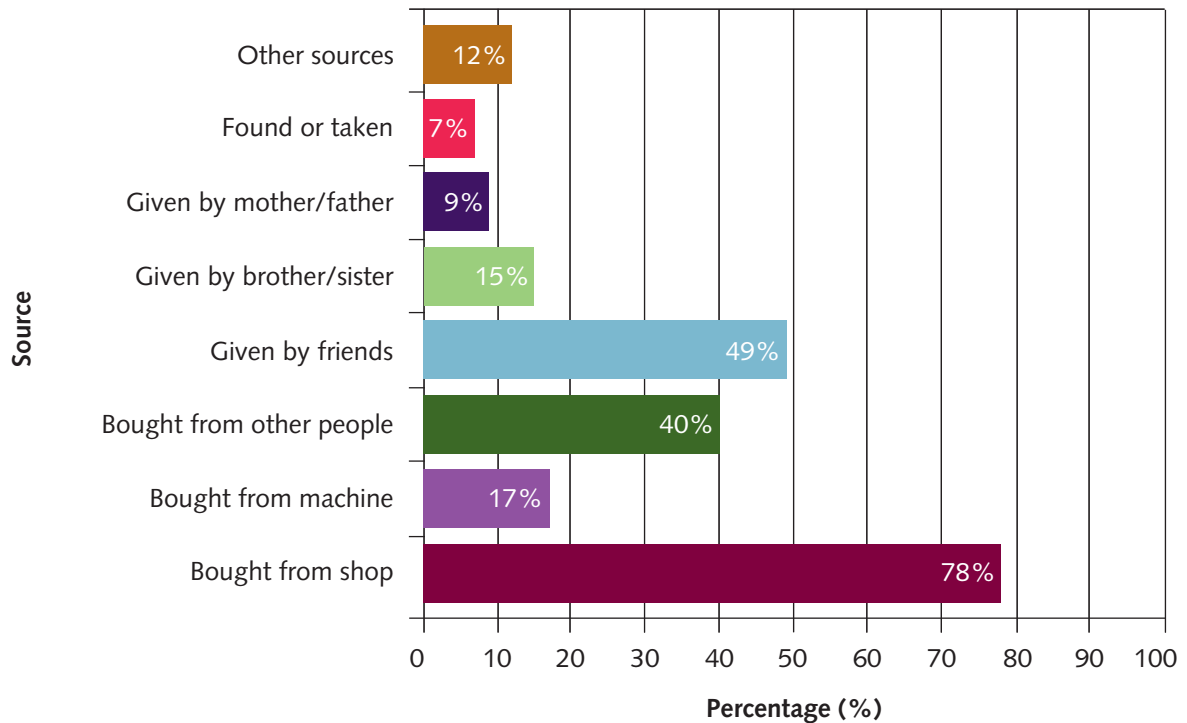
We are particularly interested in hearing from small retailers and in receiving information on the potential cost impact of further restrictions on display. What impact would further controls on the display of tobacco have on your business, and what might the cost be of implementing such changes?

Limiting young people's access to tobacco products

Current situation

- 3.54 Significant progress has been made in limiting the access that children and young people have to tobacco products. The Government has raised the age of sale, and legislation has been passed that strengthens the sanctions available against retailers who persistently sell tobacco to young people. However, too many young people under the legal age of sale are still able easily to purchase tobacco products. The most common sources of tobacco for young people aged 11–15 are shown in *figure 10*.

Figure 10: The usual sources of cigarettes for regular smokers aged 11–15 in 2006²⁴



The sale of tobacco from vending machines

- 3.55 While tobacco vending machines account for only 1% of the overall UK market in tobacco sales, a disproportionate number of young people under the minimum legal age for sale of tobacco obtain cigarettes from this source. The Government seeks stakeholder views on how access by young people to tobacco from vending machines can be reduced.

Rationale for placing restrictions on, or prohibiting access to, vending machines

- 3.56 Tobacco vending machines are ‘self-service’, which means that currently there are no routine age checks carried out prior to purchase. The World Health Organization’s (WHO) Framework Convention on Tobacco Control, which was ratified by the UK in 2004, encourages measures to ensure that tobacco vending machines are not accessible to minors. A 2003 European Council Recommendation⁴⁹ suggests that Member States should restrict tobacco vending machines to locations accessible to persons over the age set for purchase of tobacco products in national law, or otherwise regulate access to the products sold from such machines in an equally effective way. The WHO European Strategy for Tobacco Control⁵⁰ goes further, stating that strategic national actions to restrict availability of tobacco to young people should include banning its sale through vending machines.

- 3.57 The Department of Health understands that there are a number of ways in which access to tobacco from vending machines can be limited, including:
- **Electronic age verification:** Tobacco companies provide an electronic ID card, after proof of age has been supplied, to allow customers to activate tobacco vending machines. A customer is only able to buy tobacco from the vending machine if they insert the card, which electronically ‘awakens’ the machine. Such electronic card systems are used in Germany and the Netherlands, and are soon to be introduced in Japan.
 - **ID coin mechanism:** To purchase tobacco from a vending machine, customers must obtain an ID coin from a member of staff. It is then inserted into the tobacco vending machine to activate it and allow purchase. This system enables staff to monitor who is purchasing tobacco from the vending machine and to ask for proof of age where necessary. It is used on a proportion of vending machines in the Republic of Ireland and Spain.
 - **Infra-red remote control:** Vending machines are required to be switched on using an infra-red remote control held by a staff member. Customers need to request a staff member to activate the tobacco vending machine to allow purchase. This system enables staff to monitor who is purchasing tobacco from the vending machine and to ask for proof of age where necessary. This system is used in New Zealand.
- 3.58 Nevertheless, evidence from the USA indicates that mechanisms restricting access to tobacco vending machines are not necessarily effective at preventing people under age from accessing tobacco, as commonly the age-control mechanisms are not installed or maintained properly.⁵¹ A number of jurisdictions across the world have completely banned tobacco sales from vending machines. These include Vietnam, China, Hong Kong, Russia, Singapore, Thailand, Bermuda, two US states and 22 countries in Europe.⁵²

Concerns over placing restrictions on, or prohibiting access to, vending machines

- 3.59 Young people obtain their tobacco from a range of sources, including purchases from shops and being given tobacco by friends and relatives. However, these other common sources of tobacco for young people are already being addressed through measures such as raising the age of sale, strengthening sanctions against retailers who persistently sell tobacco to people under the legal age and through the Department of Health’s communications campaigns.

Tobacco vending machines charge a premium above manufacturers’ recommended retail price, which results in the price of cigarettes from vending machines being higher than the price from shops. While some stakeholders suggest that, because cigarettes from vending machines are more expensive, children and young people are not encouraged to access tobacco from this source, vending machines do remain a significant source of cigarettes for young people. Nevertheless, the number of 11–15 year old regular smokers who say that vending machines are their usual source of cigarettes has declined in recent years, from 24% in 2004 to 17% in 2006.²⁴

- 3.60 The Department of Health also understands that a prohibition on the sale of tobacco from vending machines will have a significant effect on the business stability of tobacco vending machine companies. It also appreciates that there may be issues around contract obligations of

vending machine operators. As with any change to policy on the display of tobacco products, such implementation details will be the subject of future detailed consultation with business, should the decision be reached to further regulate tobacco vending machines.

Options

- 3.61 The Department of Health proposes the following options for the sale of tobacco from vending machines. We wish to understand the preferences of stakeholders in terms of these options or other alternatives. In particular, we seek specific information on the costs and benefits of each option, with supporting evidence wherever possible. Estimated costs and benefits are set out in the impact assessment accompanying the consultation (see Annex 4). The options are:
- **Option one:** Retain the status quo and continue to allow tobacco products to be sold from vending machines with no legislative restrictions on where vending machines are located or the requirement to include age restrictors on access.
 - **Option two:** Require mechanisms on all tobacco vending machines to restrict underage access by young people.
 - **Option three:** Prohibit the sale of tobacco products from vending machines altogether.
- 3.62 Stakeholders may wish to suggest alternative options. Indeed, in each option there could be several alternatives, and we would ask stakeholders to elaborate on these.

Question 9: Do you believe that there should be further controls on the sale of tobacco from vending machines to restrict access by young people? If so, what is your preferred option?

Further action to reduce smoking uptake by young people

- 3.63 The Department of Health seeks views from stakeholders and members of the public on the potential for plain packaging of tobacco products and for a larger minimum cigarette pack size as initiatives to reduce uptake of smoking, particularly among children and young people. More general feedback is sought in these areas, as specific proposals are not being considered at present.

Packaging of tobacco products: the potential of plain packaging

What is meant by plain packaging?

- 3.64 Plain packaging, also known as generic, standardised or homogeneous packaging, means that the attractive, promotional aspects of tobacco product packages are removed and the appearance of all tobacco packs on the market is standardised. Except for the brand name (which would be required to be written in a standard typeface, colour and size), all other trademarks, logos,

colour schemes and graphics would be prohibited. The package itself would be required to be plain coloured (such as white or plain cardboard) and to display only the product content information, consumer information and health warnings required under the law.

3.65 The Department of Health is not aware of any precedent of legislation in any jurisdiction requiring plain packaging of tobacco products.

Potential impact of plain packaging: key findings

3.66 Studies show that plain packaging reduces the brand appeal of tobacco products, especially among youth. A Canadian study⁵³ reveals that virtually all 14–17 year olds involved in the study said that the reason they might start smoking or currently do smoke is to be ‘cool’ or to ‘fit in’. The same study also found that:

- Some 49% of teenagers believed that plain packaging would result in fewer teenagers starting smoking.
- Over a third said that plain packaging would result in teenagers smoking less and in more teenagers stopping smoking.
- The group that found plain packaging to be most effective were teenagers considering whether to take up smoking, suggesting that plain packaging would have an effect on the levels of uptake of teenage smoking.

3.67 The same study also found that:

- Over 60% of teenagers said they would not be bothered very much by the introduction of plain packaging.
- Some 45% of teenagers said that it would not change the number who would start smoking.

3.68 Research suggests that teenage smokers who claim that they are more interested in the taste and freshness of the tobacco than in the packaging also said that ‘the plain package looked “cheap” and expressed concern that the cigarettes inside might also be cheap, stale or substandard in some other way’.⁵⁴ Researchers have suggested that smokers who perceive cigarettes to be of inferior quality to the product they are used to, and are faced with no viable alternative (such as getting different types of cigarettes with branded packaging), may adjust their behaviour by smoking less.

3.69 Plain packaging may also increase the salience of health warnings. Studies show that students have enhanced ability to recall health warnings on plain packs.^{55,56} Health warnings on plain packs are seen as being more serious than the same warnings on branded packs, suggesting that brand imagery dilutes the impact of health warnings. In addition, plain packaging would eliminate the potentially pro-smoking messages implicit in the current forms of attractive package design.

Positive effects of plain packaging

- 3.70 Plain packaging presents an opportunity to further ‘denormalise’ tobacco products and change the social acceptability of tobacco use. Attractive packaging can give legitimacy to tobacco products and imply that the product is safe. Requiring plain packaging would separate tobacco products from other consumer products on the marketplace, which would send out a strong message about the seriousness of the harmful effects of tobacco.⁵⁷
- 3.71 Following restrictions on tobacco advertising and promotion, tobacco packaging has become one of the key promotional vehicles for the tobacco industry to interest smokers and potential smokers in tobacco products. Tobacco packs can function as portable advertisements, with smokers handling and displaying the packs throughout their daily routines. According to Morgan Stanley research:
- In our opinion, [after taxation] the other two regulatory environmental changes that concern the industry the most are homogenous packaging and below-the-counter sales. Both would significantly restrict the industry’s ability to promote their products.*⁵⁸
- 3.72 A tobacco pack can represent a badge for a smoker, particularly for teenage smokers. Plain packaging could eradicate the positive imagery associated with particular brands, and in so doing could reduce the status-signalling roles and appeal of cigarettes.
- 3.73 Plain packaging can also reduce the misleading differences between various tobacco products, such as the common use of colour to represent different cigarette ‘strengths’. Since 2003, tobacco manufacturers have been prohibited from suggesting that any tobacco product is less harmful to health than any other tobacco product.⁵⁹ Different colours of tobacco packaging can mislead and perpetuate the understanding that certain brands have lower yields of emissions and are therefore ‘healthier’. All smoked tobacco products are hazardous to health.
- 3.74 Plain packaging would also break the link between past advertising campaigns, run before advertising was prohibited in 2003, and the continuing advertising presented by the package. It could also serve to diminish the impact of foreign tobacco advertising, including internet-based advertising accessible from websites hosted in other countries, by breaking the association with the conventional appearance of the product.

Potential disadvantages of plain packaging

- 3.75 As there are no jurisdictions where plain packaging of tobacco products is required, the research evidence into this initiative is speculative, relying on asking people what they might do in a certain situation. The assumption is that changes in the packaging will lead to changes in behaviour.
- 3.76 Plain packaging may force tobacco companies to compete on price alone, resulting in cigarettes becoming cheaper. However, if a decrease in price were to follow the introduction of plain packaging, increases in tax on tobacco could counter the effect.
- 3.77 Children may be encouraged to take up smoking if plain packages were introduced, as it could be seen as rebellious. However, the Department of Health is not aware of any research evidence that supports such concerns.

- 3.78 Tobacco industry stakeholders suggest that packaging of tobacco products serves to inform adults about the product and encourage brand-switching among smokers. Brand imagery facilitates product differentiation for current smokers at point of sale. However, 90% of Australian adult smokers say that they never decide their brand at point of sale, with only 1% saying that they always decide which brand to buy in the shop.⁶⁰ An earlier study found that only 3% of smokers do not make up their mind about brand choice until they arrive at the shop.⁴⁴
- 3.79 Some stakeholders have suggested that plain packaging may exacerbate the illicit tobacco market, as it could be easier for counterfeit producers to replicate the plain packages than current tobacco packaging. A way to counteract this potential problem would be to require other sophisticated markings on the plain packages that would make the packages more difficult to reproduce. In addition, the colour picture warnings, which must appear on all tobacco products manufactured from October 2008, would remain complicated to reproduce.
- 3.80 If plain packaging was to be introduced, it could be more difficult for retailers to conduct inventory checks, and customer service could be made more difficult at point of sale. However, brands could be stacked in alphabetical order, for example, to facilitate quick identification, and provision could be made for bulk containers of tobacco products to carry the names of products in larger typeface, so long as they were not exhibited within the retail environment.
- 3.81 The introduction of plain packaging for tobacco products may set a precedent for the plain packaging of other consumer products that may be damaging to health, such as fast food or alcohol. Nonetheless, as tobacco is a uniquely dangerous and extremely widely available consumer product, it has for some time merited different regulatory and legislative treatment from other consumer products.

Question 10: Do you believe that plain packaging of tobacco products has merit as an initiative to reduce smoking uptake by young people?

Packaging of tobacco products: pack size

Current situation

- 3.82 Cigarettes sold as part of a retail business must be sold in pre-packed quantities of 10 or more.⁶¹ Packs of 10 cigarettes, often referred to as ‘kiddie’ packs, are widely available for sale. The majority of 11–15 year olds who smoke say they bought a pack of 10 cigarettes the last time they made a purchase.²⁴
- 3.83 An increasing number of jurisdictions have prohibited the sale of packs of 10 as part of wider tobacco youth prevention strategies, including Australia, New Zealand, Canada, Ireland, France, 14 states in the USA and the District of Columbia.⁶²

Rationale for increasing the minimum pack size

- 3.84 Packs of 10 are cheaper than larger packs of cigarettes and are therefore more accessible to young people. There is some suggestion that young people are responsive to price increases in their choice of cigarette purchases. In 1988, when cigarettes were substantially cheaper, the majority of 11–15 year olds bought packs of 20. Most recent figures show that this situation has changed and most 11–15 year olds now buy packs of 10.
- 3.85 The WHO Framework Convention on Tobacco Control directs parties to the treaty to prohibit the sale of cigarettes in small packs that increase the affordability of such products to minors. In addition, a 2003 European Council Recommendation suggests that Member States should adopt legislative or administrative measures to prohibit the sale of cigarettes in packets of fewer than 19 cigarettes.⁴⁹

Potential problems with increasing the minimum pack size

- 3.86 Increasing the minimum pack size, from packs of 10 cigarettes, could drive more smokers to purchase illicitly traded tobacco products, because they could no longer afford to purchase larger quantities of the legitimate product. The increase in pack size would be likely to have the greatest effect on young people and people with less disposable income.
- 3.87 Prohibiting packs of 10 might remove an element of consumer choice. Tobacco industry representatives have suggested that packs of 10 allow consumers to try new brands of cigarettes without committing to purchasing a larger pack of 20.
- 3.88 Smokers who are trying to cut down or to stop may be more likely to purchase packs of 10, and there is concern that smokers who have more cigarettes available will smoke more. However, the Department of Health is not aware of any evidence that supports these propositions.
- 3.89 There is less evidence to demonstrate the effectiveness of banning packs of 10 than there is for other proposals within this part of the consultation. The Scottish Executive's Smoking Prevention Working Group has recommended that further action should not be taken until more evidence emerges to demonstrate that the benefits of prohibiting packs of 10 outweighs any potential disadvantages.⁶²

Question 11: Do you believe that increasing the minimum size of cigarette packs has merit as an initiative to reduce smoking uptake by young people?

Smoking in films

- 3.90 There is evidence that exposure to smoking in movies is linked to smoking initiation among teenagers. Two major studies have demonstrated that such exposure is a significant risk factor in the likelihood of young people taking up smoking.^{63,64} An experimental study found that teenagers were more likely to have positive attitudes toward smoking after seeing smoking portrayed in movies.⁶⁵ Further independent research on smoking in films in the UK is under way.

- 3.91 The British Board of Film Classification states that it takes portrayal of smoking in films into account in giving films an age rating. Its guidelines require that anything that may cause harm to children be taken into account. Smoking in films was raised as a concern in the Department's 2004 *Choosing Health* White Paper.
- 3.92 Some commentators, particularly in the United States, have argued that portrayal of smoking should be treated more strictly by film censors.⁶⁶

Purchase by under-18s and proxy purchasing

- 3.93 During the recent debates on retailer sanctions, Parliament considered whether to make it a criminal offence for young people under 18 to purchase tobacco. It was decided not to do so, as it was felt that creating such an offence would not be in line with the Government's current efforts to keep young people outside the criminal justice system. In addition, it was felt to be more important to support and encourage people not to use tobacco in the first place than to create new criminal penalties.
- 3.94 A related proposal considered by Parliament was whether to make it an offence for adults to buy tobacco on behalf of young people under the age of 18. While there was consensus that 'proxy purchasing' is wrong, creating a new offence would be difficult to enforce. Neither is there evidence that proxy purchasing is a common practice. Most young regular smokers buy tobacco themselves.

