



# Statistics on Alcohol: England, 2013

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# Executive Summary

## Introduction

This statistical report acts as a reference point for health issues relating to alcohol use and misuse, providing information obtained from a number of sources in a user-friendly format. It covers topics such as drinking habits and behaviours among adults (aged 16 and over) and school children (aged 11 to 15), drinking-related ill health and mortality, affordability of alcohol, alcohol related admissions to hospital and alcohol-related costs. The report contains previously published information and also includes additional new analyses.

The new analyses are mainly obtained from the Health and Social Care Information Centre (HSCIC) Hospital Episodes Statistics (HES), and prescribing data. The report also includes up to date information on the latest alcohol related government policies and ambitions and contains links to further sources of useful information.

The data in this report relates to England unless otherwise specified. Where figures for England are not available, figures for England and Wales, Great Britain or the United Kingdom are provided.

Most of the data contained in the report have been published previously including information from the HSCIC, Department of Health, the Office for National Statistics, Her Majesty's Revenue and Customs and the Department for Environment, Food and Rural Affairs.

As the General Lifestyle Survey 2011 (GLF 2011) report was published by the Office for National Statistics (ONS) later than usual, the HSCIC have been unable to produce any England level GLF analysis for this report. Instead Great Britain level analysis has been presented.

## Background

Government recommendations at the time of publication are that adult men should not regularly drink more than 3-4 units of alcohol a day and adult women should not regularly drink more than 2-3 units a day and after an episode of heavy drinking, it is also advisable to refrain from drinking for 48 hours to allow tissues to recover. A number of sources collect information on the number of units drunk in an average week and the amount drunk on the heaviest drinking day in the last week. Neither of these indicators precisely measure consumption against the recommendations, therefore in this compendium, we will refer to the information as it is collected, rather than compare the data with recommendations.

## **Main findings:**

### **Drinking behaviour among adults and children**

In England, in 2011:

- 61% of men and 72% of women had either drunk no alcohol in the last week, or had drunk within the recommended levels on the day they drank the most alcohol. This was most common among men and women aged 65 or over.
- 64% of men drank no more than 21 units weekly, and 63% of women drank no more than 14 units weekly.
- 12% of school pupils had drunk alcohol in the last week. This continues a decline from 26% in 2001, and is at a similar level to 2010, when 13% of pupils reported drinking in the last week.

### **Drinking related costs, ill health and mortality**

In England:

Estimates of the number of alcohol-related admissions to hospital are calculated using a method developed by the North West Public Health Observatory (NWPHO) which takes information on patients' characteristics and diagnoses from the Hospital Episode Statistics (HES), together with estimates for the proportion of cases of a particular disease or injury that are caused by alcohol consumption (known as alcohol-attributable fractions (AAFs)). Within this publication, two main measures are presented:

- a broad measure, which is derived by summing the alcohol attributable fraction associated with each admission based on the diagnosis most strongly associated with alcohol out of all recorded diagnoses (both primary and secondary); and
- a narrow measure, which is constructed in a similar way but counts only the fraction associated with the diagnosis recorded in the primary position.

The attributable fractions represent the likelihood that the condition is the result of alcohol consumption, rather than the likelihood that the admission is the result of alcohol consumption. The figures based on all diagnoses give an estimate of the number of admissions to hospital caused or affected by alcohol consumption at a particular time or place and hence the pressure put on the health system. Information based only on primary diagnoses allow an uncomplicated picture of trends in alcohol-related admissions over time although will provide an incomplete picture of admissions resulting from or affected by alcohol consumption (as in some cases, the secondary diagnoses will have contributed to the admission to hospital).

This method was subject to a public consultation, led by the NWPHO working with the Department of Health and the Health and Social Care Information Centre. The consultation was launched on 31 May 2012, and ran for 12 weeks. Full details can be found on the NWPHO website: [www.lape.org.uk](http://www.lape.org.uk). The responses are currently being considered.

- In 2011/12, there were 200,900 admissions where the primary diagnosis was attributable to the consumption of alcohol (the narrow measure). This is a 1% increase since 2010/11 when there were 198,900 admissions of this type and a 41% increase since 2002/03 when there were around 142,000 such admissions.
- In 2011/12, there were an estimated 1,220,300 admissions related to alcohol consumption where an alcohol-related disease, injury or condition was the primary reason for hospital admission or a secondary diagnosis (broad measure). This is an increase of 4% on the 2010/11 figure (1,168,300) and more than twice as many as in 2002/03 (510,700). Comparisons over time in the broad measure are complicated by changes in recording practices over the period. In order to estimate the trend once changes in recording practices are accounted for, a method to adjust the national figures has been devised which is presented in Appendix E. Adjusted figures show a 51% increase from an estimated 807,700 in 2002/03 and a 1% increase from 1,205,500 in 2010/11.
- In 2012, there were 178,247 prescription items prescribed for the treatment of alcohol dependence in primary care settings or NHS hospitals and dispensed in the community. This is an increase of 6% on the 2011 figure (167,764) and an increase of 73% on the 2003 figure (102,741).
- The Net Ingredient Cost (NIC) of these prescriptions was £2.93 million in 2012. This is an increase of 18% on the 2011 figure (£2.49 million) and an increase of 70% on the 2003 figure (£1.72 million).

# 1 Introduction

This statistical bulletin presents a range of information on the drinking habits of adults and children, their knowledge and attitudes to drinking and health related effects of alcohol misuse, drawn together from a variety of sources. Some of the information has previously been published whilst new analyses are also included.

Most of the sources referred to in this publication are National Statistics. National Statistics are produced to high professional standards set out in the Code of Practice for Official Statistics. It is a statutory requirement that National Statistics should observe the Code of Practice for Official Statistics. The UK Statistics Authority assesses all National Statistics for compliance with the Code of Practice.

Some of the statistics referred to in this publication are not National Statistics and are included here to provide a fuller picture; some of these are Official Statistics, whilst others are neither National Statistics nor Official Statistics. Those which are Official Statistics should still conform to the Code of Practice for Official Statistics, although this is not a statutory requirement. Those that are neither National Statistics nor Official Statistics may not conform to the Code of Practice for Official Statistics.

A brief explanation and a short review of the quality of each of the sets of statistics used in this publication have been included in Appendix A.

The data within this report relate to England where possible. Where figures for England are not available, figures for England and Wales, Great

Britain or the United Kingdom are provided.

**Chapter 2** reports on alcohol consumption among adults and children, looking at how much and how often people drink, drinking patterns among different groups, the type of alcohol consumed and the affordability of alcohol.

**Chapter 3** reports on adults' knowledge of alcohol and children's attitudes towards drinking, including their knowledge of measuring alcohol in units and awareness of the health risks of drinking.

**Chapter 4** looks at the health risks associated with alcohol misuse including the number of admissions to hospital related to alcohol and the number of deaths that are linked to alcohol. Information on prescription drugs used for the treatment of alcohol dependency is also included and the cost of alcohol misuse to the NHS is considered.

Throughout the bulletin, references are given to sources for further information. The bulletin also contains five appendices; Appendix A describes the key sources used. Appendix B describes Government and NHS plans and guidelines on sensible drinking. Appendix C explains the editorial notes regarding the conventions used in presenting information. Appendix D provides a list of sources of further information and useful contacts and Appendix E provides the detailed methodology devised for estimating the effect of changes in recording practice on the estimates of alcohol



related admissions based on primary and secondary diagnoses.

### **United Kingdom Statistics Authority assessment of this publication**

This statistical release is a National Statistics publication. National Statistics are produced to high professional standards set out in the Code of Practice for Official Statistics. It is a statutory requirement that National Statistics should observe the Code of Practice for Official Statistics. The United Kingdom Statistics Authority (UKSA) assesses all National Statistics for compliance with the Code of Practice.

During 2010 the Statistics on Alcohol: England publications underwent assessment by the United Kingdom Statistics Authority. In accordance with the Statistics and Registration Service Act 2007 and signifying compliance with the Code of Practice for Official Statistics these statistics were recommended continued designation as National Statistics.

Designation can be broadly interpreted to mean that the statistics:

- [meet identified user needs;](#)
- [are well explained and readily accessible;](#)
- [are produced according to sound methods; and](#)
- [are managed impartially and objectively in the public interest.](#)

Once statistics have been designated as National Statistics it is a statutory requirement that the Code of Practice shall continue to be observed.

### **Drinking recommendations and consumption indicators**

Government recommendations, at the time of publication, are that adult men should not regularly drink more than 3-4 units of alcohol a day and adult women should not regularly drink more than 2-3 units a day. After an episode of heavy drinking, it is also advisable to refrain from drinking for 48 hours to allow tissues to recover.

