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Information Centre



# Statistics on Smoking

England 2015

Published 29 May 2015



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This report may be of interest to members of the public, policy officials, commissioners and other stakeholders to gain a comprehensive picture of society at regional and national level and understand the public health challenges faced by health and social care providers.

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## Executive Summary

This is the tenth annual statistical compendium report which presents a range of information on smoking among adults and children including prevalence, habits, attitudes, affordability, NHS costs and the effect on health in terms of hospital admissions and deaths from smoking related illnesses. This information has been drawn together from a variety of sources.

It contains data and information previously published by the Health and Social Care Information Centre (HSCIC), Department of Health, the Office for National Statistics and Her Majesty's Revenue and Customs. The report also includes new analyses carried out by the HSCIC.

The report is primarily concerned with cigarette smoking unless otherwise specified. These data relate to England where possible. Where figures for England are not available, figures for England and Wales, Great Britain or United Kingdom have been used.

Some changes are planned for the 2016 edition of this report and feedback is welcome on these proposals. More details are available in chapter 1.

## Main findings

### Smoking among adults and children

- Nearly one in five adults in Great Britain (19 per cent) aged 16 and over were smokers in 2013, a rate that although slightly less than 2012, has remained largely unchanged in recent years, compared to just over one in four (26 per cent) a decade earlier in 2003.
- Amongst 11 to 15 year olds in England in 2013, less than a quarter of pupils reported that they had tried smoking at least once. At 22 per cent, this is the lowest level recorded since the data were first collected in 1982, and continues the decline since 2003, when 42 per cent of pupils had tried smoking.

### Availability and affordability of tobacco

- The price of tobacco has increased by 87 per cent over the last ten years from 2004 to 2014, making it 30 per cent less affordable.

### Prescribing costs

- The number of prescriptions dispensed in England to help people stop smoking in 2013/14 was 1.8 million, compared to 1.6 million ten years earlier in 2003/4.
- In 2013/14 the Net Ingredient Cost<sup>a</sup> (NIC) of all prescription items used to help people quit smoking was nearly £48.8 million. This is a decrease of 16 per cent on the £58.1 million spent in 2012/13 and 26 per cent less than 2010/11 when NIC of all prescription items peaked at £65.9 million.

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<sup>a</sup> The Net Ingredient Cost NIC is the basic cost of a drug as listed in the Drug Tariff or price lists; it does not include discounts, prescription charges or fees

## **Hospital admissions in England in 2013/14 among adults aged 35 and over**

- In 2013/14 there were over 1.6 million admissions for adults aged 35 and over with a primary diagnosis of a disease that can be caused by smoking. This is approximately 4,500 admissions per day on average. This compares to 1.4 million admissions ten years earlier in 2003/04 with approximately 3,800 admissions per day on average.
- Around 454,700 hospital admissions were estimated to be attributable to smoking. This accounts for 4 per cent of all hospital admissions in this age group (35 years and over). This compares to 447,300 admissions in 2003/04 which was 6 per cent of all admissions.
- The proportion of admissions attributable to smoking as a percentage of all admissions was greater amongst men (6 per cent) than women (3 per cent).

## **Deaths in England in 2013 among adults aged 35 and over**

- In 2013, 17 per cent (78,200) of all deaths of adults aged 35 and over were estimated to be caused by smoking compared to 19 per cent (95,300) in 2003.

# 1 Introduction

This annual statistical report presents a range of information on smoking among adults and children, drawn together from a variety of previously published sources. It also presents new analyses not previously published before which mainly consist of data from the Health and Social Care Information Centre's (HSCIC) Hospital Episode Statistics (HES) databank as well as prescriptions data from the HSCIC.

Topics covered in this report include: smoking prevalence; behaviours and attitudes to smoking; smoking-related costs and the effect on health in terms of hospital admissions and deaths from smoking related illnesses. Appendix A provides more detail on the key data sources used for this report. The data in this report relate to England where possible. Where figures for England are not available, figures for England and Wales, Great Britain or United Kingdom have been used.

This report has a range of known users and uses including the Department of Health (DH) to inform policy and planning, the NHS for benchmarking and decision making, academics, researchers and the media. The HSCIC make use of the information contained within this report to answer Parliamentary Questions, Freedom of Information requests and ad-hoc queries. A complete list of our understanding of users and uses of this report is available in Appendix E.

The publication date of the report has been moved from October to May to maximise the timeliness of the data sources. We have made some other changes such as providing additional time series data on deaths from smoking related illnesses and removing data tables from other sources if they do not relate to charts within the report.

We welcome feedback from users to enable us to expand our list of users and uses, to review user opinion on the changes and to consider suggested improvements for future reports. This may be sent via the "Have your say" link within the feedback section on the publication page, or by sending an email to [enquiries@hscic.gov.uk](mailto:enquiries@hscic.gov.uk) including "Statistics on Smoking" in the subject heading.

In particular we would welcome feedback on the format of the report. We are considering putting more focus on the new information which is included in chapter 4 on smoking related hospital admissions, smoking related deaths and prescription data, and replacing the information in chapters 2 and 3 with a series of weblinks to the relevant sources. This will help users who access the report electronically to easily find further information on the previously published data and it will also allow us to concentrate on the new data which has not been released before. We also propose to change the rate calculation in table 4.2 to prescription items per 100,000 of the 16+ population in England rather than per head of population of all ages.

Please use the same contact details to give us your thoughts on this change.

The report is structured as follows:

**Chapter 2** presents a range of information on cigarette smoking patterns in adults and children. Smoking prevalence, consumption and trends among different groups of society and geographical areas are explored. Information is also presented on tobacco expenditure and availability.

**Chapter 3** reports on behaviour and attitudes to smoking in adults, including awareness of health risks associated with smoking and attitudes to the introduction of smoke-free legislation. Children's attitudes and smoking behaviour are also reported.



**Chapter 4** looks at the health risks associated with smoking. Information on prescription drugs used to help people stop smoking and the costs of NHS Stop Smoking Services are presented. Information on the number of hospital admissions and the number of deaths that are attributable to smoking are also reported.

## Smoking definitions

Smoking definitions adopted by the main sources used in this report differ in some cases, especially between adults and children. Key definitions that differ between sources are highlighted below and clarified in the relevant section of the report.

### Definitions for adult smoking behaviours

**Current smoker:** Adults who said that they do smoke cigarettes nowadays are classed as current smokers in the surveys used in this report.

**Ex-smoker:** Adults who said that they used to smoke cigarettes regularly but no longer do so are defined as ex-smokers (or ex-regular smokers).

The definitions for adults who are non-smokers, heavy or light smokers vary in the different surveys. Further information is provided in the relevant sections.

### Definitions for child smoking behaviours

**Regular smoker:** is defined as a child who smokes at least one cigarette a week.

**Occasional smoker:** Those children who said they smoke less than one cigarette per week are defined as occasional smokers.

**Current smoker:** These include those who are regular and occasional smokers.

Sources of further reading on all classifications of smoking are listed in [Appendix A](#) of this report.

## 2 Smoking patterns in adults and children

### Key findings

Nearly one in five adults (19 per cent) aged 16 and over were smokers in 2013, a rate that although slightly less than 2012, has remained largely unchanged in recent years, compared to just over one in four (26 per cent) a decade earlier in 2003.

Unemployed people (35 per cent) (not working but seeking work) were almost twice as likely to smoke as those either in employment (19 per cent) or economically inactive (16 per cent) (for example, students or retired people).

12.0 per cent of mothers were recorded as smokers at the time of delivery for 2013-14, which is lower than 2012-13 (12.7 per cent) and continues the steady year-on-year decline in the percentage of women smoking at the time of delivery from 15.1 per cent in 2006-07.

Amongst 11 to 15 year olds in 2013, less than a quarter of pupils reported that they had tried smoking at least once. At 22 per cent, this is the lowest level recorded since the data were first collected in 1982, and continues the decline since 2003, when 42 per cent of pupils had tried smoking.

Regular smokers aged 11 to 15 years consumed, on average (mean), 31.1 cigarettes a week. Occasional smokers consumed 3.4 cigarettes a week in 2013.

Cigarettes in packets were the most popular type of cigarette smoked (46 per cent of men and 66 per cent of women) by current smokers. A higher proportion of men than women smoked hand-rolled cigarettes (40 per cent of men and 23 per cent of women).

In the United Kingdom in 2013 the average weekly household expenditure on cigarettes was £3.50.

The price of tobacco has increased by 87 per cent over the last ten years from 2004 to 2014, making it 30 per cent less affordable.

Between 2004 and 2014 the price of tobacco increased by 36.6 per cent relative to retail prices.

UK household expenditure on tobacco has nearly trebled from just over £7 billion in 1985 to £19.4 billion in 2014. However, tobacco expenditure as a proportion of total household expenditure has decreased overall over the same period (from 3.3 per cent in 1985 to 1.8 per cent in 2014).

Three per cent of adults were currently using e-cigarettes (vapourisers); a further two per cent of men and one per cent of women were currently using other nicotine delivery products but not e-cigarettes.

### 2.1 Introduction

This chapter presents a range of information on cigarette smoking patterns in adults and children. Smoking prevalence, consumption and trends among different groups of society and geographical areas are explored. Information is also presented on tobacco expenditure and availability.

The main source of data for smoking prevalence among adults is the Opinions and Lifestyle, Smoking Habits Amongst Adults Survey<sup>1</sup> (OPN) carried out by the Office for National Statistics. This is an annual survey covering adults aged 16 and over living in private households in Great Britain. The latest OPN 2013 report is based on the survey which ran from January to December 2013 and was released on 25 November 2014. It replaced the General Lifestyle Survey<sup>16</sup> (GLF) in 2012 which used to be the source for a lot of the findings.

The main source of data for smoking prevalence among children is the Smoking, Drinking and Drug Use among Young People survey (SDD). This is an annual survey of secondary school pupils in years 7 to 11 (mostly aged 11 to 15) in England published by the Health and Social Care Information Centre. The survey includes a core section of questions on smoking, drinking and drug use each year. From 2000, the remainder of the questionnaire has, on alternate years, focused on either; smoking and drinking, or on drug use. In 2013 the focus was on drug use, therefore the latest survey to focus on smoking and drinking was *Smoking, drinking and drug use among young people in England in 2012*<sup>8</sup> (SDD12) which summarised results from 7,589 pupils in 254 schools throughout England in the autumn term of 2012. The forthcoming *Smoking, drinking and drug use among young people in England in 2014* (SDD14) will have a focus on smoking and drinking and will be released on 23 July 2015. Results of the smoking element of the SDD14 report will be summarised in this report next year.

Information is also summarised from the Health Survey for England (HSE) which has been carried out since 1994, by NatCen and the Department of Epidemiology and Public Health at the University College London (UCL) Medical School. The surveys are designed to measure health and health-related behaviours in adults and children in England. Smoking, general health, drinking, fruit and vegetable consumption, height, weight, blood pressure and blood and saliva samples are core elements of the survey included every year. The latest report *Health Survey for England - 2013*<sup>2</sup> with associated trend tables<sup>3</sup> was published in December 2014.

The availability of tobacco is extracted from Her Majesty's Revenue and Customs (HMRC) Statistical Bulletins<sup>9</sup> and shown as the volume of tobacco released for home consumption.

The affordability of tobacco is described using information on tobacco price and retail price indices taken from the ONS publication: *Focus on Consumer Price Indices*<sup>11</sup> and households' disposable income data published by ONS in the *Economic and Labour Market Review*, formerly *Economic Trends*<sup>12</sup>.

Data on tobacco expenditure and household expenditure are taken from two sources: ONS *Consumer Trends*<sup>13</sup> which gives annual figures for UK household expenditure on tobacco and total household expenditure, and the Living Costs and Food Survey<sup>14</sup> (LCF) a part of the Integrated Household Survey (IHS) managed by ONS and used to provide information for the Consumer Prices Index and the Retail Prices Index.

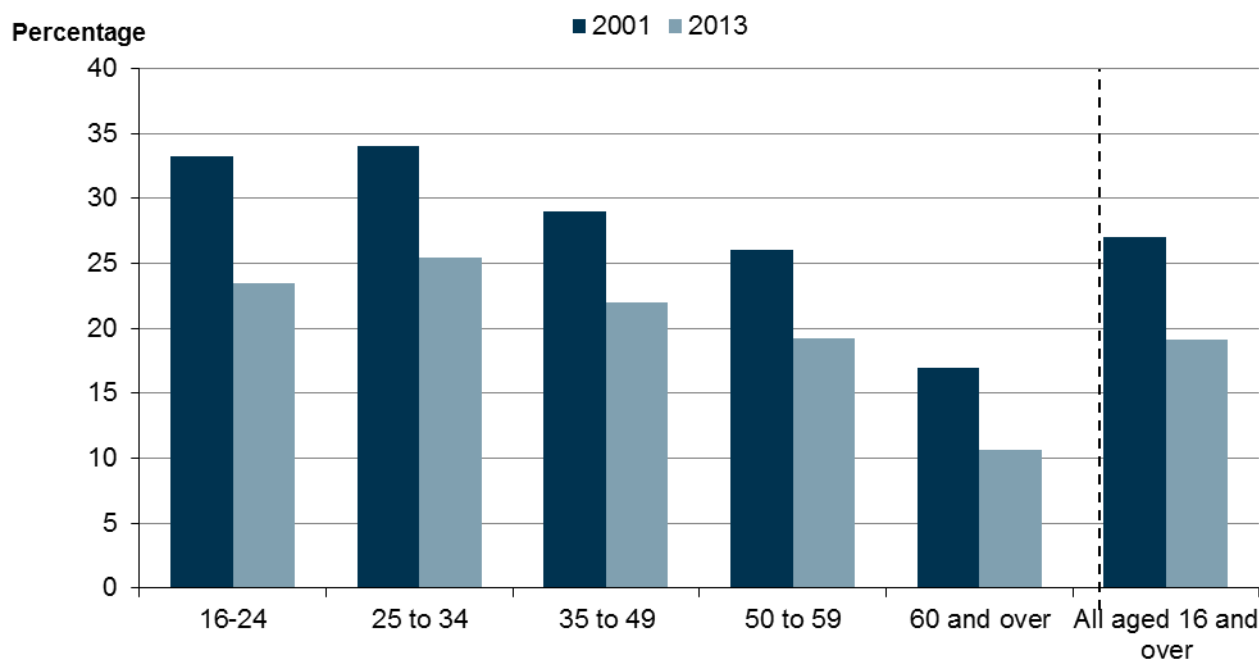
## 2.2 Smoking prevalence, consumption and trends in adults

### 2.2.1 Trends in smoking prevalence

Results from the Opinions and Lifestyle Survey 2013<sup>1</sup> show that nearly one in five adults in Great Britain (19 per cent) aged 16 and over were smokers in 2013, a rate that although slightly less than 2012, has remained largely unchanged in recent years, compared to just over one in four (26 per cent) a decade earlier in 2003. [Table 2.1](#)

In 2013, those aged 16 to 24 and 25 to 34 reported the highest prevalence of cigarette smoking (23 per cent and 25 per cent respectively), while those aged 60 and over reported the lowest prevalence (11 per cent). The pattern of smoking prevalence by age shows a fair decrease to the position twelve years ago with the 16 to 24 age range showing the largest drop (down from 33 percent in 2001) compared to the other age groups. [Figure 2.1](#)

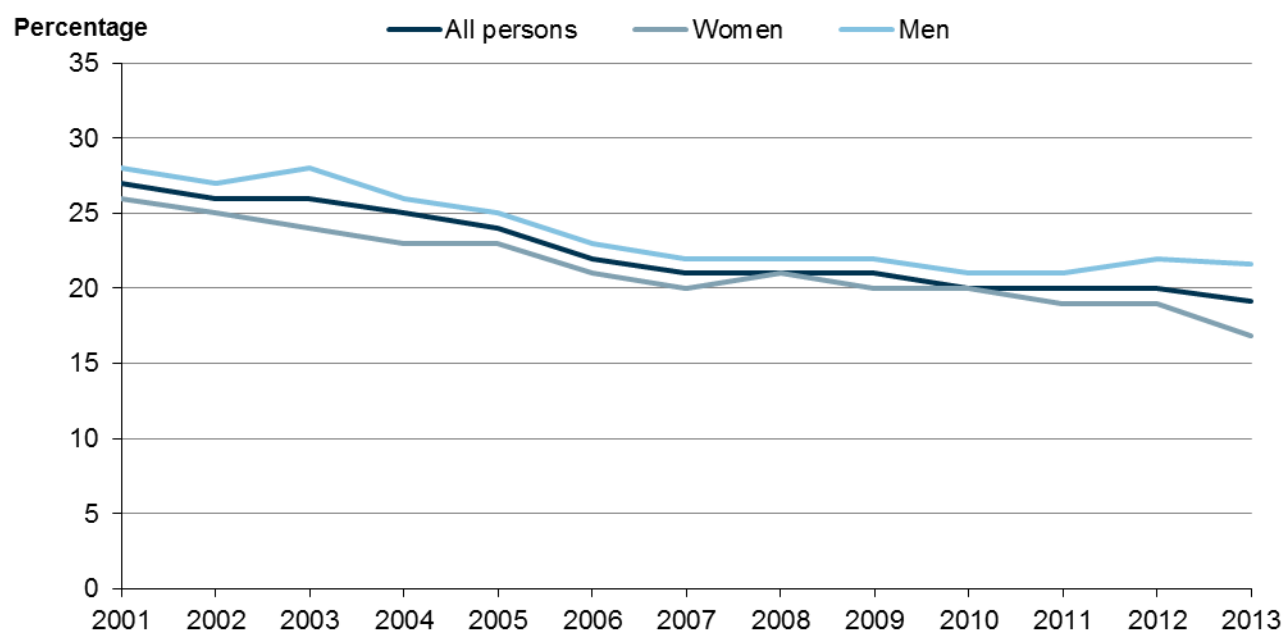
**Figure 2.1 - Prevalence of cigarette smoking among adults in Great Britain, by age group, 2001 and 2013**



**Source:** Opinions and Lifestyle 2013, Office for National Statistics licensed under the Open Government Licence v.2.0. Copyright © 2015, re-used with the permission of The Office for National Statistics.

Prevalence of cigarette smoking was higher for men (22 per cent) than women (17 per cent). This compares with 28 per cent of men and 26 per cent of women in 2001. [Table 2.1](#) [Figure 2.2](#)

**Figure 2.2 - Prevalence of cigarette smoking among adults in Great Britain, by age group, 2001 and 2013**



**Source:** Opinions and Lifestyle 2013, Office for National Statistics licensed under the Open Government Licence v.2.0. Copyright © 2015, re-used with the permission of The Office for National Statistics.

Smoking rates varied by whether people were in employment<sup>b</sup> or not. Unemployed people (35 per cent) were around twice as likely to smoke as those either in employment (19 per cent) or economically inactive (16 per cent). In 2003, these figures were 46, 28 and 22 per cent respectively.

The Health Survey for England 2013<sup>2</sup> (HSE13) which was released in December 2014, found that the proportion of men who had never regularly smoked increased from 39 per cent in 1993 to 48 per cent in 2013. The proportions for women were 52 per cent in 1993 and 60 per cent in 2013.

## 2.2.2 Cigarette consumption

In 2013, current smokers consumed an average of 12 cigarettes a day. This is unchanged from last year but down from 14 per day in 2003. Men smoked on average more than women (13 and 11 cigarettes per day respectively) with men in the 50-59 age bracket smoking the most (15.5 per day)<sup>1</sup>.

## 2.2.3 Cigarette type

Cigarettes in packets are the most popular type of cigarette smoked by current smokers (46 per cent of men and 66 per cent of women). A higher proportion of men than women smoke hand-rolled cigarettes (40 per cent of men and 23 per cent of women)<sup>1</sup>.

<sup>b</sup> International Labour Organisation (ILO) definitions of economic activity are used. Unemployed people are those who are not currently in work but who are looking for work. The group 'economically inactive' contains those who are not in work, and not looking for work. This includes retired people and students.

## 2.2.4 Smoking during pregnancy

In 2013, 11 per cent of pregnant women aged 16 to 49 were smokers and 34 per cent were ex-smokers<sup>1</sup>.

The Infant Feeding Survey (IFS) was carried out in the UK every 5 years up to 2010 and the results published by the Health and Social Care Information Centre in 2012. Chapter 11 of the IFS – UK, 2010<sup>15</sup>. It provides information on smoking during pregnancy and presents the information by age, socio-economic classification and region. Key findings from this chapter include:

In England in 2010:

- 26 per cent of women smoked in the 12 months before or during their pregnancy, a fall from 33 per cent in 2005
- Of the mothers who smoked before or during their pregnancy over half (54 per cent) gave up at some point before the birth
- 12 per cent of mothers continued to smoke throughout their pregnancy, down from 17 per cent in 2005
- The highest levels of smoking before or during pregnancy were found among mothers in routine and manual occupations (40 per cent smoked before or during pregnancy) and among those aged under 20 (57 per cent).
- Mothers aged under 20 were also the least likely to have given up smoking at some point before or during pregnancy (38 per cent gave up) but by socio-economic group mothers who had never worked were the least likely to have done given up smoking (29 per cent).