Protection of young people from secondhand smoke

Current situation

- 3.95 Smokefree legislation was implemented in July 2007, providing protection from exposure to secondhand smoke in virtually all enclosed work and public places, including public transport.⁶⁷

The health effects of exposure to secondhand smoke

- 3.96 Exposure to secondhand smoke is a serious health hazard, and there is no safe level of exposure. Every time someone breathes in secondhand smoke, they breathe in over 4,000 chemicals. Many are highly toxic. More than 50 are known to cause cancer.⁶⁸
- 3.97 Medical and scientific evidence shows that exposure to secondhand smoke increases the risk of serious medical conditions such as lung cancer, heart disease and asthma attacks. The health of children is particularly at risk from exposure to secondhand smoke. After a review of scientific evidence, the Government's independent Scientific Committee on Tobacco and Health (SCOTH) concluded in 2004 that children's exposure to secondhand smoke increases the risk of pneumonia and bronchitis, asthma attacks, middle ear disease, decreased lung function and sudden infant death syndrome. Evidence also shows that babies born to mothers who come into contact with secondhand smoke have lower birth weights.⁶⁹

Smokefree legislation

- 3.98 Comprehensive smokefree legislation is now in place across the United Kingdom. Smokefree laws have been introduced to protect everyone from the harmful effects of secondhand smoke in enclosed parts of virtually all work and public places, including public transport.
- 3.99 Smokefree legislation has been implemented successfully in England. In the first nine months of the implementation of smokefree laws in England from 1 July 2007, local authorities undertook some 453,000 inspections and found over 98% of premises and vehicles to be properly compliant with the law.
- 3.100 Department of Health research has found that 75% of adults in England support the smokefree legislation, and a greater proportion of smokers support the laws than oppose them. Some 79% of adults believe that smokefree legislation will have a positive effect on public health.⁷⁰
- 3.101 Health Ministers have made a commitment to undertake a review of smokefree legislation in England in 2010, during which stakeholders will be asked to participate. The Department is not, therefore, seeking feedback from stakeholders on the operation or application of smokefree legislation as part of this consultation exercise.

Secondhand smoke in the home

- 3.102 With the successful implementation of smokefree legislation, the home and private cars are now the main locations for the exposure of both children and adults to secondhand smoke. In general, smokefree legislation (in the Health Act 2006 and subsequent regulations) does not extend to private dwellings or to vehicles used primarily for private purposes. The Government has no plans for smokefree legislation to be extended to private dwellings.
- 3.103 Research undertaken in the Republic of Ireland⁷¹ and Scotland⁷² shows no evidence of smoking shifting from public places into the home after the implementation of smokefree legislation. In fact, some stakeholders have suggested that smokefree legislation can reduce smoking within the home because of the greater awareness of the risks of secondhand smoke, and that the new laws promote the habit of smoking outdoors.
- 3.104 Nevertheless, given the serious health risks from secondhand smoke, especially to children, the Government remains concerned about continued exposure to secondhand smoke within the home and in private vehicles. Views are sought from stakeholders as to whether more should be done to protect children and adults from exposure to secondhand smoke at home and in private vehicles, and if so, what could be done.

Question 12: Do you believe that more should be done by the Government to reduce exposure to secondhand smoke within private dwellings or in vehicles used primarily for private purposes? If so, what do you think could be done? Where possible, please provide reference to any relevant information or evidence to accompany your response.

4. Part C: Supporting smokers to quit

Stop smoking support

Current situation

- 4.1 Stop smoking support from the NHS is available to all smokers free of charge in all communities across England. NHS Stop Smoking Services are extremely cost-effective compared with other healthcare interventions⁷³ and smokers who use NHS support are up to four times more likely to quit successfully than those trying to go it alone ‘cold turkey’. Advice and support in quitting is also available to smokers through NHS national helplines and websites.
- 4.2 The blueprint for the service is based on extensive research evidence.⁷⁴ However, much more needs to be done to improve the impact of treatment provided, increase the range of approaches to be used to support smoking cessation for all groups of people and the settings in which treatment can be provided, to ensure that anyone who wants support in quitting has equal access to the most appropriate treatment. Currently, some 5% of smokers report that they use the Stop Smoking Service each year.⁷⁵
- 4.3 Because around half of all smokers in England fall within the category of routine and manual workers, the Government believes that this group should remain a priority for stop smoking support. While routine and manual workers try to stop smoking at the same rate as the wider population, they are less successful in their efforts, due to a wide range of factors affecting this group.
- 4.4 With seven smokers in ten saying they want to quit, we need to do more to encourage smokers to make quit attempts that will maximise their success in breaking their addiction. Significant numbers of smokers who attempt to quit each year do so without the benefit of evidence-based support, and this is particularly true of smokers from routine and manual groups, who frequently opt for a ‘cold turkey’ approach to quitting, which is much less successful than quitting with support. Most smokers want to quit, and in the course of a year just under half make a quit attempt, but only 2–3% succeed in quitting for good each year.⁷⁵
- 4.5 To reduce smoking prevalence, including in the routine and manual grouping and in deprived groups, we must expand the choice of treatment available and increase the accessibility of treatment options. The more quit attempts someone makes, the greater their chance of stopping smoking forever. Ideally, the NHS should provide support at every quit attempt with the treatment option most suitable for the individual, to ensure the greatest possibility of success.

Key issues for the NHS Stop Smoking Services

- 4.6 There is a network of free local NHS Stop Smoking Services to help smokers to quit in communities across England. Statistics show that around 165,000 smokers quit with the NHS between April and September 2007 alone – an increase of 28% over the same period the previous year.
- 4.7 NHS Stop Smoking Services are extremely cost-effective compared with other healthcare interventions⁷³ and, according to research, are successful at targeting services to reduce health inequalities;⁷⁶ but action is needed to improve data quality from local services and to ensure that service delivery is evidence-based and of optimum quality.
- 4.8 NHS Stop Smoking Services operate in a number of key settings (pharmacy, primary care antenatal and acute care) where there is significant potential for increased delivery of brief interventions and referral of smokers who are motivated to make use of intensive support options. ‘Stop before the op’ (pre-operative smoking cessation interventions) have also been shown to be of value in decreasing inpatient stays, reducing complications and shortening recovery times, but progress in setting up such programmes within acute trusts has been slow to date.
- 4.9 The Department of Health is committed to developing more robust performance measures to help primary care monitor how effective their treatment services are and establish what works best for different groups and in different settings. To do this we need to generate and use insight from different groups and communities in order to help plan and develop more effective services to meet the needs of smokers, especially within high smoking prevalence groups.

Current action by the Department of Health

- 4.10 The Department published updated *Service and Monitoring Guidance for the NHS Stop Smoking Services* in October 2007 to encourage greater consistency in the delivery of the Stop Smoking Services and to improve data collection. This guidance will be reviewed and updated annually. It includes a new ‘exception reporting system’ to facilitate local data validation and highlight reasons for unusual variations in performance.⁷⁷
- 4.11 Importantly, the Department of Health’s Tobacco National Support Team (NST) has provided support visits to a number of local areas to help with the delivery of stop smoking and other tobacco control efforts. These visits help local planners and commissioners identify what more can be done to reduce smoking locally through co-ordinated community-based tobacco control and improved NHS services.
- 4.12 Guidance on ‘High Impact Changes’ for local tobacco control has been published by the NST to provide a resource for local partnerships to link the improvement of NHS services with wider action to reduce tobacco use in local communities.⁷⁸

Future strategy proposals

- 4.13 To further assist the NHS in supporting smokers to quit, the Department of Health will provide nationally accredited training for NHS Stop Smoking advisers and other healthcare professionals. We will also continue to support research into new ways of supporting smokers to quit, making smoking cessation more effective and finding new ways to reduce smoking prevalence.
- 4.14 Also under development is a programme designed to embed a ‘systems approach’ to smoking cessation in primary care, which is based on an existing model that has stimulated increased brief interventions and referrals in the Yorkshire and Humber region. We are also considering:
- how the consistency and reliability of data management and reporting within NHS Stop Smoking Services can be improved;
 - maximising brief interventions and referral to NHS Stop Smoking Services in key health settings, including primary care, pharmacy, antenatal and acute care;
 - accelerating progress on embedding ‘stop before the op’ programmes and referral systems within acute care settings;
 - promoting working by the NHS Stop Smoking Services based on the latest evidence;
 - generating more detailed cost-effectiveness data on new and existing smoking cessation delivery methods;
 - supporting regional or local social marketing approaches and building an evidence base for what works best for different groups in supporting quitting action.

Wider NHS support systems: key issues

- 4.15 Alongside the NHS Stop Smoking Services, smokers can also quit with free support from the NHS Smoking Helpline and the ‘Together’ programme, which provides information, advice and motivation by telephone, email, post or by text message at key moments during the smoker’s quitting process. The NHS Pregnancy Smoking Helpline and the Asian Tobacco Helpline are also in operation. The NHS makes available a wide range of printed materials on quitting smoking, and the NHS Go Smokefree website at www.nhs.uk/gosmokefree has information and tools to support smokers to quit, and details of the location of NHS Stop Smoking Services across England.
- 4.16 There is potential to increase the uptake of these centrally delivered support options, and there is an opportunity to better connect them to the NHS Stop Smoking Service network. For example, we are investigating the potential for visitors to the Go Smokefree website or callers to the NHS Stop Smoking Helpline, totalling over 1 million each year, to book themselves directly into local NHS stop smoking treatment programmes. We are also looking to develop new, centrally delivered NHS support programmes that are more attractive to smokers from high smoking prevalence groups, including the routine and manual grouping.

Future action

- 4.17 The Department is currently considering the merit of developing a web-based data reporting system for NHS Stop Smoking Services (in partnership with the NHS Information Centre) and making this available to primary care trusts, subject to ROCR (Review of Central Returns) approval. This would have the dual benefit of enhancing data collection within the NHS Stop Smoking Service network and providing a mechanism that would allow for the introduction of a centralised booking and follow-up system for all forms of NHS stop smoking support.
- 4.18 Stop Smoking Services need to be located where people in high smoking prevalence groups can most easily access them, including in the workplace.

Marketing and communications

- 4.19 The Department has run highly effective stop smoking marketing communications campaigns to motivate and support smokers to stop. In 2007, over a million people responded to these campaigns via the NHS Smoking Helpline, the Go Smokefree website, interactive TV and by text message to ask for support in stopping smoking.
- 4.20 Marketing communications have been used very successfully in this country and abroad to change smoking-related attitudes and behaviour. They provide an efficient way to communicate powerful messages to millions of smokers and can provide a cost-effective way of triggering action. Advertising also plays an important role in keeping tobacco control on the public 'agenda', communicating new information about the public health impacts of smoking, as well as providing a valuable platform for tobacco control stakeholders in the field.
- 4.21 High-profile and hard-hitting campaigns, such as those featuring real-life smokers' testimonials, have achieved high and enduring levels of recognition, with 92% of smokers aware of the advertising. They have also served as a key trigger for action, with around two-thirds of smokers who recognised the advertising claiming to have taken some form of quitting action.⁷⁹
- 4.22 More recently, forceful campaigns that aim to reinforce smokers' desire to quit have run in conjunction with campaigns that inform smokers of the range of NHS support available to help them quit, such as the NHS Stop Smoking Services. This work aims to encourage smokers to take advantage of these services and improve their chances of quitting successfully. By September 2007, 89% of smokers were aware that there was 'a lot of help available' to smokers wanting to quit.⁸⁰
- 4.23 In recent years, tobacco control marketing campaigns have played an important role in changing public attitudes towards secondhand smoke. Public understanding of the impact of secondhand smoke on public health has increased significantly, with those claiming to strongly agree that cigarette smoke is harmful to non-smokers rising from 53% in 2003 to 75% in 2007.⁸¹
- 4.24 Campaigns are also a cost-effective way for the Government to communicate new information on tobacco use. Advertising running in spring 2007 explained that 85% of the toxins in cigarette smoke are invisible and odourless and that the precautions that smokers employ to protect others from their cigarette smoke, though well intentioned, are often ineffective.

- 4.25 As well as contributing to high awareness and public support for the smokefree legislation that was implemented in July 2007, communications also helped to secure compliance, with virtually all those businesses interviewed in September 2007 reporting that their business was compliant.⁸²
- 4.26 Communications have also shifted attitudes towards smoking and quitting, and now the Department of Health is focusing its efforts on the segments of the population where smoking is most prevalent, smokers are more addicted and quitting is found to be most difficult. Routine and manual smokers are the focus of the Department's new marketing communications strategy. Smoking habits are particularly entrenched for this audience; smoking is an intrinsic part of their working, social and family lives.
- 4.27 With regard to motivating these groups, health arguments alone will probably not be enough to trigger action, as these smokers feel that they have heard most of the arguments before and can often feel overwhelmed by advice about smoking. Therefore, a range of arguments will be employed, such as exploring the way in which smoking can undermine family life.
- 4.28 Recognising that attempting to stop smoking can involve a build-up of motivational tension and a final trigger to immediate action,⁸³ future campaigns will also place equal weight on triggering smokers to take action to quit, and encouraging the use of NHS support to increase the efficacy of quit attempts. Many smokers still try to quit 'cold turkey', as there remains a common and unfounded belief among many smokers that only 'weak' people need to use support. Ongoing campaign activity will tackle these prejudices about using NHS support and will seek to address the emotional and practical barriers people have to accessing it.
- 4.29 Future campaign activity will make use of best practice from the commercial sector to support quitters into the future. There will be additional work with employers and healthcare professionals, and the use of media channels and marketing activity to reach out to groups in which smoking prevalence is particularly high.

Supporting smokers to quit and health inequalities

- 4.30 NHS Stop Smoking Services have a successful track record in supporting smokers from more deprived backgrounds to quit. They have been able to attract smokers from less socially advantaged backgrounds to engage in treatment, and their provision of specialist counselling, weekly group support, and reimbursed pharmaceutical aids to cessation can help overcome the hurdle of higher nicotine dependence and achieve outcomes matching those for smokers from more affluent backgrounds.
- 4.31 Treatment services need to be as accessible as possible to less advantaged smokers, as a way of eliminating the burden that high-cost tobacco imposes on those with limited disposable incomes. It will be important to improve further the availability and targeting of treatment help for less socially advantaged smokers.
- 4.32 One particular area of priority for the Government is to reduce the proportion of women who smoke during pregnancy. Smoking remains one of the few modifiable risk factors in pregnancy, and it can cause a range of serious health problems, including lower birth weight, pre-term birth, placental complications and perinatal mortality. Smoking during pregnancy is estimated to contribute to 40% of all infant deaths.⁸⁴ Babies of smoking mothers are, on average,

200g lighter at birth – birth weight is a key indicator of a newborn’s overall health.⁸⁵ According to NICE, more than a quarter of the risk of sudden unexpected death in infancy is attributable to smoking.

- 4.33 Pregnant women who smoke are most likely to be in the key high smoking prevalence groups. In 2005, 17% of mothers continued to smoke during pregnancy across England. Smoking rates in pregnancy were almost double the national average among women in the routine and manual grouping, and almost triple the national average among women under the age of 20.
- 4.34 While NHS support is available for mothers to quit smoking before or during pregnancy, the Department of Health seeks feedback from stakeholders on what more could be done to support pregnant women to quit smoking.

Question 13: What do you believe the Government’s priorities for research into smoking should be?

Question 14: What can be done to provide more effective NHS Stop Smoking Services for:

- smokers who try to quit but do not access NHS support?
- routine and manual workers, young people and pregnant women – all groups that require tailored quitting support in appropriate settings?

Question 15: How can communication and referral be improved between nationally provided quit support (such as the website and helplines) and local services?

Question 16: How else can we support smoking cessation, particularly among high-prevalence or hard-to-reach groups?

5. Part D: Helping those who cannot quit

- 5.1 To date, tobacco control policy has focused on preventing people from starting to smoke or on reducing smoking rates by promoting quitting through high taxation, media campaigns, advertising bans, smokefree policies and quitting support services. Those policies have had a significant impact in reducing smoking prevalence over the past decade.
- 5.2 However, even if those policies continue to have an impact, it has been estimated by the Royal College of Physicians that it will take at least two decades to halve current smoking prevalence.⁸⁶ Cigarette smoking is currently declining by only about 0.4 percentage points per year, and even on an optimistic scenario there will still be 5 million or more smokers in the UK in 10–12 years' time, most from socially disadvantaged groups.
- 5.3 Some smokers are so heavily addicted that they find it very difficult to quit. They will have made repeated attempts to give up and failed or, quite simply, have lost the will to quit. If nothing is done to help these smokers, of the estimated 5 million people still smoking in England in a decade's time, half will die from smoking-related disease, losing many years of productive and active life.
- 5.4 Harm reduction strategies seek to minimise the adverse health and social consequences of substance use. This is usually achieved through the use of safer (usually medicinal) versions of the substance or through safer forms of administration. These are an accepted part of treatment for addiction to opiates such as heroin and have a strong international evidence base.
- 5.5 To date, harm reduction approaches have not received widespread attention for tobacco compared with other areas of public health. This is perhaps not surprising. Opiates and nicotine have very different effects on the brain and the body of users. But, while nicotine on its own is clearly not as harmful as opiates, it is highly addictive. The health impacts of smoking are also largely unrelated to nicotine. People smoke to get nicotine but they die from emissions from smoking tobacco, particularly the tar and carbon monoxide. It may therefore be possible to find new ways to reduce the risk to smokers who are unwilling or unable to break their addiction to nicotine.
- 5.6 Future government strategy in tobacco control should therefore address the needs of the smoker who cannot quit and give consideration to how the harms caused by smoking can be reduced. The aim should continue to be to encourage smokers to quit, with the support of the NHS Stop Smoking Services. Harm reduction initiatives, which would supplement rather than replace existing approaches, could aim to make existing medicinal nicotine products more widely and easily available to smokers as alternatives to cigarettes.
- 5.7 Steps that have already been taken in this direction include reducing VAT on nicotine replacement products and making them available on general sale. The development of better and more consumer acceptable nicotine products could be encouraged as safer, more effective competition for cigarettes, and be offered at a competitive price in the marketplace.

- 5.8 However, any harm reduction programme in the UK would be limited by current regulatory restrictions. For example, while NRT products are strictly regulated as medicines, other nicotine products, including cigarettes, can be sold today with relatively few restrictions.
- 5.9 For critics, the disadvantage of even a harm reduction strategy using only ‘pure’ nicotine products is that it involves an acceptance of addiction. There are even greater concerns about a harm reduction approach using non-smoked tobacco products, as it would lead to the implicit abandonment of the goal of a tobacco-free society.

Current situation: alternative tobacco products

- 5.10 Among the consequences of the smokefree law coming into force across the UK has been the appearance on the market of allegedly ‘safer’ cigarette substitutes. These have ranged from new smokeless tobacco products to inhalers and electronic cigarettes. Most are manufactured abroad and sold over the internet.
- 5.11 If manufacturers claim that their product will help people to quit smoking, their product will be considered a medicine and therefore they must apply for a licence from the Medicines and Healthcare Products Regulatory Authority (MHRA). However, if no such claims are made explicitly in the packaging or marketing, these products remain largely unregulated.
- 5.12 Any product containing tobacco is covered by the Tobacco Advertising and Promotion Act. So while such products can be legally sold in the UK, they are subject to the restrictions set out in the Act.
- 5.13 The sale and marketing of the Swedish oral tobacco product ‘snus’ is banned under EU law. The UK has transposed the ban into its own regulations and will continue to prohibit the availability of snus unless the EU ban is lifted. The legitimacy of the ban has been upheld by the European Court of Justice. The EU’s expert scientific advisory group has also recently carried out a major review of smokeless tobacco products. While they found that snus carries a risk of pancreatic cancer, they did lend it some support, stating:
- If snus or other smokeless products can provide some of the smokers who will not otherwise quit smoking with a less hazardous source of nicotine that is acceptable to them the use of snus as a harm reduction option deserves consideration.⁸⁷*
- 5.14 In contrast, chewing tobacco, largely used by people from south Asia, is legal and unregulated in the UK and has been found to have higher rates of toxins than snus, which is illegal.⁸⁸
- 5.15 The Department’s *Choosing Health* White Paper in 2004 called for ‘new and innovative therapies’ to be developed for those trying to quit.⁸⁹ The White Paper led to the easing of many restrictions on the availability of NRT after an MHRA expert working group evaluated the risks of taking NRT for different patient groups. Since 2006, NRT can be made available for use by pregnant women, teenagers aged 12–18, and those with cardiovascular, pancreatic or renal disease. The MHRA assesses the risks of nicotine products against the much greater risk of smoking. That approach has led to approval of licences for ‘cut down to quit’ products, approval for the use of NRT products in combination, and use of NRT for temporary abstinence.