A number of sources collect information on the number of units drunk in an average week and the amount drunk on the heaviest drinking day in the last week. Neither of these indicators precisely measure consumption against the recommendations, therefore in this compendium, we will refer to the information as it is collected, rather than compare the data with recommendations.

Information in Chapter 2 of this report on estimated weekly alcohol consumption for this year is taken from the Health Survey for England 2011 (HSE 2011) report (as it was not possible to produce England level figures from the General Lifestyle Survey 2011 as this publication was delayed). HSE 2011 takes a slightly different approach considering wider current and previous guidelines. Chapter 6 of HSE 2011 contains further details.

Definitions for drinking units are covered in [Appendix A](#).

### **Amount consumed on the heaviest drinking day in the last week**

Two of the indicators used in the report look at the amount of alcohol consumed on the heaviest drinking day in the last week.

Drinking more than 4/3 units on the heaviest drinking day: Although looking at how many men drank over 4 units on a day and how many women drank over 3 units on a day does not measure the government recommendations, it is useful to look at the proportion of men and women who drank over these amounts on their heaviest drinking day. In this report we refer to this as drinking over 4/3 units on the heaviest drinking day in the last week.

Drinking more than 8/6 units on the heaviest drinking day: It is useful to look at the proportion of men who drank more than 8 units and the proportion of women who drank more than 6 units on their heaviest drinking day in the last week. Drinking this amount in one day has sometimes been referred to as 'heavy' drinking or 'binge' drinking. In this report we will

refer to this as drinking more than 8/6 units on the heaviest drinking day in the last week.

### **Amount of alcohol consumed in an average week**

Two of the indicators in this report look at the amount of alcohol consumed in an average week.

Drinking an average of 21/14 units a week: This report considers the proportion of men who drink more than 21 units in an average week and the proportion of women who drink more than 14 units in an average week. Drinking this amount will be referred to as drinking more than 21/14 units in an average week.

Drinking an average of 50/35 units a week: This report considers the proportion of men who drink more than 50 units in an average week and the proportion of women who drink more than 35 units in an average week. Drinking this amount has been referred to as 'chronic' drinking. In this report it will be referred to as drinking more than 50/35 units in an average week.

## 2 Drinking behaviour among adults and children

### 2.1 Introduction

The information presented in this chapter relates to the drinking patterns of adults (aged 16 and over) and children (aged 11 to 15). A number of sources are used to describe drinking patterns, drinking among different groups in society, geographical patterns in the prevalence of drinking among adults and children, and expenditure on and affordability of alcohol.

The main source of data for drinking prevalence among adults is the General Lifestyle Survey (GLF), formerly known as the General Household Survey (GHS) and published by the Office for National Statistics (ONS). This is a national survey covering adults aged 16 and over living in private households in Great Britain. The latest GLF 2011 report<sup>1</sup> is based on the survey which ran from January to December 2011. As the GLF 2011 report was published later than usual, the HSCIC have been unable to produce any England level analysis for this report. Instead GB level analysis has been presented. A wide range of topics are covered in the GLF to provide a comprehensive picture of how we live and the social change we experience. Each year there are questions on alcohol consumption and drinking habits in the week prior to interview and in some years there are questions on average alcohol consumption in a typical week during the last 12 months.

Following consultation with users, the ONS has determined that the GLF will not continue in its current format. Questions on drinking (except average weekly alcohol consumption) will instead be included in the new ONS Opinions and Lifestyles Survey. Average weekly alcohol consumption and maximum alcohol

consumption will be included in the Health Survey for England (HSE) going forward and were included in HSE 2011<sup>2</sup> to aid interpretation of these data following the change in surveys.

The HSE is an annual survey designed to monitor the health of the population of England. The report is written by NatCen Social Research (previously the National Centre for Social Research) and published by the HSCIC. As it has not been possible to conduct the England level analyses from GLF 2011 this year information presented in this chapter on estimated weekly alcohol consumption and maximum daily consumption in the last week is taken from the HSE 2011.

Data on adults' drinking behaviour and knowledge was collected as part of the ONS Omnibus Survey. The Omnibus Survey provided information on the types of alcohol consumed and weekly consumption for adults. The Omnibus Survey has been discontinued so information from the last publication, *Drinking: Adults' behaviour and knowledge in 2009*<sup>3</sup> is again included in this chapter.

Data on purchased quantities of alcohol are taken from the Living Costs and Food Survey (LCFS)<sup>4</sup> (formally known as the Expenditure and Food Survey (EFS)). The LCFS is commissioned by ONS and the Department for Environment, Food and Rural Affairs (DEFRA), and is a continuous household survey that provides data on weekly expenditure on and purchase quantities of alcoholic drinks consumed both within and outside the home. In 2008, the LCFS became part of the Integrated Household Survey (IHS), with DEFRA having responsibility for the Family Food Module of the LCFS.

Data on alcohol price and retail price indices are taken from the ONS publication *Focus on Consumer Price Indices*<sup>5</sup>, while households' disposable income data are taken from the ONS publication *Household sector: Secondary Distribution of Income Account*<sup>6</sup>.

International comparisons on alcohol consumption are included in the report using data from the *Health at a Glance 2012*<sup>7</sup> published by the Organisation for Economic Co-operation and Development (OECD).

The *Smoking, drinking and drug use among young people in England in 2011*<sup>8</sup> (SDD11) report published by the Health and Social Care Information Centre (HSCIC) is the main source of data for drinking prevalence among children. This report contains results from an annual survey of secondary school pupils in years 7 to 11 (mostly aged 11 to 15). Overall 6,519 pupils from 219 schools in England completed questionnaires in the autumn term of 2011. The *Smoking, drinking and drug use among young people in England in 2011* (SDD11) report includes regional information on alcohol consumption.

### 2.1.1 Updated methodology for converting volumes drunk to units

Estimates of alcohol consumption in surveys are given in standard units derived from assumptions about the alcohol content of different types of drink, combined with information from the respondent about the volume drunk. From 2006 the GLF (then GHS), and from 2007 the Omnibus survey, introduced an improved method of converting volumes of alcohol drunk into alcohol units. This was due to new types of alcoholic drinks being introduced, the increase in the alcohol content of some drinks and the fact that

alcoholic drinks are now sold in more variable quantities than before.

In the GLF 2008, a further revision in methodology was introduced for calculating the units of alcohol for wine. Respondents were asked whether they had consumed small (125 ml), standard (175 ml) or large (250 ml) glasses of wine. It is assumed that a small glass contains 1.5 units of alcohol; a standard glass contains 2 units and a large glass 3 units. This is different from 2006 and 2007 when it was assumed that all respondents drank from an average size (170 ml) glass containing 2 units. In the GLF, the updated method made little difference overall, but has slightly reduced the proportion of women exceeding 3 units on their heaviest drinking day in the week before interview. Further details of the updates in methodology are supplied in [Appendix A](#).

The Health Survey for England has asked about drinking alcohol since its inception in 1991. Until 1997, drinking was measured using a series of questions that, for each type of drink, recorded the frequency of drinking within the last 12 months and the usual amount drunk on any single day. In 1998, questions were introduced about the maximum amount of alcohol consumed on any day in the previous week.

The method used by the HSE to convert drinks to units remained essentially unchanged from 1991 until 2005. The assumptions were similar to those which have been used by the GHS in 1990 and other major surveys. Table 6A in Chapter 6 of the HSE 2011 report shows the conversion factors used in the HSE report; drinks other than wine are the same as the revised unit measures used since 2006.

## 2.1.2 Drinking guidelines

Drinking guidelines and indicators used to measure consumption are described in [Appendix B](#) and used throughout this chapter.

## 2.2 Alcohol consumption

### 2.2.1 Drinking in the last week

Respondents to the GLF were asked questions about their drinking in the week prior to interview. In Great Britain, in 2011, 66% of men and 54% of women (aged 16 and over) reported drinking an alcoholic drink on at least one day in the week prior to interview. Men were more likely to drink on more days of the week than women, with 16% reporting drinking on five or more days compared with 9% of women. Similarly, men were more likely than women to have drunk alcohol every day during the previous week (9% compared with 5%). See Table 2.3 of Chapter 2 of the GLF 2011 report for further information.

Figure 2.1 shows how the proportion of adults who reported drinking in the last week varied by age and gender. Those in the youngest and oldest age groups (16 to 24 and 65 and over) were less likely than those in the other age groups (25 to 44 and 45 to 64) to report drinking during the previous week. Less than half (42%) of women aged 65 and over reported drinking alcohol during the previous week, compared with 63% of men in this age group.