Almost nine in ten mothers (88 per cent) who smoked before or during pregnancy received some type of information on smoking. Midwives were the most common source of information, mentioned by 85 per cent of mothers who had received information.

Statistics on Women's Smoking Status at Time of Delivery (SATOD) provides information on the prevalence of smoking among pregnant women at Commissioning Region, Area Team and Clinical Commissioning Group level.

The latest results for a full year (2013/14)<sup>6</sup> were published by Health and Social Care Information Centre in 2014 and found:

In England in 2014:

- 12.0 per cent of mothers were recorded as smokers at the time of delivery for 2013-14, which is lower than 2012-13 (12.7 per cent) and continues the steady year-on-year decline in the percentage of women smoking at the time of delivery from 15.1 per cent in 2006-07
- The smoking prevalence varied amongst the Area teams from 5.1 per cent in London to 20.6 per cent in Durham, Darlington and Tees
- The smoking prevalence varied amongst Clinical Commissioning Groups from 1.9 per cent in NHS Central London (Westminster) and NHS Richmond to 27.5 per cent in NHS Blackpool

- 82 (39 per cent) of the 211 Clinical Commissioning Groups (CCGs) had estimates meeting the national ambition of 11 per cent or less women smoking at the time of delivery
- Of the four Commissioning Regions, London had 31 of its 32 CCGs meeting the national ambition by the end of March 2014; South of England had 26 of its 50 CCGs; Midlands and East of England had 16 of its 61 CCGs and the North of England 9 of its 68 CCGs.

## 2.3 Smoking and demographic characteristics in adults

### 2.3.1 Smoking and marital status

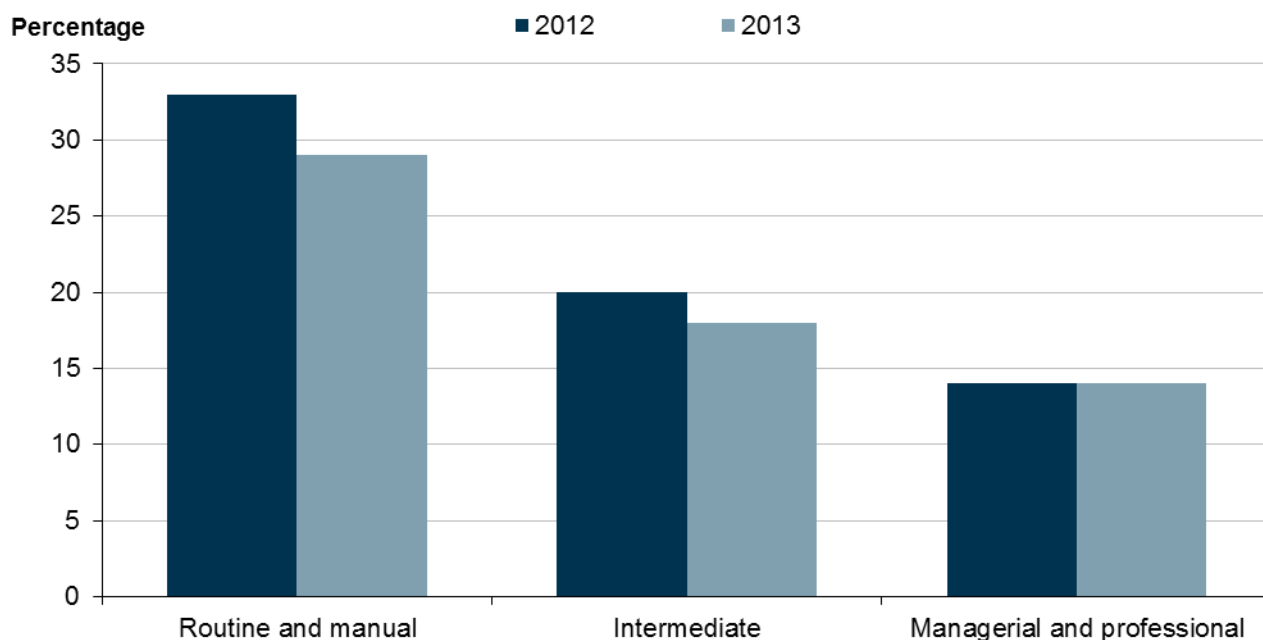
The Opinions and Lifestyle Survey<sup>1</sup> reports that the prevalence of cigarette smoking varies considerably according to marital status. In 2013, people who were cohabiting were most likely to smoke (29 per cent), while those who were married were least likely (13 per cent).

Single people were most likely to have never smoked with 63 per cent not doing so.

### 2.3.2 Smoking and socio-economic classification

The highest prevalence of smoking was amongst the socio-economic classification of “routine and manual” at 29 per cent in 2013 down from 33 per cent in 2012. “Managerial and professional” remained the same in 2012 and 2013 at 14 per cent. “Intermediate” fell slightly from 20 per cent in 2012 to 18 per cent in 2013. [Table 2.2](#) [Figure 2.3](#)

**Figure 2.3 - Rates of cigarette smoking in Great Britain, by socio-economic classification, 2012 and 2013**



**Source:** General Lifestyle Survey and Opinions and Lifestyle Survey, Office for National Statistics licensed under the Open Government Licence v.2.0.  
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Nearly all socio-economic classifications showed a fall from 2012 to 2013 in the average number of cigarettes smoked in a day. [Table 2.2](#)

### 2.3.3 Smoking and other factors

*Chapter 8, Adult Cigarette Smoking, of the Health Survey for England 2013 (HSE13)*<sup>2</sup> provides information on smoking status and tobacco consumption in adults. It also reports on adults' use of non-tobacco nicotine delivery products (NDPs), including electronic cigarettes (vapourisers). The chapter presents both self-reported exposure to second hand smoke and data on saliva cotinine, an objective measure of non-smokers' exposure to environmental tobacco smoke.

Smoking status reported in the *HSE 2013* found that:

- Around one in four men (24 per cent) and one in six women (17 per cent) reported they were current smokers.
- Current smoking was highest among those aged 25-34 and then declined with age
- The average number of cigarettes smoked per day among current smokers was higher for men (12.5 per day) than women (10.8 per day); older smokers had higher consumption.
- Prevalence of current smoking varied considerably across regions; it was highest for men in the West Midlands and women in the North East and Yorkshire and the Humber.
- The proportion of current smokers in the lowest two income quintiles was double the proportion in the highest income quintiles (36 – 40 per cent for men in the lowest quintiles, 17 – 18 per cent in the highest). The equivalent figures for women were 22 – 30 per cent in the lowest quintiles and 10 – 14 per cent in the highest. Similarly, those living in the most deprived areas had the highest proportion of current smokers.
- 31 per cent of men and 24 per cent of women who had a limiting longstanding illness were current smokers.

#### Trends in smoking

- Among women, there has been a steady decline in the proportion of current smokers since around 2003 (26 per cent in 1993, 24 per cent in 2003, 17 per cent in 2013). Equivalent figures for men were 28, 27, and 24 per cent; however, there have been fluctuations year on year for men since 2006 rather than a continuing downward trend.

#### Self-reported exposure to second-hand smoke

- Self-reported exposure to second-hand smoke was highest among those aged 16-24; over half of this age group reported at least some exposure. Exposure was most likely to occur in outdoor smoking areas of pubs/restaurants/cafes or at home (including other people's homes).

#### Tobacco-related disease

The cost to the NHS of treating illnesses due to smoking was estimated to be £5.2 billion in 2006, accounting for approximately 5.5 per cent of total health care costs.



## Ethnicity

In 2004 the HSE included a boost sample to increase the sample size of people in ethnic minority groups. The relationship between smoking status and ethnicity was explored in *Chapter 4: Use of tobacco products* of the associated report *Health Survey for England 2004: The Health of Minority Ethnic Groups*<sup>17</sup> (HSE 2004). The findings in HSE 2004 are the latest available from the HSE on smoking and ethnicity.

Example findings include: self-reported cigarette smoking prevalence for men was 40 per cent among Bangladeshi, 30 per cent Irish, 29 per cent Pakistani, 25 per cent of Black Caribbean, 21 per cent Black African and Chinese, and 20 per cent in Indian men, compared with 24 per cent among men in the general population. After adjustment for age, Bangladeshi and Irish men were more likely, and Indian men less likely to report smoking cigarettes than men in the general population. Self-reported smoking prevalence was higher among women in the general population (23 per cent) than most minority ethnic groups, except Irish (26 per cent) and Black Caribbean women (24 per cent). The figures for the other groups were 10 per cent Black African, 8 per cent Chinese, 5 per cent Indian and Pakistani, and 2 per cent in Bangladeshi women.

There are currently no plans for this to be repeated in future HSE publications.

## 2.4 Geographical comparisons in adults

### 2.4.1 International comparisons

International comparisons are taken from Attitudes of Europeans towards Tobacco<sup>4</sup> relating to data collected in February to March 2012 from all 27 member states.

- In March 2012, 28 per cent of the EU population aged 15 or more smoked (this was 27 per cent in the UK). Half of the EU population has never smoked. In autumn 2009, the smoking prevalence was 29 per cent (28 per cent in the UK).

### 2.4.2 National comparisons

National and regional prevalence is taken from the Integrated Household Survey: January 2013 to December 2013<sup>5</sup> (IHS 2014).

IHS 2014 reported that 18.7 per cent of adults (aged 18 and over) were current smokers in the UK in 2013. This represents a significant drop from 19.8 per cent in 2012.

Of the constituent countries of the UK, Scotland reported the highest proportion of current smokers (21.1 per cent). England had the lowest proportion of current smokers (18.4 per cent).

### 2.4.3 Regional prevalence

IHS 2014 also shows that in England, at a regional level there appeared to be a North/South divide. Smoking prevalence in London (17.3 per cent), the South East (17.2 per cent) and the South West (17.3 per cent) were significantly lower than the North East (22.3 per cent), the North West (20.1 per cent) and Yorkshire and The Humber (20.3 per cent).

## 2.4.4 Local area prevalence

Figures from Smoking prevalence for local and unitary authorities in England 2012-13<sup>22</sup> database (Public Health England, 2014) show that Hyndburn Unitary Authority (which is within Lancashire County Council) showed the highest percentage of smoking prevalence in England at 30.1 percent. This was closely followed by Kingston upon Hull at 29.8 per cent and Fenland and Blackpool both showing 29.5 percent. At the other end of the scale, Brentwood showed the lowest prevalence of smoking at 8.4 per cent, followed by Rother, Hart, Staffordshire Moorlands and North Warwickshire all showing a 10.4 per cent prevalence.

## 2.5 Smoking in Children

Pupils' smoking behaviour has been collected in the *Smoking, drinking and drug use among young people in England* survey since the series began in 1982. The survey covers children in years 7 to 11 who will be mostly all aged 11 to 15 years. From 2000, core questions on smoking have been included each year and in alternate years more detailed smoking questions are also asked. The survey in 2013<sup>7</sup> (which is the latest available data source) focused on drug use and included the core smoking questions only. Chapters in the report which covered smoking are:

*Chapter 3: Smoking* reports on the prevalence of smoking among 11 to 15 year olds and patterns of cigarette consumption.

*Chapter 5: Smoking, drinking and drug use* compares the prevalence of smoking, drinking and drug use and explores the relationship between these behaviours in more detail. This chapter also reports on children's attitudes to these behaviours and on what schools teach about smoking.

The report on SDD 2014 which is expected to be published on 23 July 2015 will focus on smoking and drinking and will provide more up to date information.

### 2.5.1 Smoking prevalence and consumption

The key findings on smoking prevalence and consumption show that amongst 11 to 15 year olds in 2013:

- Less than a quarter of pupils reported that they had tried smoking at least once. At 22 per cent, this is the lowest level recorded since the survey began in 1982, and continues the decline since 2003, when 42 per cent of pupils had tried smoking.
- Three per cent of pupils said that they smoked at least one cigarette a week, the survey definition of regular smoking. This is also at the lowest level measured since 1982, and considerably below the 9 per cent who smoked regularly in 2003.
- The prevalence of regular smoking increased with age. Less than 0.5 per cent of 11 year olds were regular smokers in 2013, and this increased to 8 per cent amongst 15 year olds.
- Six per cent of pupils reported that they had smoked cigarettes in the last week. Older pupils were more likely than younger pupils to have smoked in the last week (13 per cent of 15 year olds, compared with 1 per cent of 11 year olds).

- Regular smokers consumed, on average (mean), 31.1 cigarettes a week. Occasional smokers consumed 3.4 cigarettes a week.

Further information can be found in the *Smoking, drinking and drug use among young people in England in 2012*<sup>8</sup> (SDD12) report, which is the last year in which more detailed questions on smoking were asked, in Section 2.2 and in Tables 2.1 to 2.11.

## 2.5.2 Influences on pupils' smoking

SDD12, Section 2.3 Tables 2.12 to 2.23 provide information on the influences on pupils' smoking, including exposure to second hand smoke.

The key facts from this section show that in 2012:

- 67 per cent of pupils reported being exposed to second-hand smoke in the last year. This was most likely to be in someone else's home (55 per cent). 43 per cent said they had been exposed to second-hand smoke in their own homes, 30 per cent in someone else's car and 26 per cent in their family's car
- 68 per cent of pupils reported that members of their family smoked. About a third (32 per cent) reported that one or both of their parents smoked
- Almost all smokers knew at least one person who smoked (97 per cent of regular smokers and 98 per cent of occasional smokers) compared with about half (51 per cent) of non-smokers
- Pupils who lived with someone else who smoked were more likely to smoke themselves. Just 2 per cent of pupils who did not live with a smoker smoked regularly, compared with 5 per cent of those who lived with one person who smoked and 16 per cent of pupils who lived with three or more smokers.

## 2.5.3 Where pupils get cigarettes

SDD12, Section 2.4 and Tables 2.24 to 2.44 provide information on where pupils get cigarettes.

The key facts from this section show that in 2012:

- Pupils who smoked were most likely to get cigarettes given to them by other people (69 per cent), typically by other friends (57 per cent)
- As well as being given cigarettes by other people (69 per cent), regular smokers were also likely to report buying cigarettes from a shop (60 per cent) or from other people (46 per cent)
- 32 per cent of current smokers said they found it difficult to buy cigarettes from any shop. Just five per cent of pupils tried to buy cigarettes in a shop in the last year. Of these, 51 per cent had been refused at least once – in other words half (49 per cent) were always successful
- Eight per cent of pupils had asked someone else to buy them cigarettes from a shop in the last year. 88 per cent of these were bought cigarettes by someone else on at least one occasion. Friends were the most likely people to buy cigarettes on a pupil's behalf (77 per cent), with strangers being the next most common source (58 per cent).

## 2.5.4 Dependence on smoking

SDD12, [Section 2.5](#) and [Tables 2.45 to 2.53](#) provide information on dependence on smoking. Pupils who were regular smokers were likely to show signs of dependence on the habit. 67 per cent reported that they would find it difficult not to smoke for one week and almost three quarters (72 per cent) would find it difficult to give up altogether. Almost two thirds of regular smokers (63 per cent) had tried to give up smoking.

## 2.5.5 Attitudes and beliefs

SDD12, [Section 2.6](#) provides information on pupils' attitudes and beliefs. Most pupils (84 per cent) believed that people smoked because they thought it made them look cool in front of their friends. Pupils were also very likely to agree that people of their age smoked because they were addicted to cigarettes (70 per cent), or their friends pressured them into it (70 per cent). Further information can be found in [Tables 2.54 to 2.62](#).

## 2.5.6 Sources of information about smoking

SDD12 showed that pupils were most likely to say that they got helpful information about smoking from their parents (73 per cent), teachers (71 per cent) and television (69 per cent) [Section 2.7](#) and [Tables 2.63 to 2.65](#).

## 2.5.7 Factors associated with regular smoking

Factors strongly associated with smoking for children aged 11-15 included being female, being older, partaking in other risky behaviours (drinking alcohol, drug use, truancy), and having friends and family who smoke. [SDD12, Section 2.8](#) and [Table 2.66](#). A logistic regression model was used to explore the characteristics of pupils and their environments associated with regular smoking. Further information on logistic regression can be found in SDD12 Appendix B.

## 2.5.8 Regional comparisons

Data from 2011 and 2012 have been combined to enable analysis of key survey estimates by region and shows the proportion of pupils who had tried smoking varied between 22 per cent in London, the East Midlands and the West Midlands to 30 per cent in the North East. There was similar variation in the proportion of regular smokers, but this was not statistically significant. Further information on the findings can be found in SDD12 Chapter 6.

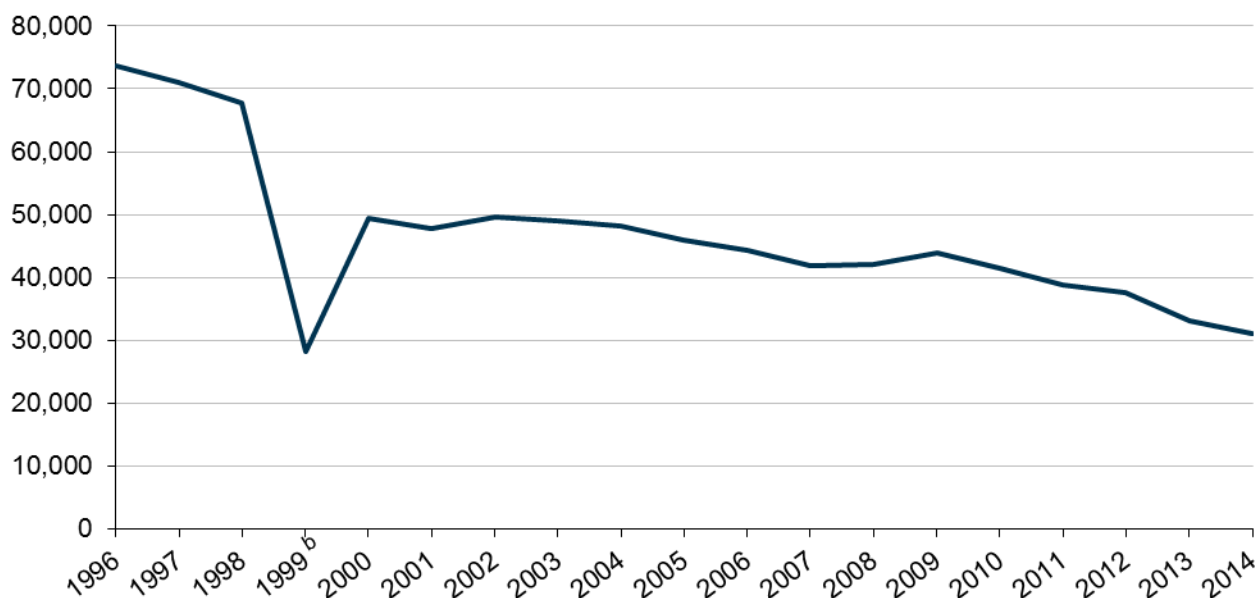
# 2.6 Availability and affordability of tobacco

## 2.6.1 Tobacco released for home consumption

Information on the quantities of tobacco released for home consumption is collected by Her Majesty's Revenue and Customs and relates to the United Kingdom as a whole<sup>9</sup>. Releases of cigarettes, both home produced and imported, have fallen since the mid-1990s; although much of the decline among home produced cigarettes occurred before 2000. [Table 2.3](#)  
[Figure 2.4](#)

**Figure 2.4 - Quantities of cigarettes released for home consumption in the United Kingdom, 1996 to 2014**

Millions of sticks

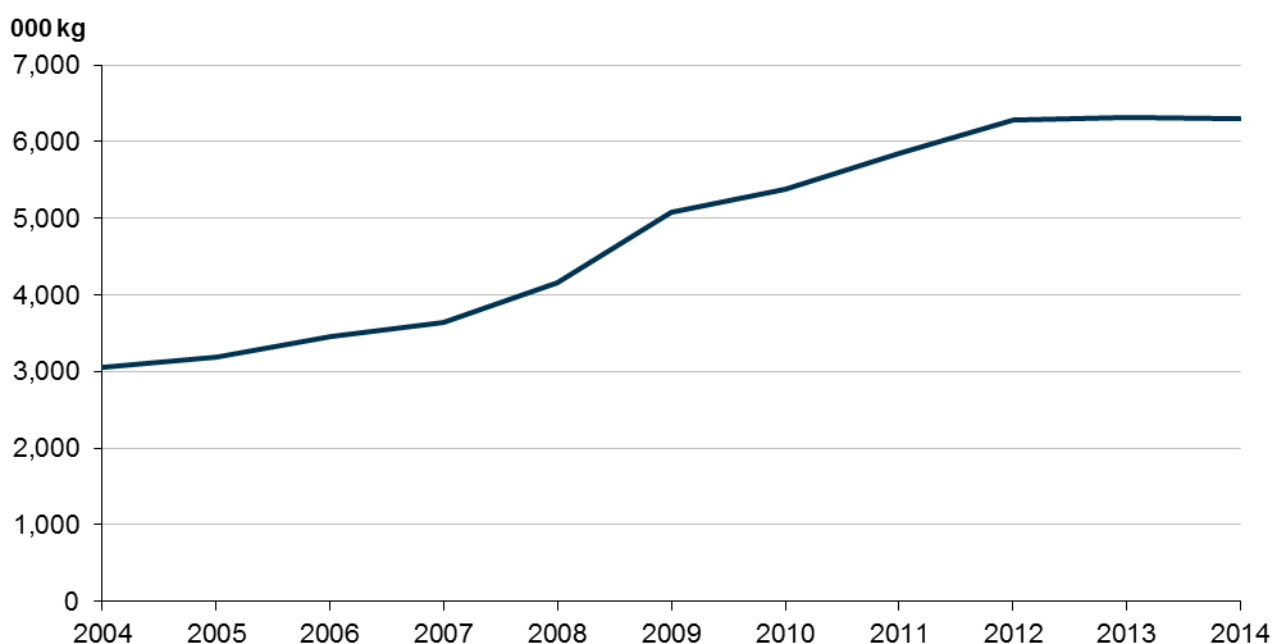


<sup>b</sup> Receipts were high in December 1998 following the November Budget and associated forestalling. The next Budget took place in March 1999 but as stocks were still available from the November forestalling, no further forestalling took place. The next Budget took place in March 2000. Manufacturers forestalled against this affecting April receipts. There was therefore no forestalling in the financial year 1999/00.