- 5.16 There is considerable potential for providing smokers with safe forms of medicinal nicotine delivery that are effective alternatives to smoked tobacco products. There could be scope for further relaxing restrictions on NRT, if it is safe to do so. Some smokers finding it hard to quit would like to be able to use NRT for much longer than the periods recommended by doctors and pharmaceutical companies. However, it can be more difficult for them to afford to do so when their prescription for NRT comes to an end.
- 5.17 Medicinal nicotine and the alternative nicotine products currently on the market are known to deliver nicotine more slowly than cigarettes. There is considerable scope for developing faster-delivery nicotine products, research into which would be encouraged by the Government. For those who have made repeated unsuccessful quit attempts, making such products more affordable and easily available may present a solution.
- 5.18 Tobacco companies have invested a great deal in attempting to develop safer cigarettes, often known as potentially reduced exposure products (PREPs). Evidence on the relative safety of these products is not conclusive. American companies have test-marketed products resembling cigarettes which heat tobacco using a charcoal ignition system or a carbon tip. Such products claim to have lower tar levels.⁹⁰ Another product being tested overseas is a device that heats cigarettes electronically but still delivers a small amount of smoke to the user.
- 5.19 The Government's expert committees on toxicology and carcinogenicity have concluded that, without evidence of long-term impact on health, they cannot recommend that these products are safer than conventional cigarettes now on the market. In any event, it would not be possible under the Tobacco Products (Presentation and Sale) Regulations for manufacturers to advertise or make relative safety claims for PREPs.⁹¹
- 5.20 More recently, electronic 'cigarettes' have begun to appear on the market across Europe. While resembling cigarettes, most of these products do not appear to contain tobacco, simply providing a dose of nicotine, which is inhaled as water vapour. Because most e-cigarettes do not make health claims, they currently are not required to be sold under any form of licence.

Tobacco testing, ingredients and emissions

- 5.21 The EU requires testing of cigarettes for tar, nicotine and carbon monoxide emissions, for which maximum levels are set. However, there is debate over the public health benefits of testing tobacco products in this way. Some experts in the field support switching to a testing regime that more closely reflects human smoking behaviour. The issue is under consideration at an international level.
- 5.22 EU law requires cigarette packs to carry the data about these emissions, but these are felt by both the scientific and public health communities to be misleading as indicators of the relative safety of different cigarette brands. Both the EU and the WHO are considering recommendations calling for the removal of this information from packs.
- 5.23 Disclosure of ingredients information to the public is a requirement of the EU Directive on product labelling. Cigarette packs in other jurisdictions like Canada carry information about ingredients and emissions. Many feel that disclosure of such information is in line with the consumer's right to know what they are consuming and may also be important in reinforcing people's awareness of the dangers of smoking and therefore their likelihood of quitting.

The Cancer Research UK ‘Smoke is Poison’ campaign, launched in December 2006, featured the risks of some of the dangerous emissions from cigarettes, which triggered a large number of calls to the NHS quit line.

Reduced ignition propensity cigarettes

- 5.24 Accepting that some people will continue to smoke despite all interventions, the Government is looking for ways in which smoking can be made safer. In 2005, 3,113 fires were caused by smoking, resulting in 110 deaths and over 1,000 injuries in accidental dwelling fires. This represents a third of all accidental dwelling fire deaths and 11 per cent of accidental dwelling fire injuries.
- 5.25 A requirement for reduced ignition propensity (RIP) cigarettes is believed to be one potential solution. These cigarettes are designed to be self-extinguishing once they have been left for a short period without being smoked. RIP cigarettes are required in a number of jurisdictions including Canada, Norway and New York City.
- 5.26 The creation of fire-safer cigarettes based on a standard developed in the United States is thought to represent a significant step forward for fire safety. The most common approach used by cigarette manufacturers to create fire-safer cigarettes is to wrap cigarettes in two or three thin bands of less porous paper that act as ‘speed bumps’ slowing down a burning cigarette. If a fire-safer cigarette is left unattended, the burning tobacco will reach one of these speed bumps and self-extinguish.
- 5.27 At the time of writing, 27 US states have introduced legislation to mandate production and sale of fire-safer cigarettes. New York was the first to introduce legislation in 2004. In 2005, Canada was the first country to implement a cigarette fire-safety standard at a national level. In 2007, Australia released its own standard, based on the US standard. However, in Europe there is no standard and no legislation requiring cigarettes that are manufactured and sold in Member States to meet any fire-safety standards.
- 5.28 Communities and Local Government (CLG) leads the work in the UK to develop a European standard for fire-safer cigarettes. A mandate is due to go from the European Commission to CEN, the European Standards body, to develop a European standard within two years. In parallel, CLG is looking at the options for introducing accompanying legislation and will consult in due course.

Question 17: Do you support a harm reduction approach and if so can you suggest how it should be developed and implemented?

References

- 1 National Institute for Health and Clinical Excellence (2008). *NICE Public Health Guidance 10: Smoking cessation services in primary care, pharmacies, local authorities and workplaces, particularly for manual working groups, pregnant women and hard to reach groups*. NICE, London.
- 2 Goddard E. (2008). *General Household Survey 2006: Smoking and drinking among adults 2006*. Office for National Statistics, Newport.
- 3 Raw M. and Joossens L. (2007). *Progress in Tobacco Control in 30 European Countries, 2005 to 2007*. Available at: www.ensp.org/files/30_european_countries_text_final.pdf
- 4 HM Treasury (2007). *PSA Delivery Agreement 18: Promote better health and wellbeing for all*. HM Treasury, London. Available at: www.hm-treasury.gov.uk/media/5/A/pbr_csr07_psa18.pdf
- 5 Adult smoking prevalence was 22% in 2006, according to latest data from the *General Household Survey 2006*.
- 6 Smoking prevalence in the routine and manual socio-economic classification was 29% in 2006, according to data from the *General Household Survey 2006*.
- 7 Parrott S., Godfrey C., Raw M. et al. (1998). 'Guidance for commissioners on the cost effectiveness of smoking cessation interventions', *Thorax*, 53, pp. 2–37.
- 8 Health Development Agency (2004). *The Smoking Epidemic in England*. HDA, London.
- 9 NHS Information Centre (2007). *Smoking-related ill health and mortality – Statistics on smoking: England, 2007*. NHS Information Centre, Leeds.
- 10 Doll R. and Peto R. (1981). 'The causes of cancer: Quantitative estimates of avoidable risks of cancer in the United States today', *Journal of the National Cancer Institute*, 66, pp. 1191–1308.
- 11 Department of Health (2007). *Health Profile for England*. Department of Health, London. Available at: www.dh.gov.uk/en/Publicationsandstatistics/Publications/PublicationsStatistics/DH_079716
- 12 Davy M. (2007). 'Socio-economic inequalities in smoking: an examination of generational trends in Great Britain', *Health Statistics Quarterly*, 34 (Summer 2007), pp. 26–34.
- 13 Parrott A. (1995). 'Stress modulation over the day in cigarette smokers', *Addiction*, 90(2), pp. 233–244.
- 14 Jarvis M. and Wardle J. (2005). 'Social patterning of health behaviours: the case of cigarette smoking', in Marmot M. and Wilkinson R. (eds.), *Social Determinants of Health*, Oxford University Press, Oxford.

- 15 NHS Information Centre (2007). *Statistics on smoking: England, 2007*. NHS Information Centre, Leeds.
- 16 West R., Townsend J., Joossens L., Arnott D. and Lewis S. (in press). ‘Why combating tobacco smuggling is a priority: an estimation of the numbers of deaths caused by tobacco smuggling.’
- 17 HM Treasury and HMRC (2006). *New responses to new challenges: Reinforcing the Tackling Tobacco Smuggling Strategy*. HMSO, Norwich.
- 18 World Bank (1999). *Curbing the Epidemic: Governments and the Economics of Tobacco Control*. World Bank, Washington.
- 19 Stephens E., Calder A. et al. (2005). ‘Source and health implications of high toxic metal concentrations in illicit tobacco products’, *Environmental Science Technology*, 39(2), pp. 479–488.
- 20 ASH (2008). ‘New evidence on tobacco smuggling presented to Health Select Committee’, press release published on 22 May 2008. Available at: www.ash.org.uk/ash_1spmpepp7.htm
- 21 Joossens L. and Raw M. (1998). ‘Cigarette smuggling in Europe: Who really benefits?’, *Tobacco Control*, 7, pp. 66–71.
- 22 Joossens L. and Raw M. (2000). ‘How can cigarette smuggling be reduced?’, *British Medical Journal*, 321, pp. 947–950.
- 23 Sweanor D. (1997). *The smuggling of tobacco products*. Smoking and Heart Foundation, Ottawa.
- 24 Fuller E. (2007). *Smoking, Drinking and Drug Use Among Young People in England 2006*. NHS Information Centre, Leeds.
- 25 Pierce J., Choi W., Gilpin E. et al. (1998). ‘Tobacco industry promotion of cigarettes and adolescent smoking’, *Journal of the American Medical Association*, 279(7), pp. 511–515.
- 26 DiFranza J. et al. (2007). ‘Symptoms of tobacco dependence after brief intermittent use: the development and assessment of nicotine dependence in youth’, *Archives of Pediatrics and Adolescent Medicine*, 162(7), pp. 704–710.
- 27 Amos A. and Bostock Y. (2007). ‘Young people, smoking and gender: A qualitative exploration’, *Health Education Research*, 22, pp. 770–781.
- 28 Section 1, Tobacco Advertising and Promotion Act 2002 (c.36).
- 29 LACORS (Local Authorities Coordinators of Regulatory Services) is the local government central body responsible for overseeing local authority regulatory and related services in the UK. More information is at: www.lacors.gov.uk
- 30 LACORS (2006). *Report on the implementation of the point of sale regulations*. LACORS, London.
- 31 Health Canada (2006). *A proposal to regulate the display and promotion of tobacco and tobacco-related products at retail: consultation document*. Health Canada, Ottawa.
- 32 Pierce J. et al. (1991). ‘Does tobacco advertising target young people to start smoking? Evidence from California’, *Journal of the American Medical Association*, 266(22), pp. 3154–3158.

- 33 Henriksen L. et al. (2004). 'Association of retail tobacco marketing with adolescent smoking', *American Journal of Public Health*, 94(12), pp. 2081–2083.
- 34 Lovato C. et al. (2004). *Cochrane Review: Impact of tobacco advertising and promotion on increasing adolescent smoking behaviours*. The Cochrane Library, Issue 2.
- 35 Lavack A. and Toth G. (2006). 'Tobacco point-of-purchase promotion: examining tobacco industry documents', *Tobacco Control*, 15, pp. 377–384.
- 36 Carter S. (2003). 'New frontier, new power: The retail environment in Australia's dark market', *Tobacco Control*, 12, pp. 95–101.
- 37 The European School Survey Project on Alcohol and Other Drugs (ESPAD). Available at: www.espad.org/sa/node.asp?node=730
- 38 Wakefield M. et al. (2006). 'An experimental study of effects on schoolchildren of exposure to point-of-sale cigarette advertising and pack displays', *Health Education Research*, 21(3), pp. 338–347.
- 39 Pollay R. (2007). 'More than meets the eye: On the importance of retail cigarette merchandising', *Tobacco Control*, 15, pp. 270–274.
- 40 Feighery E. et al. (2003). 'How tobacco companies ensure prime placement of their advertising and products in stores: Interviews with retailers about tobacco company incentive programmes', *Tobacco Control*, 12, pp. 184–188.
- 41 Blau J. and Greaves L. (2005). Saskatchewan Coalition for Tobacco Reduction: Evidence to Ontario Standing Committee on Finance and Economic Affairs, 27 April 2005.
- 42 Wakefield M. et al. (2008). 'The effect of retail cigarette displays on impulse purchase', *Addiction*, 103(2), pp. 338–347.
- 43 Rogers T., Feighery R. et al. (1995). 'Community mobilisation to reduce point of purchase advertising of tobacco products', *Health Education Quarterly*, 22, pp. 427–442.
- 44 Annan S. (1995). *Consumer communication at POP*. Trade Marketing Solutions, Richmond.
- 45 Smee C., Parsonage M., Anderson R. and Duckworth S. (1992). *Effect of tobacco advertising on tobacco consumption: A discussion document reviewing the evidence*. Department of Health, London.
- 46 Pierce J. (2002). 'Does tobacco marketing undermine the influence of recommended parenting in discouraging adolescents from smoking?', *American Journal of Preventive Medicine*, 23(2), pp. 73–81.
- 47 Klitzner M. et al. (1991). 'Cigarette advertising and adolescent experimentation with smoking', *British Journal of Addiction*, 6(3), pp. 287–298.
- 48 Personal communication from Nova Scotia's Ministry of Health, April 2008.
- 49 Council Recommendation 2003/54/EC of 2 December 2002 on the prevention of smoking and on initiatives to improve tobacco control. Available at: www.europa.eu/scadplus/leg/en/cha/c11574.htm

- 50 World Health Organization (2002). *European Strategy for Tobacco Control*. World Health Organization's Regional Office for Europe, Copenhagen.
- 51 Forster J., Hourigan M. and Kelder S. (1992). 'Locking devices on cigarette vending machines: evaluation of a city ordinance', *American Journal of Public Health*, 82(9), pp. 1217–1219.
- 52 World Health Organization (2007). *The European Tobacco Control Report 2007*. World Health Organization, Geneva.
- 53 Expert Panel Report for Health Canada (1995). 'National Survey of Teens: Knowledge, Attitudes, Beliefs and Smoking Behaviours', *When Packages Can't Speak: Possible impacts of plain and generic packaging of tobacco products*. Health Canada, Ottawa.
- 54 University of Toronto Centre for Health Promotion (1993). *Effects of plain packaging among youth*. University of Toronto, Toronto.
- 55 Beede P. and Lawson R. (1992). 'The effect of plain packages on the perception of cigarette health warnings', *Public Health*, 106, pp. 315–322.
- 56 Goldberg M., Liefeld J., Madill J. and Vredenburg H. (1999). 'The effect of plain packaging on response to health warnings', *American Journal of Public Health*, 89(9), pp. 1434–1435.
- 57 Rootman I. and Flay B. (1995). *A study on youth smoking, plain packaging, health warnings, event marketing, and price reductions key findings*. University of Toronto Centre for Health Promotion, Toronto.
- 58 Morgan Stanley Research Europe (2007). *Tobacco: Late to the Party*. Morgan Stanley Research, London.
- 59 Regulation 11, The Tobacco Products (Manufacture, Presentation and Sale) (Safety) Regulations 2002.
- 60 Wakefield M. and Germain, D. (2006). 'Adult smokers' use of point of sale displays to select cigarette brands', *Australian and New Zealand Journal of Public Health*, 30(5), pp. 483–484
- 61 Section 3 of the Children and Young Persons (Protection from Tobacco) Act 1991 (c.23).
- 62 Scottish Executive (2006). *Towards a Future Without Tobacco: The Report of the Smoking Prevention Working Group*. Scottish Executive, Edinburgh.
- 63 Dalton M. et al. (2003). 'Effect of viewing smoking in movies on adolescent smoking initiation: a cohort study', *Lancet*, 362, pp. 281–285.
- 64 Hanewinkel R. and Sargent J. (2008). 'Exposure to smoking in internationally distributed American movies', *Pediatrics*, 121(1), pp. 108–117.
- 65 Pechmann C. and Shih S. (1999). 'Smoking scenes in movies and anti-smoking advertisements before movies: Effects on youth', *Journal of Marketing*, 63(3), pp. 1–11.
- 66 The University of California San Francisco's 'smokefree movies' website has detailed information about the prevalence of smoking in Hollywood films and links to research, and is at: www.smokefreemovies.ucsf.edu/problem/index.html

- 67 More information is available on the Smokefree England website at: www.smokefreeengland.co.uk
- 68 Smokefree England (2007). *Everything you need to prepare for the new smokefree law on 1 July 2007*. Department of Health, London.
- 69 Scientific Committee on Tobacco and Health (2004). *Secondhand Smoke: Review of evidence since 1998*. Department of Health, London.
- 70 Smokefree England (2007). *Awareness, attitudes and compliance three months after the commencement of smokefree legislation: A summary report*. Department of Health, London. Available at: www.smokefreeengland.co.uk/files/three-month-report-factsheet.pdf
- 71 Hyland A. et al. (2007). 'Does smoke-free Ireland have more smoking inside the home and less in pubs than the United Kingdom? Findings from the international tobacco control policy evaluation project', *European Journal of Public Health*, 18(1), pp. 63–65.
- 72 More information is available from the Scottish Government at: www.scotland.gov.uk/News/Releases/2007/09/10081400
- 73 Godfrey C., Parrott S., Coleman T. and Pound, E. (2005). 'The cost effectiveness of the English smoking treatment services: Evidence from practice', *Addiction*, 100(2), pp. 70–83.
- 74 West R., McNeill A. and Raw M. (2000). 'National smoking cessation guidelines for health professionals: An update', *Thorax*, 55, pp. 987–999.
- 75 Research into smoking cessation and the use of smoking cessation support in England is at: www.smokinginengland.info
- 76 Bauld L., Judge K. and Platt S. (2007). 'Assessing the impact of smoking cessation services on reducing health inequalities in England: Observational study', *Tobacco Control*, 16, pp. 400–404.
- 77 Department of Health (2007). *Monitoring Guidance for Stop Smoking Services*. Department of Health, London. Available at: www.dh.gov.uk/en/Publicationsandstatistics/Publications/PublicationsPolicyAndGuidance/DH_079644?IdcService=GET_FILE&dID=160449&Rendition=Web
- 78 Department of Health (2008). *Excellence in Tobacco Control: 10 high impact changes to achieve tobacco control*. Department of Health, London. Available at: www.dh.gov.uk/en/Publicationsandstatistics/Publications/PublicationsPolicyAndGuidance/DH_084847
- 79 BMRB Campaign Tracking, June 2006.
- 80 BMRB Campaign Tracking, September 2007.
- 81 BMRB Campaign Tracking, June 2007.
- 82 Continental Smoking Legislation Research, September 2007.
- 83 West R. and Sohal T. (2006). 'Catastrophic pathways to smoking cessation: Findings from a national survey', *British Medical Journal*, 332, pp. 458–460.
- 84 Salihu H. et al. (2003). 'Levels of excess infant deaths attributable to maternal smoking during pregnancy in the United States', *Journal of Maternity and Child Health*, 7(4), pp. 219–227.