Figure 2.1 Proportion of adults who drank in the last week, by age and gender, 2011

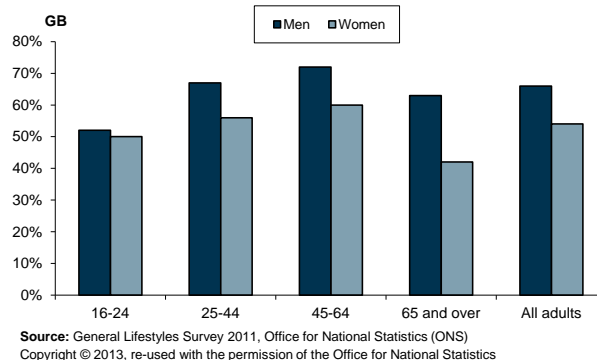


Table 2.3 of Chapter 2 of the GLF2011 report also shows that those aged 65 and over were more likely than any other age group to have drunk on every day of the previous week; for example, 17% of men and 9% of women aged 65 and over had drunk every day during the previous week, compared to one per cent of both men and women aged 16 to 24.

There has been a long-term downward trend in the proportion of adults who reported drinking in the week prior to interview. In 1998, 75% of men and 59% of women drank in the week prior to interview (in England) compared to 66% and 54% respectively in 2011 (in GB).

### 2.2.2 Maximum daily consumption in the last week

Tables 6.6 to 6.10 of Chapter 6 of the HSE 2011<sup>2</sup> report show findings for maximum daily consumption of alcohol in the last week for England.

Table 6.6 of the HSE 2011 report shows consumption of alcohol on the heaviest drinking day in the last week for all participants, including those who did not drink at all that week. 61% of men and 72% of women had either drunk no alcohol in the last week, or had drunk within the



recommended levels on the day they drank the most alcohol. This was most common among men and women aged 65 or over. Among men, 39% drank above the recommended levels on at least one day, including 22% who drank more than twice the recommended amount at least once. The corresponding proportions among women were 27% and 13%.

Table 6.7 of the HSE 2011 report shows that over half of those who drank in the last week exceeded recommended limits on at least one day in the previous week (56% of men, 52% of women), while over a quarter drank more than twice the recommended limit (31% of men, 25% of women). Men drank an average of 7.7 units, and women an average of 5.0 units on the day they drank the most in the last week.

Younger people were the most likely to drink heavily on a single occasion. 67% of men and 68% of women aged 16-24 drank above the recommended level, and 45% and 46% respectively drank more than twice the recommended amount. Among those aged 75 and over, only 27% of men and 16% of women drank more than the recommended amount, and 8% and 2% respectively drank more than twice the recommended amount.

Table 6.8 of the HSE 2011 reports shows similar information broken down by Strategic Health Authority, Table 6.9 by equivalised household income and Table 6.10 by Index of Multiple Deprivation.

### **2.2.3 Estimated weekly alcohol consumption**

Tables 6.11 to 6.15 of Chapter 6 of the HSE 2011 report shows findings for estimated weekly alcohol consumption.

In 2011, for the first time since 1999, the HSE asked about the frequency of consuming different types of drinks and the amounts of each type of drink consumed on a usual day. This information has been used to estimate drinking across a typical week.

Table 6.11 of the HSE 2011 report shows that in the population for England as a whole, 13% of men and 19% of women were non-drinkers, that is to say they had not drunk alcohol in the last 12 months, or said that they never drank alcohol. The estimated weekly consumption of the majority of men and women was within the levels recommended by the NHS. 64% of men drank no more than 21 units, and 63% of women drank no more than 14 units. Drinking above these levels increases the risk of alcohol related harm and drinking more than 50 units a week for men or 35 units for women is defined by the NHS as the threshold for 'higher risk' drinking. 23% of men and 18% of women had an estimated weekly consumption of more than the recommended levels, including 6% of men and 4% of women whose consumption put them in the higher risk category.

Table 6.12 of the HSE 2011 report shows that older people were most likely to be non-drinkers. 21% of men aged over 75 did not drink, compared with between 10% and 15% in younger age groups. Between 14% and 19% of women aged up to 64 did not drink, but this increased to 24% of those aged between 65 and 74 and 35% of those aged 75 and over.

Consumption levels also varied with age. Men aged between 45 and 64 were most likely to drink more than 21 units in an average week (27-29%); among women, those aged between 45 and 54 were most likely to drink more than 14 units in a week

(25%). For both men and women, drinking at this level was least common among those aged over 75 (17% of men, 8% of women).

The proportion of men who drank more than 50 units a week did not vary significantly with age. Women aged 45-54 were most likely to drink more than 35 units a week (7%). Drinking at this level was least common among those aged between 25 and 34 (2%) and those aged over 75 (1%).

Average (mean) weekly consumption among those who did drink was 17.2 units for men and 9.4 units for women. For both men and women it was lowest among those aged 75 and over (13.6 units in a week for men, 5.3 units for women). Men aged between 55 and 64 and women aged between 45 and 54 drank more than those in other age groups (19.4 units and 11.6 units respectively).

Table 6.13 shows similar information by SHA, Table 6.14 by equivalised household income and Table 6.15 by Index of Multiple Deprivation.

## 2.3 Purchases, availability and affordability of alcohol

### 2.3.1 Purchases

Table 2.1 shows the purchases of alcoholic drinks bought for consumption within the home in the UK, as reported by the Living Costs and Food Survey (LCFS), have increased overall since 1992 from 527 millilitres (ml) per person per week, peaking in 2003/04 at 792 ml per person per week with figures fluctuating since. In 2011 this figure was 728 ml per person per week, a 38% increase since 1992. Purchases of cider and perry and wine showed the largest increase between 1992

and 2011 compared to other types of drink. Consumption of cider and perry has increased by 85% from 47 ml per person per week to 87 ml and wine consumption has increased by 68% from 152 ml to 255 ml. It should be noted that alcopops didn't really exist pre 1997.

The overall volume of alcoholic drinks purchased for consumption outside the home has decreased by 46% from 733 ml per person per week in 2001/02 to 394 ml per person per week in 2011. This reduction is mainly due to a 54% decrease in the volume of beer purchases from 623 ml to 286 ml per person per week over the same period.

### 2.3.2 Availability

Information on the volume of alcohol released for home consumption is collected by Her Majesty's Revenue and Customs and relates to the United Kingdom as a whole. The data on alcohol released for home consumption excludes personal imports (both legal and illegal). Although this data is not presented in this report it is available at; <https://www.uktradeinfo.com/Statistics/Pages/TaxAndDutyBulletins.aspx>

### 2.3.3 Affordability

The HSCIC has routinely published a series of indices derived from ONS data in its *Statistics on Alcohol: England* reports. These include the alcohol price index (API), retail price index (RPI), relative alcohol price index (defined as API / RPI), real households' disposal income (RHDI) and the affordability of alcohol index (defined as RHDI / relative price index).

Since the publication of *Statistics on Alcohol: England 2010*, the HSCIC has worked with key customers to investigate

the scope for making methodological improvements to the way the affordability of alcohol index is derived. The Institute of Alcohol Studies (IAS) produced a research paper<sup>9</sup> proposing a number of adjustments to the affordability index produced by the HSCIC. One of these proposed adjustments was implemented in the *Statistics on Alcohol: England, 2011*<sup>10</sup> report and as a result, the revised Real Households' Disposable Income (RHDI) index now tracks, exclusively, changes in real disposable income **per capita**. Previously, the RHDI index tracked changes in the total disposable income of all households and was not a per capita basis. This had the implication that 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 alcohol index, and so 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 alcohol index. For further information on the methodology see [Appendix A](#).

The unadjusted RHDI index and the unadjusted affordability of alcohol index (as used in *Statistics on Alcohol: England 2010* and prior publications) are presented alongside the revised indices for comparability purposes in the *Statistics on Alcohol: England 2011*<sup>10</sup> report ([Table 2.8](#) and [Figure 2.6](#)).