Forestalling is a tax avoidance practice. Whereby excessive quantities of goods are removed for home-use on payment of duty because an increase in the rate of duty is expected. (HMRC 2014)

**Source:** Statistical Bulletin: Tobacco duties. Her Majesty's Revenue and Customs  
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Since 2004, releases of hand-rolling tobacco have more than doubled. This reflects the increase in the proportion of adults who smoke hand-rolled cigarettes. [Table 2.3](#) [Figure 2.5](#)

**Figure 2.5 - Quantities of hand-rolling tobacco released for home consumption in the United Kingdom, 2004 to 2014**

**Source:** Statistical Bulletin: Tobacco duties. Her Majesty's Revenue and Customs  
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## 2.6.2 Affordability of tobacco

The HSCIC has routinely published a series of indices derived from Office for National Statistics (ONS) data in its *Statistics on Smoking: England* reports. They include the Tobacco Price Index (TPI), Retail Price Index (RPI), Relative Tobacco Price Index (defined as TPI / RPI), Real Households' Disposal Income (RHDI) and the affordability of tobacco index (defined as RHDI / Relative Tobacco Price Index).

Since August 2010 the HSCIC has worked with key customers to investigate the scope for making methodological improvements to the way the affordability of tobacco index is derived. The Institute of Alcohol Studies (IAS) produced a research paper<sup>18</sup> in September 2010 proposing a number of adjustments to the affordability of alcohol index produced by the HSCIC. This paper also had implications for the affordability of tobacco index presented in this report.

As a result, from 2011 the HSCIC has implemented one of the proposed adjustments. The revised Real Households' Disposable Income (RHDI) index now tracks changes in real disposable income per capita. Previously, the RHDI index tracked changes in the total disposable income of all households and was not on a per capita basis. Consequently, the changes in the RHDI index over time were, in part, due to changes in the size of the population and not exclusively due to changes in real disposable income per capita. The RHDI index feeds into the affordability of tobacco index, and this was also affected.

The adjustment was carried out using ONS mid-year population estimates of the adult population aged 18 and over, and was applied to all years in the index (1980 onwards). The adjusted RHDI index was then carried forward to produce an adjusted affordability of tobacco index. [Table 2.4](#) and [Figure 2.6](#). For further information on the methodology see [Appendix A](#).



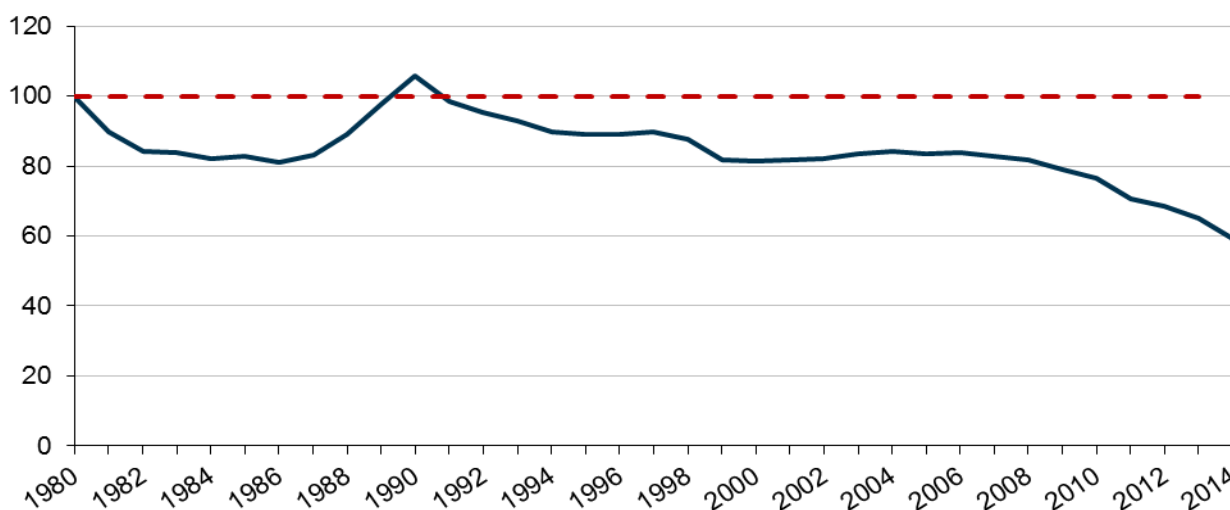
The source of the RHDI index is an ONS series known as *Economic Trends (Code NRJR)* and is closely related to a separate National Accounts ONS series known as *Gross Disposable Income (Code QWND)*. This relates to all households in the UK and is defined in the *UK National Accounts Concepts, Sources and Methods*<sup>10</sup>. Whereas QWND is presented in current prices (i.e. values appropriate to the year for which they are presented), NRJR is adjusted for inflation, hence the 'Real' in 'Real households' disposable income'.

Further views on the affordability measure, in particular to the revision made in 2011 and the further proposed amendments contained in the IAS research paper were sought during the Lifestyles Compendia Publications public consultation in 2011. All responses were in favour of the adjustment made in the 2011 report to calculate on a per capita basis and this adjustment will continue.

In the UK since 1980 (an arbitrarily chosen base year) prices of tobacco, as measured by the tobacco price index, have increased more than the retail price index. The price of tobacco has increased by 87 per cent over the last ten years from 2004 to 2014, making it 30 per cent less affordable, highlighting the overall trend of decreasing affordability over the period. Between 2004 and 2014 the price of tobacco increased by 37 per cent relative to retail prices. However, real households' disposable income (adjusted) decreased by 4 per cent over the same period. [Table 2.4](#) and [Figure 2.6](#)

**Figure 2.6 - Tobacco revised affordability index: 1980 to 2014**

**Affordability of Tobacco index**



**Source:** Family Spending 2014. Expenditure and Food Survey. Office for National Statistics licensed under the Open Government Licence v.2.0.

a Population estimates used for 2014 are mid-year population estimates for 2013.

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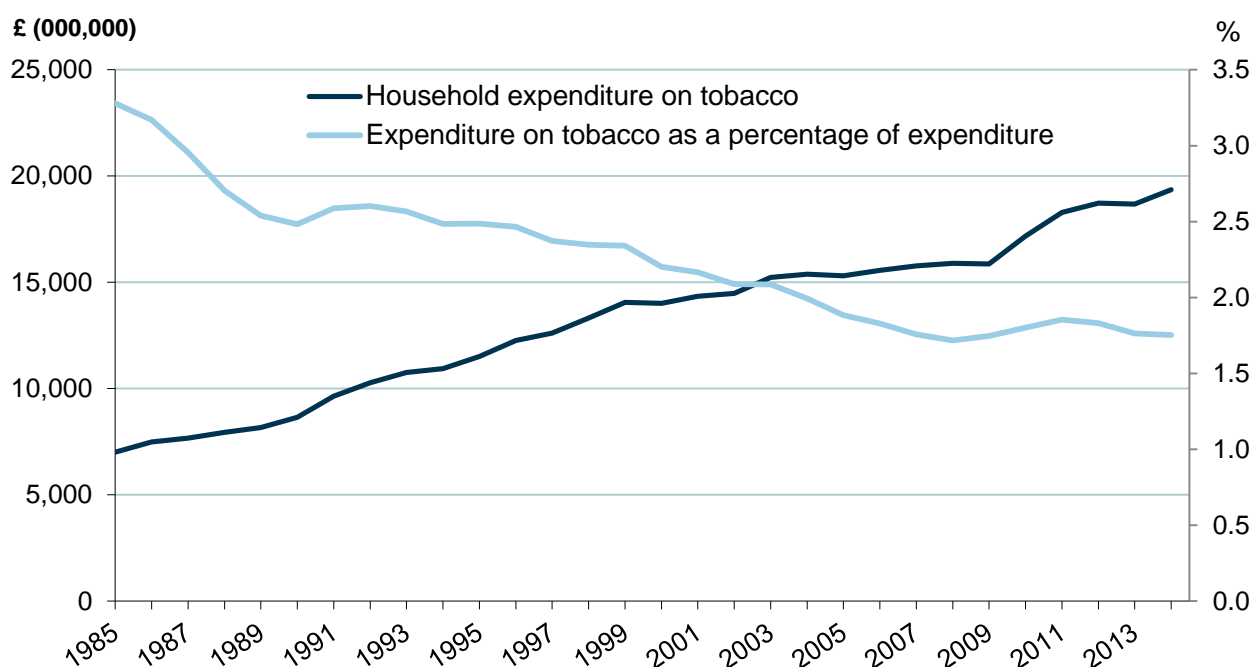
The HSCIC continues to investigate new and improved measures for calculating indicators and may include revised methodologies in future publications.

### 2.6.3 Spending on tobacco

Office for National Statistics (ONS) *Consumer Trends*<sup>13</sup> reported that the total UK household expenditure on tobacco has nearly trebled from just over £7 billion in 1985 to £19.4 billion in 2014. However, tobacco expenditure as a proportion of total household expenditure has decreased overall over the same period (from 3.3 per cent in 1985 to 1.8 per cent in 2014).

[Table 2.5](#) [Figure 2.7](#)

**Figure 2.7 - Household expenditure on tobacco and percentage of household expenditure in United Kingdom at current prices, 1985 to 2013**



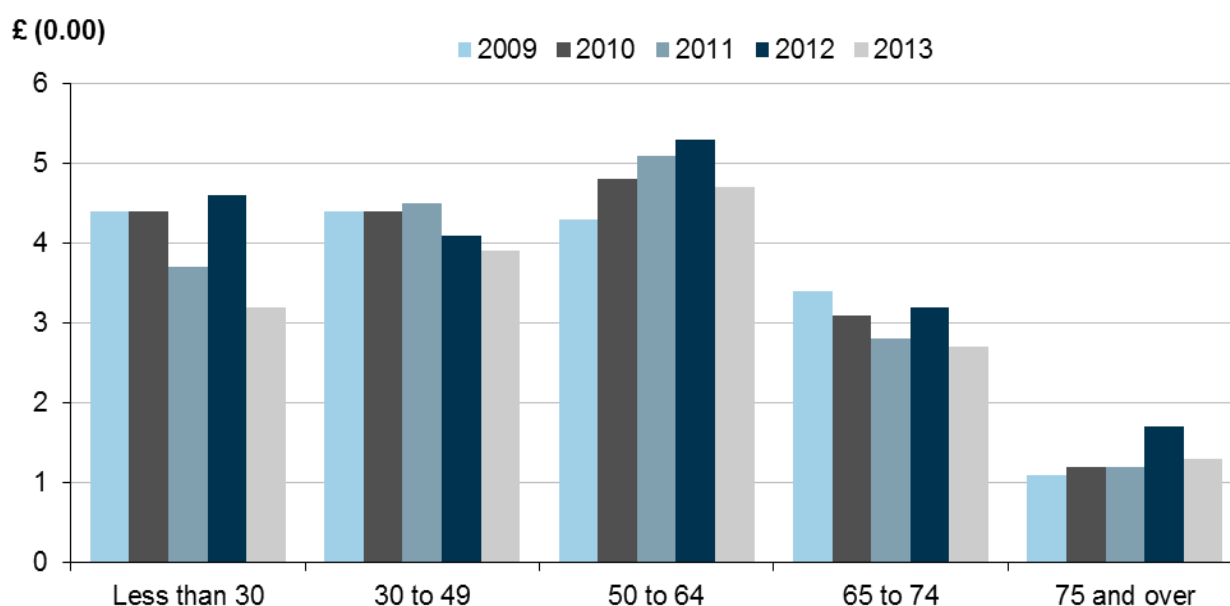
**Source:** Consumer Trends. Office for National Statistics licensed under the Open Government Licence v.2.0  
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Table A11 of the *Family Spending, 2014, a report on the 2013 Living Costs and Food Survey*<sup>14</sup> shows average weekly household expenditure on cigarettes by age. In the United Kingdom in 2013 this was £3.50. Average weekly household expenditure on cigarettes varied by age group. The highest weekly expenditure was seen in the 50 to 64 year old age group (£4.70 a week) compared with £2.70 for the 65 to 74 age group, with the lowest being those aged 75 or over (£1.30). [Figure 2.8](#)

For figures from previous years please see Table 2.5



**Figure 2.8 - Average weekly household expenditure on cigarettes in United Kingdom at current prices, by age of household reference person, 2009 to 2013**



Source: [Table 2.6](#)

## 2.7 Use of electronic cigarettes

E-cigarettes are an electronic inhaler that vaporises a liquid solution into an aerosol mist, simulating the act of tobacco smoking. E-cigarettes deliver nicotine that is vapourised and inhaled from a liquid form via a battery-powered device that simulates cigarette smoking, they are classed as nicotine containing products and are currently regulated as general consumer products.

In May 2016 the European Union directive concerning the manufacture, presentation and sale of tobacco related products<sup>19</sup> comes into force. This covers nicotine-containing liquid where the nicotine concentration does not exceed 20mg/ml, which delivers a dose of nicotine comparable to smoking a standard cigarette over the same period of time.

Some are designed to resemble ordinary cigarettes. Once sucked on, a sensor is activated which heats the liquid within the e-cigarette to create a vapour that delivers nicotine to the individual.

Since e-cigarettes contain no tobacco and thus no tar, unlike ordinary cigarettes, they are considered to be less harmful than tobacco products, emitting vapour containing nicotine and a few other compounds, rather than the environmental tobacco smoke that cigarettes produce. However, it has not yet been scientifically established whether the nicotine and chemical uptake from e-cigarettes and the products are safe. For example, there is emerging evidence that e-cigarettes emit ultrafine/fine particles in their vapour which can be damaging to the lung<sup>23</sup>.

E-cigarettes also contain the chemical propylene glycol, which has been linked to eye, throat and respiratory irritation. The longer term effects of e-cigarettes have not been established.

Other public health concerns include the uptake of e-cigarettes by non-smokers. While some claim that e-cigarettes can be a useful adjunct to cutting down, others suggest that the co-

use of e-cigarettes with tobacco cigarettes may reinforce the smoking habit by helping smokers when they are unable to smoke or may discourage cessation attempts. Over the past few years, the availability and use of e-cigarettes has been rising.

For the first time in HSE13, participants were asked questions on their use of electronic cigarettes (e-cigarettes, also called vapourisers).

- Three per cent of adults were currently using e-cigarettes (vapourisers); a further two per cent of men and one per cent of women were currently using other nicotine delivery products but not e-cigarettes.
- Among men, 29 per cent of current smokers, six per cent of ex-smokers and one per cent of people who have never smoked had ever used e-cigarettes. The proportions were similar for women.

E-cigarettes have been marketed as a tool to help stop smoking, which was identified as the most popular reason for use in an online survey carried out for Action on Smoking and Health (ASH)<sup>20</sup>.

The survey also estimated that there are 2.1 million adults who are current users of e-cigarettes in Great Britain. Of these, ex-smokers account for approximately 700,000 and 1.3 million use both tobacco and electronic cigarettes.

The number of users is increasing; 2.7 per cent of smokers reported using e-cigarettes on a regular basis in 2010, increasing to 17.6 per cent in 2014.

The main reason smokers reported having used e-cigarettes is to “help me stop smoking entirely” (32 per cent); and “help me reduce the amount of tobacco I smoke, but not stop completely” (32 per cent). The main reasons ex-smokers reported having used e-cigarettes are to “help me stop smoking entirely” (56 per cent); and “help me keep off tobacco (34 per cent).

The HSCIC collects data from local authorities on a quarterly basis on NHS Stop Smoking Services. From April 2014 data collected for ‘Number of people setting a quit date and successful quitters by pharmacotherapy treatment received’ will include both licensed and unlicensed nicotine containing products<sup>21</sup>. The last annual report covered 2013/14 and was published on 19 August 2014. The 2014/15 annual report is expected to be published on 19 August 2015. Provisional data is also published on a quarterly basis in the Statistics on NHS Stop Smoking Services in England. Quarter 3 2014/15 was published on 23 April 2015. The reports on NHS Stop Smoking Services are available on the HSCIC website: <http://www.hscic.gov.uk/lifestyles>

Findings from the Smoking Tool Kit Study suggest that the rise in use of e-cigarettes has more than surpassed a decrease in licensed nicotine delivery products (NDPs).

More details on the Smoking Toolkit Study can be found at the below link along with a summary of findings with links to more detailed research.

[www.smokinginengland.info/downloadfile/?type=latest-stats&src=7](http://www.smokinginengland.info/downloadfile/?type=latest-stats&src=7)

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## 3 Behaviour and attitudes to smoking

### Key findings

#### Adults' behaviour and attitudes to smoking

In 2008/09, two-thirds of current smokers reported wanting to give up smoking.

Three quarters of current smokers reported trying to give up smoking at some point in the past.

43 per cent of all current smokers sought help or advice for stopping smoking.

69 per cent of adults report that they do not allow smoking at all in their home.

#### Childrens' behaviour and attitudes to smoking

In 2012, 86 per cent of pupils who had been smoking for over year felt it would be difficult for them to give up smoking.

In 2010, 66 per cent of smokers said they started smoking before they were 18 years old.

#### Smoking in cars

In 2014 77 per cent of adults in Great Britain agreed smoking should be banned in cars carrying children younger than 18 years of age, including 63 per cent of smokers

Forty six per cent agreed that smoking should be banned in all cars.

### 3.1 Introduction

This chapter presents information from a number of sources about both adults' and children's behaviour and attitudes towards smoking.

Data on adults' smoking behaviour and attitudes are taken from the Office for National Statistics (ONS) Omnibus Survey. The last version of this report was *Smoking-related Behaviour and Attitudes, 2008/09*<sup>1</sup> and it was discontinued after this date. This survey was carried out during September and November 2008 and February and March 2009 and sampled adults aged 16 and over living in private households in Great Britain. The report presents results on smoking behaviour and habits, views and experiences of giving up smoking, awareness of health issues linked with smoking and attitudes towards smoking.

A further source of data on attitudes to smoking in adults is the General Lifestyle Survey (GLF) published by the Office for National Statistics. This report has also been discontinued and the last edition covered the 2011 survey<sup>2</sup>. The GLF was a national survey covering adults aged 16 and over living in private households in Great Britain. Each year questions were asked about adults' smoking habits.

NHS Stop Smoking Services information can also be found in this chapter and includes the number setting a quit date and of those, how many successfully quit. Information is taken from the latest report *NHS Stop Smoking Services: England, April 2013 to March 2014*<sup>4</sup>.

Children's attitudes towards smoking are taken from *Smoking, drinking and drug use among young people in England in 2012*<sup>5</sup> based on the 2012 Smoking, drinking and drug use survey. Since 1998, this survey has included a core section of questions on smoking,

drinking and drug use among children in secondary schools. From 2000, the remainder of the questionnaire has focused in alternate years on either smoking and drinking, or on drug use. In 2013 the focus was on drug use, the latest survey to focus on smoking and drinking was *Smoking, drinking and drug use among young people in England in 2012*<sup>6</sup> (SDD12).

*Action on Smoking and Health (ASH)*<sup>11</sup> produces a fact sheet which has been reviewed in this chapter which looks at the health impact of being exposed to second-hand smoke in cars and policy options to tackle the problem. The health risks of exposure to second-hand smoke (SHS) are well established and in the UK it has been against the law to smoke in vehicles used for work since July 2007.