- 85 Chan D. and Sullivan E. (2008). 'Teenage smoking in pregnancy and birthweight: A population study, 2001–2004', *Medical Journal of Australia*, 188(7), pp. 392–396.
- 86 Tobacco Advisory Group, Royal College of Physicians (2007). *Harm reduction in nicotine addiction: Helping people who can't quit*. Royal College of Physicians, London.
- 87 Scientific Committee on Emerging and Newly Identified Health Risks (2007). *Health Effects of Smokeless Tobacco Products*. European Commission, Brussels.
- 88 McNeill A., Bedi R. et al. (2006). 'Levels of toxins in oral tobacco in the UK', *Tobacco Control*, 15, pp. 64–67.
- 89 Department of Health (2004). *Choosing Health: making healthy choices easier*. Department of Health, London.
- 90 Slade, J. and Connolly, G. (2002). 'Eclipse: does it live up to its health claims?', *Tobacco Control*, 11, pp. 64–70.
- 91 Committees on Toxicity, Carcinogenicity, Mutagenicity of Chemicals in Food, Consumer Products and the Environment (2004). *Joint Statement on Re-assessment of the Toxicological Testing of Tobacco Products*. Department of Health, London. Available at: www.advisorybodies.doh.gov.uk/cottonfood/tobacco.htm

Annex 1

Questions set out in the consultation paper

Part A: Reducing smoking rates and health inequalities caused by smoking

Question 1: What smoking prevalence rates for all groups (children, pregnant women, routine and manual workers and all adults) could we aspire to reach in England by 2015, 2020, and 2030, and on what basis do you make these suggestions? What else should the Government and public services do to deliver these rates?

Question 2: What more do you think could be done to reduce inequalities caused by tobacco use?

Question 3: Do you think the six-strand strategy should continue to form the basis of the Government's approach to tobacco control into the future? Are there other areas that you believe should be added?

Question 4: How can collaboration between agencies be enhanced to contribute to the inland enforcement against illicit tobacco?

Question 5: What more can the Government do to increase understanding about the wider risks to our communities from smuggled tobacco products?

Part B: Protecting children and young people from smoking

Question 6: What more do you think the Government could do to:

- a. reduce demand for tobacco products among young people?
- b. reduce the availability of tobacco products to young people?

Question 7: Do you believe that there should be restrictions on the advertising and promotion of tobacco accessories, such as cigarette papers?

Question 8: Do you believe that there should be further controls on the display of tobacco products in retail environments? If so, what is your preferred option?

We are particularly interested in hearing from small retailers and in receiving information on the potential cost impact of further restrictions on display. What impact would further controls on the display of tobacco have on your business, and what might the cost be of implementing such changes?

Question 9: Do you believe that there should be further controls on the sale of tobacco from vending machines to restrict access by young people? If so, what is your preferred option?

Question 10: Do you believe that plain packaging of tobacco products has merit as an initiative to reduce smoking uptake by young people?

Question 11: Do you believe that increasing the minimum size of cigarette packs has merit as an initiative to reduce smoking uptake by young people?

Question 12: Do you believe that more should be done by the Government to reduce exposure to secondhand smoke within private dwellings or in vehicles used primarily for private purposes? If so, what do you think could be done? Where possible, please provide reference to any relevant information or evidence to accompany your response.

Part C: Supporting smokers to quit

Question 13: What do you believe the Government's priorities for research into smoking should be?

Question 14: What can be done to provide more effective NHS Stop Smoking Services for:

- smokers who try to quit but do not access NHS support?
- routine and manual workers, young people and pregnant women – all groups that require tailored quitting support in appropriate settings?

Question 15: How can communication and referral be improved between nationally provided quit support (such as the website and helplines) and local services?

Question 16: How else can we support smoking cessation, particularly among high-prevalence or hard-to-reach groups?

Part D: Helping those who cannot quit

Question 17: Do you support a harm reduction approach and if so can you suggest how it should be developed and implemented?

Annex 2

The consultation process

Criteria for consultation

This consultation follows the Cabinet Office Code of Practice. In particular, we aim to:

- consult widely throughout the process, allowing a minimum of 12 weeks for written consultation at least once during the development of the policy;
- be clear about what our proposals are, who may be affected, what questions we want to ask and the timescale for responses;
- ensure that our consultation is clear, concise and widely accessible;
- ensure that we provide feedback regarding the responses received and how the consultation process influenced the development of the policy;
- monitor our effectiveness at consultation, including through the use of a designated consultation co-ordinator; and
- ensure our consultation follows Better Regulation best practice, including carrying out a regulatory impact assessment, if appropriate.

The full text of the code of practice is on the Better Regulation website at:

www.berr.gov.uk/files/file44364.pdf

Comments on the consultation process itself

If you have concerns or comments that you would like to make relating specifically to the consultation process itself, please contact:

Consultations Co-ordinator
Department of Health
3E58, Quarry House
Leeds
LS2 7UE
Email: Mb-dh-consultations-coordinator@dh.gsi.gov.uk

Please do not send consultation responses to this address.

Confidentiality of information

Information provided in response to this consultation, including personal information, may be published or disclosed in accordance with the access to information regimes (these are primarily the Freedom of Information Act 2000 (FOIA), the Data Protection Act 1998 (DPA) and the Environmental Information Regulations 2004).

If you want the information that you provide to be treated as confidential, please be aware that, under the FOIA, there is a statutory Code of Practice with which public authorities must comply and which deals, among other things, with obligations of confidence. In view of this, it would be helpful if you could explain to us why you regard the information you have provided as confidential. If we receive a request for disclosure of the information we will take full account of your explanation, but we cannot give an assurance that confidentiality can be maintained in all circumstances. An automatic confidentiality disclaimer generated by your IT system will not, of itself, be regarded as binding on the Department.

The Department will process your personal data in accordance with the DPA, and in most circumstances this will mean that your personal data will not be disclosed to third parties.

Summary of the consultation

A summary of the response to this consultation will be made available within three months of the end of the live consultation period and will be placed on the Consultations website at www.dh.gov.uk/en/Consultations/Responsestoconsultations/index.htm

Annex 3

Consultation-stage impact assessment for controlling the display of tobacco in retail environments

Summary: Intervention & Options

Department /Agency:

Department of Health

Title:

Impact assessment of restrictions on, or prohibition of, the display of tobacco at point of sale

Stage: Consultation

Version: Completed

Date: 31 May 2008

Related Publications: *Consultation on the Future of Tobacco Control* 2008; *Smoking Kills* White Paper 1998; *Choosing Health* White Paper 2004

Available to view or download at:

www.dh.gov.uk/consultations

Contact for enquiries: Tobacco Consultation Officer

Telephone: N/A

What is the problem under consideration? Why is government intervention necessary?

Tobacco smoking is proven to cause serious harm to the health of the smoker. However, and most importantly, under-18s may not be fully capable of understanding the risks. Additionally, existing smokers may be unable to reduce these risks due to addiction or lack of information. Smoking poses significant externalities to the rest of society and is a leading cause of health inequalities; prevalence is higher among routine and manual groups.

Government intervention to reduce smoking prevalence can therefore be justified.

What are the policy objectives and the intended effects?

The primary objective is to reduce smoking take-up in under-18s. The policy may also provide a more supportive environment for those trying to quit, and may help prevent the health message from being undermined.

A significant body of research demonstrates a correlation between the advertising and promotion of tobacco products and initiation into tobacco use, and also suggests that retail displays can trigger those trying to quit to continue their habit. Restriction of the promotion of smoking should therefore contribute to the above objective.

What policy options have been considered? Please justify any preferred option.

1. Retain the status quo, i.e. tobacco products can continue to be displayed in retail outlets, with advertising limited to a maximum space of an A5 piece of paper.
2. Introduce a complete prohibition on the display of tobacco products, with no other advertising. A plain price list would be permitted.

The consultation also includes an additional option of further restrictions on the display of tobacco products (rather than complete prohibition). The impact assessment will consider this option once it has been further developed.

When will the policy be reviewed to establish the actual costs and benefits and the achievement of the desired effects? Any future policy would be reviewed three years after the date of implementation of the policy.

Ministerial Sign-off For consultation-stage impact assessments:

I have read the impact assessment and I am satisfied that, given the available evidence, it represents a reasonable view of the likely costs, benefits and impact of the leading options.

Signed by the responsible Minister:

Dawn Primarolo MP
Minister of State for Public Health

Date: 31 May 2008

Summary: Analysis & Evidence

Policy Option: 2

Description: Introduce a complete prohibition on the display of tobacco products, with no other advertising. A plain price list would be permitted.

COSTS	ANNUAL COSTS		Description and scale of key monetised costs by 'main affected groups' An average cost of £1,000 (spread over two years) is incurred by approximately 90,000 retail premises for new equipment, fitting and possible short-term increase in the time taken to serve customers. Flexible rules on implementing the display ban provide low-cost compliance options for firms.
	One-off (Transition)	Yrs	
	£ 45m	2	
	Average Annual Cost (excluding one-off)		
£ 0		Total Cost (PV)	£ 85.5m
Other key non-monetised costs by 'main affected groups' Possible loss to consumers if outlets were forced to close. Marginal increase in enforcement costs.			

BENEFITS	ANNUAL BENEFITS		Description and scale of key monetised costs by 'main affected groups' Estimate of the monetised lifetime health benefits arising from fewer young people starting to smoke; based on 579–2,786 fewer smokers per annum (for a 10-year time horizon).
	One-off	Yrs	
	£ 0	10	
	Average Annual Benefit (excluding one-off)		
£ 48.2m to £231.6m		Total Benefit (PV)	£ 400m to £1.93bn
Other key non-monetised benefits by 'main affected groups' Possible beneficial effect on the quit rate of adults trying to quit smoking, with associated health benefits. Reduced morbidity as a result of lower smoking prevalence. Increased compliance with the law on underage sales.			

Key Assumptions/Sensitivities/Risks Specialist tobacconists exempted (as with some existing legislation on advertising and promotion). Firms given two years to comply. Benefits range is due to uncertainty on exactly how many new, regular young smokers would be deterred.

Price Base Year 2008	Time Period Years 10	Net Benefit Range (NPV) £ 314.5m to £1.93bn	NET BENEFIT (NPV Best estimate) £ 1.09bn
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What is the geographic coverage of the policy/option?		UK (Excl. Scotland)		
On what date will the policy be implemented?		N/A		
Which organisation(s) will enforce the policy?		Trading Standards		
What is the total annual cost of enforcement for these organisations?		£ 0		
Does enforcement comply with Hampton principles?		Yes		
Will implementation go beyond minimum EU requirements?		Yes		
What is the value of the proposed offsetting measure per year?		£ N/A		
What is the value of changes in greenhouse gas emissions?		£ N/A		
Will the proposal have a significant impact on competition?				
Annual cost (£-£) per organisation (excluding one-off)	Micro 0	Small 0	Medium 0	Large 0
Are any of these organisations exempt?	No	No	N/A	N/A

Impact on Admin Burdens Baseline (2005 Prices) (Increase – Decrease)

Increase of £ Decrease of £ **Net Impact** £

Key:	Annual costs and benefits: Constant Prices	(Net) Present Value
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Evidence Base (for summary sheets)

Background

1. The Tobacco Advertising and Promotion Act (TAPA) 2003 introduced a ban on the publication of tobacco advertisements. Specifically, point of sale regulations that came into force in December 2004 limit tobacco advertising at the retail point of sale to a maximum space of an A5 piece of paper. These regulations also require the display of a health warning about the dangers of smoking and the NHS Smoking Helpline number, but do not cover smoking accessories (such as cigarette papers or pipes).
2. Display can be considered a form of advertising, encompassing any way of showing tobacco products with a view to promoting their sale. Currently, display of tobacco products predominantly takes the form of gantries behind the cash till, or of stacks of merchandise at any point in the retail premises (particularly in duty free outlets).
3. LACORS¹ found that, although technical compliance with the current point of sale regulations is good, there is a growing problem with the use of counter-top devices such as clocks and counter mats to draw attention to tobacco products in the retail environment. In addition, many retailers were found to have been stacking multi-packs of cigarettes in a way that creates large virtual advertisements that contravene the spirit, if not the letter, of the point of sale restrictions.
4. Cigarettes continue to be displayed on large, prominent gantries or shelving units behind the cash tills of retail outlets. In larger supermarkets, they can be sold from separate kiosks or sales areas, generally sited close to the store entrance. Point of sale restrictions allow specific brand advertising within the A5 size restrictions at the point of sale, as specified in the regulations.

Rationale for further control on the display of tobacco products in retail environments

5. Tobacco smoking is proven to cause serious harm to the health of the smoker. It also poses significant externalities to the rest of society and is a leading cause of health inequalities; prevalence is higher among routine and manual groups.
6. Those under the age of 18 are uniquely vulnerable consumers, in that they are not yet fully able to understand the risks of tobacco consumption, so appropriate interventions may be justified. The key rationale in controlling the display of tobacco products at the point of sale is the protection of children and young people. So long as tobacco is prominently marketed there is a danger that new generations of smokers will be recruited. Shoppers are regularly reminded of the availability of tobacco whenever they visit retail environments.
7. Additionally, existing smokers may be unable to reduce their risks due to addiction or lack of information.

1 LACORS (2006). *Report on the implementation of the point of sale regulations*. LACORS, London.

8. Across the world, an increasing number of jurisdictions have either taken action to limit or prohibit the display of tobacco products or have plans to do so, including:
- a) Iceland (from August 2001);
 - b) Thailand (from September 2005);
 - c) Ireland (awaiting commencement of legislation);
 - d) Norway (awaiting EEA/EU approval);
 - e) Canada (provinces of Saskatchewan, Manitoba, Nunavut, Prince Edward Island, British Columbia, New Brunswick, Northwest Territories, Nova Scotia, Ontario, Quebec, Alberta and Yukon Territory);
 - f) New Zealand (undertaken consultation with a view to implementing changes in 2009);
 - g) Australia (states of Victoria, New South Wales and Queensland have consulted on legislation; Tasmania will introduce a ban in 2011).
9. There are a number of (mainly small) businesses in the UK selling specialist premium tobacco products such as cigars, pipe tobacco and relatively unknown cigarette brands. Children and young people are not their target audience, and only those already seeking to buy tobacco products are likely to come into contact with the displays in these shops. They are currently exempted from some legislation concerning tobacco advertising and promotion. Additionally, ITPAC (the Imported Tobacco Products Advisory Council, a trade association representing these businesses) has estimated that a display ban might reduce turnover by 40%. This impact assessment is therefore written on the basis that these businesses would be exempted from the display ban.

Policy options

10. The following policy options are considered:
- (Option 1) Retain the status quo, i.e. tobacco products can continue to be displayed in retail outlets, with advertising limited to a maximum space of A5.
 - (Option 2) Introduce a complete prohibition on the display of tobacco products, with no other advertising. A plain price list would be permitted.
11. The consultation also includes an additional option on further restrictions on the display of tobacco products (rather than complete prohibition). The impact assessment will consider this option once it has been further developed.

Costs

12. Number of premises affected: IGD (see the Grocery Retailing Factsheet: www.igd.com/cir.asp?menuid=51&cirid=114) report that there are 99,134 grocery stores in the UK, broken down as follows:
- a) Convenience stores: stores with a sales area of 3,000 sq ft, open for long hours and selling products from at least eight specified grocery categories.

- b) Traditional retail and developing convenience stores: stores with a sales area of less than 3,000 sq ft such as confectioners, tobacconists and newsagents, grocers, off-licences and some forecourts.
 - c) Supermarkets and superstores: stores with a sales area of over 3,000 sq ft selling a broad range of grocery items. Superstores are defined as having a sales area of over 25,000 sq ft.
 - d) Alternative channels, e.g. kiosks, markets, post offices, doorstep delivery, vending and home shopping.
13. Clearly, although the majority of the above stores sell tobacco products, not all of them do; 99,134 is therefore an overestimate of the number of businesses affected.
14. The scope of this impact assessment includes all UK countries except Scotland. An appropriate population-based scaling factor of 0.916 (derived using ONS mid-2006 population estimates) is therefore applied to the number of affected premises, yielding a result of 90,807.

Costs for option 2

15. Cost of altering premises: ACS have suggested that an under-the-counter installation would cost £1,850+VAT, broken down as follows:
- a) Site visit to assess details and produce drawings: £450+VAT.
 - b) Installation time of 10 hours with 2 men at £35/hour: £650+VAT.
 - c) Mileage of 100 miles at 75p/mile: £75+VAT.
 - d) Materials and factory production time to build unit: £350+VAT.
 - e) Sub-total: £1,525+VAT. If the work were undertaken at night, increasing wage rates by 50% yields £1,850+VAT.
16. ACS have stated that some premises may require the purchase of a new counter costing up to £2,000. For the overall cost, they also cite a compliance cost of £2,250–£4,965 from the Canadian Convenience Store Association.
17. However, there may well be cheaper ways of complying with the regulation, for example by installing a screen or curtain to the existing gantry. Some firms (especially the smallest firms) would inevitably take up this opportunity given the lower cost, although cheaper methods of compliance may increase the time taken to serve customers; learning effects should reduce this over time, and a plain price list would be permitted, so that price and availability information can be conveyed to consumers. It should also be noted that the above figure for the number of premises affected is likely to be an overestimate. Taking into account all of the above, an average cost of £1,000 per premise is therefore used in this impact assessment.
18. Taking a cost of £1,000 per premise, and allowing retailers two years to comply with the policy, we obtain a total cost (across all premises in the UK, excluding Scotland) of **£85.5 million** (one-off).

19. The following costs are not yet quantified:
- a) Any marginal increase over current enforcement costs.
 - b) Lost profit from reduced tobacco sales (including any lost profit on non-tobacco sales that occur when customers visit a shop to buy cigarettes). This is not an economic cost, as it would likely be offset by increased expenditure (and profit) elsewhere in the economy. However, if outlets were forced to close, this would create a loss for consumers by reducing consumer choice. There are likely to be few if any such closures, given the availability of low-cost means of complying with the regulation. Businesses also have the option of no longer stocking tobacco products.

Benefits

Quantifying the monetised benefit of one person not starting to smoke, and one adult deciding to quit smoking

20. The benefits analysis covers two types of health outcome that might arise from the policy, and places a monetary value on each. The monetary values are listed below.
- a) Each child that the policy deters from taking up smoking: £83,100 (1.66 discounted life years).
 - b) Each adult that the policy induces to quit smoking: £57,300 (1.15 discounted life years).
21. These values have been calculated by estimating the number of life years (discounted in line with Green Book principles) that are saved in each of the above outcomes. A standard £50,000 value is placed on each life year saved. The method takes account of the fact that many smokers quit at some point in their lifetime, so potential ‘new’ smokers who have been deterred from starting to smoke by the policy would not necessarily have smoked until the end of their life (and experienced all of the associated health problems). Similarly, adult smokers who are induced to quit now may otherwise have quit at some point in the future.
22. A detailed description of the calculations is provided, including references for all sources of data.
23. The calculations begin with data from the General Household Survey (2006) on smokers’ ages, smoking prevalence and smoking status (i.e. whether the respondents are current smokers, former smokers or have never smoked). The proportion of smokers who have quit as they get older is found to increase at a fairly steady and constant rate (with roughly an extra 1% of smokers quitting at every year of age; 18% of those who have ever smoked by age 16 have already stopped at that age).
24. The seminal 50-year study of smoking mortality in British doctors (by Doll et al., 2004)² is used to obtain mortality rates for the following categories of smoker:
- a) those who have quit at age 35–44;
 - b) those who have quit at age 45–54;

2 Doll R., Peto R., Boreham J. and Sutherland I. (2004). ‘Mortality in relation to smoking: 50 years’ observations on male British doctors’, *British Medical Journal*, 328, p. 1519.

- c) those who have quit at age 55–64; and
- d) those who continue to smoke beyond age 65.