Further views on the affordability measure, in particular to the revision made in 2011 and the further proposed amendments contained within the IAS research paper,

were sought during the Lifestyles Compendia Publications public consultation in 2011:

[http://www.hscic.gov.uk/media/9813/Lifestyles-stats-compedia-publications-consultation---Outcomes-document/pdf/Outcomes\\_lifestyles\\_Statistics\\_Compedia\\_Publications\\_Consultation.pdf](http://www.hscic.gov.uk/media/9813/Lifestyles-stats-compedia-publications-consultation---Outcomes-document/pdf/Outcomes_lifestyles_Statistics_Compedia_Publications_Consultation.pdf)

The RHDI index used to construct the affordability of alcohol index, even though now adjusted in the way described earlier, is still subject to some debate in relation to other matters as described in the IAS paper. The source of the RHDI index is an ONS series known as *Economic Trends (Code NRJR)*. NRJR is closely related to a separate National Accounts ONS series known as *Gross Disposable Income (Code QWND)* which relates to all households in the UK and is defined in detail by ONS in *UK National Accounts Concepts, Sources and Methods*,

<http://www.ons.gov.uk/ons/rel/naa1-rd/national-accounts-concepts--sources-and-methods/1998-release/index.html>

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'.

The concerns raised related to the detailed treatment of owner-occupier mortgage interest payments and imputed rent. Both are still being considered.

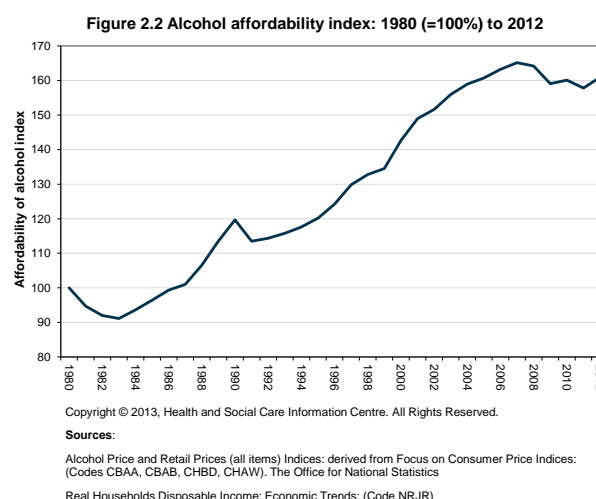
All responses received were in favour of the adjustment made in the 2011 report to calculate on a per capita basis. We intend to continue performing this adjustment going forwards. Further work will be necessary in the future to consider the further amendments to the index, including investigating whether an alternative source of data is more appropriate to measure disposable income, or whether to apply the adjustments proposed by IAS to the



existing measure. From initial discussions with ONS it appears the adjustments would be beneficial or an alternative source of data on household disposable income could be used which may not have the limitations of the existing RHDl index. We will aim to examine this in the future, subject to resources, meantime like last year, the methodology underpinning the affordability index is an interim measure that may be refined if deemed necessary upon completion of further enquiry.

Table 2.2 and Figure 2.2 are based on this interim measure. In the UK, prices of alcoholic drinks, as measured by the alcohol price index, have increased more than the retail price index since 1980 (an arbitrarily chosen base year). Between 1980 and 2012 the price of alcohol increased by 24% more than the retail prices generally. However, real households' disposable income per adult (adjusted) increased by 99% over the same period. Using the most recently available data, alcohol in 2012 was 61% more affordable than it was in 1980, highlighting the overall trend of increasing affordability over the period.

This alcohol price index used in the affordability index relates to a 'basket of alcoholic drinks' chosen by the ONS. It therefore provides an overall picture of the affordability of alcohol. It is not designed to measure the affordability of the cheapest alcohol, and neither is it designed to measure the affordability of pure alcohol. It is intended to be used as a national measure – its relevance at an individual level will depend on the extent to which an individual's choice of drinks match the drinks included in the measure.



## 2.4 Types of alcohol consumed

The 2009 Omnibus Survey, *Drinking: Adults' behaviour and knowledge in 2009*<sup>3</sup> reports on the average weekly alcohol consumption in Great Britain, by recording how many pints, glasses, measures or bottles/cans of different types of alcoholic drink the respondent would usually consume on any one day in the past 12 months and how often each type of drink is usually consumed. From this information average weekly alcohol consumption is broken down into the number of units consumed by alcohol type.

Table 2.3 shows that there were marked differences in the drink preferences of men and women. Compared with men, women were proportionately less likely to drink beers and more likely to drink wine, fortified wine, spirits and alcopops. In terms of amounts drunk, even though women drink much less than men overall, they drank more units of wine (5.4 units for women and 4.0 units for men). Women's beer consumption was much lower than men's (an average of 1.9 units compared with 9.3 units).

Beers were the most popular drink among men of all ages, but decline with

increasing age as a proportion of total alcohol consumed, from 68% of the alcohol consumed by those aged under 25 to 43% of that consumed by those age 65 and over. Most of this variation is contributed by strong beer, lager and cider, which accounted for 23% of the units consumed by young men aged 16 to 24 but only 8% of alcohol drunk by men aged 65 and over.

The amount of spirits as a proportion of men's total consumption was highest among those aged 16 to 24 (19%) and 65 and over (18%). The amount of wine as a proportion of total consumption was highest among men aged 45 and over (32% of 45 to 64 year olds and 35% of those aged 65 and over).

The pattern of women's drinking in relation to age was slightly different to that of men. Among women aged 16 to 24, spirits were the most popular type of drink, followed by wine. Among older women, wine was by far the most popular alcoholic drink in women aged 45 to 64; wine accounted for 70% of average weekly alcohol consumption. The amount of fortified wine as a proportion of women's total consumption was highest (9%) among those aged 65 and over.

The consumption of alcopops showed the opposite association with age, accounting for a greater proportion of young people's alcohol consumption compared with that of older people: alcopops accounted for 16% of the alcohol consumption of women aged 16 to 24 compared with less than half a per cent for those aged 65 and over (Table 2.3).

## 2.5 Alcohol consumption and socio-economic variables

### 2.5.1 Socio-economic classification

The GLF collects and reports on a variety of socio-economic variables and drinking behaviours are reported against a number of these.

Table 2.6 of Chapter 2 of the GLF 2011 report shows that households in GB where the household reference person was classified as managerial and professional had the highest proportions of both men and women who had an alcoholic drink in the last seven days (75% and 64% respectively). The lowest proportions were observed for men and women in households where the reference person was in a 'routine and manual' occupation (59% and 43%). There was a similar pattern in the proportions drinking on five or more days in the previous week. For example, 16% of adults who were living in a household where the reference person was in a 'managerial and professional' occupation had an alcoholic drink on five or more days in the previous week. In households where the reference person was in an occupation in the 'routine and manual' classification, this proportion was lowest, at 9%.

### 2.5.2 Economic activity status

Table 2.12 of Chapter 2 of the GLF 2011 report shows variations in alcohol consumption by economic status in GB reflect differences in both the income and age profiles of the groups. Among men aged 16 to 64, those in employment were most likely to have drunk alcohol during the previous week – 73% had done so compared with 46% of the unemployed

and 47% of those who were economically inactive. Working men were more likely than unemployed and economically inactive men to have drunk more than 4 units of alcohol on one day – 41%, compared with 25% and 26% respectively. Working men were also more likely than unemployed and economically inactive men to have drunk heavily (more than 8 units) on one day – 24% for working men in comparison to 14% for both unemployed and economically inactive men.

Among women aged 16 to 64, 61% of those who were working, 53% of those who were unemployed, and 46% of those who were economically inactive had drunk alcohol in the previous week. Working women were more likely than the economically inactive to have drunk more than 3 units of alcohol on one day - 36%, compared with 24%. Working women were also more likely than the economically inactive to have drunk heavily (more than 6 units) on one day - 16 %, compared with 10%.

### 2.5.3 Household income

Tables 2.10 and 2.11 of Chapter 2 of the GLF 2011 report show drinking in the last week and household income.

The proportion of people who drank alcohol in the week before interview increased as household income increased. In households in the lowest quintile, 45% of adults drank alcohol in the previous week and 9% did so on 5 or more days whereas in the highest income quintile, 77% of adults drank in the previous week and 18% did so on 5 or more days.

The proportions of adults exceeding 4/3 units of alcohol and drinking heavily (exceeding 8/6 units) tended to rise with increasing gross weekly household income. In households in the lowest income quintile 22% of adults exceeded

4/3 units of alcohol and 10% drank heavily (exceeded 8/6 units) on at least one day in the previous week. Adults living in households in the highest income quintile were twice as likely to have exceeded 4/3 units of alcohol and were twice as likely to have drunk heavily as adults in households in the lowest income quintile (44% and 23% compared with 22% and 10%).

## 2.6 Drinking and pregnancy

Information on drinking during pregnancy is collected as part of the Infant Feeding Survey (IFS), the latest survey being *Infant Feeding Survey 2010*<sup>11</sup>. The main focus of the survey is the prevalence of breast feeding, however the new mothers interviewed are also asked about their drinking behaviours before, during and after pregnancy.