## 3.2 Adults' behaviour and attitudes to smoking

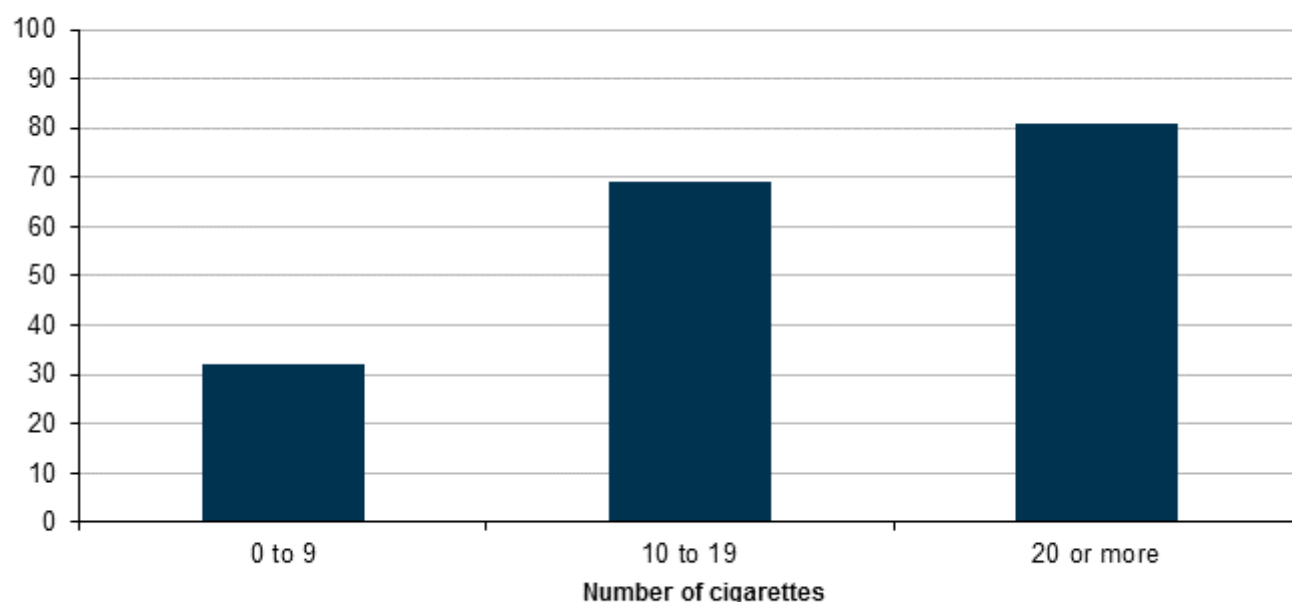
### 3.2.1 Dependence on cigarette smoking

In order to estimate people's dependence on cigarettes, GLF 2011 asked respondents questions on whether they would find it easy or difficult not to smoke for a whole day and how soon after waking they smoke their first cigarette.

In 2011, 60 per cent of smokers in England thought they would find it difficult to go without smoking for a day. Unsurprisingly, heavy smokers (those who smoke 20 or more cigarettes a day) were more likely to say they would find it difficult not to smoke for a day than light smokers (those who smoked less than 10 cigarettes a day) (81 per cent and 32 per cent respectively). [Table 3.1](#), [Figure 3.1](#)

**Figure 3.1 - Proportion of smokers in Great Britain who would find it difficult to go without smoking for a day by number of cigarettes smoked a day, 2011**

Percentage



Source: General Lifestyle Survey, 2011. Office for National Statistics licensed under the Open Government Licence v.2.0. Copyright © 2014, Re-used with the permission of The Office for National Statistics

Differences were also reported between socio-economic groups. Smokers in routine and manual groups were more likely to say they would find it difficult to go without smoking for a whole day than those in managerial and professional occupations (63 per cent and 52 per cent respectively). However, for those who smoked 20 or more cigarettes a day, the difference between the same two socio-economic groups in the proportion who would find it



difficult to go without smoking for a day was reversed (87 per cent in managerial and professional occupations and 79 per cent in the routine and manual group). [Table 3.1](#)

Overall, 16 per cent of smokers reported having their first cigarette within five minutes of waking. Heavy smokers (those smoking 20 or more cigarettes a day) were more likely to smoke within five minutes of waking than light smokers (35 per cent and 3 per cent respectively). Smokers in managerial and professional occupations were less likely than smokers in routine and manual occupations to smoke within five minutes of waking (10 per cent and 18 per cent respectively)<sup>2</sup>.

### 3.2.2 Wanting to stop smoking

The information below is sourced from the Office for National Statistics (ONS) Omnibus Survey, *Smoking-related Behaviour and Attitudes 2008/09*<sup>1</sup>. The survey was last conducted in 2008/09 and the results were published in 2009. This is currently not being continued, therefore at the time of this publication there is no new information to add from this report.

An earlier version of this smoking compendium report, *Statistics on Smoking: England, 2009*<sup>7</sup> published by the Health and Social Care Information Centre (HSCIC) presented detailed summary information of the 2008/09 Omnibus Survey (for Great Britain). As this is still the latest information available, it is provided again below.

In 2008/09, the Omnibus Survey found that 67 per cent of current smokers in Great Britain reported that they wanted to give up smoking; this is lower than in 2007 when 74 per cent of smokers wanted to give up. There were no statistically significant differences in the percentage of men and women smokers who reported wanting to stop smoking.

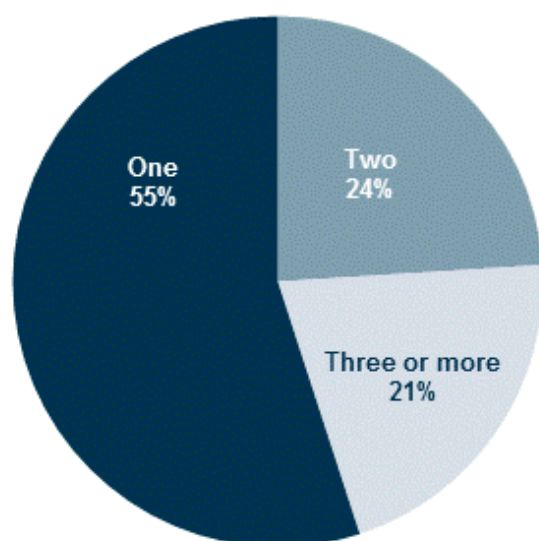
Those who reported wanting to give up smoking were also asked why they wanted to do so and up to three of their answers were recorded. Eighty three per cent of respondents gave at least one health reason for wanting to give up smoking. Financial reasons were the second most common answer (31 per cent), followed by harms children (22 per cent) and family pressure (16 per cent)<sup>1</sup>.

### 3.2.3 Attempts at stopping smoking

In 2008/09, 75 per cent of current smokers in Great Britain reported having tried to give up smoking at some point in the past. There was no significant difference between the proportion of men and women who have tried to stop smoking<sup>1</sup>.

The percentage of smokers who had made an attempt to quit smoking in the 12 months before they were interviewed increased from 22 per cent in 2000 to 31 per cent in 2007, then fell to 26 per cent in 2008/09<sup>1</sup>.

Smokers who had tried to give up smoking in 2008/09 were asked how many attempts they had made. Fifty five per cent reported making one quit attempt and 21 per cent reported making three or more quit attempts. [Figure 3.2](#), [Table 3.2](#)

**Figure 3.2 - Number of attempts to give up smoking in Great Britain in 2008/09**

Source: Smoking-Related Behaviour and Attitudes, 2008/09. Office for National Statistics licensed under the Open Government Licence v.2.0.  
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Smokers who had previously quit were also asked how long they had given up for on the last occasion before returning to smoking. Just over a fifth (22 per cent) had quit for a week, while 29 per cent had been successful for six months or more. Only 8 per cent had quit for two years or more.

Smokers who had stopped smoking for at least one day in the last year were asked why they had started to smoke again. Thirty eight per cent said they had started again because they had found life too stressful or it was just not a good time. The other most common reasons given by respondents were they liked smoking (20 per cent), their friends smoked (18 per cent), they missed the habit/having something to do with their hands (12 per cent) or they couldn't cope with the cravings (12 per cent)<sup>1</sup>.

In 2008/09, 43 per cent of all current smokers had sought some kind of help or advice for stopping smoking in the last year. The most popular method used was reading leaflets/booklets on how to stop (33 per cent). Other methods included asking a doctor or other health professional for help (15 per cent), being referred/self-referred to a stop smoking group (8 per cent) or calling a smokers' telephone helpline (4 per cent). Nearly a quarter (23 per cent) had used Nicotine Replacement Therapy (NRT) or another prescribed drug such as Varenicline or Bupropion to help them stop<sup>1</sup>.

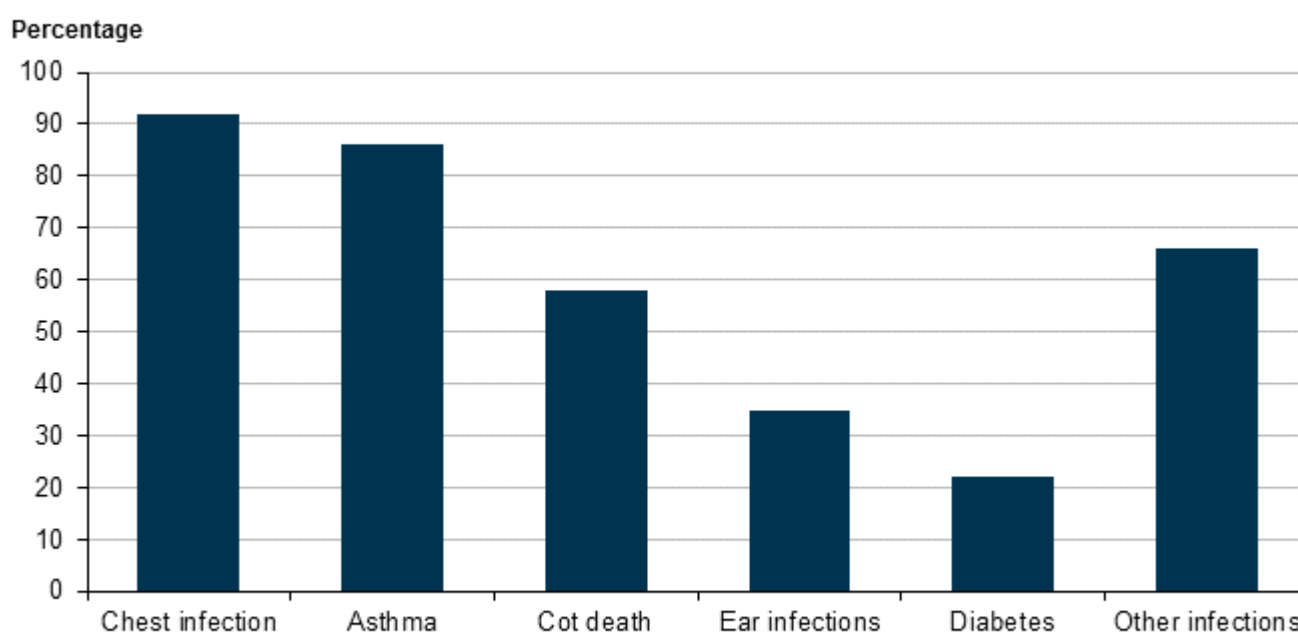
### 3.2.4 Health risk awareness

To evaluate awareness of the effects of second-hand smoking, respondents to the Omnibus Survey were asked whether or not they thought that living with a smoker increased a child's risk of a range of medical conditions known, or thought, to be caused or exacerbated by second-hand smoking.

People appeared to be most aware of the effect of living with a smoker on a child's risk of chest infections and asthma (92 per cent and 86 per cent respectively). Respondents were less likely to be aware of the risks associated with cot deaths (58 per cent), ear infections (35 per cent) and diabetes (22 per cent). [Figure 3.3](#), [Table 3.3](#)



**Figure 3.3 - Percentage that agree that second-hand smoke increases a child's risk of certain medical conditions in Great Britain, 2008/09**



Source: Smoking-Related Behaviour and Attitudes, 2008/09. Office for National Statistics licensed under the Open Government Licence v.2.0.

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### 3.2.5 Non-smoker attitudes

In 2008/09, the Omnibus Survey found that 62 per cent of non-smokers said that they would mind if other people smoked near them.

Women who did not smoke were more likely to mind others smoking near them than men who did not smoke (64 per cent compared with 59 per cent). Those who have never smoked regularly were more likely to mind people smoking near them than ex-regular smokers (67 per cent and 53 per cent respectively)<sup>1</sup>.

The main reasons why non-smokers said they would mind if people smoked near to them were the unpleasant smell of cigarette smoke (65 per cent), the residual smell of smoke on clothing (53 per cent) and the health effect of second-hand smoke (51 per cent)<sup>1</sup>.

### 3.2.6 Smokers' behaviour

Since 2006, respondents to the Omnibus Survey have been asked about the extent to which smoking was allowed inside their homes. The majority of respondents in 2008/09 said that smoking is not allowed at all inside their homes (69 per cent). A fifth (20 per cent) said that smoking is allowed in some rooms or at certain times and only 10 per cent said that smoking is allowed anywhere<sup>1</sup>.

Heavy smokers (20 or more cigarettes a day) were the least likely to say that smoking was not allowed at all in their homes (21 per cent) compared with 38 per cent of light smokers (less than 20 cigarettes a day), 78 per cent of ex-smokers and 81 per cent of those who had never smoked<sup>1</sup>.

Respondents in managerial and professional or intermediate occupations were more likely than those in routine and manual occupations, to report that they did not allow smoking at all in their home (80 per cent and 69 per cent compared with 62 per cent respectively). People

who were living in a household with children were more likely to say that they did not allow smoking at all in their home (75 per cent compared with 67 per cent living with no children)<sup>1</sup>.

Those who were aware of the potential harm to children and non-smoking adults of second-hand smoke were more likely than others to say that smoking was not allowed at all in their home. For example, 74 per cent of people who were aware of the effect of second-hand smoke on a child's risk of asthma did not allow smoking at all in their home compared with 42 per cent of those who believed that it did not increase the risk<sup>1</sup>.

Smokers were also asked if they altered their smoking behaviour when in the company of non-smoking adults or children. The majority of smokers (81 per cent) said that they modified their smoking behaviour when in the presence of non-smoking adults, with half (50 per cent) saying they did not smoke at all and 31 per cent reporting that they tended to smoke fewer cigarettes. 5 per cent said they modified their behaviour in another way such as asking permission to smoke but the remaining 14 per cent said they smoked the same number of cigarettes<sup>1</sup>.

In the presence of children, smokers were more likely to alter their behaviour than in the presence of non-smoking adults. In 2008/09, just over nine in ten (91 per cent) smokers reported modifying their smoking behaviour when a child was present. The percentage of smokers who reported that they would not smoke at all in front of children has increased since 1997 from 54 per cent to 77 per cent in 2008/09<sup>1</sup>.

### **3.2.7 Views on smoking restrictions**

New legislation was introduced making enclosed public places smoke-free from March 2006 in Scotland, from April 2007 in Wales and from July 2007 in England. The Omnibus survey questions from previous years asking respondents whether they thought there should be restrictions on smoking in certain places were therefore reworded to reflect this change and hence the results from 2007 are not comparable with those prior to this year.

In 2008/09, the vast majority of respondents agreed that smoking should be restricted in certain places; 94 per cent thought there should be smoking restrictions in indoor sports and leisure centres, 93 per cent in restaurants, 91 per cent in indoor shopping centres and 85 per cent at work or in railway and bus stations<sup>1</sup>.

Current smokers were less likely to agree that there should be restrictions than ex-smokers and those who had never smoked. For example, 93 per cent of those who have never smoked regularly agreed with the restrictions at work, compared with 87 per cent of ex-smokers and 65 per cent of current smokers. Heavy smokers were also less likely to agree with the restrictions than lighter smokers<sup>1</sup>.

Overall, 81 per cent of people agreed with the smoking ban (with 60 per cent strongly agreeing and 21 per cent agreeing), while 13 per cent disagreed and 6 per cent neither agreed nor disagreed. Overall, men were less likely to strongly agree with the legislation (57 per cent compared with 63 per cent respectively). There were no statistically significant differences between those in different age groups<sup>1</sup>.

### **3.2.8 NHS Stop Smoking Services**

The NHS Stop Smoking Services offer support to help people quit smoking. This can include intensive support through group therapy and where appropriate, one-to-one support. The support is designed to be widely accessible within the local community and is provided by trained personnel such as specialist stop smoking advisors and trained nurses and

pharmacists. These services complement the use of pharmacotherapies. Statistics on NHS Stop Smoking Services presents statistics from the NHS Stop Smoking Services in England.

*Statistics on NHS Stop Smoking Services: England, April 2013 to March 2014*<sup>6</sup>, is the most recent publication in this series.

The main findings from this report are:

England - April 2013 to March 2014

- 586,337 people set a quit date through the NHS Stop Smoking Services in 2013/14 (down 19 per cent on 2012/13, and the first time this number has fallen for two consecutive years, since NHS Stop Smoking Services (previously Smoking Cessation Services) were set up in all Health Authorities in England in 2000/01). 300,539 people successfully quit (down 20 per cent) which gives a quit rate of just over half (51 per cent) which was similar to 2012/13. The success rate of giving up smoking generally increased with age, from 39 per cent for those aged under 18, to 58 per cent of those aged 60 and over.
- In 2013/14, 47 per cent (9,385) of pregnant women setting a quit date successfully quit. This success rate is the same as last year compared to a peak of 53 per cent in 2005/06.
- The North East region reported the highest number of people setting a quit date in 2013/14 (2,023 per 100,000 population) while the South East reported the lowest number (1,036 per 100,000 population).
- The City of London had the highest number of people setting a quit date per 100,000 population but their numbers are subject to relatively high variation each year due to the small size of the Local Authority. The next highest was Manchester City Council, although there are concerns around the quality of their data (see Data Quality Statement in the Stop Smoking Services report for more information), followed by Blackpool Borough Council (Unitary). Borough of Poole Council (Unitary) had the lowest number of people setting a quit date per 100,000 population followed by Bury Metropolitan Borough Council and Surrey County Council.
- Just over nine out of ten people who reported they had successfully quit are known to have received pharmacotherapies in 2013/14. This has remained fairly consistent since 2008/09 (between 91 and 93 per cent).

## 3.3 Children's behaviour and attitudes to smoking

### 3.3.1 Point of sale advertising

Point of Sale Display of Tobacco Products undertaken by The Centre for Tobacco Control Research<sup>13</sup> reports the results of primary research with UK Adolescents are:

- Since the implementation of the UK Tobacco Advertising and Promotion Act (TAPA) of 2002, Point-of-Sale (PoS) has taken over as the most important source of tobacco marketing for young people. In 2006, almost half (46%) of UK teens were aware of tobacco marketing at PoS.
- The related marketing tools of posters (which are now only present at PoS), new pack designs and special price offers (which are both displayed at PoS) remain prominent. They are recalled by between 18 per cent and 27 per cent of UK youngsters.

- Whilst TAPA has successfully reduced overall awareness of tobacco promotion and brands among the young, awareness of new pack design/size has actually increased from 11 per cent to 18 per cent.
- Despite TAPA's success, branding continues to drive adolescent smoking in the UK. PoS display is contributing to this effect. When other risk factors are controlled for, never smokers' susceptibility to smoke increased with greater brand awareness and with greater awareness of tobacco marketing. Furthermore, never smokers' awareness of cigarette brand was positively associated with awareness of tobacco marketing at PoS as well as of new pack designs or new pack sizes.
- Thus the primary research is in line with the literature and confirms that PoS is instrumental in youth smoking.

[http://www.cancerresearchuk.org/prod\\_consump/groups/cr\\_common/@nre/@pol/documents/generalcontent/crukmig\\_1000ast-3338.pdf](http://www.cancerresearchuk.org/prod_consump/groups/cr_common/@nre/@pol/documents/generalcontent/crukmig_1000ast-3338.pdf)

New legislation under the Health Act 2009 from April 2012 banned in large stores and April 2015 in all other stores. (A large store is a store with a relevant floor area exceeding 280 square meters and is based on the definition in the Sunday Trading Act 1994).