25. Non-smokers’ mortality rates are also obtained from this study. The results are combined with smoking prevalence data for the above age groups and the latest Office for National Statistics population mortality data to produce eight sets of two life tables: one life table for non-smokers, and one for the category of smoker under consideration ((a) to (d) above, for both males and females). The differences between each pair of life tables indicate how the smokers’ life expectancy loss is distributed between different years of age. The figures are discounted appropriately to take account of the fact that benefits accrued in the future are worth less than benefits accrued today.
26. The results of these calculations are presented in the table below, and are used to calculate the final estimates:

Quit age band	Percentage of smokers in this band	Change in life years lived for this band (discounted, male)	Change in life years lived for this band (discounted, female)
Under 35	38.2	0.00	0.00
35 to 44	10.5	–0.85	–0.66
45 to 54	10.5	–2.75	–2.34
55 to 64	10.5	–3.48	–3.03
65 or over	30.2	–4.49	–4.15

27. For each sex, the number of life years saved for each young smoker (given that they may have quit anyway in future) is calculated by weighting the number of life years lost in each quit age band by the percentage of smokers who quit in that age band.
28. For each sex, the estimated monetary benefit for each adult who is induced to quit smoking is derived by a similar calculation to above, albeit with different bands for adult smokers’ current age. These are (a) under 35, (b) 35–44, (c) 45–54, (d) 55–64, and (e) over 65. For each of these age bands, the results are then weighted by the percentage of smokers in each age band in order to give a final figure.
29. The calculations described in the two paragraphs above deliver two results: one for men, and one for women. Each result is adjusted downwards to take account of the fact that the doctors in the study by Doll et al. (2004) consumed a median of 18 cigarettes per day; current average consumption is less than this, at 15 per day for men and 13 per day for women. Lastly, the male and female results are averaged to give a single result.
30. A full discussion follows, but the above calculations are argued to be conservative. For example, improvements in the quality of life from quitting smoking (or never starting to smoke) – such as avoiding the morbidity associated with various smoking-related diseases – are not taken account of in the above calculations. Other limitations of the analysis are also discussed.

The importance of tobacco display at retail

31. The following paragraphs describe the importance of tobacco promotion, and its effect of encouraging existing smokers to keep smoking and inducing young non-smokers to start.
- a) Although there has yet to be a full evaluation of a display ban, the evidence suggests that tobacco promotion encourages people to take up and continue smoking. An extensive review of the scientific literature undertaken in 1992 found that advertising bans enacted in four countries at that time (Norway, Finland, Canada and New Zealand) had been ‘followed by a fall in smoking on a scale which cannot reasonably be attributed to other factors’.³ Numerous consumer studies in the UK and elsewhere have shown that adolescents are more responsive to tobacco promotion than others, and that such promotion influences their propensity to take up smoking.⁴
 - b) Two major US longitudinal studies which tracked groups of young people over time (12–17 years of age and 12–15 years of age) found clear evidence that tobacco industry advertising and promotional activities can influence non-susceptible never-smokers to start the process of becoming addicted to cigarettes. The data establish that the influence of tobacco promotional activities was present before adolescents showed any susceptibility to becoming smokers.⁵
 - c) There is a growing body of evidence on the impact of tobacco marketing on smoking among young people. A review of nine cohort studies found ‘a positive, consistent and specific relationship’ between exposure to tobacco advertising and the subsequent uptake of smoking among adolescents.⁶ Children and young people have been found to be far more receptive to tobacco advertising than adults;⁷ young people exposed to tobacco advertising and promotion are more likely to take up smoking.⁸
 - d) In all the studies reviewed by the Cochrane Library, teenagers who were more aware of the advertising or more receptive to it were more likely to be found at follow-up to have experimented with cigarettes or taken up smoking. Based on an analysis of these longitudinal studies, the review concluded that ‘tobacco advertising and promotion increase the likelihood that adolescents will start to smoke’; ‘From a policy perspective, attempts to eliminate tobacco advertising and promotion should be supported.’⁶
32. The above findings encompass many forms of tobacco promotion. Nonetheless, point of sale display and advertising are crucial tools in the promotion of tobacco products as other promotional routes are closed (e.g. bans on tobacco sponsorship and advertising on television, radio, and in print).⁹ There is evidence to suggest that point of sale displays in particular are influential:

- 3 Smee C., Parsonage M., Anderson R. and Duckworth S. (1992). *Effect of tobacco advertising on tobacco consumption: A discussion document reviewing the evidence*. Department of Health, London.
- 4 Klitzner M. et al. (1991). ‘Cigarette advertising and adolescent experimentation with smoking’, *British Journal of Addiction*, 6(3), pp. 287–298.
- 5 Pierce J. (2002). ‘Does tobacco marketing undermine the influence of recommended parenting in discouraging adolescents from smoking?’, *American Journal of Preventive Medicine*, 23(2), pp. 73–81.
- 6 Lovato C. et al. (2004). *Cochrane Review: Impact of tobacco advertising and promotion on increasing adolescent smoking behaviours*. The Cochrane Library, Issue 2.
- 7 Pierce J. et al. (1991). ‘Does tobacco advertising target young people to start smoking? Evidence from California’, *Journal of the American Medical Association*, 266(22), pp. 3154–3158.
- 8 Pierce J., Choi W., Gilpin E. et al. (1998). ‘Tobacco industry promotion of cigarettes and adolescent smoking’, *Journal of the American Medical Association*, 279(7), pp. 511–515.
- 9 Lavack A. and Toth G. (2006). ‘Tobacco point-of-purchase promotion: examining tobacco industry documents’, *Tobacco Control*, 15, pp. 377–384.

- a) There is a body of evidence suggesting that point of sale displays stimulate impulse purchases among those not intending to buy cigarettes and, importantly, among adult smokers who are trying to give up.¹⁰ The Point-of-Purchase Advertising Institute, an industry trade group in the USA, has argued that the chief rationale for point of sale promotion is to target shoppers at the place where they will buy the product, drawing attention to the brand when the consumer is in a buying mood. The research has found that tobacco impulse purchases increase by as much as 28% when there are (promotional) displays of tobacco products at point of sale, although this is not directly comparable to the UK situation because of different rules on permitted advertising.¹¹ A study in the Australian state of Victoria found that promotion of cigarettes at point of sale can influence smokers trying to quit to relapse and start smoking again.¹²
- b) A survey of 2,100 middle school students in California (aged 11–14 years) found that exposure to tobacco marketing in convenience stores was associated with a 50% increase in the odds of ever smoking, even after controls for social influences to smoke were taken into account.¹³ It is important to note, however, that the study was carried out in a state where there are very few controls on tobacco advertising so that teenagers would have been exposed to very prominent advertisements, in addition to the display of cigarettes on gantries.
- c) Evidence suggests that display gantries may play a role in recruiting new smokers. For example, recent research from the Australian state of Victoria showed 605 14–15 year olds (i) a picture of a typical convenience store point of sale, (ii) a similar picture but with pack display, and (iii) a similar picture but with pack display and other tobacco advertising.¹⁴ Respondents in the display-only condition tended to recall particular cigarette brands more often than those who saw no tobacco products. Cigarette advertising also weakened students' resolve not to smoke in future. The authors conclude that 'retail tobacco advertising as well as cigarette pack displays may have adverse influences on youth, suggesting that tighter tobacco marketing restrictions are needed'.

33. While the evidence about the impact of the display ban in Iceland – the first country in the world to introduce such a ban – is not definitive, it does point to the potential benefit in reducing smoking rates among teenagers. The number of 16–17 year olds who had smoked in the last 30 days fell from 32% in 1995, six years prior to the ban, to 20% in 2003, two years after the ban came in. Evidence on teenage smoking in Canada is largely inconclusive, with increases in youth (and overall) smoking rates in some areas, and decreases in others. It is difficult to draw any conclusions from the data; it only covers a small number of time periods, (crucially) does not control for other factors affecting smoking prevalence, and the surveys may not have the statistical power to detect smaller changes in prevalence.

10 Wakefield M. et al. (2008). 'The effect of retail cigarette pack displays on impulse purchase', *Addiction*, 103(2), pp. 388–347.

11 Rogers T., Feighery R. et al. (1995). 'Community mobilisation to reduce point of purchase advertising of tobacco products', *Health Education Quarterly*, 22, pp. 427–442.

12 Harper T. (2006). 'Why the tobacco industry fears point of sale display bans', *Tobacco Control*, 15, pp. 270–271.

13 Henriksen L. et al. (2004). 'Association of retail tobacco marketing with adolescent smoking', *American Journal of Public Health*, 94(12), pp. 2081–2083.

14 Wakefield M. et al. (2006). 'An experimental study of effects on schoolchildren of exposure to point-of-sale cigarette advertising and pack displays', *Health Education Research*, 21(3), pp. 338–347.

Benefit calculation for option 2

34. While the introduction of restrictions on tobacco display in retail environments may not have an immediate benefit on health or smoking prevalence, based on the evidence, it is reasonable to expect that fewer young people would start using tobacco and that smoking prevalence among young people would decline at a faster rate than otherwise.
35. As with all measures in tobacco control, it is difficult to disaggregate the benefits of specific changes. A display ban would be one element within a comprehensive and multi-faceted tobacco control programme which, as a whole, would lead to a reduction in smoking prevalence among the population at large.
36. Nonetheless, Henriksen et al (2004)¹⁵ found, using a sample of 2,100 Californian schoolchildren, that exposure to retail tobacco marketing resulted in a 50% increase in the odds of ever smoking. This finding was made even after controlling for other correlates of ever smoking, such as risk taking, maternal supervision and self-reported grades.
37. It is possible to apply the Henriksen findings to UK data. There are some problems here – for example, the tobacco advertising that the Californian children were exposed to appears to be less restricted than the current UK situation (which nonetheless allows some advertising), laws on underage sale may differ, and the policy under consideration includes the prohibition of display (which can be a form of advertising). Additionally, their sample of children aged 11–14 is rather different to UK schoolchildren – for example, 42% of respondents were Hispanic – although the sample’s smoking prevalence rates (2.6% of 11–12 year olds, 6% of 12–13 year olds and 7.6% of 13–14 year olds) are similar to UK levels.
38. Data from *Smoking, drinking and drug use among young people in England in 2006* (NHS Information Centre) state that 9% of a sample of 11–15 year olds were regular smokers, whereas 39% of the sample had ever smoked. There are therefore 0.23 regular smokers for each ‘ever smoker’ in the sample. If current UK advertising and display of tobacco products resulted in a 50% increase in ‘ever smokers’, the rate of 11–15 year old ‘ever smokers’ would be 26% (instead of the current 39%) if these were prohibited. The 13 percentage point gap between these two figures – the supposed effect of existing advertising and display – may be associated with $(13 * 0.23) = 3\%$ of the 11–15 year old sample being regular smokers. Using a birth cohort size of 650,000 births per annum, a 3 percentage point reduction in the number of regular smokers aged 11–15 would yield 19,500 fewer smokers in each annual cohort. If the reduction persists into adulthood (which is likely, as the absence of advertising and display will persist), the estimates in the previous section equate this to 32,400 discounted years of life saved in each annual cohort (monetised as £1.62 billion per annual cohort). When summed across 10 years and discounted appropriately, the figure equals £13.5 billion, which vastly exceeds the total cost of the policy.
39. Clearly, the effect size in the Henriksen study is very large – and, as stated above, UK point of sale advertising is already quite restrictive, so the comparison is not entirely fair. The effect size in the UK could not reasonably be expected to be of this magnitude. However, it can be shown that only a very small effect size is needed to justify the costs. Following the logic above, but presuming instead that advertising and display of tobacco products yields only a 1–5% (instead

15 Henriksen L. et al. (2004). ‘Association of retail tobacco marketing with adolescent smoking’, *American Journal of Public Health*, 94(12), pp. 2081–2083.

of 50%) increase in the number of 'ever smokers', this results in a 0.09–0.43 percentage point reduction in the number of regular smokers aged 11–15. If this reduction persists into adulthood, despite the fact that this effect size is only a fraction of the effect size in the Henriksen study, this still yields 963–4,632 discounted years of life saved per annual cohort (monetised as £48.2 million to £231.6 million per annual cohort). When summed across 10 years and discounted appropriately, this still equals £400 million to £1.93 billion, which again exceeds the cost of the policy by a considerable margin.

40. By reducing underage sales, the policy will help increase compliance with the law on underage sales.
41. Additionally, given the evidence set out earlier, the policy may also make it easier to successfully quit smoking. A discounted benefit of £57,300 was derived above for a randomly chosen adult who successfully quits smoking, so even if only a small number of quitters were helped by the measure, it would still make a significant contribution to offsetting the costs.
42. The overall benefit of the policy is estimated to be £48.2 million to £231.6 million per annum, or **£400 million to £1.93 billion** when discounted over 10 years.

Implications of the cost-benefit analysis

43. Option 2 has a **£314.5 million – £1.93 billion** net benefit over a 10-year time horizon. A best estimate of the net benefit (**£1.09 billion**) is obtained by using a 3% reduction (instead of a 1–5% reduction) in the calculations above.

Specific Impact Tests: Checklist

Use the table below to demonstrate how broadly you have considered the potential impacts of your policy options.

Ensure that the results of any tests that impact on the cost-benefit analysis are contained within the main evidence base; other results may be annexed.

Type of testing undertaken	Results in evidence base?	Results annexed?
Competition Assessment	No	Yes
Small Firms Impact Test	No	Yes
Legal Aid	No	No
Sustainable Development	No	No
Carbon Assessment	No	No
Other Environment	No	No
Health Impact Assessment	Yes	Yes
Race Equality	No	Yes
Disability Equality	No	Yes
Gender Equality	No	Yes
Human Rights	No	Yes
Rural Proofing	No	No

Appendices

Specific impact tests

Competition assessment

1. Option 2 would not directly limit the number or range of suppliers.
2. Option 2 is unlikely to indirectly limit the number or range of suppliers. Because the regulations would apply to all tobacco retailers (specialist tobacconists excepted), the proposal does not significantly raise the costs for some existing suppliers relative to others. The proposal may slightly increase the cost of entering an affected market, but any regulation would be sufficiently flexible to enable compliance with the policy at a low cost (e.g. through the use of a screen or curtain).
3. Option 2 reduces the ability of suppliers to advertise their products, and as such may have a marginal effect on competition. Because a plain price list will be permitted in all cases, the provision of price information to consumers will not be distorted.
4. Option 2 is not likely to reduce the incentive to compete vigorously.

Small firms impact test

5. Option 2 will impact upon small businesses due to the costs of compliance. The Government has engaged with, and received cost estimates from, representatives of small businesses, such as the Association of Convenience Stores, which represents small retailers, and the Imported Tobacco Products Advisory Council, which represents retailers of specialist tobacco products, prior to the publication of this consultation. We would welcome feedback from independent retailers and newsagents.
6. The Government will further engage with representatives of small businesses of the type likely to be affected by the options set out in this impact assessment during the consultation process. It has not been possible to perform a small firms impact test prior to the publication of this consultation, but the intention is to continue to work closely with small businesses to conduct such a test for any final impact assessment.

Health

7. The proposed options will result in a reduction in the uptake of smoking and smoking rates among young people in particular, as well as a potential incidental reduction in smoking by adults. As stated (and quantified) in the cost-benefit analysis above, a reduction in the number of people who smoke will have a beneficial impact on the health of the population by reducing the incidence of smoking-related morbidity and mortality. It will also have a wider impact on the general well-being of the population through children taking less time off school and adults taking less time off work due to smoking-related illness.

Age

8. The proposed options are likely to impact differently on people on grounds of their age. Although the proposed options would be population-wide policy, there is evidence that point of sale displays of tobacco have a particularly strong influence on children and young people.^{16,17} The proposed options would also impact on adults and smokers of all ages who are trying to quit.
9. The differential impact of the proposed options on children and young people would be a positive impact because it would help to reduce the uptake of smoking and smoking rates in this age group.

Race and ethnicity

10. The proposed options are not likely to impact differently on people on grounds of their race or ethnicity. The proposed options would be population-wide policy that will affect all people equally and will not differentiate on the grounds of race or ethnicity.
11. Some ethnic and racial groups have higher smoking rates than the general adult population, for example Bangladeshi men.¹⁸ However, the Department of Health is not aware of any evidence of tobacco point of sale display restrictions or prohibitions impacting differently on certain ethnic or racial groups.

Disability, transgender, religion or belief and sexual orientation

12. The proposed options are not likely to impact differently on people on grounds of their disability, transgender, religion or belief, or sexual orientation. The proposed options would be population-wide policy that affects all people equally and does not differentiate on grounds of disability, transgender, religion or belief, or sexual orientation.

Gender

13. The proposed options are not likely to impact differently on people on grounds of their gender. The proposed options would be population-wide policy that will affect all people equally and will not differentiate on the grounds of gender.

Human rights

14. The proposed options would prohibit or restrict the display of tobacco at point of sale in retail outlets. We do not expect there to be any significant human rights impacts. There may be concern that restricting or prohibiting the display of tobacco at point of sale is a limit on freedom of commercial expression under Article 10 of the European Convention on Human

16 Pierce J., Choi W., Gilpin E. et al. (1998). 'Tobacco industry promotion of cigarettes and adolescent smoking', *Journal of the American Medical Association*, 279(7), pp. 511–515.

17 Henriksen L. et al. (2004). 'Association of retail tobacco marketing with adolescent smoking', *American Journal of Public Health*, 94(12), pp. 2081–2083.

18 NHS Information Centre (2007). *Statistics on Smoking: England, 2007*. NHS Information Centre, Leeds.

Rights. However, freedom of commercial expression is treated as less significant than freedom of political expression, and the protection of public health is a very important counterbalance to unrestricted commercial expression. Member states have a certain margin of appreciation in assessing the necessity of interference with commercial freedom of expression. The national authorities of Member States are best placed to determine the right balance between the competing interests of freedom of expression and public health.

Measuring the impact of the policy

15. The annual *Smoking, drinking and drug use among young people in England* survey by the Information Centre measures smoking prevalence among young people aged 11–15. The General Household Survey measures the smoking prevalence among people aged 16–19 years, and 20–24 years.
16. From the results of these two surveys, it will be possible to measure the trends in smoking rates of children and young people, as well as the trends in smoking prevalence of the general adult population.
17. However, a multi-faceted response is necessary to effectively tackle tobacco use, and a number of policies and initiatives to help reduce smoking prevalence will be active at any one time. Therefore, trends in smoking rates among young people and the adult population generally cannot be solely attributed to any one policy.

Technical appendix

18. This technical appendix describes the method and data sources behind the estimation of:
 - a) the discounted number of life years saved for each young person who does not take up smoking;
 - b) the discounted number of life years saved for a randomly chosen adult who quits smoking today. This figure is lower, as some harm may already have been done by past smoking.
19. To convert the above figures into a monetary value, a standard value of £50,000 per life year is applied. Both estimates take account of the fact that many smokers quit during their lifetime, thus reducing the expected number of life years lost from starting to smoke in the first place, and reducing the expected number of life years gained by quitting today.
20. The following main sources of data are used:
 - a) General Household Survey (2006) source data. Used to identify the age distribution of smokers and the relationship between age and the percentage of smokers who have quit.
 - b) Doll et al.¹⁹ Reports the impact of smoking on mortality, split by age of quitting smoking (if applicable).

19 Doll R., Peto R., Boreham J. and Sutherland I. (2004). 'Mortality in relation to smoking: 50 years' observations on male British doctors', *British Medical Journal*, 328, pp. 1519.

- c) Office for National Statistics (ONS) period life tables, United Kingdom, 2004–06.²⁰ Reports population mortality estimates. Used to transform the outputs of the doctors' study into life years saved.