Key findings from the IFS show that in 2010 in England, of the women who drank before pregnancy, 48% gave up (33% in 2005) while they were pregnant and 47% (62% in 2005) said they cut down on the amount drank while 2% reported no change/drank more (4% in 2005) to their drinking patterns.

Further details are provided within Chapter 11 of the IFS 2010 report.

## 2.7 Geographic patterns of alcohol consumption

### 2.7.1 International Comparisons

In 2012 the Organisation for Economic Co-operation and Development (OECD) published *Health at a Glance 2012*<sup>7</sup> which includes data on alcohol consumption among adults across different countries.

Figure 2.6.1 on page 61 of the OECD report shows alcohol consumption for the population aged 15 and over in 2010 (or the nearest year) and change between 1980 and 2010. The EU region has the highest alcohol consumption in the world. Average alcohol consumption in the EU region, as measured by annual sales, stands at 10.7 litres of pure alcohol per adult. Alcohol consumption in the UK was lower than the EU average at 10.2 litres. Austria, France, Latvia, Lithuania and Romania reported the highest consumption of alcohol, with 12.0 litres or more per adult (Luxembourg has been left aside because of the high volume of purchases by non-residents in this country). At the other end of the scale, southern European countries (Cyprus, Greece, Italy, Malta) along with Nordic countries (Iceland, Sweden, and Norway) have relatively low levels of consumption, in the region of 7-8 litres of pure alcohol per adult. Turkey and the Former Yugoslav Republic of Macedonia have rates well below four litres.

### 2.7.2 Alcohol consumption by region

Table 6.8 of the HSE 2011 report shows the maximum alcohol consumption on any day in the last week by Strategic Health Authority (SHA).

The highest proportions exceeding recommended limits came from the North East (68% of men, 60% of women) and the North West (65% of men, 60% of women). Regional variations were also reflected in differing average maximum daily consumption. The average units consumed on the heaviest drinking day exceeded twice the recommended limits for drinkers in the North East (9.3 for men and 6.5 for women), while the average number of units was lowest in London (6.4 for men, 4.2 for women).

## 2.8 Drinking among children

The Smoking, drinking and drug use among young people in England in 2011<sup>8</sup> (SDD11) report contains information on drinking in children aged 11 to 15 in secondary schools in England. The key findings are:

- 45% of pupils said that they had drunk alcohol at least once. This was at the same level as in 2010, and maintains the downward trend since 2001 when 61% of pupils had drunk alcohol.
- Boys and girls were equally likely to have drunk alcohol. The proportion who had drunk alcohol at least once increased with age, from 11% of 11 year olds to 74% of 15 year olds.
- In 2011, 12% of pupils had drunk alcohol in the last week. This continues a decline from 26% in 2001, and is at a similar level to 2010, when 13% of pupils reported drinking in the last week.
- Similar proportions of boys and girls had drunk alcohol in the last week. The proportion who had drunk alcohol in the last week increased with age from 1% of 11 year olds to 28% of 15 year olds.
- The reported frequency of drinking continues to decline. In 2011, 7% of pupils said they usually drank at least once a week, compared with 20% in 2001.
- Pupils aged 11 to 15 who drank in the last week drank a mean amount of 10.4 units and a median amount of 7.0 units.
- The most popular type of drink was beer, lager or cider, which accounted for around half of pupils' mean weekly intake (5.2 units). Boys were more likely than girls to

drink beer, lager or cider; girls drank more wine and alcopops than boys.

- Drinking alcohol in the last week is associated with age, ethnicity, and other risky behaviours (smoking, drug taking and truancy).

### **2.8.1 Regional comparisons of drinking among children**

The SDD11 report presents drinking estimates by the nine English regions in Chapter 6 based on 2010 and 2011 data combined.

Table 6.3 of the SDD11 report shows the proportion of pupils who have ever drunk alcohol by region and sex. Table 6.4 shows the proportions of pupils who drank alcohol in the last week by region and Table 6.5 shows mean consumption of alcohol by pupils who drank in the last week, by region and sex.

As in previous years, pupils in London were much less likely to have ever drunk alcohol than pupils in other regions. Less than a third (30%) of pupils in London had ever drunk alcohol. Elsewhere the proportion of pupils who had ever drunk alcohol varied from 39% in the West Midlands to 51% in the North East. There was a similar regional pattern for the proportion of pupils who had drunk alcohol in the last week, which varied from 8% in London to 17% in the North East.

Similar regional variations in the prevalence of drinking were found in the analysis of data from 2006 to 2008.<sup>12</sup>



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12. Smoking, drinking and drug use among young people in England: Findings by region 2006 to 2008. Health and Social Care Information Centre. Available at: <http://www.hscic.gov.uk/pubs/sdd0608region>

## List of Tables

- 2.1 Household consumption of alcoholic drinks, 1992 to 2011
- 2.2 Indices of alcohol price, retail prices, alcohol price index relative to retail prices index (all items), real households' disposable income, and affordability of alcohol, 1980 to 2012
- 2.3 Average weekly consumption of different types of drink, by gender and age, 2009

**Table 2.1 Household consumption of alcoholic drinks, 1992 to 2011<sup>1</sup>**

United Kingdom		ml per person per week					
	All alcoholic drinks	Beer <sup>2</sup>	Cider and perry	Wine <sup>3</sup>	Spirits <sup>4</sup>	Alcopops <sup>5</sup>	Other <sup>5,6</sup>
<b>Consumption within the home</b>							
1992	527	298	47	152	30	.	.
1993	536	297	44	164	32	.	.
1994	552	311	52	162	28	.	.
1995	627	338	77	180	32	.	.
1996	656	351	82	188	34	.	.
1997	653	365	58	196	32	2	.
1998	645	340	61	212	30	1	.
1999	640	329	60	213	35	4	.
2000	725	388	58	232	37	10	.
2001/02	735	386	55	236	39	18	.
2002/03	726	380	50	239	39	18	.
2003/04	792	416	64	251	41	19	.
2004/05	763	395	55	261	38	14	.
2005/06	739	377	52	262	38	11	.
2006 <sup>7</sup>	760	393	59	255	41	12	.
2007	772	384	75	263	42	8	.
2008	706	349	69	242	38	8	.
2009	744	371	82	245	40	7	.
2010	762	378	79	252	43	9	.
2011	728	339	87	255	38	9	.
<b>Consumption outside the home<sup>8</sup></b>							
2001/02	733	623	21	20	21	34	15
2002/03	704	592	20	20	21	36	15
2003/04	664	557	20	21	22	25	21
2004/05	616	515	18	22	20	20	22
2005/06	597	499	16	22	20	15	25
2006 <sup>7</sup>	561	459	24	23	18	11	25
2007	503	400	28	19	17	8	31
2008	443	358	21	18	14	6	25
2009	449	342	28	29	16	6	27
2010	413	299	29	34	16	5	30
2011	394	286	27	31	12	3	34

1. Data from 1992 to 2000 was collected from the National Food Survey and has been adjusted to allow comparisons to data collected from 2001/02 to 2007 from the Expenditure and Food Survey (EFS). In 2008 the EFS was renamed the Living Costs and Food Survey (LCFS) when it became part of the Integrated Household Survey. The data presented here comes from the Family Food Module of LCFS.

2. 'Beer' includes beers, lagers and continental beers.

3. 'Wine' includes table wine, champagne and fortified wines.

4. 'Spirits' includes spirits and mixer, liqueurs and cocktails.

5. A '.' indicates data are unavailable. Alcopops did not really exist pre 1997.

6. 'Other' includes rounds of alcohol drinks bought and alcohol not otherwise specified.

7. From 2006 the survey moved onto a calendar year basis (from the previous financial year basis). As a consequence, the January 2006 to March 2006 data are common between the 2005/06 financial year results and the 2006 calendar year results.

8. Data on volumes consumed outside of the home from 1992 to 2000 are not available.

#### Source:

Family Food Module of Living Costs and Food Survey (LCFS) 2010 (Defra/ONS).