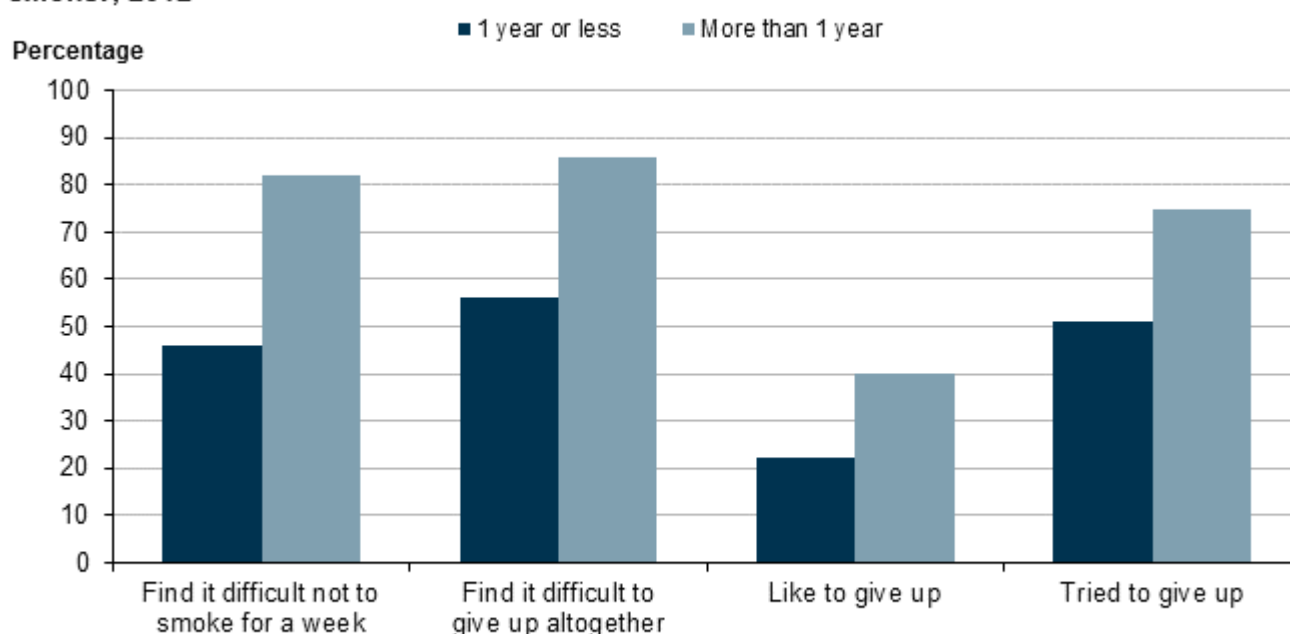
### 3.3.2 Children's dependence on smoking

SDD2013<sup>5</sup> focussed on drug use, so references in this section will continue to quote, where appropriate, SDD12 which focussed on smoking and drinking. In addition to the core questions on smoking, there were also a series of questions designed to estimate children's dependence on cigarettes by asking whether those who smoked thought they would find it difficult to stop smoking, whether they would like to give up smoking and whether they have tried to give up.

Findings from SDD 2012<sup>6</sup> showed that children's dependence on smoking was related to the length of time spent as a regular smoker (defined as those who smoke at least one cigarette a week). Of those pupils who were regular smokers and had been smoking for over a year, 82 per cent reported that they would find it difficult not to smoke for a week, compared with 46 per cent of those regular smokers who had been smoking for one year or less. Similarly, 86 per cent of regular smokers who had been smoking for over a year would find it difficult to give up altogether, compared with 56 per cent of those who had smoked for one year or less.

Almost two thirds (63 per cent) of pupils who were regular smokers had tried to give up smoking and 31 per cent reported that they wanted to give up. Among pupils who had smoked regularly for more than a year, 75 per cent had tried to give up smoking compared with 51 per cent of those who had smoked for less time. Similarly, those who had smoked for over a year were more likely to want to give up than those who had smoked for one year or less (40 per cent and 22 per cent respectively). [Table 3.20](#), [Figure 3.4](#)

**Figure 3.4 - Perceived dependency on smoking in England, by length of time as a regular smoker, 2012**



Source: Smoking, Drinking and Drug use among Young People in England in 2012. The Health and Social Care Information Centre. Copyright © 2014

### 3.3.3 Help on giving up

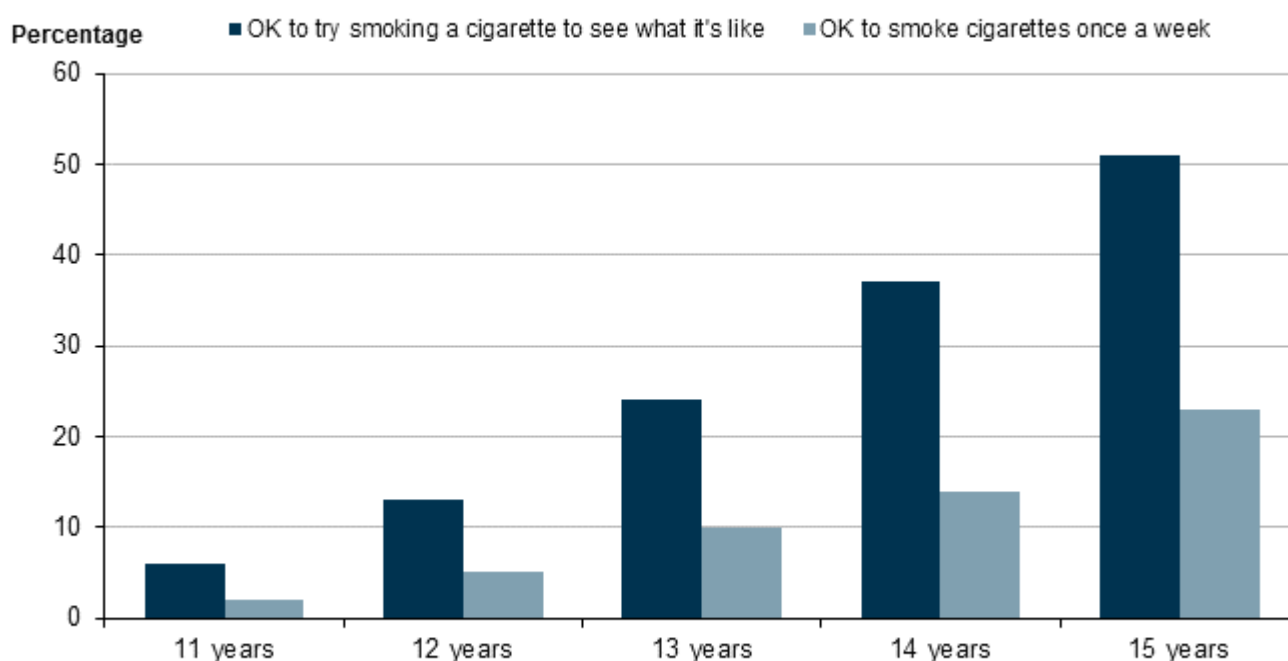
Pupils who had tried to give up smoking, and those who smoked in the past, were asked whether they had made use of different types of help to give up smoking. Most had not tried any of the methods asked about. 43 per cent reported not spending time with friends who smoke and 22 per cent reported consulting friends or family for advice and 10 per cent reported using nicotine replacement products. Asking an adult at school for advice (5%), phoning an NHS smoking helpline (2%), using NHS Stop Smoking Services (1%) and visiting a GP to help give up (2%) were all less frequently reported methods of trying to stop smoking<sup>6</sup>.

### 3.3.4 Children's attitudes towards smoking

In SDD 2012, pupils were also asked whether they thought it was 'OK' for someone their age to try cigarettes to see what it is like or to smoke cigarettes once a week.

Since 1999, there has been a steady decrease in the proportion of pupils who thought it was OK to try smoking to see what it was like (54 per cent in 1999 to 31 per cent in 2012). Pupils were also less likely to think that it was OK to smoke cigarettes once a week; 13 per cent in 2012, down from 25 per cent in 2003 (when this question was first asked<sup>6</sup>).

The acceptability of smoking increased with age, as shown in [Figure 3.5](#). For example, 6 per cent of 11 year olds thought it was OK to try smoking to see what it was like, compared with 57 per cent of 15 year olds. [Table 3.5](#)

**Figure 3.5 - Attitudes to smoking among secondary school children in England by age, 2012**

Source: Smoking, Drinking and Drug use among Young People in England in 2012. The Health and Social Care Information Centre. Copyright © 2014

Boys and girls were equally likely to think that it was acceptable to try smoking or to smoke once a week, and older pupils were more tolerant of smoking than younger pupils<sup>6</sup>.

Pupils' attitude towards the acceptability of smoking also reflected their own smoking status. Regular and occasional smokers were more likely to think that it was acceptable to try smoking than non-smokers (84 per cent, 85 per cent and 26 per cent respectively)<sup>6</sup>.

### 3.4 Age started smoking

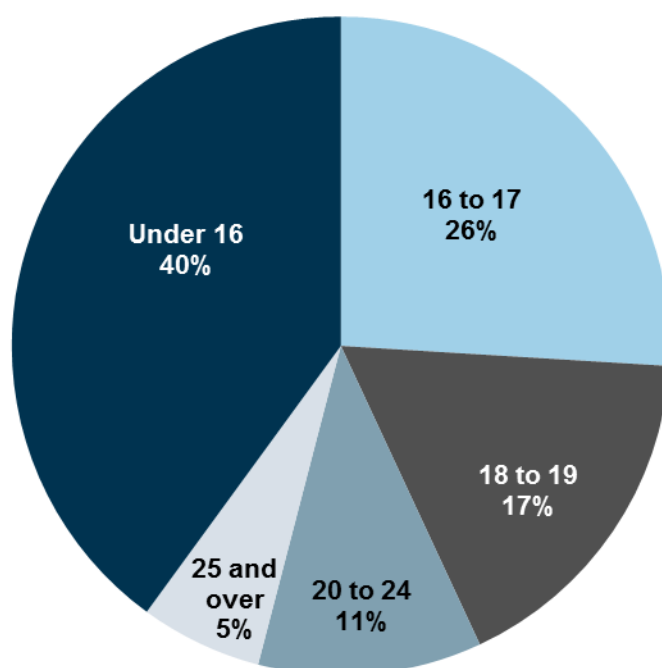
The *Smoking Kills*<sup>8</sup> white paper introduced by the then government in 1998 noted that people who start smoking at an early age are more likely than other smokers to smoke for a long period of time and more likely to die from a smoking-related disease.

Data from the GLF 2011 report found that, in England, two-thirds (66 per cent) of adults who were either current smokers or who had smoked regularly at some time in their lives had started smoking before they were 18 years of age. Two-fifths (40 per cent) had started smoking regularly before the age of 16 even though it has been illegal to sell cigarettes to people aged under 16 since 1908 and in 2007 become illegal to sell cigarettes to people under 18 years of age. [Figure 3.6](#)



**Figure 3.6 - Age at which adults in England started smoking regularly, 2011**

Percentages may not add to 100% due to rounding.



**Source:** General Lifestyle Survey 2011. Office for National Statistics licensed under the Open Government Licence v.2.0.  
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Men were more likely than women to have started smoking before they were 16 years of age (43 per cent of men who had ever smoked regularly compared with 37 per cent of women in 2011).

Since the early 1990s there has been an increase in the proportion of women taking up smoking before the age of 16:

- In 1992, 28 per cent of women who had ever smoked started before they were 16 years of age; in 2011 the corresponding figure was 37 per cent.
- Since 1992, the proportion of men who had ever smoked and had started smoking regularly before the age of 16, has stayed constant at approximately 40 per cent.

In 2011, as in previous years, there was an association between age started smoking regularly and the socio-economic classification of the household reference person:

- In managerial and professional households, 31 per cent of smokers started smoking before they were 16 years of age compared with 45 per cent of those in routine and manual households.

Current heavy smokers (20 or more cigarettes a day) were more likely than current moderate (10 to 19 cigarettes a day) or light smokers (fewer than 10 cigarettes a day) or ex-smokers to have started smoking at an early age.

Among current heavy smokers, 58 per cent started smoking regularly before they were 16 years of age compared with 44 per cent of current moderate smokers and 35 per cent of current light smokers

### 3.5 Smoking in cars

Tobacco use remains a significant challenge to public health and exposure to second-hand smoke (SHS) is hazardous to health, especially for children because they breathe more rapidly and inhale more pollutants than adults<sup>10</sup>.

The Smoking, Drinking and Drug Use Among Young People in England survey 2012<sup>5</sup> (SDD12) reported that 26 per cent of 11 to 15 year olds were exposed to SHS in their family's car in the past year and 30 per cent in someone else's car.

Smoking in work vehicles has been illegal since 2007 and in February 2014, Parliament voted in favour of introducing legislation to make private vehicles carrying children smoke-free. An amendment to the Children's and Families Act 2014, Part 5, Section 95 paved the way to making smoking in a private vehicle carrying children illegal by 2015.

Government intervention is believed to be required to prevent SHS from adversely affecting the health of children in cars, where the levels of SHS can be significantly more concentrated. Intervention is further required on behalf of children as they cannot exert their choice to leave an SHS-exposed vehicle unlike adult passenger<sup>10</sup>.

The Children and Families Act 2014 gave the Secretary of State for Health the power to legislate against smoking in private vehicles when children are present. Regulations were approved in February 2015 and the law will enter into force on 1st October 2015. Some experts argue that it is ethically justifiable to ban smoking in cars carrying children because children are not fully autonomous and are therefore unable to act to protect their own interests.

Action on smoking and health (ASH) YOUNGOV survey<sup>11</sup> in 2014 found that:

- 77 per cent of adults in Great Britain agreed smoking should be banned in cars carrying children younger than 18 years of age, including 63 per cent of smokers
- 46 per cent agreed that smoking should be banned in all cars.

ASH also presents information related to smoking while driving. A review of studies on smoking and car safety found that smokers have an increased risk of being involved in motor crashes and "actual distraction caused by the act of smoking is a likely factor." The review concludes that "it is clear that smoking while driving is a hazard." A Taiwanese study examining the risk of injury for drivers who smoke found that smoking almost doubled car death risk. Smoking was associated with at least one in five male injury deaths.<sup>11</sup>

### 3.6 European attitudes and behaviour

International comparisons are taken from Attitudes of Europeans towards Tobacco<sup>4</sup> relating to data collected in February to March 2012 from all 27 member states.

- A fifth (21 per cent) of EU population (26 per cent in the UK) has stopped smoking; this proportion is usually higher in Western and Northern European countries.
- Most Europeans who smoke or used to smoke start smoking early: the average starting age is 17.6 (16.8 in the UK).
- Peer influence is the most commonly cited reason for starting smoking: 79 per cent of smokers and ex-smokers say they started because their friends smoked (77 per cent in the UK) and 21 per cent because their parents smoked (24 per cent in the UK). 19 per cent say they liked the smell and/or taste of tobacco (8 per cent in the UK).



Specific tastes such as menthol (3 per cent, UK 4 per cent) or fruity/spicy flavours (1 per cent, UK 1 per cent) also seem to play a role.

- 61 per cent (UK 75 per cent) of current smokers have tried to quit smoking. 21 per cent (UK 33 per cent) made the attempt in the 12 months prior to the survey while 40 per cent (UK 43 per cent) did so more than a year ago.
- Most of those who tried to quit smoking in the last 12 months prior to the survey did not make use of any external assistance (66 per cent, UK 48 per cent). Those who used an aid opted mainly for nicotine replacement or other type of medication (22 per cent, UK 42 per cent). 7 per cent turned to a health professional or used e-cigarettes. In the UK 13 per cent turned to a health professional whilst 9 per cent used e-cigarettes.
- Those respondents who have succeeded in stopping smoking used even less external assistance: 74 per cent (UK 68 per cent) say that they stopped smoking by themselves.
- Personal health concerns are by far the most cited reason behind the decision to stop smoking – both for smokers (60 per cent, UK 56 per cent) and ex-smokers (60 per cent, UK 54 per cent). However, for ex-smokers family/partners/friends are the second most common factor, while smokers mention the price of tobacco. In the UK smokers cited family/partners/friends and price of tobacco equally (32 per cent).

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## 4 Smoking-related costs, ill health and mortality

### Key findings

The number of prescription items dispensed in England to help people stop smoking in 2013/14 was 1.8 million, compared to 1.6 million ten years earlier in 2003/4.

In 2013/14 the Net Ingredient Cost<sup>1</sup> (NIC) of all prescription items used to help people quit smoking was nearly £48.8 million. This is a decrease of 16 per cent on the £58.1 million spent in 2012/13 and 26 per cent less than 2010/11 when NIC of all prescription items peaked at £65.9 million.

In 2013/14 there were over 1.6 million admissions for adults aged 35 and over with a primary diagnosis of a disease that can be caused by smoking. This is approximately 4,500 admissions per day on average. This compares to 1.4 million admissions ten years earlier in 2003/04 with approximately 3,800 admissions per day on average.

Around 454,700 hospital admissions were estimated to be attributable to smoking. This accounts for 4 per cent of all hospital admissions in this age group (35 years and over). This compares to 447,300 admissions in 2003/04 which was 6 per cent of all admissions.

The proportion of admissions attributable to smoking as a percentage of all admissions was greater amongst men (6 per cent) than women (3 per cent).

Men accounted for 895,456 (55 per cent) admissions for diseases which can be caused by smoking in 2013/14 and women accounted for 738,810 (45 per cent). In both men and women, circulatory diseases were the most common reason for admissions (431,648 and 291,809 respectively). But Chronic Obstructive Lung Disease which is a respiratory disease had the highest individual attributable proportion of 85 per cent.

In 2013, 17 per cent (78,200) of all deaths of adults aged 35 and over were estimated to be caused by smoking compared to 19 per cent (95,300) in 2003.

### 4.1 Introduction

This chapter presents information on the costs of smoking to the NHS including prescription costs and costs of the NHS Stop Smoking Service. Information is also presented on the number of hospital admissions and the number of deaths that are attributable to smoking.

Information on the prescription items used to help people stop smoking is produced using Prescription Analysis and Cost (PACT)<sup>1</sup> data, which are accessed from NHS Prescription Services.

This chapter looks at admissions to NHS hospitals in England with a primary diagnosis of diseases that can be caused by smoking. The most recent information available at the time of publication is taken from Hospital Episode Statistics (HES)<sup>2</sup> for the financial year 2013/14.

Information on smoking-attributable hospital admissions and mortality<sup>3</sup> are estimates of the numbers of admissions and deaths in England which were caused by smoking. The estimates of the proportion of hospital admissions and deaths attributable to smoking in this chapter follow a recognised methodology, which uses the proportions of current and ex-smokers in the population and the relative risks of these people dying from specific diseases or developing certain non-fatal conditions compared with those who have never smoked, see

[Appendix B](#) for further details. Figures presented in this chapter relate to people aged 35 and over, as relative risks are only available for this age group.

## 4.2 Costs to the NHS

### 4.2.1 Estimated costs to the NHS

Illness and disease associated with smoking gives rise to costs in the NHS. Direct costs of smoking arise from GP consultations, prescriptions for drugs and various costs related to treating diseases attributable to smoking.

Research carried out by Christine Callum, Sean Boyle and Amanda Sandford and published in *Estimating the cost of smoking to the NHS in England and the impact of declining prevalence*<sup>4</sup> in August 2010 estimated the cost of smoking to the National Health Service (NHS) in England to be £2.7 billion in 2006. This took into account, smoking-attributable hospital admissions which cost the NHS an estimated £1 billion in 2006, outpatient attendances cost £190 million, general practitioner (GP) consultations £530 million, practice nurse consultations £50 million and GP prescriptions £900 million. This represented 5 per cent of adult hospital admission costs, 4 per cent outpatients, 11 per cent GP and 8 per cent practice nurse consultations and 12 per cent of prescription costs. Smoking accounted for 24 per cent of respiratory disease hospital admission costs and 16 per cent of cancer and cardiovascular disease costs (people aged 35 years and over).

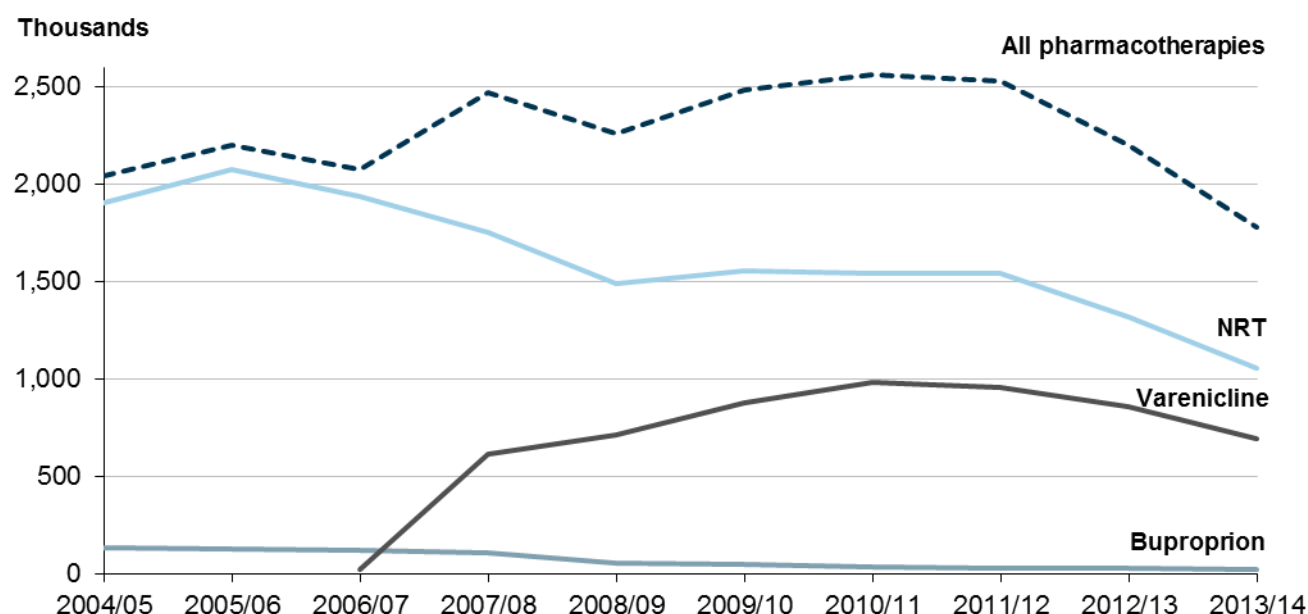
### 4.2.2 Prescribing costs for smoking cessation

There are three main pharmacotherapies prescribed for the treatment of smoking dependence in England: Nicotine Replacement Therapy (NRT), Bupropion (Zyban) and Varenicline (Champix). Prescription items give a measure of how often a prescriber writes a prescription and it is not an ideal measure of the volume of drugs prescribed as different practices may use different durations of supply.