21. The steps common to both estimates are listed below:

- a) **Identify an estimate of the percentage of smokers who have quit by each year of age.** Data from GHS (2006)²¹ are used here. The percentage who have quit increases at a fairly steady and constant rate as age increases. A linear relationship was therefore identified between age and the percentage who have quit; the results imply that 18.2% of 'ever smokers' have already quit by age 16, with 1.05% quitting in each year thereafter up to age 94.
- b) **Identify an estimate of the prevalence of smoking at each year of age.** Data from GHS (2006) are used here.²²
- c) **Identify an age distribution for the smoking population.** Again, data from GHS (2006) are used here.²³
- d) **Identify mortality data (by year of age) for non-smokers and for four categories of smoker (as defined by quit age).** Mortality data are taken from Doll et al. (2004, Table 5), which lists number of deaths per 1,000 people at ages 34–44, 45–54, 55–64, 65–74 and 75–84. (These are referred to below as the five age bands.) This information is presented at each age band for lifelong non-smokers, as well as:
- those who have quit at age 35–44;
 - those who have quit at age 45–54;
 - those who have quit at age 55–64; and
 - those who continue to smoke beyond age 65.

These four categories of smoker are used throughout the calculations, and are referred to as 'quit age bands'. The data are converted into relative risks by dividing the number of deaths per 1,000 in each of these four categories by the equivalent number of deaths (i.e. the number of deaths in the same age band) for the lifelong non-smokers. The following formulae are then applied, which calculate mortality rates at each year of age (from 0 to 100) for smokers and non-smokers respectively:

- Smokers' mortality at age $x = M * (r / (pr + 1 - p))$.
- Non-smokers' mortality at age $x = M * (1 / (pr + 1 - p))$.
- Where M is the mortality estimate from the ONS life tables for age x , r is the relative risk at age x , and p is the prevalence (expressed as a proportion) at age x .

20 Available at <http://www.statistics.gov.uk/StatBase/Product.asp?vlnk=14459&Pos=&ColRank>

21 Variables 'age' and 'cigsmk1' were used – the latter identifies 'ex-smokers', 'current smokers' and 'never smokers'. For each year of age, the percentage of smokers who have quit equals the number of 'ex-smokers' divided by the sum of 'ex-smokers' and 'current smokers'.

22 Prevalence at each year of age was defined as the number of current smokers (as indicated by the variable 'cigsmk1') at each age, divided by the total number of individuals of that age in the sample.

23 The variable 'age' was used on the subset of respondents who are current smokers (as indicated by the variable 'cigsmk1').

- The above formulae are calculated for each year of age, for each sex and for each of the four categories of smoker, as the relative risks differ between quit age categories and population mortality differs between the sexes.

- e) **Identify the number of life years lost (by year of age) for each combination of sex and the four categories of smoker.** For each combination of quit age band and sex,²⁴ two life tables are calculated, following the method of Chiang (1984).²⁵ One of the two life tables starts with the smokers' mortality figures and the other starts with the non-smokers' mortality figures (both for each year of age, and as calculated above). Each life table models a birth cohort of 100,000 children; one column in particular measures the total number of life years lived by the cohort for each year of age. For each year of age, the difference in this column between the two life tables is calculated and divided by 100,000 to convert the value into the expected number of life years lost per capita (for that age). The sum of these values across all years of age (from 0 to 100) equals the number of life years lost by the specified combination of quit age band and sex.
- f) **Discount the numbers of life years lost, as calculated in the previous step.** As the life years lost occur in future years of the cohort's life, they should be discounted appropriately. The discount rates used are equal to Green Book rates minus 2%. The 'minus 2%' takes account of the fact that the monetary value per life year (which is applied later on) can be expected to grow at the same rate as real economic growth. The 2% figure for this is taken from the Social Rate of Time Preference assumptions underlying the Green Book discount rates. The sum of the discounted numbers of life years lost at each year of age equals the discounted number of life years lost by the specified combination of quit age band and sex.

22. The end results of these calculations are presented in the following table. The identified relationship between age and the percentage of smokers who have quit is used to calculate the percentages in the second column.

Quit age band	Percentage of smokers in this band	Change in life years lived for this band (discounted, male)	Change in life years lived for this band (discounted, female)
Under 35	38.2	0.00	0.00
35 to 44	10.5	-0.85	-0.66
45 to 54	10.5	-2.75	-2.34
55 to 64	10.5	-3.48	-3.03
65 or over	30.2	-4.49	-4.15

23. The benefit (in discounted life years) for each child who does not take up smoking is estimated as follows:
- a) A weighted average of the number of life years saved for male children is calculated, with the percentage of smokers who quit in each quit age band being used to weight the life expectancy penalties for those bands.
- b) A similar weighted average is calculated for female children.

²⁴ For example, one combination considers male smokers who quit at age 35–44.

²⁵ Chiang C. (1984). *The Life Table and its Applications*. Krieger, Malabar, Florida.

- c) The resulting male and female estimates are then downscaled to 83% and 72% of their calculated value, respectively. This reflects the fact that the median doctor from the doctors' study smoked 18 cigarettes per day, whereas current averages for men and women are lower: 15 and 13 respectively (GHS 2006²⁶). Current smokers can therefore be expected to experience less harm.
- d) The resulting downscaled estimates are then monetised with a value of £50,000 per life year.

24. **Therefore, the benefit for each child who does not take up smoking:**

- a) Males: 1.75 life years, i.e. £87,559.
- b) Females: 1.57 life years, i.e. £78,703.

25. The benefit (in discounted life years) for a randomly chosen adult who quits smoking is estimated as follows:

- a) The aforementioned five age bands for adult smokers are also used here: those aged (i) under 35, (ii) 35–44, (iii) 45–54, (iv) 55–64, and (v) over 65. The percentage of smokers that quit in each quit age band is then considered, *given that the smoker has already reached one of age categories (i) to (v) above*. For example, 10.5% of smokers quit in the 55–64 age band, whereas 30.2% go on to become lifetime smokers. For an individual who is already aged 55–64, it must be that $10.5\% / (10.5\% + 30.2\%) = 25.9\%$ will quit in the 55–64 age band, whereas the remaining 74.1% continue to smoke over the age of 65.
- b) For each category of smoker age, the percentage of smokers who quit in each quit age band (as adjusted above) is multiplied by the life year penalty associated with each quit age band. Obviously, as we move towards the older age bands, fewer and fewer quit age bands enter into the calculation (as it is not possible, say, to quit smoking at 35–44 if you are already aged 45–54). This calculation gives the expected number of life years lost given that the smoker may quit at some point in the future. The calculated values for the older age groups are larger, as they are more likely to become lifelong smokers.
- c) For each age band, the previous table indicates the number of life years that would be lost anyway if the smoker were to quit at their current age. This number is higher for the older age groups, as more harm has already been done. For each age band, these values are subtracted from the numbers calculated in the previous bullet. This gives the number of life years that could be reclaimed if the smoker were to stop smoking at their current age.
- d) GHS (2006) data on the age distribution of smokers is used to weight the number of life years that could be saved in each age band. This yields a final estimate of the number of life years that could be saved if a random smoker were to quit today.

26. **Therefore, the benefit for each adult who decides to quit smoking:**

- a) Males: 1.18 life years, i.e. £58,884.
- b) Females: 1.12 life years, i.e. £55,755.

26 Goddard E. (2008). *General Household Survey 2006: Smoking and drinking among adults, 2006*. Office for National Statistics, Newport.

27. For the following reasons, the benefit estimates described above are conservative:
- a) They do not take account of the improved quality of life that results from quitting smoking. For example, a quitter may escape diseases that reduce their quality of life as well as reduce their life expectancy (such as chronic obstructive pulmonary disease).
 - b) It is assumed that no harm is incurred by smoking over the age of 84. There is likely to be some harm here (which would increase the measured benefits if counted), but there is a lack of precise data. In any case, as the cohort is fairly small by this age, the results are not particularly sensitive to this assumption. Even assuming that the relative risk for those aged 84 also holds for those who are aged 84 and over, the discounted 'child who does not start smoking' benefits only increase by less than 5%.
 - c) It is assumed in this assessment that no harm is incurred by smoking under the age of 35. Again, there is likely to be a benefit from not smoking at this age, but there is a lack of precise data.
 - d) It is assumed that quitting after the age of 65 yields no health benefit. There is also likely to be a small benefit here, but again, there is a lack of precise data.
 - e) The estimates do not take account of the fact that the resulting reduced smoking prevalence would reduce demand for stop smoking goods and services. The economic resources saved could be used for other purposes.
28. Other limitations of the estimate include:
- a) It is assumed that the same smoking mortality impacts hold for both men and women. The Doll et al. (2004) study only covers male doctors.
 - b) It is assumed that the average daily number of cigarettes smoked throughout life is linearly related to the number of life years lost. The relationship is unlikely to be perfectly linear in practice.
 - c) The Doll et al. (2004) study does not explicitly adjust for confounding factors (although it does control for social class, given that its sample consists only of doctors). For example, if smokers are also more likely to drink heavily, this may exaggerate the mortality impact of smoking. However, a similar cohort study (based in The Netherlands)²⁷ does adjust for a long list of confounding factors, including socio-economic status, alcohol use and body mass index. The authors conclude that adjusting for confounding factors reduces the estimated number of (undiscounted) life years lost due to smoking by half a year. This is a fairly small effect given that the estimated life expectancy loss to smokers (including the adjustment for potential confounders) is still equal to seven years. Given that the estimates presented in this annex are discounted and take account of future quit propensities, any reduction to take account of confounding factors would be considerably less than half a life year.

27 Streppel M., Boshuizen H., Ocke M., Kok F. and Kromhout D. (2007). 'Mortality and life expectancy in relation to long-term cigarette, cigar and pipe smoking: the Zutphen Study', *Tobacco Control*, 16, pp. 107–113. The Zutphen Study, based in Zutphen, The Netherlands, covers 1,373 men born between 1900 and 1920 and studied between 1960 and 2000.

Annex 4

Consultation-stage impact assessment for limiting young people's access to tobacco products

Summary: Intervention & Options

Department /Agency:

Department of Health

Title:

Impact assessment of mandatory age-restriction technology or prohibition for tobacco vending machines

Stage: Consultation

Version: Completed

Date: 31 May 2008

Related Publications: *Consultation on the Future of Tobacco Control* (2008)

Available to view or download at:

www.dh.gov.uk/consultations

Contact for enquiries: Tobacco Consultation Officer

Telephone: N/A

What is the problem under consideration? Why is government intervention necessary?

Tobacco smoking is proven to cause serious harm to the health of the smoker. It also poses significant externalities to the rest of society.

Those under the age of 18 are uniquely vulnerable consumers in that they are not yet fully able to understand the risks of tobacco consumption. Government intervention is therefore justified to prevent people in this age group from purchasing tobacco products. However, the voluntary code of practice governing the siting of tobacco vending machines (the NACMO Guidance) does not sufficiently restrict young people's access to tobacco from this source.

What are the policy objectives and the intended effects?

The policy objective is to reduce smoking take-up, prevalence and/or the number of cigarettes smoked by under-18s, thus creating a future beneficial effect on public health.

Because 17% of regular smokers (or 14% of all smokers, including occasional smokers) aged 11–15 report that cigarette vending machines are their usual source of tobacco, further restricting access to these machines should contribute to the above objective.

What policy options have been considered?

1. Retain the status quo, including the voluntary NACMO guidance on the siting of vending machines.
2. Introduce age-restriction mechanisms onto all tobacco vending machines.
3. Prohibit the sale of tobacco from vending machines.

When will the policy be reviewed to establish the actual costs and benefits and the achievement of the desired effects? Any future policy would be reviewed three years after the date of implementation of the policy.

Ministerial Sign-off For consultation-stage impact assessments:

I have read the impact assessment and I am satisfied that, given the available evidence, it represents a reasonable view of the likely costs, benefits and impact of the leading options.

Signed by the responsible Minister:

Dawn Primarolo MP
Minister of State for Public Health

Date: 31 May 2008

Summary: Analysis & Evidence

Policy Option: 2

Description: Introduce age-restriction mechanisms onto all tobacco vending machines

ANNUAL COSTS		Description and scale of key monetised costs by 'main affected groups' One-off cost to vending machine operators of fitting a remote control system to 69,000 vending machines (over two years), including parts, labour and the cost of an exchange programme on site. Annual time cost (to staff and customers) of age checks.
One-off (Transition)	Yrs	
£ 4,325,000	2	
Average Annual Cost (excluding one-off)		
£ 715,000		Total Cost (PV) £ 14.2m
Other key non-monetised costs by 'main affected groups' Marginal increase in maintenance costs as a result of the installation of a remote control system to each machine. Marginal increase in enforcement costs (e.g. possible increased number of test purchases). Cost to the Exchequer of a small reduction in tax revenue.		

ANNUAL BENEFITS		Description and scale of key monetised benefits by 'main affected groups' Life years gained by underage smokers from smoking (on average) 0.45 fewer cigarettes per day; range is 10%–50% of the resulting figure.
One-off	Yrs	
£ 0		
Average Annual Benefit (excluding one-off)		
£ 34.8m to £174m		Total Benefit (PV) £ 289m to £1.45bn
Other key non-monetised benefits by 'main affected groups' Reduced morbidity arising from reduced cigarette consumption. Benefit to affected consumers of a small reduction in tax revenue.		

Key Assumptions/Sensitivities/Risks Enforcement is fully effective. Firms given two years to comply. Benefits range is due to uncertainty as to exactly how many young smokers would be affected.

Price Base Year 2008	Time Period Years 10	Net Benefit Range (NPV) £ 274.8m to £1.45bn	NET BENEFIT (NPV Best estimate) £ 565m
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What is the geographic coverage of the policy/option?	England & Wales			
On what date will the policy be implemented?	N/A			
Which organisation(s) will enforce the policy?	Trading Standards			
What is the total annual cost of enforcement for these organisations?	£ 0			
Does enforcement comply with Hampton principles?	Yes			
Will implementation go beyond minimum EU requirements?	Yes			
What is the value of the proposed offsetting measure per year?	£ 0			
What is the value of changes in greenhouse gas emissions?	£ 0			
Will the proposal have a significant impact on competition?	No			
Annual cost (£-£) per organisation (excluding one-off)	Micro 0	Small 0	Medium 0	Large No firms
Are any of these organisations exempt?	No	No	N/A	N/A

Impact on Admin Burdens Baseline (2005 Prices)		(Increase – Decrease)	
Increase of £	Decrease of £	Net Impact	£

Key:	Annual costs and benefits: Constant Prices	(Net) Present Value
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Summary: Analysis & Evidence

Policy Option: 3	Description: Prohibit the sale of tobacco from vending machines
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COSTS	ANNUAL COSTS		Description and scale of key monetised costs by 'main affected groups' Immediate one-off cost: the total value of UK cigarette vending machines (69,000 machines at £375 each). Annual costs: £39.6m annual cost to Exchequer of lost tobacco duty and associated VAT. £20.9m annual cost to legitimate smokers who no longer have the convenience of vending machines.
	One-off (Transition)	Yrs	
	£ 26m	0	
	Average Annual Cost (excluding one-off)		
£ 60.5m			Total Cost (PV) £ 529m
Other key non-monetised costs by 'main affected groups' Costs arising from the bringing forward of disposal costs for existing cigarette vending machines. Marginal increase in enforcement costs.			

BENEFITS	ANNUAL BENEFITS		Description and scale of key monetised benefits by 'main affected groups' Life years gained by underage smokers from smoking (on average) 0.45 fewer cigarettes per day; range is 10%–50% of the resulting figure.
	One-off	Yrs	
	£ 0		
	Average Annual Benefit (excluding one-off)		
£ 34.8m to £174m			Total Benefit (PV) £ 289m to £1.45bn
Other key non-monetised benefits by 'main affected groups' Reduced morbidity arising from reduced cigarette consumption. Possible gain in quality and length of adult smokers' lives if cigarettes become less readily accessible.			

Key Assumptions/Sensitivities/Risks Enforcement is fully effective. Benefits range is due to uncertainty as to exactly how many young smokers would be affected.

Price Base Year 2008	Time Period Years 10	Net Benefit Range (NPV) - £ 240m to £921m	NET BENEFIT (NPV Best estimate) £ 49m
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What is the geographic coverage of the policy/option?	England & Wales				
On what date will the policy be implemented?	N/A				
Which organisation(s) will enforce the policy?	Trading Standards				
What is the total annual cost of enforcement for these organisations?	£ 0				
Does enforcement comply with Hampton principles?	Yes				
Will implementation go beyond minimum EU requirements?	Yes				
What is the value of the proposed offsetting measure per year?	£ 0				
What is the value of changes in greenhouse gas emissions?	£ 0				
Will the proposal have a significant impact on competition?	No				
Annual cost (£-£) per organisation (excluding one-off)	<table style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 25%; text-align: center;">Micro £85k</td> <td style="width: 25%; text-align: center;">Small £85k</td> <td style="width: 25%; text-align: center;">Medium £9m</td> <td style="width: 25%; text-align: center;">Large No firms</td> </tr> </table>	Micro £85k	Small £85k	Medium £9m	Large No firms
Micro £85k	Small £85k	Medium £9m	Large No firms		
Are any of these organisations exempt?	<table style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 25%; text-align: center;">No</td> <td style="width: 25%; text-align: center;">No</td> <td style="width: 25%; text-align: center;">N/A</td> <td style="width: 25%; text-align: center;">N/A</td> </tr> </table>	No	No	N/A	N/A
No	No	N/A	N/A		

Impact on Admin Burdens Baseline (2005 Prices)		(Increase - Decrease)
Increase of £	Decrease of £	Net Impact £

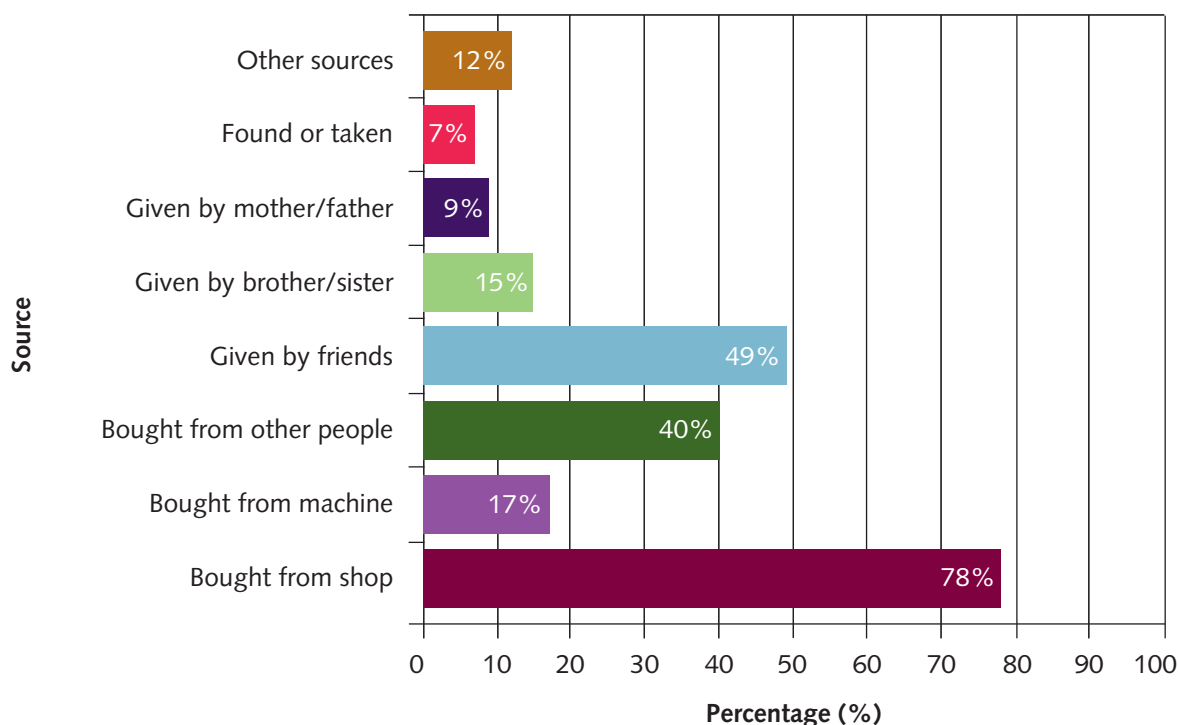
Key:	Annual costs and benefits: Constant Prices	(Net) Present Value
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Evidence Base (for summary sheets)

Background

1. It is illegal to sell tobacco products to those under the age of 18; the age of sale for tobacco products was increased from 16 to 18 on 1 October 2007. However, because of their automated nature, vending machines present a possible means for under-18s to purchase tobacco products.
2. Consequently, voluntary guidance has been issued by the National Association of Cigarette Machine Operators (NACMO) concerning the siting of vending machines. The guidance suggests that vending machines should be sited in supervised, monitored areas so that under-18s are unable to use the machines undetected.
3. Information from NACMO suggests that 78% of machines are located in public houses, with 10% being located in clubs, 7% in hotels or restaurants, 3% in shops, 1% in bingo halls and 1% elsewhere.
4. Nonetheless, survey evidence, as published in the Information Centre's *Smoking, drinking and drug use among young people in 2006*, suggests that vending machines remain a source of tobacco for those aged 11–15. Nonetheless, their importance has significantly decreased in recent years, and they are less commonly cited than other sources of tobacco (such as purchases from shops and being given cigarettes by friends).