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**Table 2.2 Indices of alcohol price, retail prices, alcohol price index relative to retail prices index (all items), real households' disposable income, real disposable income per adult and affordability of alcohol United Kingdom, 1980 to 2012**

Indices (1980 = 100)						
	Alcohol price index	Retail prices index (all items)	Alcohol price index relative to Retail price index (all	Real household disposable income	Real disposable income per adult (18+) <sup>2</sup>	Affordability of alcohol index on a per capita basis <sup>3</sup>
1980	100.0	100.0	100.0	100.0	100.0	100.0
1981	116.9	111.9	104.5	99.6	99.0	94.7
1982	130.2	121.5	107.2	99.7	98.6	92.0
1983	140.0	127.1	110.1	102.2	100.4	91.1
1984	148.1	133.4	111.0	106.6	103.9	93.6
1985	157.4	141.5	111.2	110.8	107.3	96.5
1986	164.5	146.3	112.4	116.1	111.7	99.4
1987	171.2	152.4	112.3	118.6	113.5	101.0
1988	179.9	159.9	112.5	125.9	119.8	106.6
1989	190.1	172.3	110.3	132.2	125.2	113.5
1990	208.4	188.6	110.5	140.2	132.2	119.7
1991	234.3	199.7	117.3	141.7	133.1	113.5
1992	249.4	207.2	120.3	146.8	137.6	114.4
1993	260.4	210.5	123.7	153.1	143.3	115.8
1994	266.7	215.6	123.7	155.7	145.5	117.6
1995	276.8	223.1	124.1	159.9	149.2	120.2
1996	284.8	228.4	124.7	166.2	154.9	124.2
1997	292.7	235.6	124.2	173.7	161.3	129.9
1998	302.7	243.7	124.2	178.3	165.0	132.8
1999	310.6	247.4	125.5	183.4	168.8	134.5
2000	315.4	254.8	123.8	192.9	176.6	142.6
2001	322.0	259.3	124.2	203.4	185.0	149.0
2002	329.3	263.6	124.9	209.3	189.4	151.6
2003	336.3	271.2	124.0	215.1	193.4	156.0
2004	342.8	279.3	122.7	218.4	195.0	158.9
2005	349.6	287.2	121.7	221.2	195.6	160.7
2006	358.0	296.4	120.8	224.8	197.2	163.2
2007	368.6	309.1	119.3	226.5	197.0	165.2
2008	383.3	321.3	119.3	227.1	195.8	164.2
2009	397.3	319.7	124.3	231.1	197.7	159.1
2010	411.2	334.5	122.9	232.2	196.8	160.1
2011 <sup>3</sup>	435.1	351.9	123.7	230.2	195.1	157.8
2012	449.4	363.1	123.8	235.1	199.2	160.9

1. See Appendix A for affordability calculations

2. Population data for 2011 and 2012 is unavailable at time of writing. 2010 data has been used to calculate the real disposable income per adult (18+) in these years.

3. In 2010 the Alcohol affordability index was revised. Prior to 2010 the Real Households' Disposable Income (RHDI) index tracked changes in the total disposable income of all households. From 2010 onwards the RHDI index tracked these changes per capita. The adjusted and unadjusted index are presented alongside the revised indices for comparability purposes in the *Statistics on Alcohol: England 2011* report (Table 2.8 and Figure 2.6).

#### Sources:

Alcohol Price and Retail Prices (all items) Indices: derived from Focus on Consumer Price Indices: (Codes CBAA, CBAB, CHBD, CHAW). The Office for National Statistics

Real Households Disposable Income: Economic Trends: (Code NRJR). The Office for National Statistics

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**Table 2.3 Average weekly consumption of different types of drink, by gender and age<sup>1</sup>, 2009**

Great Britain						Numbers / Percentages				
	All ages <sup>1</sup>	Men				All ages <sup>1</sup>	Women			
		16-24	25-44	45-64	65 and over		16-24	25-44	45-64	65 and over
<b>Total units<sup>2</sup></b>	<b>15.6</b>	<b>17.5</b>	<b>15.0</b>	<b>16.8</b>	<b>12.5</b>	<b>9.5</b>	<b>11.0</b>	<b>10.2</b>	<b>10.5</b>	<b>5.8</b>
Strong beer, lager, cider	2.0	4.1	1.6	2.0	1.0	0.4	1.2	0.4	0.3	0.2
Normal strength beer, lager, cider	7.3	7.9	8.2	7.7	4.4	1.5	1.3	1.9	1.7	0.5
Spirits	1.8	3.3	1.3	1.4	2.3	1.6	4.0	1.6	0.8	0.9
Fortified Wine	0.1	0.1	0.1	0.1	0.1	0.2	0.3	0.1	0.1	0.5
Wine	4.0	0.7	3.8	5.5	4.0	5.4	2.5	5.9	7.4	3.7
Alcopops	0.3	1.4	0.1	0.2	0.2	0.4	1.7	0.3	0.1	0.0
<b>Percentages</b>										
Strong beer, lager, cider	13	23	10	12	8	4	11	4	3	3
Normal strength beer, lager, cider	47	45	54	46	35	15	12	18	17	9
Spirits	12	19	9	8	18	16	37	16	8	15
Fortified Wine	1	0	0	1	1	2	2	1	1	9
Wine	25	4	25	32	35	57	22	58	70	63
Alcopops	2	8	1	2	2	4	16	3	1	0
<i>Weighted Bases (000s)<sup>3</sup></i>	<i>23,414</i>	<i>3,633</i>	<i>8,182</i>	<i>7,419</i>	<i>4,181</i>	<i>24,641</i>	<i>3,484</i>	<i>8,290</i>	<i>7,681</i>	<i>5,186</i>
<i>Unweighted Bases<sup>4</sup></i>	<i>960</i>	<i>80</i>	<i>300</i>	<i>340</i>	<i>240</i>	<i>1,150</i>	<i>80</i>	<i>380</i>	<i>390</i>	<i>300</i>

1. Aged 16 and over.

2. Includes 'other' drinks such as cocktails.

3. Weighted to population totals.

4. Figures for unweighted sample have been rounded independently. The sum of component items does not therefore necessarily add to the totals shown.

Shaded figures indicate the estimates are unreliable and any analysis using these figures may be invalid. Any use of shaded figures must be accompanied by this disclaimer.

**Source:**

Drinking: Adults' behaviour and knowledge in 2009. The Office for National Statistics (ONS).

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## 3 Knowledge and attitudes to alcohol

### 3.1 Introduction

The information presented in this chapter relates to adults' knowledge and awareness of alcohol and children's attitudes to drinking.

Three sources of information are used: The Office for National Statistics (ONS) Omnibus Survey Report *Drinking: adults' behaviour and knowledge in 2009*<sup>1</sup>; the *Heath Survey for England 2007*<sup>2</sup>; and *Smoking, drinking and drug use among young people in England in 2010*<sup>3</sup> (SDD).

The drinking topic in the ONS Omnibus Survey ran biannually but is now discontinued. The last report was published in 2009 using data collected from 2008/09. The survey report presented results from questions about drinking over several years, allowing comparisons to be made over time. The survey used a small sample size and asked respondents about knowledge and attitudes. The survey provided Great Britain level data.

*The Heath Survey for England 2007 (HSE07)* also asked questions of people's knowledge and attitudes towards alcohol. It used a larger sample size and different population sample to the Omnibus survey report. There have been more recent HSE reports, however these have not had the same focus on knowledge and attitudes so are not referenced in this chapter.

In general the HSE07 estimates levels of knowledge to be slightly higher than the Omnibus survey report on drinking. As the two surveys are of different populations, ask slightly different questions and cover

different geographies, it is not unexpected that estimates are slightly different.

In this chapter the Omnibus survey report on drinking and HSE07 are used to explore the knowledge and attitudes people have towards alcohol. The Omnibus survey report on drinking also provides changes over time.

The *Smoking, drinking and drug use among young people in England* (SDD) survey began in 1982 and since 1998 each survey has included a core section of questions on smoking, drinking and drug use. From 2000 the questionnaire has focused on either, smoking and drinking, or drug use. The emphasis of the 2010 survey was on smoking and drinking.

### 3.2 Adults knowledge and Attitudes to Alcohol

#### 3.2.1 Knowledge of Units

Advice on the amount people should drink has to be provided in such a way that it applies to the wide range of different types of alcohol people may drink, which can have very different alcohol contents. Advice on drinking is therefore given in terms of units, and for people to be able to monitor how much they drink, they need to understand what is meant by a unit of alcohol, and how many units different drinks contain.

Government recommendations are that adult men should not regularly drink more than 3 to 4 units of alcohol a day and adult women should not regularly drink more than 2 to 3 units a day<sup>4</sup>. After an episode

of heavy drinking, it is also advisable to refrain from drinking for 48 hours to allow tissues to recover.

The 2009 Omnibus survey report on drinking asked respondents whether they had heard of measuring alcohol consumption in units; 90% of respondents said that they had. This has steadily increased from 79% in 1997. Men and women were equally likely to have heard of alcohol units and the increase in knowledge since 1997 has occurred among both men and women. On the whole, the more people drank, the more likely they were to have heard of units: 95% of those with the highest average weekly consumption (22 units and over for men and 15 units and over for women) had heard of units, compared with only 71% of those who did not drink at all (Table 3.1).