The number of prescription items dispensed in England to help people stop smoking in 2013/14 was 1.8 million, compared to 1.6 million ten years earlier in 2003/4. It peaked during this period at 2.6 million in 2010/11.

In 2013/14 1.1 million items were for NRT, 697,000 for Varenicline and 22,000 for Bupropion. The reduction in the number of items prescribed is not limited to one type of pharmacotherapy.

Prescription items for Varenicline have fallen for the third consecutive year. In 2010/11 Prescription items for Varenicline peaked at 987,000 and are now at 697,000 in 2013/14. Prescription items for Bupropion have been steadily falling since a peak of 136,000 in 2004/05 (it was actually higher in 2000/01 and 2001/02 when fewer alternatives were available). Prescription items for NRT peaked at 2.1 million in 2005/06 and have currently fallen to nearly half that number. [Table 4.1](#) [Figure 4.1](#)

**Figure 4.1 - Number of pharmacotherapies prescribed in primary care to help people quit smoking, 2004/05 to 2013/14**

**Source:** Prescribing Analysis and Cost (PACT) from Prescription Services, part of the NHS Business Service Authority (NHSBSA). The Health and Social Care Information Centre.

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In 2013/14 the Net Ingredient Cost<sup>c</sup> (NIC) of all prescription items used to help people quit smoking was nearly £48.8 million. This is a decrease of 16 per cent on the £58.1 million spent in 2012/13 and 26 per cent less than 2010/11 when NIC of all prescription items peaked at £65.9 million. However the current NIC of all prescription items is over three times the £15.6 million spent in 2000/01.

The average NIC per item was £27 in 2013/14, higher than in 2006/07 (£22) (the first year all three pharmacotherapies were available) but lower than in 2000/01 (£38). The cost per item for Bupropion (Zyban) rose sharply from £37 in 2008/09 to £44 in 2009/10 due to a price increase in February 2009. [Table 4.1](#)

Since April 2013 Strategic Health Authorities and Primary Care Trusts have ceased to exist and have been replaced by Commissioning Regions and Area Teams<sup>5</sup>. No comparison can be made between the two as the geographic boundaries are different and therefore no time series is currently available. The North of England Commissioning Region had the highest number of prescription items per 100,000 of the population (3,637 per 100,000 population) whilst London had the lowest (2,567) in 2013/14. [Table 4.2](#)

### 4.2.3 NHS Stop Smoking Services costs

NHS Stop Smoking Services costs are taken from the most recently available information published which covers a full financial year: *Statistics on NHS Stop Smoking Services in England, April 2013 to March 2014*<sup>6</sup>. NHS Stop Smoking Services are described in [Appendix A](#) of this publication. Chapter 4: Treatment and Expenditure of the above

<sup>c</sup> The Net Ingredient Cost NIC is the basic cost of a drug as listed in the Drug Tariff or price lists; it does not include discounts, prescription charges or fees.

publication presents information on the types of pharmacotherapy used within NHS Stop Smoking Services and provides information on the costs of the services provided.

**Table 4.6** of *Statistics on NHS Stop Smoking Services: England, April 2013 to March 2014* shows total expenditure on NHS Stop Smoking Services in England (excluding Nicotine Replacement Therapy (NRT), Bupropion (Zyban) Varenicline (Champix) prescriptions). No data is given for 2013/14 for England as a whole as seven Local Authorities (LAs) were unable to provide a full dataset for 2013/14. No estimates have been produced for these LAs so national and regional totals are not available. Therefore the latest data available which has an England total is for 2012/13, when the cost per quitter was £235; this is an increase on 2011/12 and 2010/11 when the cost was £220.

## 4.3 Smoking-related ill health

Perceived general health and smoking prevalence is taken from the *Integrated Household Survey, January to December 2013: Experimental Statistics*<sup>13</sup>.

When comparing smoking prevalence and general health, current smokers were less likely to report themselves to be in good health compared to those who have never smoked (Integrated Household Survey Table 5).

The age of adults appeared to have an impact on the perceived general health of current smokers and non-smokers. For adults aged 18-24 years old, 81.8 per cent of current smokers considered themselves to be in good health. This is compared with 91.9 per cent who had never smoked<sup>d</sup>.

For adults aged 50-64 years old, the difference was larger. Of current smokers, 56.7 per cent considered themselves in good health. This compared with 75.9 per cent of adults who had never smoked.

This suggests a relationship between the effects of smoking on perceived general health as age increased.

### 4.3.1 NHS hospital admissions for diseases that can be caused by smoking

**Table 4.3** in this report shows that in England in 2013/14 there were over 1.6 million admissions for adults aged 35 and over with a primary diagnosis of a disease that can be caused by smoking. This is approximately 4,500 admissions per day on average. This compares to 1.4 million admissions ten years earlier in 2003/04 with approximately 3,800 admissions per day on average.

In 2013/14, circulatory disease accounted for the largest number of admissions where there was a primary diagnosis of a disease that can be caused by smoking (723,457). The second most common diagnosis was for cancers which can be caused by smoking (330,280 admissions).

Of the five categories, diseases of the digestive system and respiratory diseases showed the greatest percentage increase in the number of admissions (66 per cent and 53 per cent respectively) since 2003/04.

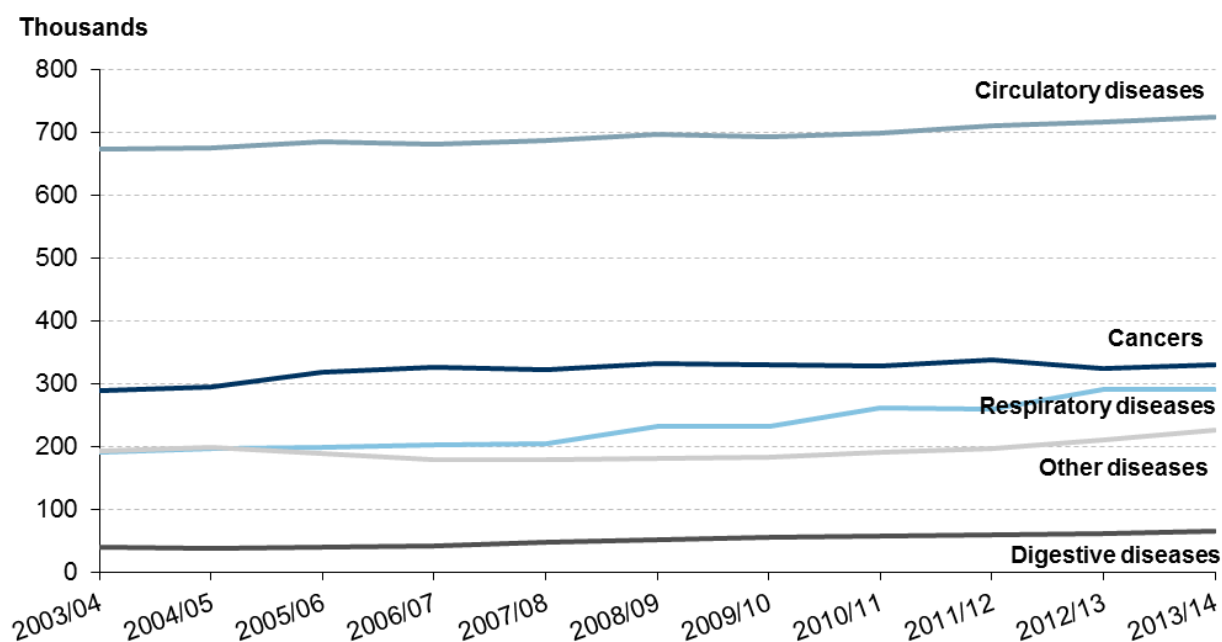
Of the remaining categories, Other diseases (16 per cent), Cancers (15 per cent) and Circulatory diseases (8 per cent) have increased by far less since 2003/04. [Figure 4.2](#)

<sup>d</sup> The total number of eligible responders to the question was 268,102. The question was asked to respondents aged 18 and over.



Specific data quality issues for the inpatient data for 2014/15 can be seen via the data quality note which accompanied the “Hospital Episode Statistics, Admitted Patient Care, England - 2013-14” report at: <http://www.hscic.gov.uk/catalogue/PUB16719>.

**Figure 4.2 - NHS hospital admissions<sup>1</sup> in England with a primary diagnosis of diseases which can be caused by smoking, 2003/04 and 2013/14**



1. Among adults aged 35 and over.

Source: Hospital Episode Statistics. Health and Social Care Information Centre, 2015.

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In 2013/14, Men accounted for 895,456 (55 per cent) admissions for diseases which can be caused by smoking and women accounted for 738,810 (45 per cent).

In both men and women, circulatory diseases were the most common reason for admissions (431,648 and 291,809 respectively), though this accounted for 48 per cent of admissions for men compared with 39 per cent for women.

Diseases of the digestive system which can be caused by smoking were the least common reason for admissions (29,888 for men and 35,391 for women) which accounted for 3 per cent of admissions for men compared with 5 per cent for women. This pattern has remained the same since 2003/04 [Table 4.4](#)

### 4.3.2 Smoking-attributable NHS hospital admissions

The previous section showed that a large number of hospital admissions of adults aged 35 and over are due to diseases which can be caused by smoking. Not all of these admissions however, will be attributable to smoking as there are other contributory factors to these diseases. In order to estimate the number of smoking-attributable hospital admissions, the relative risks of these diseases for current and ex-smokers have been used.

Estimates of the number of smoking-attributable hospital admissions have been calculated following the methodology developed by Callum and White for the report *Tobacco in London: The Preventable Burden*<sup>7</sup> produced by the London Health Observatory (now part of Public Health England) and Smoke-free London by Hughes and Atkinson for the report *Choosing Health in the South East: Smoking*<sup>8</sup> produced by the South East Public Health Observatory. This report calculates smoking-attributable admissions using risk ratios for diseases



associated with smoking-attributable fatalities employed by the Department of Health in their work for the *Health Profile of England 2007*<sup>9</sup> with additional risk ratios for non-fatal diseases attributable to smoking taken from *Tobacco in London: The Preventable Burden*<sup>7</sup>.

The analysis relates to people aged 35 and over where a gender has been specified as relative risks are only available for this age group and differ by gender. [Appendix B](#) gives more details of the methodology used and lists the diseases for which smoking is an attributable factor and their corresponding risk ratios by age and gender where applicable. Note the figures in this chapter for smoking attributable hospital admissions are only estimates as there is no guarantee that in all cases the admissions were directly linked to smoking.

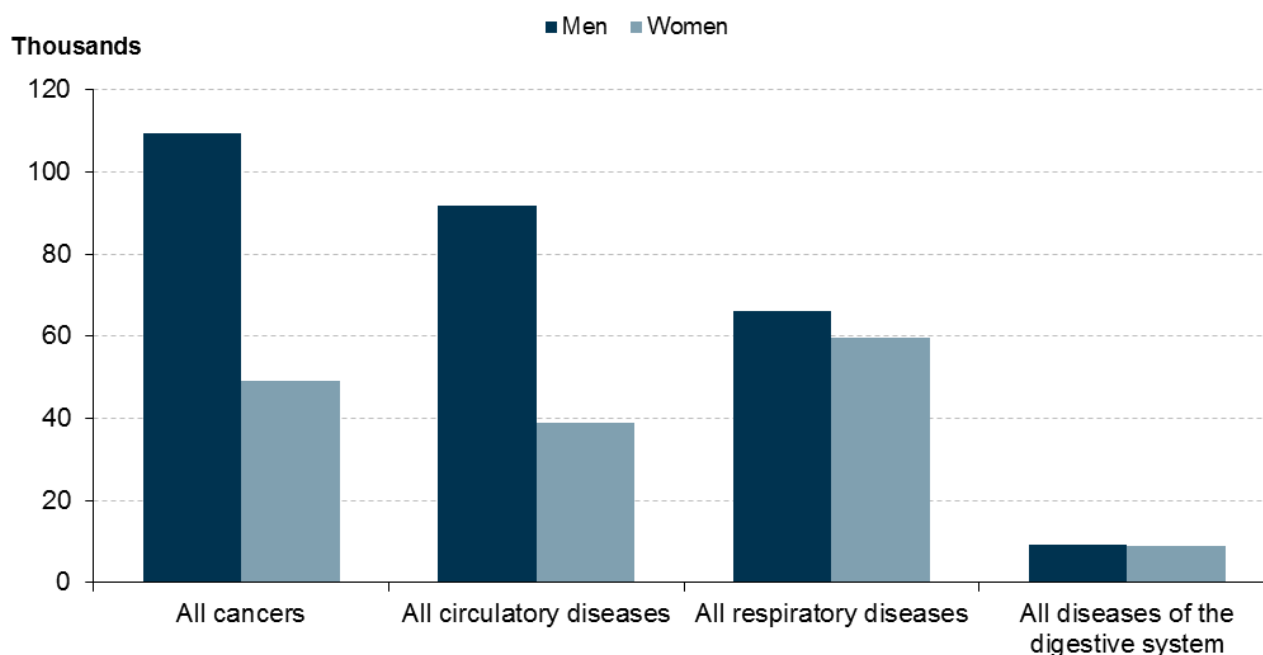
In 2013/14, there were approximately 10.6 million hospital admissions (for all diseases) for adults aged 35 and over in England. Around 454,700 (4 per cent) of these are estimated to have been attributable to smoking. This compares to approximately 7.6 million hospital admissions in 2003/04 of which 447,300 (6 per cent) are estimated to have been attributable to smoking.

The number of admissions in 2013/14 can be broken down further by type of primary diagnosis which shows that an estimated 23 per cent of all admissions with a primary diagnosis of respiratory diseases were attributable to smoking, compared to 15 per cent of admissions with a primary diagnosis of circulatory diseases, 10 per cent with a primary diagnosis of cancer and 1 per cent with a primary diagnosis of diseases of the digestive system. [Table 4.4](#)

A larger proportion of admissions among men than women were attributable to smoking. In 2013/14, there were an estimated 285,300 admissions that can be attributed to smoking for men compared with 169,400 among women. The proportion of admissions attributable to smoking as a percentage of all admissions was also greater amongst men (6 per cent) than women (3 per cent). This indicates that men were more likely to have their health adversely affected as a result of smoking than women. [Figure 4.3](#)

A particularly big difference was found for cancer of

- Upper respiratory sites (72 per cent of admissions attributed to smoking for men and 48 per cent for women)
- the kidney and renal pelvis (33 per cent of admissions attributed to smoking for men and 8 per cent for women)
- Unspecified sites (52 per cent of admissions attributed to smoking for men and 20 per cent for women). [Table 4.4](#)

**Figure 4.3 - Estimated number of NHS hospital admissions attributable to smoking, by disease<sup>1</sup>, 2013/14**

1. Among adults aged 35 and over.

Source: Hospital Episode Statistics. Health and Social Care Information Centre.

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Of the 454,700 admissions estimated to be attributable to smoking in 2013/14, 158,800 were cancer related, 130,800 were for circulatory diseases, 125,600 were for respiratory diseases and a further 18,400 were for diseases of the digestive system.

Admissions with a primary diagnosis of chronic obstructive lung disease had the highest percentage of estimated admissions attributable to smoking (85 per cent). An estimated 80 per cent of admissions with a primary diagnosis of cancers of the trachea, lung and bronchus were attributable to smoking. An estimated 79 per cent of admissions for cancer of the larynx were attributable to smoking.

Smoking is also recognised as the cause of admissions for other non-fatal conditions. For example, in 2013/14 10 per cent of admissions with a primary diagnosis of age-related cataracts (among people aged 45 and over) were attributed to smoking. [Table 4.4](#)

## 4.4 Smoking-attributable deaths

Estimated numbers of smoking-attributable deaths in England have been calculated using the methodology employed by the Department of Health (DH) in the *Health Profile of England*<sup>9</sup> (HPE) which expands upon work undertaken by Twigg, Moon and Walker in the report *The Smoking Epidemic in England*<sup>10</sup> produced by the NHS Health Development Agency. This methodology is described in more detail in [Appendix B](#). The methodology employed in this report is identical to that used in the HPE from 2008. The method differs slightly from the HPE 2007 as it does not reduce the deaths figure to take account of those diseases for which smoking decreases the relative risk, specifically Parkinson's disease and cancer of the uterus.

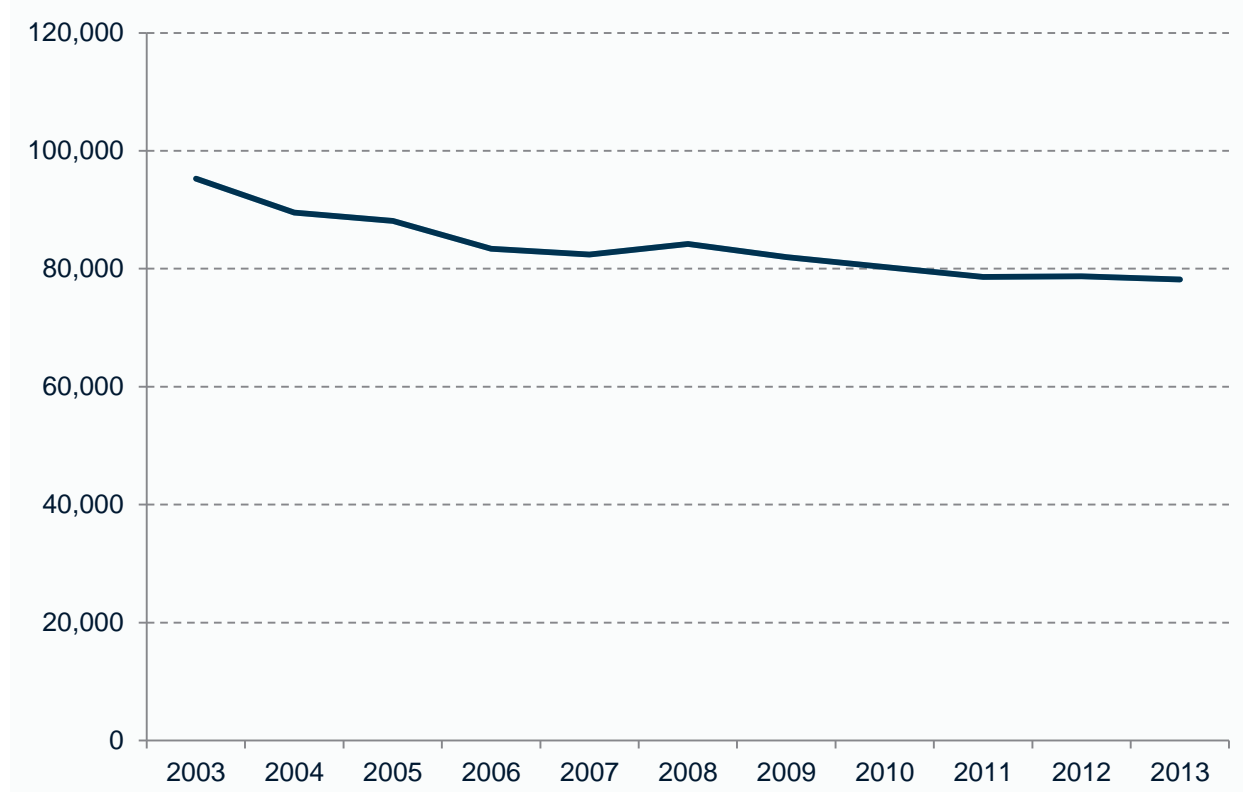
The estimates presented for 2013, are based on 2013 prevalence information (taken from the 2013 Opinions and Lifestyle Survey<sup>11</sup>) and 2013 deaths information<sup>3</sup> from Office for National Statistics, Annual Mortality Statistics, 2013 date of death registration. The time series presented in [Tables 4.5](#) and [4.6](#) were revised at the end of 2014 so that prevalence

data and Mortality statistics were taken from the same calendar year and risk ratio's taken from the Health Profile for England, 2007<sup>9</sup> were applied to all years.