Usual sources of cigarettes for regular smokers aged 11–15 in 2006



Usual source of cigarettes for regular smokers aged 11–15, by year

Year	1982	1986	1990	1994	1996	1998	2000	2002	2004	2006
% responding 'bought from machine'	13	19	37	31	32	30	22	22	24	17

Source: NHS Information Centre (2007). *Smoking, drinking and drug use among young people in 2006*. Percentages total more than 100% because respondents could give more than one answer.

5. However, the other common sources of tobacco for young people are already being addressed by other measures such as raising the age of sale, strengthening sanctions against retailers who sell to people under the legal age, enforcement action against smuggling, and through effective media communications campaigns.
6. Because tobacco vending machines account for only 1% of the UK market in tobacco sales, it appears that a disproportionate number of young people under the minimum legal age for sale of tobacco purchase their cigarettes from vending machines.

Rationale for further control on tobacco vending machines

7. Tobacco smoking is proven to cause serious harm to the health of the smoker. It also poses significant externalities to the rest of society and is a leading cause of health inequalities; prevalence is higher among routine and manual groups.
8. Those under the age of 18 are uniquely vulnerable consumers in that they are not yet fully able to understand the risks of tobacco consumption, so appropriate interventions may be justified.
9. Additionally, existing smokers may be unable to reduce their risks due to addiction or lack of information.

Policy options

10. The following policy options are considered:
- (Option 1) Retain the status quo, including the voluntary NACMO guidance on the siting of vending machines.
 - (Option 2) Introduce age-restriction mechanisms onto all tobacco vending machines.
 - (Option 3) Prohibit the sale of tobacco from vending machines.

Types of age-restriction mechanisms and action taken in other countries

11. The following types of age-restriction mechanism may be suitable:
- a) **Electronic age verification:** Tobacco companies provide an electronic ID card (after proof of age has been provided) that allows customers to activate tobacco vending machines. Alternatively, an electronic chip or code is inserted into the tobacco purchaser's ATM card (on proof that the cardholder is 18 years or over). A customer is only able to buy tobacco from the vending machine if they insert the card, which electronically 'awakens' the machine. Such electronic card systems are used in Germany and the Netherlands, and are soon to be introduced in Japan.
 - b) **ID coin mechanism:** Potential purchasers are required to obtain an ID coin from a member of staff. It is then inserted into the tobacco vending machine before purchase. The vending machine cannot be activated without the insertion of an ID coin. This system enables staff to monitor who is purchasing tobacco from the vending machine and to ask for proof of age where necessary. This system is used on a proportion of vending machines in the Republic of Ireland.
 - c) **Remote control:** The vending machine can only be activated by means of a remote control held by a staff member. Potential purchasers need to approach a staff member in order for the machine to be activated. This enables the staff member to ask for proof of age where necessary. Such a system is used in New Zealand.
12. The World Health Organization's (WHO) Framework Convention on Tobacco Control, which was ratified by the UK in 2004, encourages measures that ensure that tobacco vending machines are not accessible to minors. A 2003 European Council Recommendation¹ suggests that Member States should restrict tobacco vending machines to locations accessible to persons over the age set for purchase of tobacco products in national law, or otherwise regulate access to the products sold through such machines in an equally effective way. The WHO European Strategy for Tobacco Control² goes further, stating that strategic national actions to restrict availability of tobacco to young people should include banning its sale through vending machines.

1 Council Recommendation 2003/54/EC of 2 December 2002 on the prevention of smoking and on initiatives to improve tobacco control. Available at: www.europa.eu/scadplus/leg/en/cha/c11574.htm

2 World Health Organization (2002). European Strategy for Tobacco Control. World Health Organization's Regional Office for Europe, Copenhagen.

Costs

Option 2: Introduce age-restriction mechanisms on to all tobacco vending machines

13. According to National Association of Cigarette Machine Operators (NACMO) data, there are around 78,000 cigarette vending machines in the UK. This impact assessment covers only England and Wales, so a population-based scaling factor (derived from ONS mid-2006 estimates) of 0.887 is applied. This yields an estimate of 69,186 cigarette vending machines in England and Wales.
14. Profit-maximising firms would of course opt for the cheapest possible age-verification system that satisfies regulatory requirements.
15. NACMO has suggested that the following costs might be incurred for each vending machine modified:
 - a) ID card system: £300 per machine (excluding labour costs), possibly with an extra cost for telephone line rental. Some 30% of the machine estate could not be converted to use this system. Significant extra costs would be incurred by the provision of personal activation cards; obtaining such cards would also impose an inconvenience (with associated time cost) on customers. If age-verification data were instead included on new bank cards, this would require the agreement (and likely compensation) of UK banks.
 - b) ID coin system: £125 per machine, plus £0.10 per token (excluding labour costs). Assuming 100 tokens per site, the total cost would be £135 per machine.
 - c) Infra-red remote control system: £60 per machine (excluding labour costs).
 - d) £50 in labour costs should be added to all of the above costs, to reflect the cost of fitting the appropriate modification.
 - e) The cost of the cheapest possible conversion (the infra-red system), including labour, would therefore be (£60 + £50) = £110 per machine.
16. Sinclair Collis, a large cigarette machine operator, has suggested slightly different costs:
 - a) ID card system: £300 per machine (presumably excluding labour costs). The extra costs stated above would still apply on top of this.
 - b) ID coin system: £125 per machine, plus £0.10 per token. The company states that *'this takes into account the cost of coin mechanism upgrade (£25–£30) plus labour and fitting, and the required exchange programme on site, although there would also be ongoing operational costs'*.
 - c) Radio frequency remote control system: £70 plus labour costs per machine. This is Sinclair Collis' preferred age-verification system.
 - d) The overall cost of the radio frequency control system must be less than £125 per machine, given that it is Sinclair Collis' preferred mechanism. We make the conservative assumption that the overall cost is £125 per machine.

17. An overall cost of £125 per machine is therefore used in this impact assessment.
18. Using the figure of 69,186 cigarette vending machines in England and Wales, this would yield a **one-off cost of £8.65 million**. The actual figure may be higher if some machines cannot be modified to use a remote control system; however, the estimate also does not take account of economies of scale in modifying the machines. In order to reduce compliance costs, firms would be given two years in which to comply.
19. The radio frequency control system will impose a time cost on staff, who will now have to check identification for younger customers who wish to use the vending machine. It will also impose a time cost on the customers themselves. Consider a time cost of 10 seconds per transaction to both the staff member and the consumer. The Tobacco Manufacturers' Association³ states that (in 2007) 47 billion duty-paid cigarettes were consumed in the UK. Scaling this down for England and Wales (using a scaling factor of 0.887) yields 41.7 billion cigarettes. As 1% of these (i.e. 416 million cigarettes) would have been sold in vending machines, vending machine sales would have been equivalent to 20.9 million packs of 20 cigarettes. These sales are equivalent to 57,901 hours per annum for staff, and 57,901 hours per annum for customers. The Department for Transport 'Value of travel time savings' gives an indication of the value of leisure time: £3.54 per hour at end-1997 prices, or £4.53 per hour in 2007/08 prices.⁴ The Annual Survey of Hours and Earnings (ASHE) states that in 2007, the mean wage of bar staff was £6.01,⁵ or £7.81 when uplifted by 30% to include other costs of employment. These rates value the time cost calculated above at a combined value of **£715,000 per annum**.
20. Any losses resulting from lost sales to under-18s are excluded.
21. The following costs are not yet quantified:
 - a) Any increased maintenance cost arising from the fact that extra equipment has been added to the vending machine.
 - b) Any increase in the cost of enforcement visits. It may be that test purchasing, for example, needs to be expanded to include establishments with vending machines. The number of test purchases would need to be increased in order to maintain the probability that a given establishment is subjected to a test purchase.
22. Overall, option 2 results in a one-off cost of £8.65 million (spread over two years), and an annual cost of £715,000. Summed over 10 years and discounted appropriately, these costs equal **£14.2 million**.

Option 3: Prohibit the sale of tobacco from vending machines

23. NACMO has stated that the tobacco vending machine industry currently:
 - a) Has an annual gross margin of £102 million.

³ See www.the-tma.org.uk/uk-cigarette-consumption.aspx

⁴ Using the HM Treasury GDP Deflator from 1997/98 to 2007/08. See www.hm-treasury.gov.uk/economic_data_and_tools/gdp_deflators/data_gdp_fig.cfm

⁵ Gross hourly pay, Table 14.5a, Annual Survey of Hours and Earnings (2007). See www.statistics.gov.uk/downloads/theme_labour/ASHE_2007/2007_occ4.pdf

- b) Consists of 200 private businesses with a total of around 1,000 employees, and one large business with around 200 employees. This gives a total of 1,200 employees.
 - c) Note that these figures are for the whole of the UK, so will be higher than if they only covered England and Wales (the two countries covered by this impact assessment). As above, a population-based scaling factor of 0.887 would be appropriate.
24. The economic cost of a ban on tobacco vending machines is calculated as the total value of the machines currently used in England and Wales. Given the estimate of 69,186 machines in England and Wales, and an estimate that each vending machine is worth £375 (bearing in mind that the average machine is not new), a **one-off cost of £26 million** is obtained.
25. Although they only represent a small proportion of tobacco sales, if purchases from cigarette vending machines are not fully offset by an increase in cigarette sales elsewhere, this will result in a revenue loss to the Exchequer. To quantify the possible impact on tax revenues, consider that HMRC forecast £7.602 billion tobacco duty revenues in 2008/09 for the UK as a whole.⁶ VAT is levied on top of tobacco duty, yielding a total UK revenue of £8.932 billion. When downscaled for England and Wales (using a population-based scaling factor of 0.887), the estimate becomes £7.923 billion. Using the NACMO estimate that 1% of cigarette sales are from vending machines, and keeping the calculations in the same terms as above, forecast vending machine-associated tax revenue must equal £79.23 million for 2008/09. Assuming that 50% of vending machine cigarette sales are not offset by increased sales elsewhere, the impact on the Exchequer as a result of this policy option is **£39.6 million per annum**.
26. This policy option will result in lost utility to legitimate cigarette machine users; cigarette vending machines are clearly a convenience, for which some consumers are willing to pay. The Tobacco Manufacturers' Association⁷ states that (in 2007) 47 billion duty-paid cigarettes were consumed in the UK. Scaling this down for England and Wales (using a scaling factor of 0.887) yields 41.7 billion cigarettes. As 1% of these (i.e. 416 million cigarettes) would have been sold in vending machines, vending machine sales would have been equivalent to 20.9 million packs of 20 cigarettes. Assuming a marginal willingness-to-pay of £1 per packet for the convenience of using a vending machine, the annual cost of lost convenience to legitimate cigarette users would be **£20.9 million per annum**.
27. The following costs are not yet quantified:
- a) The bringing forward of the cost of disposal of cigarette vending machines. All machines will need to be disposed of at some point, but (due to the policy) this would occur sooner than would otherwise have been the case. Because costs incurred closer to the present are discounted less heavily, bringing forward the disposal would involve some economic cost.
 - b) A marginal increase in the cost of current enforcement visits; such visits would now make a note if a vending machine were still in operation.
28. Overall, the costs of option 3 include a one-off cost of £26 million plus annual costs of £60.5 million. Discounted over 10 years, the total cost is **£529 million**.

⁶ See www.hmrc.gov.uk/stats/tax_receipts/table1-2.pdf

⁷ See www.the-tma.org.uk/uk-cigarette-consumption.aspx

Benefits

Quantifying the monetised benefit of smoking one cigarette less per day

29. The benefits analysis that follows identifies (i) the discounted number of life years lost from each young person who does not start smoking, and (ii) the number of life years saved for a randomly chosen adult smoker who quits smoking. The estimates are adjusted for the fact that smokers may quit their habit in future.
30. It is suggested that the mortality impact of smoking increases linearly (from zero) with each cigarette smoked per day. The ONS publication *Smoking and drinking among adults, 2006* finds that the average number of cigarettes smoked per day is 15 for men and 13 for women. It is possible to calculate the number of life years saved by smoking one cigarette less per day from a young age, given that the individual may quit in the future: for men, it is simply one-fifteenth of the male value calculated in (i) above. For women, it is one-thirteenth of the female value calculated in (i) above.
31. The number of life years saved by a random adult smoking one cigarette less per day, given that they may quit in future, is equal to one-fifteenth of the male value calculated in (ii) above (for men). For women, it is one-thirteenth of the female value calculated in (ii) above.
32. The male and female results are averaged to give an overall value.
33. The results are as follows:

a)	Smoking one cigarette less per day from a young age:	0.12 life years gained £5,950
b)	Smoking one cigarette less per day (random adult):	0.08 life years gained £4,100
34. The following paragraphs explain the derivation of the estimates for (i) and (ii) above. A detailed description of the calculations is provided, including references for all sources of data. The values are discounted in line with Green Book principles and a standard £50,000 value per life year is applied to each.
35. The calculations begin with data from the General Household Survey (2006) on smokers' ages, smoking prevalence and smoking status (i.e. whether the respondents are current smokers, former smokers or have never smoked). The proportion of smokers who have quit as they get older is found to increase at a fairly steady and constant rate (with roughly an extra 1% of smokers quitting at every year of age; 18% of those who have ever smoked by age 16 have already stopped at that age).

36. The seminal 50-year study of smoking mortality in British doctors (by Doll et al., 2004)⁸ is used to obtain mortality rates for the following categories of smoker:
- those who have quit at age 35–44,
 - those who have quit at age 45–54,
 - those who have quit at age 55–64, and
 - those who continue to smoke beyond age 65.
37. Non-smokers' mortality rates are also obtained from this study. The results are combined with smoking prevalence data for the above age groups and the latest Office for National Statistics population mortality data to produce eight sets of two life tables: one life table for non-smokers, and one for the category of smoker under consideration ((a) to (d) above, for both males and females). The differences between each pair of life tables indicate how the smokers' life expectancy loss is distributed between different years of age. The figures are discounted appropriately to take account of the fact that benefits accrued in the future are worth less than benefits accrued today.
38. The results of these calculations are presented in the table below, and are used to calculate the final estimates:

Quit age band	Percentage of smokers in this band	Change in life years lived for this band (discounted, male)	Change in life years lived for this band (discounted, (female)
Under 35	38.2	0.00	0.00
35 to 44	10.5	-0.85	0.66
45 to 54	10.5	-2.75	-2.34
55 to 64	10.5	-3.48	-3.03
65 or over	30.2	-4.49	-4.15

39. For each sex, the number of life years saved for each young smoker (given that they may have quit anyway in future) is calculated by weighting the number of life years lost in each quit age band by the percentage of smokers who quit in that age band.
40. For each sex, the estimated monetary benefit for each adult who is induced to quit smoking is derived by a similar calculation to above, albeit with different bands for adult smokers' current age. These are (a) under 35, (b) 35–44, (c) 45–54, (d) 5–64, and (e) over 65. For each of these age bands, the results are then weighted by the percentage of smokers in each age band in order to give a final figure.
41. The calculations described in the two paragraphs above deliver two results: one for men, and one for women. Each result is adjusted downwards to take account of the fact that the doctors in the study by Doll et al. (2004) consumed a median of 18 cigarettes per day; current average consumption is less than this, at 15 per day for men and 13 per day for women. Lastly, the male and female results are averaged to give a single result for each of the two paragraphs above.

8 Doll R., Peto R., Boreham J. and Sutherland I. (2004). 'Mortality in relation to smoking: 50 years' observations on male British doctors', *British Medical Journal*, 328, p. 1519.

42. A full discussion follows but the above calculations are argued to be conservative. For example, improvements in the quality of life from quitting smoking (or never starting to smoke) – such as avoiding the morbidity associated with various smoking-related diseases – are not taken account of in the above calculations. Other limitations of the analysis are also discussed.

Quantifying the benefits of policy option 2

43. The data presented above state that for 17% of regular smokers aged 11–15, a vending machine is a usual source of tobacco products. However, respondents were allowed to specify more than one ‘usual source’, meaning that the responses sum to 227% (instead of 100%). It seems unreasonable to state that 17% of the respondents’ cigarettes came from vending machines; the 17% estimate is therefore adjusted downwards to 7.5% (this figure has been chosen because, if all the other responses were adjusted downwards by the same factor, they would then sum to 100%).
44. It is therefore instructive to consider the health implications of a 7.5% average reduction in under-18s’ cigarette consumption. The publication *Smoking, drinking and drug use among young people in England in 2006* finds that 11–15 year olds smoke an average of six cigarettes per day. A 7.5% reduction in this figure would yield, on average, 0.45 fewer cigarettes per day. Note that this figure is an average; some children may completely stop smoking, whereas others may not reduce their smoking at all.
45. Consider the scenario in which this average reduction in daily cigarette consumption persists throughout the cohort’s life. Using the estimates provided in the previous section, and taking averages across the male and female results, 0.05 life years are saved per person (monetised as £2,675).
46. Using a birth cohort size of 650,000 per annum and a smoking prevalence of 20% for 16–19 year olds (as taken from *Smoking and drinking among adults, 2006*), 130,000 smokers per year would be affected by the proposed policy. Some 6,950 life years would be saved per annum (i.e. per cohort), monetised at a total of £348 million per annum.
47. The reduction needs to persist throughout the cohort’s lifetime. It is likely that this will be the case for some individuals, especially those who do not start smoking because of the difficulty of buying from vending machines; but it may not be the case for all individuals. There is also the possibility that young people will be very effective at finding alternative sources of cigarettes (thus blunting the policy benefits), although recent changes (such as the new minimum age of sale) imply that they may not be entirely successful. The benefits are therefore presented as a range, equal to 10%–50% of the values calculated above.
48. Overall, the estimated (health) benefits therefore range from £34.8 million to £174 million per annum, giving a figure of **£289 million to £1.45 billion** when discounted over 10 years.
49. The above calculations implicitly assume that the age-verification system will be fully effective; if this were not the case, it would bring the policy benefits closer to zero. Evidence from the USA indicates that locking mechanisms restricting access to tobacco vending machines are not

necessarily effective at preventing people under age from accessing tobacco.⁹ However, better enforcement and better-designed restriction mechanisms (e.g. electronic systems where it is not possible to forget to re-enable the lock) may help mitigate this problem.