Those aged 65 and over were less likely to have heard of alcohol units: 80% had done so, compared with 96% of those aged 45 to 64 and 88% of the youngest age group (16 to 24). Although average weekly alcohol consumption is not strongly related to socio-economic classification, there were marked differences in awareness of units between those in different occupations. Those in managerial and professional occupational groupings were the most likely to have heard of measuring alcohol in units (96%), and those in routine and manual occupations the least likely to have done so (87%) (Table 3.2 and 3.3).

In the HSE07 most adults (92% of men and 89% of women) had heard of units; this was most common among adults aged between 35 and 64.

### 3.2.2 Awareness of Units and Alcohol Content

It is especially important that people are aware of the alcohol content of drinks they

themselves drink. Therefore, for each of the most common types of drink, the 2009 Omnibus survey asked respondents who had drunk that particular drink in the last year if they knew what a unit of that drink was.

Results found that those who frequently drink a particular type of alcohol at least once a week were aware of its alcohol content. Those who drank beer and those who drank wine at least once a week were much more likely to know how many units were in that drink than were those who seldom drank these drinks, but even so, about a third (31%) of frequent beer drinkers and a sixth (17%) of frequent wine drinkers were not aware of the number of units in what they were drinking. Differences according to frequency of consumption were much less marked for those who drank spirits and fortified wine (Table 3.4).

Further information on respondents' awareness of units for different types of alcohol can be found in Chapter 4 on pages 56 to 57 of the ONS Omnibus Survey Report Drinking: adults' behaviour and knowledge in 2009.<sup>1</sup>

In the HSE07, results showed that accurate knowledge of the content of different drinks in units varied with age, being highest among 25 to 54 year olds. It was also related to what people actually drank. Seventy seven per cent of men and 73% of women who had drunk wine on the day they drank most in the last week said correctly that a 125 ml glass of wine contained one or two units, compared with 65% of men and 60% of women who had not drunk wine on the day they drank most in the last week (though they may have drunk wine on other days). A similar, though less marked pattern was seen for beer and spirits. Further information can be found in Chapter 7 on pages 177 to 218 of HSE07.

## 3.3 Knowledge of drinking limits

### 3.3.1 Alcohol consumption

The 2009 Omnibus survey report on drinking asked respondents whether or not they kept a check on the number of units they drank: 13% said that they did. It should be noted however, given that not all respondents who drank each type of drink knew how many units were contained therein, the likelihood of them keeping an accurate check was, in some cases, low.

Although men were more likely than women to drink heavily (see [Chapter 2](#) of this report for details), they were not more likely to keep a check in terms of units on how much they drank – overall, 12% of men and 14% of women who had heard of units did so. Women who did keep a check on units were slightly more likely to do so on a weekly basis (6%) than on the daily basis (2%) suggested by the government's current advice on sensible drinking. There was no difference among men.

The percentage of people who kept a daily or a weekly check on the number of units drunk has remained similar over the period covered by the surveys varying between 11% and 16% between 1997 and 2009.

Among men who had heard of units, those who drank less than 10 units a week were less likely than others to keep a daily or weekly check on the number of units drunk. Among women, those who drank less than 1 unit a week were least likely to keep a check ([Table 3.5 and 3.6](#)).

In the HSE07 results showed that the majority of adults who drank in the last week exceeded recommendations on at least one day; 59% of men and 55% of

women had done so. This was more likely in adults of working age than those aged 65 or over.

Among adults who drank in the last week, 35% of men and 27% of women had drunk more than twice the recommended levels on at least one day in the last week. This was most common among the youngest age group (56% of men and 52% of women aged between 16 and 24), and decreased with age to 6% of men and 3% of women aged 75 and over.

### 3.3.2 Daily drinking limits

The current government advice on drinking is that daily intake should not regularly exceed 3 to 4 units a day for men and 2 to 3 units for women.<sup>4</sup> After an episode of heavy drinking, it is also advisable to refrain from drinking for 48 hours to allow tissues to recover.

The 2009 Omnibus survey report on drinking asked respondents if they had ever heard of the recommended maximum number of alcohol units that people should drink in a day.

There has been an increase from 54% in 1997 to 75% in 2009 in the percentage of people who had heard of daily drinking limits. Throughout the period, differences between men and women have been slight. Male non-drinkers and those who drank very little were less likely to have heard of daily drinking limits than heavier drinkers. The percentage of men who drank less than 1 unit a week who had heard of daily drinking limits increased significantly from 49% in 2007 to 65% in 2009. Among women, non-drinkers were the least likely to have heard of daily drinking limits and heavier drinkers the most likely. For example, 70% of women who drank less than 1 unit a week had heard of daily consumption levels

compared with 86% of those who drank 15 units or more a week (Table 3.7 and 3.8).

The HSE07 results showed 35% of men and 47% of women had heard of units but said they didn't know what the recommendations were for men, and 39% of men and 43% of women similarly knew about units but said they did not know the recommendations for women. Those who attempted to define the recommendations were more likely to be wrong than right. General awareness of units was higher among men and women who had drunk alcohol in the last week but most adults who drank more than the recommended amounts either did not know what these limits were or could not identify them correctly.

### 3.4 Children's attitudes to drinking alcohol

In *Smoking, drinking and drug use among young people in England in 2010*<sup>3</sup> (SDD10) pupils were asked about their attitudes to drinking alcohol, including their perceptions of parents' views on drinking alcohol and being drunk.

The key findings from the SDD10 showed that;

- There has been a fall in recent years in the proportion of pupils who think that drinking is acceptable for someone of their age. In 2010, 32% thought it was OK for someone of their age to drink once a week compared with 46% in 2003. Similarly 11% of pupils thought that it was OK for someone of their age to get drunk once a week, compared with 20% who thought that in 2003.
- Half (51%) of pupils thought their parents didn't like them to drink,

slightly more than the proportion who said their parents didn't mind as long as they didn't drink too much (48%). A few pupils (1%) said their parents let them drink as much as they liked. There was a strong relationship between pupils' drinking behaviour and their parents' attitudes to their drinking. 85% of pupils whose parents did not like them to drink had never drunk alcohol, compared with 27% who thought their parents wouldn't mind as long as they didn't drink too much.

- Pupils were most likely to think that people of their age drink to look cool in front of their friends (76%), to be more sociable with friends (65%), because their friends pressured them into it (62%) or because it gives them a rush or buzz (60%). There were differences between the opinions of pupils who drank alcohol and those who did not. Those who did drink were more likely to agree that people of their age drank to be sociable or for the rush or buzz; pupils who had never drunk alcohol were more likely to believe that people of their age drank to look cool or because of pressure from their friends
- In the HSE07 children aged 13 to 15 were asked about their perceptions of their parents' views on drinking alcohol. Those who stated that they ever drank alcohol were asked whether their parents knew about it, and if so what their parents thought about them drinking alcohol. Very few who drank thought that their parents were unaware of this (5% of boys and 3% of girls). Among the rest, a minority said that their parents did not like them drinking (21% of boys and 17% of girls), while a slightly greater

percentage said that their parents did not mind (38% and 35% respectively), or that their parents' views on their drinking varied (26% and 33% respectively).



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**Table 3.1 Percentage of respondents who said they had heard of measuring alcohol consumption in units: by gender and average weekly consumption, 1997 to 2009**

Great Britain											Percentages		
	1997	1998	2000	2002	2004	2006	2007 original method <sup>1</sup>	2007 updated method <sup>1</sup>	2008 <sup>2</sup>	2008 <sup>3</sup>	2009	2009 Weighted base (000s) <sup>3</sup>	2009 Unweighted base <sup>4</sup>
All													
Non-drinker	53	46	54	50	55	58	55	55	64	63	71	6,720	310
Less than 1 unit	71	61	74	70	74	81	80	78	81	81	85	8,495	380
1–10/1–7 units <sup>5</sup>	82	78	83	87	88	90	90	89	91	90	94	14,253	610
11–21/8–14 units <sup>5</sup>	89	85	88	89	93	94	95	95	94	94	96	8,014	340
22/15 units and over <sup>5</sup>	90	88	90	90	92	93	94	95	95	95	95	10,551	470
Total	79	75	80	81	83	86	85	85	86	86	90	48,033	2,110
Men													
Non-drinker	55	53	56	51	55	56	56	56	66	67	79	2,291	110
Less than 1 unit	71	56	72	65	72	79	71	70	86	87	81	3,295	120
1–10 units	83	76	80	86	85	89	89	87	91	91	93	7,544	300
11–21 units	88	83	86	88	94	93	94	94	93	94	96	5,166	210
22 units and over	91	86	88	91	93	91	93	94	96	96	94	5,117	220
Total	82	76	80	82	84	86	85	85	89	89	91	23,414	960
Women													
Non-drinker	52	42	52	49	55	60	54	54	63	60	68	4,429	200
Less than 1 unit	71	64	75	72	75	81	84	82	79	79	87	5,200	260
1–7 units	81	80	86	88	91	91	92	90	90	90	95	6,709	300
8–14 units	90	86	91	91	93	94	97	97	94	94	96	2,847	140
15 units and over	89	90	92	90	91	95	95	96	94	94	96	5,433	250
Total	77	73	81	80	83	85	85	85	84	84	89	24,618	1,150

Bases for earlier years can be found in Opinions (Omnibus) reports for each year.