In 2013, there were 463,986 deaths of adults aged 35 and over in England, 241,683 of which were from conditions that can be caused by smoking. This compares to 308,872 deaths from conditions that can be caused by smoking in 2003 (down 67,189).

Of the total number of deaths 78,200 (17 per cent) were estimated to be attributable to smoking compared to 95,300 (19 per cent) in 2003, a reduction of 17,100 attributable deaths.

**Figure 4.4 - All deaths among adults aged 35 and over in England which can be attributed to smoking, 2003 to 2013**



**Sources:** Office for National Statistics, Annual Mortality Statistics: Crown Copyright General Lifestyle Survey and Opinions and Lifestyle Survey. Office for National Statistics licensed under the Open Government Licence v.2.0.

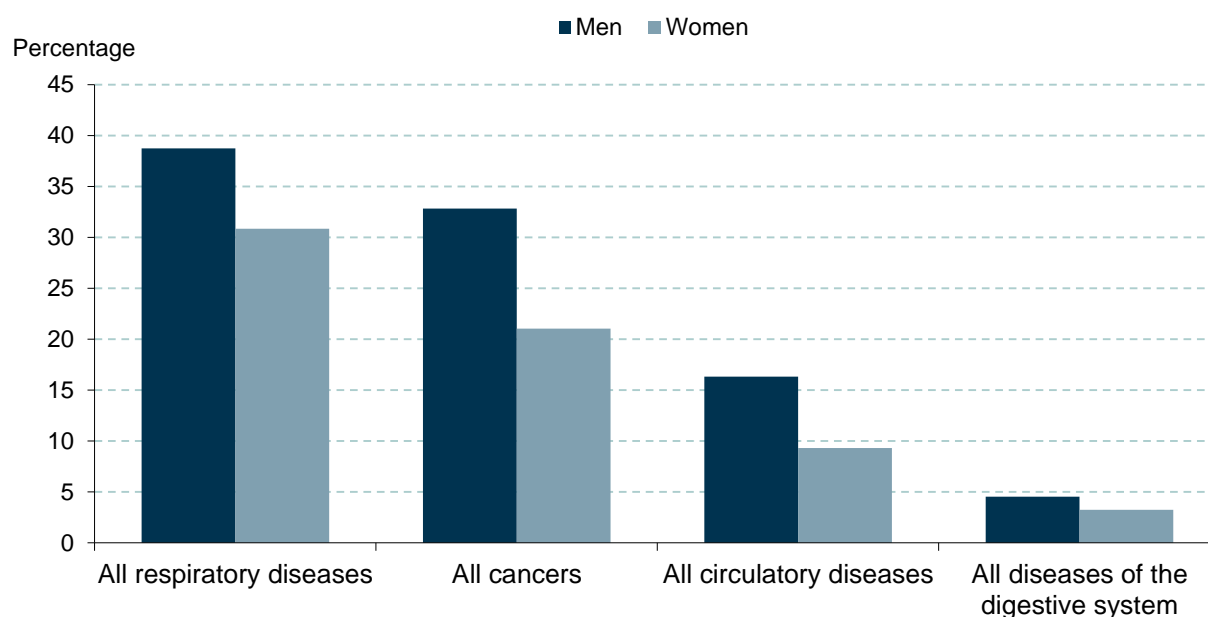
Health Profile of England, 2007. Department of Health

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In 2013, 21 per cent of male deaths were estimated to be attributable to smoking and 13 per cent of female deaths. This compares with 25 per cent and 14 per cent respectively in 2003

It is estimated that in 2013, 35 per cent (23,800) of all deaths due to respiratory diseases and 27 per cent (36,800) of all cancer deaths were attributable to smoking. In addition, an estimated 13 per cent (16,700) of deaths from circulatory diseases and 4 per cent (900) of deaths from diseases of the digestive system were attributable to smoking. [Figure 4.5](#) shows these results by gender. [Table 4.6](#)

**Figure 4.5 - Estimated deaths attributable to smoking, as a percentage of all deaths from that disease<sup>1</sup>, by gender, 2013**



1. Among adults aged 35 and over.

**Source:** Office for National Statistics, Annual Mortality Statistics, 2013 date of death registration : Crown Copyright  
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In terms of the proportion of deaths attributable to smoking, the diseases with the highest proportions were:

- 85 per cent (1,000) of deaths from chronic obstructive lung disease
- 80 per cent (22,800) of deaths from trachea, lung and bronchus cancer
- 79 per cent (500) of deaths from cancers of the larynx
- 77 per cent (18,900) of deaths as a result of chronic airway obstruction
- 65 per cent (4,100) of deaths from cancers of the oesophagus
- 63 per cent (1,300) of deaths from cancers of the upper respiratory sites
- 58 per cent (3,200) from aortic aneurysms

**Table 4.6**

A larger proportion of deaths among men than women were attributable to smoking with an estimated 21 per cent (47,200) of all deaths among men aged 35 and over being attributable to smoking. This compares with 13 per cent (31,000) of all deaths among women. [Table 4.6](#)

## 4.5 Local Tobacco Control Profiles

The Local Tobacco Control Profiles<sup>12</sup> for England present information on smoking-attributable hospital admissions and mortality at Local Authority (LA) level. These form part of a suite of indicators that are tailored to the needs of local users and cover the health problems caused by smoking, the prevalence of smoking at local level and the extent to which services across the NHS and LAs are tackling smoking and the problems it causes. They are outcome-focussed, relevant to the major modern challenges of tobacco control and provide local commissioners and services, a set of up-to-date information as well as an indication of trends over time.

The smoking attributable data available within the Local Tobacco Control Profiles have been produced by Public Health England using Hospital Episode Statistics (HES) data for admissions and Office for National Statistics (ONS) Mortality Statistics for the number of registered deaths.

The methodology used to derive estimates of the smoking attributable deaths and admissions is identical to the methodology set out in [Appendix B](#). However, the Local Tobacco Control Profiles<sup>12</sup> use prevalence estimates derived from the Integrated Household Survey (IHS)<sup>14</sup> rather than the General Lifestyle Survey (GLF) or Opinions and Lifestyle Survey (for years from 2012 onwards). This may account for any differences between the estimates in the two reports for any given year.

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## Appendix A: Key sources

- Affordability data
- Availability of tobacco
- Health Survey for England
- Hospital Episode Statistics
- Infant Feeding Survey
- Integrated Household Survey
- International Classification of Diseases
- NHS Stop Smoking Services
- Mortality Statistics
- Omnibus Survey
- Opinions and Lifestyle Survey
- Prescription data
- Smoking-attributable deaths and diseases
- Smoking, drinking and drug use among young people in England

### Affordability data

The Real Households' Disposable Income (RHDI) index exclusively tracks changes in real disposable income per capita and is then carried forward to produce an adjusted affordability of tobacco index

The tobacco price index as seen in [Table 2.4](#) of this bulletin shows how much the average price of tobacco has changed compared with the base price (1980).

The Retail Prices Index (RPI) shows by how much the prices of all items have changed compared with the base price (1980).

The relative tobacco price index is calculated as follows:

$$rtpi = (tpi/rpi) * 100$$

*rtpi* = relative tobacco price index

*tpi* = tobacco price index

*rpi* = retail prices index

This shows how the average price of tobacco has changed since the base (1980) compared with prices of all other items. A value greater than 100 shows that the price of tobacco has increased by more than inflation, during that period.

Adjusted real households' disposable income is an index of total households' income, minus payments of income tax and other taxes, social contributions and other current transfers, converted to real terms (i.e. after dividing by a general price index to remove the effect of inflation) which tracks, exclusively, changes in real disposable income per capita.

The adjusted real households' disposable income index is calculated by dividing the real households' disposable income index by total number of UK adults (aged 18 and over). The resulting series was rebased, so that 1980 equals 100 per cent.

Affordability of tobacco gives a measure of the relative affordability of tobacco, by comparing the relative changes in the price of tobacco, with changes in households' disposable income per capita over the same period (with both allowing for inflation).

The Relative Affordability of tobacco is calculated as follows:

$$rat = (arhdi / rtpi) * 100$$

*rat* = relative affordability of tobacco

*arhdi* = adjusted real households' disposable income index

*rtpi* = relative tobacco price index

If the affordability index is above 100, then tobacco is relatively more affordable than in the base year, 1980.

Affordability data is presented in [Chapter 2](#) of this report.

**Additional information can be found at:**

- Focus on Consumer Price Indices, Office for National Statistics<sup>1</sup>
- Economic and Labour Market Review, Office for National Statistics<sup>2</sup>
- Final Mid-Year Population Estimates (based on 2011 census), Office for National Statistics<sup>3</sup>

## Availability of tobacco

The availability of tobacco, shown as the volume of tobacco released for home consumption, is taken from HM Revenue & Customs (HMRC) statistical fact sheets<sup>0</sup>. Graphs, tables and charts are used to present a variety of data and to communicate information to the user. In places, commentary is provided to support the data. Fact sheets are not National Statistics. HMRC data is presented in [Chapter 2](#) of this report.

## Health Survey for England [NS]

The Health Survey for England (HSE) comprises of a series of annual surveys commissioned by the Health and Social Care Information Centre. All of the surveys cover the adult population aged 16 and over living in private households in England. Since 1991, the HSE has included questions related to smoking.

Each survey consists of core questions and measurements gathered during a nurse visit (e.g. blood pressure and analysis of blood samples) plus modules of questions on specific issues that change periodically such as cardiovascular disease or on specific population groups such as older people or ethnic minorities.

Data from the HSE are presented in [Chapters 2 and 3](#) of this report.

HSE publications from 2004 onwards are available on the Health and Social Care Information Centre website<sup>6</sup>.

Earlier HSE publications are available on the Department of Health (DH) website<sup>0</sup>.

## Hospital Episode Statistics

Hospital Episode Statistics (HES) is a data warehouse which includes details of all admissions to NHS hospitals in England since April 1987. It includes private patients treated

in NHS hospitals, patients who were resident outside of England and care delivered by treatment centres (including those in the independent sector) funded by the NHS. HES also contains details of all NHS outpatient appointments in England as well as detailed records of attendances at major A&E departments, single specialty A&E departments, minor injury units and walk-in centres in England.

HES data are classified using the International Classification of Diseases (ICD). Details of ICD-10 codes used are included in [Tables 4.4 and 4.6](#). The statistics on hospital activity in England are derived from data collected on NHS hospital in-patient care. Thus, they do not fully reflect hospital treatment of patients with smoking-related diagnoses or conditions, as local choice might favour outpatient treatment, for which detailed information is not available.

## Infant Feeding Survey

The Infant Feeding Survey (IFS)<sup>8</sup> was last carried out in 2010 and was published by the Health and Social Care Information Centre in September 2012. The survey provided statistics on smoking and drinking behaviour among women before and during pregnancy.

## Integrated Household Survey

The Integrated Household Survey (IHS) is the largest social survey produced by the Office for National Statistics (ONS), providing estimates from approximately 340,000 individuals.

This large sample size is achieved by asking a core suite of questions on two ONS household surveys, the Annual Population Survey (APS) and Living Cost and Food Survey (LCF). Topics covered by the IHS include sexual identity, perceived general health, smoking prevalence, education, housing and employment. More detailed information on the survey, and how to carry out your own analysis, can be found in the background notes.

Data from the LCF presented in [Chapter 2](#) details expenditure on cigarettes by different variables. It is important to note that the average expenditure is for all households and not only those households where there is a smoker. The differences between subgroups in the average expenditure may be due to different proportions of smoking households and/or a real difference in the amount spent by individual smokers.

Following a statistical products consultation in 2014, the LCF will no longer form part of the IHS from 2014. This means this will be the last release of the IHS based on cases from the APS and LCF. Future releases will be based solely on the APS.

At present, IHS statistics are designated as experimental. Information on what this means can be found in the background notes which can be found at:

<http://www.ons.gov.uk/ons/rel/integrated-household-survey/integrated-household-survey/january-to-december-2013/stb-intergrated-household.html#tab-background-notes>

Readers interested in previous IHS releases can find these on the ONS website.

<http://www.ons.gov.uk/ons/rel/integrated-household-survey/integrated-household-survey/index.html>

## International Classification of Diseases

The International Classification of Diseases (ICD) is the international standard diagnostic classification for all general epidemiological and many health management purposes. It is used to classify diseases and other health problems recorded on many types of health and vital records including death certificates and hospital records.

The illnesses, diseases and injuries suffered by hospital patients are currently recorded using the International Classification of Diseases, Tenth Revision (ICD-10), published by the World Health Organization (WHO)<sup>9</sup>. In 1995, the recording of diagnoses changed from the 9th to the 10th revision of the ICD. An alphanumeric coding scheme replaced the numeric

one. The regrouping of classifications means that classifications may not map precisely between the two revisions.

Data that use the ICD-10 coding are found in [Chapter 4](#) of this report.

## NHS Stop Smoking Services

NHS Stop Smoking Services (formerly known as Smoking Cessation Services) provide counseling and support to smokers wanting to quit, complementing the use of stop smoking aids Nicotine Replacement Therapy (NRT), Bupropion (Zyban) and Varenicline (Champix).

The establishment and development of Stop Smoking Services in the NHS is an important element of the government's strategy to tackle smoking. Monitoring of the NHS Stop Smoking Services is carried out via quarterly monitoring returns. The quarterly reports present provisional results from the monitoring of the NHS Stop Smoking Services, until the release of the annual bulletin when all quarterly figures are confirmed.

Prior to October 2005, *Statistics on NHS Stop Smoking Services* were collected and published by The Department of Health<sup>0</sup>. This is now the responsibility of the Health and Social Care Information Centre<sup>10</sup>.

Statistics on NHS Stop Smoking Services are presented in [Chapters 3 and 4](#) of this report.

## Mortality Statistics [NS]

The Office for National Statistics (ONS) produce an annual extract of mortality statistics to the Health and Social Care Information Centre detailing the numbers of deaths by cause in England. Registered deaths in England are classified using ICD-9 to 2000 and by ICD-10 for both 1999, and from 2001 onwards.

ONS mortality data are shown in [Chapter 4](#) of this report.

## Omnibus Survey [NS]

The Omnibus Survey is a multi-purpose continuous survey carried out by the Office for National Statistics (ONS) on behalf of a range of government departments and other bodies.

In 2008/09, interviews for the smoking module of the survey were conducted with around 1,200 adults aged 16 or over living in private households in Great Britain each month, during October and November 2008 and again in February and March 2009. This survey is currently not being continued. The latest report on the smoking module *Smoking-related behaviour and attitudes, 2008/09* presents results on smoking behaviour and habits, views and experiences of giving up smoking, awareness of health issues linked with smoking and attitudes towards smoking.

The weighting system in the Omnibus Survey used from 2007 onwards adjusts for some non-response bias. The weighting ensures that the weighted sample distribution across regions and across age-sex groups matches that in the population. Trend tables from the *Smoking-related behaviour and attitudes, 2008/09*<sup>12</sup> [NS] report show the 2007 estimates and bases weighted to population totals, and for unequal probability of selection (as in previous years) to give an indication of the effect of the revised weighting system. There appeared to be little effect on the estimates by introducing the new weighting system. Care should be taken when comparing 2008/09 estimates based on the new weighting system with those from previous reports using the old weighting system.

Data from the Omnibus survey are used in [Chapter 3](#) of this report.

## Opinions and Lifestyle Survey [NS]

The Opinions and Lifestyle Survey (OPN) provides information on smoking rates, average number of cigarettes smoked and smoking during pregnancy in Great Britain. This continues the series of releases on smoking; previously provided by the General Household Survey (GHS) and the General Lifestyle Survey (GLF).

GLF was discontinued at the end of 2011, following consultation with users. Some of the questions on smoking were included in the new ONS Opinions and Lifestyles Survey.

The Future of the General Lifestyle Survey, provides details of the GLF questions which are continued in OPN <http://www.ons.gov.uk/ons/about-ons/get-involved/consultations/archived-consultations/2011/the-future-of-the-glf-survey/update-to-the-future-of-the-glf-survey.pdf>

The OPN and GHS/GLF provide comparable results, however, there are some differences in the two surveys' design and content; see ONS Methodology for details

<http://www.ons.gov.uk/ons/rel/ghs/opinions-and-lifestyle-survey/smoking-habits-amongst-adults--2012/rpt-opinions-and-lifestyle-survey---smoking-habits-amongst-adults--2012.html#tab-Methodology->

Data from the Opinions and Lifestyle Survey are used in [Chapter 2](#) of this report.

## Prescription data [NS]

Information on prescription items prescribed in primary care settings in England is produced using Prescribing Analysis and Cost Tool (ePACT). The ePACT system covers prescriptions prescribed by GPs, nurses, pharmacists and others in England and dispensed in the community in the UK. Prescriptions written in England but dispensed outside England are included. Prescriptions written in hospitals/clinics that are dispensed in the community, prescriptions dispensed in hospitals and private prescriptions are not included in PACT data.

Hospital prescription information is taken from the Prescription Cost Analysis (PCA) system, and is based on a full analysis of all prescriptions dispensed in the community i.e. by community pharmacists and appliance contractors, dispensing doctors, and prescriptions submitted by prescribing doctors for items personally administered in England. Also included are prescriptions written in Wales, Scotland, Northern Ireland and the Isle of Man but dispensed in England. The data do not cover drugs dispensed in hospitals, including mental health trusts, or private prescriptions.

The differences between PCA and ePACT are that

1. PCA includes prescriptions prescribed by dentists.  
ePACT does not include prescriptions prescribed by dentists.
2. PCA includes prescriptions written in Wales, Scotland, Northern Ireland and the Isle of Man but dispensed in England.  
ePACT includes prescriptions written in England but dispensed in England and those dispensed outside England.

Prescriptions are written on a prescription form known as a FP10 and each single item on the form is counted as a prescription item. Net Ingredient Cost (NIC) is the basic cost of a drug. It does not take account of discounts, dispensing costs, fees or prescription charges income.

The prescription data included in this report are not routinely available. Sub-national or primary care data may be available on request from Prescription Services. National data with a wider coverage is available from the Health and Social Care Information Centre.

## Smoking-attributable deaths and diseases

Data on smoking-attributable NHS hospital admissions and deaths for those aged 35 and over are presented in [Chapter 4](#) of this report. See [Appendix B](#) for more details on the methodology employed to calculate smoking-attributable hospital admissions and deaths.

## Smoking, Drinking and Drug Use among Young People in England, 2013 [NS]

Smoking, Drinking and Drug Use Survey among Young People in England in 2013<sup>13</sup> (SDD13) is the latest in the series of surveys of secondary school children in England which provides the national estimates of the proportions of young people in school years 7 to 11 (who are mostly aged 11 to 15) who smoke, drink alcohol or take illegal drugs.

The first survey in the series, carried out in 1982 and since 1998 survey has included questions on drinking and drug use as well as smoking.

As well as these core measures, questionnaires since 2000 have included more detailed questions, with the focus alternating between smoking and drinking in one year and drug use the next. The focus in 2013 was on drug use and therefore 2012 was the last year to focus on smoking and drinking, and this report reflects that.

Following consultation with survey users, the design of the sample was changed in 2010. For surveys between 2000 and 2009, the sample of schools was stratified by school type and sex of intake, and selected across regions in proportion to the distribution of the population of 11 to 15 year olds. In 2010, the sample was stratified by Strategic Health Authority (SHA) and within each SHA an equal number of schools were sampled. This design has been used since although from 2011 it is stratified by nine Government Office Regions rather than by ten Strategic Health Authorities. This change was designed to enable the publication of more up-to-date regional analyses of the data than was possible with the original design.

Smoking, Drinking and Drug Use Among Young People in England is published by the HSCIC and reports can be found at: <http://www.hscic.gov.uk/article/2021/Website-Search?q=title%3a%22smoking+drinking+and+drug+use+among+young+people%22&sort=Most+recent&size=10&page=1&area=both#top>

Information from the SDD reports can be found in [Chapter 2](#)



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## Appendix B: Estimating smoking-attributable deaths and hospital admissions

### Introduction

Estimates of smoking-attributable NHS hospital admissions and deaths given in [Chapter 4 Tables 4.3 to 4.7](#) are based on three pieces of information:

1. Estimates of smoking prevalence for both smokers and ex-smokers
2. Relative risks for deaths and non-fatal diseases for both smokers and ex-smokers for those diseases known to be associated with smoking
3. Observed numbers of hospital admissions or deaths caused by those diseases which can be caused by smoking.

### Smoking Prevalence

Estimates of the prevalence in England of current and ex-smokers by gender and age are taken from the results of Opinions and Lifestyle Survey (OPS). These estimates are used in order to estimate the number of smoking-attributable admissions and deaths.

Smoking prevalence information from the 2013 OPN is presented in [Table B.1](#).