Quantifying the benefits of policy option 3

50. The health benefit should be calculated on the same basis as for option 2, with the same caveats. This yields a range of £34.8 million to £174 million per annum, or **£289 million to £1.45 billion** when discounted over 10 years.
51. Tax revenue is a transfer of benefit from tobacco consumers to the community (the Exchequer). To the extent that smokers may no longer buy as much tobacco, part of this transfer ceases – there is no offsetting gain to the consumer themselves or to the Exchequer.
52. The above figures implicitly assume full compliance with the vending machine ban. In reality, full compliance may not occur.
53. Because this policy option involves a full ban on vending machines, it may also reduce adult cigarette consumption (in that it makes cigarettes slightly more difficult to acquire). As stated above, one less cigarette smoked per day is estimated to result (for a randomly chosen adult smoker) in a gain of 0.08 life years (or £4,100). It might be argued that any life years saved here are not a legitimate benefit, as adults are entitled to smoke if they wish, but issues such as addiction may also be taken into account.

Implications of the cost-benefit analysis

54. Option 2 (age-restriction mechanisms) has a net benefit of £274.8 million to £1.45 billion compared with -£240 million to £921 million for option 3.
55. Central net benefit figures of £565 million (option 2) and £49 million (option 3) are calculated using 20% of the figure presented in the central benefit calculation. The upper and lower bounds are based on 10% and 50% of this calculation.

9 Forster J., Hourigan M., and Kelder S. (1992). 'Locking Devices on Cigarette Vending Machines: Evaluation of a City Ordinance', *American Journal of Public Health*, 82(9), pp. 1217–1219.

Specific Impact Tests: Checklist

Use the table below to demonstrate how broadly you have considered the potential impacts of your policy options.

Ensure that the results of any tests that impact on the cost-benefit analysis are contained within the main evidence base; other results may be annexed.

Type of testing undertaken	Results in evidence base?	Results annexed?
Competition Assessment	No	Yes
Small Firms Impact Test	No	Yes
Legal Aid	No	No
Sustainable Development	No	No
Carbon Assessment	No	No
Other Environment	No	No
Health Impact Assessment	Yes	Yes
Race Equality	No	Yes
Disability Equality	No	Yes
Gender Equality	No	Yes
Human Rights	No	Yes
Rural Proofing	No	No

Appendices

Specific impact tests

Competition assessment for option 2 (age-verification systems)

1. Option 2 would not directly limit the number or range of suppliers.
2. It is possible that option 2 may indirectly limit the number or range of suppliers. Because the regulations would apply to all vending machine operators, the proposal does not significantly raise the cost for some existing operators relative to others (other than through the number of machines owned). However, the proposal will increase the cost of entering the market, due to the need to purchase age-restriction hardware for each vending machine that the proposed entrant plans to operate.
3. Option 2 does not limit the ability of suppliers to compete.
4. Option 2 does not limit the incentive for suppliers to compete vigorously.

Competition assessment for option 3 (prohibition of cigarette vending machines)

5. Option 3 would limit the range of suppliers, in that cigarettes could now only be purchased from suppliers who do not use vending machines. It should nonetheless be noted that only 1% of UK cigarettes are purchased from vending machines.
6. Aside from the obvious implication that vending machine operators will no longer be able to compete, option 3 is unlikely to further limit the ability of suppliers to compete.
7. Option 3 is unlikely to limit the incentive for suppliers to compete vigorously.
8. Option 3 will have a greater impact on competition than option 2.

Small firms impact test

9. The proposed options are likely to impact upon small businesses as there would be costs in complying with the options. The Government has engaged with, and received cost estimates from, representatives of small businesses (such as the National Association of Cigarette Machine Operators, which represents small vending machine operators) prior to the publication of this consultation. We would welcome feedback from independent vending machine operators.
10. The Government will further engage with representatives of small businesses of the type likely to be affected by the options set out in this impact assessment during the consultation process. It has not been possible to perform a small firms impact test prior to the publication of this consultation, but the intention is to continue to work closely with small businesses to conduct such a test for the final impact assessment.

Health

11. The proposed options may result in a reduction in the number of cigarettes smoked by under-18s. As stated (and quantified) in the cost-benefit analysis above, this reduction would have a beneficial impact on the health of the population by reducing the incidence of smoking-related morbidity and mortality. It may also have a wider impact on the general well-being of the population through children taking less time off school and adults taking less time off work due to smoking-related illness.

Age

12. The proposed options are likely to impact differently on people on grounds of their age.
13. Age-restriction mechanisms should prevent children and young people under the legal age of sale of tobacco (i.e. under 18 years old) from accessing tobacco from vending machines. This age restriction will not affect adult smokers, who will still be able to access tobacco from this source.
14. A prohibition on the sale of tobacco from vending machines would prevent all smokers from purchasing their tobacco from vending machines. Whereas adult smokers would be able to purchase tobacco from other sources, such as supermarkets and newsagents, children and young people under the age of 18 years would not be able to purchase tobacco from these alternative sources.
15. The differential impact of the proposal options on young people under the age of 18 years would be a positive impact because it would help to reduce smoking levels in this age group.

Race and ethnicity

16. The proposed options are not likely to impact differently on people on grounds of their race or ethnicity. The proposed options would be population-wide and will affect all adult smokers equally; they would not differentiate on the grounds of race or ethnicity.
17. Some ethnic and racial groups have higher smoking rates than the general adult population, for example Bangladeshi men.¹⁰ However, there is no evidence of certain ethnic or racial groups purchasing their tobacco from vending machines more frequently than the population as a whole.
18. A policy that prohibits the sale of tobacco from one particular source could, in theory, have more impact on ethnic or racial groups with higher smoking rates than the general population as a whole. However, adult smokers in these ethnic and racial groups could purchase their tobacco from other sources, such as supermarkets and newsagents, and it therefore should not have a differential impact.

10 NHS Information Centre (2006). *Health Survey for England 2004*, Volume 1, *The Health of Minority Ethnic Groups*.

19. An age-restriction mechanism on tobacco vending machines would not have a differential impact on people aged 18 and over on the grounds of their race or ethnicity, because adults would still be able to purchase tobacco from vending machines.
20. The survey used for establishing the smoking prevalence of young people aged 11–15 years (the *Smoking, drinking and drug use among young people in England* survey) does not collect data on the smoking rates of the different ethnic and racial groups. It is therefore not possible to assess whether the proposed policy of either prohibiting or restricting the sale of tobacco from vending machines will impact differently on people under the age of 18 years on grounds of race or ethnicity. There is also no evidence available on whether smokers in certain ethnic or racial groups under the age of 18 years access vending machines more frequently than other ethnic or racial groups. In any event, any impact will be a beneficial impact by reducing the rates of smoking and the uptake of smoking within that racial or ethnic group.

Gender

21. The proposed options are not likely to impact differently on people over the age of 18 years on grounds of their gender for the same reasons set out in more detail above in relation to age, ethnicity and race. Briefly, the reasons are that there is no evidence of one gender purchasing tobacco from vending machines more frequently than the other gender. Age-restriction mechanisms on tobacco vending machines would not affect adult smokers. If there were a prohibition on the sale of tobacco from vending machines, adult smokers could purchase their tobacco from alternative sources. The proposed options would affect all adult smokers equally and would not differentiate on grounds of gender.
22. However, the proposed options are likely to impact differently on people under the age of 18 years on grounds of their gender. Girls aged 11–15 years are more likely to be regular smokers than boys in the same age group. Therefore, a proposed policy that restricts access to tobacco for people under the age of 18 may affect more girls than boys. However, this differential impact will be a beneficial one in helping to reduce smoking levels among young people, in particular young females.

Disability, transgender, religion or belief and sexual orientation

23. The proposed options are not likely to impact differently on people on grounds of their disability, transgender, religion or belief, or sexual orientation. The proposed options would be population-wide policy that affects all adult smokers equally and does not differentiate on grounds of disability, transgender, religion or belief, or sexual orientation.

Human rights

24. The proposed options prohibit or restrict access to tobacco from vending machines. We do not expect there to be any significant human rights impacts.

Measuring the impact of the policy

25. The annual *Smoking, drinking and drug use among young people in England* survey measures the smoking prevalence of boys and girls aged 11–15. The General Household Survey measures the smoking prevalence of men and women aged 16–19 years. Both surveys also measure the number of cigarettes smoked per day.
26. It may be possible to measure the impact of the policy by comparing the results of these two surveys over time.
27. However, a multi-faceted response is necessary to effectively tackle tobacco use, and a number of policies and initiatives to help reduce smoking prevalence will be active at any one time. Therefore, trends in smoking rates among young people and changes in smoking rates between genders cannot solely be attributed to any one policy.

Technical appendix

28. This technical appendix describes the method and data sources behind the estimation of:
 - a) the discounted number of life years saved for each young person who does not take up smoking;
 - b) the discounted number of life years saved for a randomly chosen adult who quits smoking today. This figure is lower, as some harm may already have been done by past smoking.
29. To convert the above figures into a monetary value, a standard value of £50,000 per life year is applied. Both estimates take account of the fact that many smokers quit during their lifetime, thus reducing the expected number of life years lost from starting to smoke in the first place, and reducing the expected number of life years gained by quitting today.
30. The following main sources of data are used:
 - a) General Household Survey (2006) source data. Used to identify the age distribution of smokers and the relationship between age and the percentage of smokers who have quit.
 - b) Doll et al. (2004). Reports the impact of smoking on mortality, split by age of quitting smoking (if applicable).
 - c) Office for National Statistics (ONS) period life tables, United Kingdom, 2004–06.¹¹ Reports population mortality estimates. Used to transform the outputs of the doctors' study into life years saved.

11 Available at www.statistics.gov.uk/StatBase/Product.asp?vlnk=14459&Pos=&ColRank

31. The steps common to both estimates are listed below:

- a) **Identify an estimate of the percentage of smokers who have quit by each year of age.** Data from GHS (2006)¹² are used here. The percentage who have quit increases at a fairly steady and constant rate as age increases. A linear relationship was therefore identified between age and the percentage who have quit; the results imply that 18.2% of ‘ever smokers’ have already quit by age 16, with 1.05% quitting in each year thereafter up to age 94.
- b) **Identify an estimate of the prevalence of smoking at each year of age.** Data from GHS (2006) are used here.¹³
- c) **Identify an age distribution for the smoking population.** Again, data from GHS (2006) are used here.¹⁴
- d) **Identify mortality data (by year of age) for non-smokers and for four categories of smoker (as defined by quit age).** Mortality data are taken from Doll et al. (2004, Table 5), which lists number of deaths per 1,000 people at ages 34–44, 45–54, 55–64, 65–74 and 75–84. (These are referred to below as the five age bands.) This information is presented at each age band for lifelong non-smokers, as well as:
 - those who have quit at age 35–44;
 - those who have quit at age 45–54;
 - those who have quit at age 55–64; and
 - those who continue to smoke beyond age 65.

These four categories of smoker are used throughout the calculations, and are referred to as ‘quit age bands’. The data are converted into relative risks by dividing the number of deaths per 1,000 in each of these four categories by the equivalent number of deaths (i.e. the number of deaths in the same age band) for the lifelong non-smokers. The following formulae are then applied, which calculate mortality rates at each year of age (from 0 to 100) for smokers and non-smokers respectively:

- Smokers’ mortality at age $x = M * (r / (pr + 1 - p))$.
- Non-smokers’ mortality at age $x = M * (1 / (pr + 1 - p))$.
- Where M is the mortality estimate from the ONS life tables for age x , r is the relative risk at age x , and p is the prevalence (expressed as a proportion) at age x .
- The above formulae are calculated for each year of age, for each sex and for each of the four categories of smoker, as the relative risks differ between quit age categories and population mortality differs between the sexes.

12 Variables ‘age’ and ‘cigsmk1’ were used – the latter identifies ‘ex-smokers’, ‘current smokers’ and ‘never smokers’. For each year of age, the percentage of smokers who have quit equals the number of ‘ex-smokers’ divided by the sum of ‘ex-smokers’ and ‘current smokers’.

13 Prevalence at each year of age was defined as the number of current smokers (as indicated by the variable ‘cigsmk1’) at each age, divided by the total number of individuals of that age in the sample.

14 The variable ‘age’ was used on the subset of respondents who are current smokers (as indicated by the variable ‘cigsmk1’).

- e) **Identify the number of life years lost (by year of age) for each combination of sex and the four categories of smoker.** For each combination of quit age band and sex,¹⁵ two life tables are calculated, following the method of Chiang (1984).¹⁶ One of the two life tables starts with the smokers' mortality figures and the other starts with the non-smokers' mortality figures (both for each year of age, and as calculated above). Each life table models a birth cohort of 100,000 children; one column in particular measures the total number of life years lived by the cohort for each year of age. For each year of age, the difference in this column between the two life tables is calculated and divided by 100,000 to convert the value into the expected number of life years lost per capita (for that age). The sum of these values across all years of age (from 0 to 100) equals the number of life years lost by the specified combination of quit age band and sex.
- f) **Discount the numbers of life years lost, as calculated in the previous step.** As the life years lost occur in future years of the cohort's life, they should be discounted appropriately. The discount rates used are equal to Green Book rates minus 2%. The 'minus 2%' takes account of the fact that the monetary value per life year (which is applied later on) can be expected to grow at the same rate as real economic growth. The 2% figure for this is taken from the Social Rate of Time Preference assumptions underlying the Green Book discount rates. The sum of the discounted numbers of life years lost at each year of age equals the discounted number of life years lost by the specified combination of quit age band and sex.

32. The end results of these calculations are presented in the following table. The identified relationship between age and the percentage of smokers who have quit is used to calculate the percentages in the second column.

Quit age band	Percentage of smokers in this band	Change in life years lived for this band (discounted, male)	Change in life years lived for this band (discounted, (female)
Under 35	38.2	0.00	0.00
35 to 44	10.5	-0.85	0.66
45 to 54	10.5	-2.75	-2.34
55 to 64	10.5	-3.48	-3.03
65 or over	30.2	-4.49	-4.15

33. The benefit (in discounted life years) for each child who does not take up smoking is estimated as follows:
- a) A weighted average of the number of life years saved for male children is calculated, with the percentage of smokers who quit in each quit age band being used to weight the life expectancy penalties for those bands.
- b) A similar weighted average is calculated for female children.

15 For example, one combination considers male smokers who quit at age 35–44.

16 Chiang C. (1984). *The Life Table and its Applications*, Krieger, Malabar, Florida.

- c) The resulting male and female estimates are then downscaled to 83% and 72% of their calculated value, respectively. This reflects the fact that the median doctor from the doctors' study smoked 18 cigarettes per day, whereas current averages for men and women are lower: 15 and 13, respectively (GHS 2006¹⁷). Current smokers can therefore be expected to experience less harm.
- d) The resulting downscaled estimates are then monetised with a value of £50,000 per life year.

34. Therefore the benefit for each child who does not take up smoking:

- a) Males: 1.75 life years, i.e. £87,559.
- b) Females: 1.57 life years, i.e. £78,703.

35. The benefit (in discounted life years) for a randomly chosen adult who quits smoking is estimated as follows:

- a) The aforementioned five age bands for adult smokers are also used here: those aged (i) under 35, (ii) 35–44, (iii) 45–54, (iv) 55–64, and (v) over 65. The percentage of smokers that quit in each quit age band is then considered, *given that the smoker has already reached one of age categories (i) to (v) above*. For example, 10.5% of smokers quit in the 55–64 age band, whereas 30.2% go on to become lifetime smokers. For an individual who is already aged 55–64, it must be that $10.5\% / (10.5\% + 30.2\%) = 25.9\%$ will quit in the 55–64 age band, whereas the remaining 74.1% continue to smoke over the age of 65.
- b) For each category of smoker age, the percentage of smokers who quit in each quit age band (as adjusted above) is multiplied by the life year penalty associated with each quit age band. Obviously, as we move towards the older age bands, fewer and fewer quit age bands enter into the calculation (as it is not possible, say, to quit smoking at 35–44 if you are already aged 45–54). This calculation gives the expected number of life years lost given that the smoker may quit at some point in the future. The calculated values for the older age groups are larger, as they are more likely to become lifelong smokers.
- c) For each age band, the previous table indicates the number of life years that would be lost anyway if the smoker were to quit at their current age. This number is higher for the older age groups, as more harm has already been done. For each age band, these values are subtracted from the numbers calculated in 35(b). This gives the number of life years that could be reclaimed if the smoker were to stop smoking at their current age.
- d) GHS (2006) data on the age distribution of smokers are used to weight the number of life years that could be saved in each age band. This yields a final estimate of the number of life years that could be saved if a random smoker were to quit today.

36. Therefore the benefit for each adult who decides to quit smoking:

- a) Males: 1.18 life years, i.e. £58,884.
- b) Females: 1.12 life years, i.e. £55,755.

17 Goddard E. (2006). *General Household Survey 2006: Smoking and drinking among adults, 2006*. Office for National Statistics, Newport.

37. For the following reasons, the benefit estimates described above are conservative:
- a) They do not take account of the improved quality of life that results from quitting smoking. For example, a quitter may escape diseases that reduce their quality of life as well as reduce their life expectancy (such as chronic obstructive pulmonary disease).
 - b) It is assumed that no harm is incurred by smoking over the age of 84. There is likely to be some harm here (which would increase the measured benefits if counted), but there is a lack of precise data. In any case, as the cohort is fairly small by this age, the results are not particularly sensitive to this assumption. Even assuming that the relative risk for those aged 84 also holds for those who are aged 84 and over, the discounted 'child who does not start smoking' benefits only increase by less than 5%.
 - c) It is assumed in this assessment that no harm is incurred by smoking under the age of 35. Again, there is likely to be a benefit from not smoking at this age, but there is a lack of precise data.
 - d) It is assumed that quitting after the age of 65 yields no health benefit. There is also likely to be a small benefit here, but again, there is a lack of precise data.
 - e) The estimates do not take account of the fact that the resulting reduced smoking prevalence would reduce demand for stop smoking goods and services. The economic resources saved could be used for other purposes.
38. Other limitations of the estimate include:
- a) It is assumed that the same smoking mortality impacts hold for both men and women. The Doll et al. (2004) study only covers male doctors.
 - b) It is assumed that the average daily number of cigarettes smoked throughout life is linearly related to the number of life years lost. The relationship is unlikely to be perfectly linear in practice.
 - c) The Doll et al. (2004) study does not explicitly adjust for confounding factors (although it does control for social class, given that its sample consists only of doctors). For example, if smokers are also more likely to drink heavily, this may exaggerate the mortality impact of smoking. However, a similar cohort study (based in The Netherlands)¹⁸ does adjust for a long list of confounding factors, including socio-economic status, alcohol use and body mass index. The authors conclude that adjusting for confounding factors reduces the estimated number of (undiscounted) life years lost due to smoking by half a year. This is a fairly small effect given that the estimated life expectancy loss to smokers (including the adjustment for potential confounders) is still equal to seven years. Given that the estimates presented in this annex are discounted and take account of future quit propensities, any reduction to take account of confounding factors would be considerably less than half a life year.

18 Streppel M., Boshuizen H., Ocke M., Kok F. and Kromhout D. (2007). 'Mortality and life expectancy in relation to long-term cigarette, cigar and pipe smoking: the Zutphen Study', *Tobacco Control*, 16, pp. 107–113. The Zutphen Study, based in Zutphen, The Netherlands, covers 1,373 men born between 1900 and 1920 and studied between 1960 and 2000.



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