### Relative Risks

#### *Fatal diseases*

In 2007 a review of the existing methodologies was undertaken by the Department of Health (DH) which resulted in a revised list of diseases for which there was an excess risk of death for current and ex-smokers compared to those people who have never smoked. This was then used to estimate numbers of smoking attributable fatalities in the Health Profile for England (HPE)<sup>1</sup>. This revised approach has been adopted for this report.

The methodology employed in this report is identical to that used by the DH in the HPE 2008 and HPE 2009. The method differs slightly from the HPE 2007 as it does not reduce the deaths figure to take account of those diseases for which smoking decreases the relative risk, specifically Parkinson's disease and cancer of the uterus.

The values presented in [Table B.2](#) represent the risk of a person who smokes or is an ex-smoker, dying from that disease (unless listed as a non-fatal disease, see below) compared to someone who has never smoked. That is, a value greater than 1 represents an increased risk of death. The risks are only applicable to people aged 35 and over and therefore only deaths of people aged 35 and over have been used in calculating the estimates.

#### *Non-fatal diseases*

The relative risks for non-fatal diseases (Crohn's disease; Periodontal disease/Periodontitis; Age-related cataract; Hip fracture and Spontaneous abortion) are also presented in [Table B.2](#) to estimate the numbers of smoking-attributable hospital admissions in England. These risks have been taken from diseases used by Hughes and Atkinson in the report *Choosing Health in the South East: Smoking*<sup>4</sup> which was based on an update of a 1996 epidemiological study. These diseases have not since been reclassified by the DH review as fatal.

The risks for these non-fatal diseases are presented in the same way as those for fatal disease, however they are not gender-specific (with the exception of hip fracture among the 75+ age group) and so the same risks are used to calculate the attributable proportions for

both men and women. In the case of spontaneous abortion, the risk is only given for current female smokers.

In order to be consistent with the methodology for fatal diseases, the risks for non-fatal conditions were only applied for hospital admissions of people aged 35 and over.

For fatal diseases, the risks of death were also applied to calculate smoking-related hospital admissions in England. There are some drawbacks to using mortality risks for health outcomes and these are discussed by Callum and White in *Tobacco in London: The Preventable burden*<sup>2</sup>.

## Deaths and admissions

The number of deaths for men and women in each of the specified age groups are taken from an annual extract of Office for National Statistics (ONS) mortality statistics by cause and by registrations (V53). The data used refer to the number of registered deaths in England.

Figures on hospital admissions are from Hospital Episode Statistics (HES) supplied by the Health and Social Care Information Centre (HSCIC). The data refer to hospital admissions of people who are resident in England for the specified period.

The tenth revision of the International Classification of Diseases (ICD) was used to identify hospital admissions and deaths from the diseases of interest. [Tables B.2](#) list the ICD-10 codes used in [Tables 4.3 to 4.6](#).

In January 2011 ONS introduced a new version of ICD-10 (version 2010) which replaced version 2001.2. This means that some figures for the number of deaths for 2011 onwards will not be directly comparable to figures for 2001 to 2010.

Further details are available from ONS:

<http://www.ons.gov.uk/ons/rel/subnational-health3/results-of-the-icd-10-v2010-bridge-coding-study--england-and-wales--2009/2009/index.html>

## Calculation of Smoking-Attributable Deaths and Admissions

For each of the diseases or groups of diseases shown in [Tables B.2](#), the attributable proportion is calculated as follows:

$$a = [p_{cur}(r_{cur} - 1) + p_{ex}(r_{ex} - 1)] / [1 + p_{cur}(r_{cur} - 1) + p_{ex}(r_{ex} - 1)]$$

where:

$a$  = attributable proportion for each disease

$p_{cur}$  = proportion of current smokers

$p_{ex}$  = proportion of ex-smokers

$r_{cur}$  = relative risk of current smokers

$r_{ex}$  = relative risk of ex-smokers.

The equation is reduced where the risks are only given for 'all smokers' or 'current smokers' (as is the case for some non-fatal conditions).

The estimated number of smoking-attributable hospital admissions or deaths in England is found by multiplying the observed number by the attributable proportion.

## Notes

1. Work by Callum and White in *Tobacco in London: The Preventable burden*<sup>2</sup>, and further work done by Twigg, Moon and Walker in the report *The Smoking epidemic: Deaths in 1995*<sup>3</sup> use a correction to the estimates for the smoking-attributable proportion of unspecified site cancer deaths to account for the fact that only a proportion of the unspecified site cancers will be smoking-related. Callum and White states that this correction is arbitrary and this has not been adopted by the Department of Health in the Health Profile for England and has not been adopted here to ensure that our results are easily reproducible. Therefore, the number of unspecified cancer deaths attributed to smoking in this report may be an overestimate.
2. The risk for spontaneous abortion is for those women who were current smokers during their pregnancy. Data on smoking during pregnancy is not available from the Opinions and Lifestyle Survey and so smoking prevalence in the general population was used to calculate the smoking-attributable proportion of admissions in England with this condition.

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## List of tables

B.1 Smoking Status by Sex and Age, England, 2013

B.2 Relative risk ratios for diseases for current and ex-smokers in England, by gender

Table B1 – Cigarette Smoking Status by Sex and Age, England, 2013

Age group	Percentages					
	Male		Female		Unweighted Bases	
	Smoker <sup>1</sup>	Ex-smoker <sup>2</sup>	Smoker <sup>1</sup>	Ex-smoker <sup>2</sup>	Smoker <sup>1</sup>	Ex-smoker <sup>2</sup>
35 and over	18	32	15	25	3,610	4,510
45 and over	16	35	13	26	2,890	3,550
35 to 54	22	23	19	20	1,470	1,870
55 to 64	18	33	16	28	800	900
65 to 74	11	46	10	28	770	940
75 and over	6	48	5	29	560	790
35 to 64	21	26	18	22	2,270	2,780
65 and over	9	47	8	29	1,340	1,740

**Footnotes**

1 Adults who said that they do smoke cigarettes nowadays are classed as current smokers

2 Adults who said that they used to smoke cigarettes regularly but no longer do so are defined as ex-smokers

**Source**

Opinions and Lifestyle Survey, Office for National Statistics licensed under the Open Government Licence v.2.0..

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**Table B2 - Relative risk ratios for diseases for current and ex-smokers in England, by gender**

						Numbers
			Men		Women	
Disease category	ICD-10 code	Age	Current smokers	Ex-smokers	Current smokers	Ex-smokers
Cancers which can be caused by smoking						
Trachea, Lung, Bronchus	C33-C34	35+	23.26	8.70	12.69	4.53
Upper respiratory sites	C00-C14	35+	10.89	3.40	5.08	2.29
Oesophagus	C15	35+	6.76	4.46	7.75	2.79
Larynx	C32	35+	14.60	6.34	13.02	5.16
Cervical	C53	35+	1.00	1.00	1.59	1.14
Bladder	C67	35+	3.27	2.09	2.22	1.89
Kidney and Renal Pelvis <sup>2</sup>	C64-C66,C68	35+	2.50	1.70	1.40	1.10
Stomach	C16	35+	1.96	1.47	1.36	1.32
Pancreas	C25	35+	2.31	1.15	2.25	1.55
Unspecified site <sup>2</sup>	C80	35+	4.40	2.50	2.20	1.30
Myeloid leukaemia <sup>2</sup>	C92	35+	1.80	1.40	1.20	1.30
Respiratory diseases which can be caused by smoking						
Chronic obstructive lung disease	J40-J43	35+	17.10	15.64	12.04	11.77
Chronic Airway Obstruction	J44	35+	10.58	6.80	13.08	6.78
Pneumonia, Influenza <sup>2</sup>	J10-J18	35 - 64	2.50	1.40	4.30	1.10
	J10-J18	65+	2.00	1.40	2.20	1.10
Circulatory diseases which can be caused by smoking						
Other Heart Disease	I00-I09, I26-I51		1.78	1.22	1.49	1.14
Ischaemic heart disease <sup>2</sup>	I20-I25	35 - 54	4.20	2.00	5.30	2.60
	I20-I25	55 - 64	2.50	1.60	2.80	1.10
	I20-I25	65 - 74	1.80	1.30	2.10	1.20
	I20-I25	75+	1.40	1.10	1.40	1.20
Other arterial disease	I72-I78	35+	2.07	1.01	2.17	1.12
Cerebrovascular disease <sup>2</sup>	I60-I69	35 - 54	4.40	1.10	5.40	1.30
	I60-I69	55 - 64	3.10	1.10	3.70	1.30
	I60-I69	65 - 74	2.20	1.10	2.60	1.30
	I60-I69	75+	1.60	1.10	1.30	1.00
Aortic aneurysm	I71	35+	6.21	3.07	7.07	2.07
Atherosclerosis	I70	35+	2.44	1.33	1.83	1.00
Diseases of the digestive system which can be caused by smoking						
Stomach/duodenal ulcer	K25-K27	35+	5.40	1.80	5.50	1.40
Crohns disease <sup>3</sup>	K50	35+	2.1	1	2.1	1
Periodontal disease/Periodontitis <sup>3</sup>	K05	35+	3.97	1.68	3.97	1.68
Other diseases which can be caused by smoking						
Age-related cataract <sup>3</sup>	H25	45+	1.54	1.11	1.54	1.11
Hip fracture <sup>3</sup>	S72.0-S72.2 <sup>4</sup>	55 - 64	1.17	1.02	1.17	1.02
	S72.0-S72.2 <sup>4</sup>	65 - 74	1.41	1.08	1.41	1.08
	S72.0-S72.2 <sup>4</sup>	75+	1.76	1.14	1.85	1.22
Spontaneous abortion <sup>3</sup>	O03	35+			1.28	

**Footnotes**

- 1 Based on CPS-II 1982-88 data, taken from CHP2007 / SAMMEC / USDHHS2004 unless stated  
 2 Based on CPS-II 1982-88 data, taken from UK Smoking Epidemic (1998)  
 3 Based on CPS-II 1984-88 data, taken from Tobacco in London, The preventable burden (2004)  
 4 ICD-10 code S72 for hip fracture has been refined to S70.0, S72.1 and S72.2 in reports from 2010 onwards

**Sources**

Health Profile for England 2007, Department of Health  
 Tobacco in London: The Preventable Burden, Smokefree London & The London Health Observatory, 2004

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## Appendix C: Government policy and targets

### Introduction

Tobacco use remains one of the government's most significant public health challenges, causing nearly 80,000 premature deaths in England each year.

The White Paper, *Healthy lives, Healthy people: Our strategy for public health in England*<sup>1</sup> set out the Government's commitment to improving public health in communities across England.

The subsequent Tobacco Control Plan, *Healthy lives, Healthy people: A Tobacco Control Plan for England*<sup>2</sup> was published on 9 March 2011. An academic review of the evidence of the impact of the smoke-free legislation in England<sup>3</sup> was also published alongside this document.

The Tobacco Control Plan set out how tobacco control was to be delivered in the context of the new public health system, over the next five years, up to 2015.

The plan set out three national ambitions to reduce smoking rates in England by the end of 2015:

- From 21.2 per cent to 18.5 per cent or less among adults aged 18 and over;
- From 15 per cent to 12 per cent or less among 15 year olds; and
- From 14 per cent to 11 per cent or less among pregnant mothers (measured at the time they give birth).

The Tobacco Control Plan described actions in the following six key areas:

- stopping the promotion of tobacco;
- making tobacco less affordable;
- effective regulation of tobacco products;
- helping tobacco users to quit;
- reducing exposure to second-hand smoke; and
- effective communications for tobacco control.

New EU legislation was adopted in April 2014, setting out a regulatory framework for e-cigarettes and nicotine-containing refills (e-liquids) for the first time. From May 2016, the revised EU Tobacco Products Directive (TPD)<sup>4</sup> will establish new rules for the safety, quality, ingredients and presentation of these products. The new regulations will require six month prior notification of a range of information before either e-cigarettes or refills are placed on the market. E-cigarettes that contain above 20 mg/ml of nicotine and/or making medicinal claims, such as "Helps you to quit smoking", will continue to be regulated under existing medicines legislation, for which the Medicines and Healthcare Products Regulatory Agency (MHRA) is responsible.

The TPD bans advertising of e-cigarettes which cross member states' borders e.g. in the press, TV, radio, internet and sponsored events.

New legislation will come into force in England and Wales on 1 October 2015, introducing a minimum age of sale of 18 for e-cigarettes and prohibiting the purchase these products on behalf of someone under the age of 18.

In addition, legislation to protect children from second-hand smoke by ending smoking in private vehicles carrying children will also be in place from October 2015.

## **Local Stop Smoking Services**

Stop Smoking Services were first set up in 1999/2000 and rolled out across England from 2000/2001. Services provide free, tailored support to all smokers wishing to stop offering a combination of recommended stop smoking pharmacotherapies and behavioural support.

Following a change in the guidance in December 2005, Nicotine Replacement Therapy (NRT) was made available for the first time to adolescents over 12 years, pregnant or breast feeding women and patients with heart, liver and kidney disease. In September 2006, the European Commission approved Champix, generic name Varenicline, as a new pharmacotherapy to help adults quit smoking. The National Institute for Health and Clinical Excellence (NICE) issued guidance in, recommending the use of Champix as an aid to stopping smoking in the NHS<sup>5</sup>.

NICE has since published a range of guidance to support the commissioning and delivery of stop smoking services and this is available on their website [www.nice.org.uk](http://www.nice.org.uk)

The National Centre for Smoking Cessation and Training (NCSCT) was established by the Department of Health in 2008 to standardise training for those providing support for and delivering stop smoking services. The full range of training can be accessed at [www.ncsct.co.uk/pub\\_training.php](http://www.ncsct.co.uk/pub_training.php)

The service and delivery Guidance for local stop smoking services was updated in 2014 and is available on the NCSCT website - [www.ncsct.co.uk](http://www.ncsct.co.uk).

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## Appendix D: Further Information

Readers may also find the following organisations and publications useful resources for further information on smoking:

### Action on Smoking Health (ASH)

ASH is a London-based charity providing information on all aspects of tobacco and campaigning to reduce the unnecessary addiction, disease and premature death caused by smoking.

[www.ash.org.uk](http://www.ash.org.uk)

### Her Majesty's Revenue and Customs (HMRC)

HMRC is the new department responsible for the business of the former Inland Revenue and HM Customs and Excise.

[www.hmrc.gov.uk/](http://www.hmrc.gov.uk/)

Data sets can be obtained from the internet at:

[www.uktradeinfo.com](http://www.uktradeinfo.com)

### Home Office Research, Development and Statistics Directorate (RDS)

Further information and other RDS Home Office publications can be found on the internet at: <http://webarchive.nationalarchives.gov.uk/20110218135832/http://rds.homeoffice.gov.uk/rds/index.html>

### National Institute for Health and Clinical Excellence (NICE)

The NICE has taken on the functions of the Health Development Agency to create a single excellence-in-practice organisation responsible for providing national guidance on the promotion of good health and the prevention and treatment of ill health:

<http://www.nice.org.uk/>

### NHS Smoking Helpline

Information and help on quitting smoking is available from the NHS Smoking Helpline: 0800 169 0 169.

<http://www.nhs.uk/smokefree>

### Office for National Statistics (ONS)

Information about National Statistics can be found at:

[www.statistics.gov.uk/](http://www.statistics.gov.uk/)

### Summary of Public Health Indicators Using Electronic Data from Primary Care

This report was published by the Health and Social Care Information Centre (HSCIC) in September 2008. The purpose of the project was to report trends over recent years (2001-2007) in the completeness of recording of selected public health indicators (obesity, smoking, blood pressures and cholesterol) within primary care electronic health care records, and to report on estimated population levels of obesity, smoking, blood pressure and cholesterol.

The project was jointly funded by the HSCIC and the Health Improvement and Protection Directorate (Department of Health); the work was undertaken by QRESEARCH.

[http://www.hscic.gov.uk/searchcatalogue?productid=4287&q=title per cent3a per cent22A+summary+of+public+health+indicators+using+electronic+data+from+primary+care per cent22&sort=Relevance&size=10&page=1#top](http://www.hscic.gov.uk/searchcatalogue?productid=4287&q=title+per+cent3a+per+cent22A+summary+of+public+health+indicators+using+electronic+data+from+primary+care+per+cent22&sort=Relevance&size=10&page=1#top)

## **Scientific Committee on Tobacco and Health (SCOTH)**

The report of the SCOTH drew conclusions on the adverse health risks of smoking during and after pregnancy. Continuing to smoke during pregnancy was reported to increase the chance of miscarriage, reduced birth weight and prenatal death of the child. If mothers smoke after birth, the risk of sudden infant death syndrome is increased.

[www.archive.official-documents.co.uk/document/doh/tobacco/contents.htm](http://www.archive.official-documents.co.uk/document/doh/tobacco/contents.htm)

## **Smoke-free Action**

Provides various information relating to the smoke-free legislation.

<http://www.smokefreeaction.org.uk/>

## **The World Health Organization (WHO) Framework Convention Alliance for Tobacco Control (FCTC)**

In May 2003, the member countries of the World Health Organization adopted an historic tobacco control treaty, the Framework Convention on Tobacco Control (FCTC), to set internationally agreed minimum standards on tobacco control and to ensure international co-operation on matters such as the illegal trade of tobacco.

[www.fctc.org](http://www.fctc.org)

## **Tobacco control survey from the Trading Standards Institute**

The Tobacco Control Survey was conducted by the Local Government Group (representing local authorities) amongst trading standards services on behalf of the Department of Health. The Tobacco Control Survey 2010-2011 drew findings from an online survey of tobacco control activities carried out with trading standards services in 150 local authorities in England. The trading standards services visited a total of 4,055 premises overall

<http://www.tradingstandards.gov.uk/policy/policy-pressitem.cfm/newsid/697>

## Appendix E: How are the statistics used?

### Users and uses of the report

From our engagement with customers, we know that there are many users of the Smoking in England statistics. There are also many users of these statistics who we do not know about. We are continually aiming to improve our understanding of who our users are in order to enhance our knowledge on what the uses of these data are via recent consultations and feedback forms available online. Below is listed our current understanding of the known users and uses of these statistics. Also included are the methods we use to attempt to engage with the current unknown users.

#### Known Users and Uses

**Department of Health (DH)** - frequently use these statistics to inform policy and planning. The Public Health Outcomes Framework was published in January 2012 which sets out the desired outcomes for public health and how these will be measured. The Department of Health publishes policies such as Reducing Smoking (25 March 2013) and can be found via this link: <https://www.gov.uk/government/policies/reducing-smoking>

**Public Health Observatories** - frequently use these data for secondary analysis.

**Media** - these data are used to underpin articles in newspapers, journals, etc. For example, the following articles appeared in response to the 2014 version of this report:

**BBC – “Hospital visits due to smoking have fallen in England”**

<http://www.bbc.co.uk/news/health-29534854>

**Nursing in Practice – “Smoking-related hospital attendance numbers fall”**

<http://www.nursinginpractice.com/article/smoking-related-hospital-attendance-numbers-fall>

**Plymouth Herald – “STOPTOBER: Fewer smokers than ever in South West”**

<http://www.plymouthherald.co.uk/Fewer-smokers-South-West/story-23248751-detail/story.html>

**Public** - all information is accessible for general public use for any particular purpose.

**Academia and Researchers** - a number of academics cite the Smoking data in their research papers.

**NHS** - frequently use the reports and tables for analyses, benchmarking and to inform decision making.

**Public Health Campaign Groups** - data are used to inform policy and decision making and to examine trends and behaviours.

**Ad-hoc requests** – the statistics are used by the Health and Social care Information Centre (HSCIC) to answer Parliamentary Questions (PQs), Freedom of Information (FOI) request and ad-hoc queries. Ad-hoc requests are received from health professionals; research companies; public sector organisations, and members of the public, showing the statistics are widely used and not solely within the profession.

We have received 0 ad-hoc requests and 2 PQs since Statistics on Smoking 2014 was published in October 2014.

## Unknown Users

This publication is free to access via the HSCIC website <http://www.hscic.gov.uk/lifestyles> and consequently the majority of users will access the report without being known to the HSCIC. Therefore, it is important to put mechanisms in place to try to understand how these additional users are using the statistics and also to gain feedback on how we can make these data more useful to them. On the webpage where the publication appears there is a link on the right-hand side to a feedback form which the HSCIC uses to capture feedback for all its reports.

The specific questions asked on the form are:

- How useful did you find the content in this publication?
- How did you find out about this publication?
- What type of organisation do you work for?
- What did you use the report for?
- What information was the most useful?
- Were you happy with the data quality?
- To help us improve our publications, what changes would you like to see (for instance content or timing)?
- Would you like to take part in future consultations on our publications?

Any responses via this form are passed to the team responsible for the report to consider. We also capture information on the number of web hits the reports receive, although we are unable to capture who the users are from this. Statistics on Smoking 2014 generated approximately 6,447 unique web hits between 8 October 2014 when it was published and 7 April 2015.



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