1997 to 2007 percentages weighted for unequal chance of selection.

1. In 2007 a methodology change was introduced to give a more accurate estimation of alcohol consumption taking into account the changing alcoholic content of some drinks and the increased glass sized in which wine is served (see appendix A).

2. Weighted for unequal chance of selection.

3. Weighted to population totals.

4. Figures for unweighted sample have been rounded independently. The sum of component items does not therefore necessarily add to the totals shown.

5. Number of units drunk by men/women.

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**Table 3.2 Percentage of respondents who said they had heard of measuring alcohol consumption in units: by gender and age, 1997 to 2009**

Great Britain											Percentages	
	1997	1998	2000	2002	2004	2006	2007	2008 <sup>1</sup>	2008 <sup>2</sup>	2009 <sup>2</sup>	2009 Weighted base (000s) <sup>2</sup>	2009 Unweighted base <sup>3</sup>
<b>All</b>												
16–24	89	82	82	80	83	84	86	85	84	88	7,117	160
25–44	86	84	87	89	88	90	88	89	88	91	16,472	680
45–64	81	76	82	85	87	89	88	91	91	96	15,078	730
65 and over	56	50	62	60	68	73	75	76	76	80	9,366	540
Total	79	75	80	81	83	86	85	86	86	90	48,033	2,110
<b>Men</b>												
16–24	92	81	81	81	85	85	84	88	87	86	3,633	80
25–44	86	86	88	89	89	88	87	89	90	94	8,182	300
45–64	83	76	80	85	87	90	89	93	93	95	7,419	340
65 and over	63	55	66	65	70	76	76	81	82	81	4,181	240
Total	82	76	80	82	84	86	85	89	89	91	23,414	960
<b>Women</b>												
16–24	86	83	84	79	81	82	88	84	81	90	3,484	80
25–44	86	83	87	90	87	91	89	89	88	88	8,290	380
45–64	79	76	85	84	87	89	86	90	89	96	7,659	390
65 and over	50	47	59	55	66	71	74	71	71	78	5,186	300
Total	77	73	81	80	83	85	85	84	84	89	24,618	1,150

Bases for earlier years can be found in Opinions (Omnibus) reports for each year.

1997 to 2007 percentages weighted for unequal chance of selection.

1. Weighted for unequal chance of selection.

2. Weighted to population totals.

3. Figures for unweighted sample have been rounded independently. The sum of component items does not therefore necessarily add to the totals shown.

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**Table 3.3 Percentage of respondents who said they had heard of measuring alcohol consumption in units: by gender and socio-economic classification, 2009**

Great Britain	Percentages			
	Total <sup>1</sup>	Managerial and professional	Intermediate	Routine and manual
All	90	96	94	87
Men	91	96	95	86
Women	89	96	93	88
<i>Weighted base (000s) <sup>2</sup></i>				
All	48,033	15,960	8,423	17,659
Men	23,414	8,447	3,446	9,131
Women	24,618	7,513	4,977	8,528
<i>Unweighted base <sup>3</sup></i>				
All	2,110	720	390	810
Men	960	360	150	380
Women	1,150	360	240	430

1. Those who could not be classified (full-time students, those who had never worked or were long-term unemployed, and those whose occupation was not stated or inadequately described) are not shown as separate categories, but are included in the total.

2. Weighted to population totals.

3. Figures for unweighted sample have been rounded independently. The sum of component items does not therefore necessarily add to the totals shown.

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**Table 3.4 Percentage of drinkers of each drink who knew what a unit of each type of drink was: by how often they drank that type of drink, 1997 to 2009**

Those who drank each type of drink in the last year, Great Britain											Percentages	
	1997	1998	2000	2002	2004	2006	2007	2008 <sup>1</sup>	2008 <sup>2</sup>	2009 <sup>2</sup>	2009 Weighted base (000s) <sup>2</sup>	2009 Unweighted base <sup>3</sup>
<b>Beer</b>												
At least once a week	54	51	54	54	61	64	63	66	66	69	14,407	600
Less than once a week	41	40	46	48	54	53	59	59	59	59	9,271	380
Only once or twice a year	34	34	44	42	45	49	46	45	44	53	5,363	230
Total	47	45	50	50	56	58	59	60	60	63	29,040	1,210
<b>Wine<sup>4,5</sup></b>												
At least once a week	67	63	69	70	75	77	77	77	77	83	14,713	670
Less than once a week	48	48	56	57	62	64	67	67	67	76	10,878	470
Only once or twice a year	31	36	35	42	48	48	57	50	49	65	4,639	200
Total	54	53	58	61	67	68	71	69	68	78	30,230	1,340
<b>Spirits</b>												
At least once a week	57	57	63	59	66	72	72	65	66	67	7,920	340
Less than once a week	60	57	62	66	65	70	69	70	70	70	12,338	520
Only once or twice a year	50	46	51	54	58	62	61	58	58	68	6,922	310
Total	57	55	60	61	64	69	68	65	66	69	27,180	1,160
<b>Fortified wine</b>												
At least once a week	50	44	51	51	59	56	68	57	55	65	1,204	60
Less than once a week	50	50	54	52	48	57	59	64	66	62	2,683	130
Only once or twice a year	44	44	50	52	51	60	59	54	54	61	4,542	210
Total	48	47	52	52	52	59	61	58	58	62	8,429	400
<b>Alcopops<sup>6</sup></b>												
At least once a week	.	.	.	.	.	.	55	58	[25] <sup>7</sup>	77	1,209	40
Less than once a week	.	.	.	.	.	.	62	50	50	63	2,720	80
Only once or twice a year	.	.	.	.	.	.	65	68	70	62	2,511	80
Total	.	.	.	.	.	.	61	58	58	65	6,441	210

Bases for earlier years can be found in Opinions (Omnibus) reports for each year.

1997 to 2007 percentages and bases weighted for unequal chance of selection.

1. Weighted for unequal chance of selection.

2. Weighted to population totals.

3. Figures for unweighted sample have been rounded independently. The sum of component items does not therefore necessarily add to the totals shown.

4. From 2007, includes those who said it was a small glass, as well as those who said, correctly, that it was less than a small glass.

5. From 2007, includes those who said it was a small bottle, as well as those who said, correctly, that it was less than a small bottle.

6. Question introduced in 2007.

7. Percentages are provided for all cells in this table except where a '.' is shown, or a number in square brackets appears. '.' corresponds to a cell where the unweighted base was less than 50 and therefore the associated percentage regarded as unreliable. The number within the square brackets (in this case 25) indicates that in 2008, 25 out of 40 people in the sample who drank alcopops at least once a week knew what a unit of alcopops was.

Shaded figures indicate the estimates may be unreliable due to small sample sizes and any analysis using these figures should be treated with caution. Any use of these shaded figures must be accompanied by this disclaimer.

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**Table 3.5 Whether drinkers keep a check on units drunk: by gender, 1997 to 2009**

Drinkers who had heard of units, Great Britain								Percentages	
	1997	1998	2000	2002	2004	2006	2007	2008 <sup>1</sup>	2009 <sup>2</sup>
<b>All</b>									
Daily	4	3	4	2	4	3	4	4	3
Weekly	5	5	5	4	4	5	6	6	4
Both daily and weekly	2	2	2	1	2	2	2	1	2
Other	2	3	3	4	3	3	3	4	4
All who kept a check	13	12	13	11	13	13	15	15	13
<b>Men</b>									
Daily	5	3	5	2	4	4	5	5	4
Weekly	4	5	5	3	5	4	6	6	3
Both daily and weekly	2	2	1	2	1	1	2	1	1
Other	3	3	3	3	3	4	3	4	3
All who kept a check	14	13	14	10	13	12	16	15	12
<b>Women</b>									
Daily	3	3	2	2	4	3	3	3	2
Weekly	5	5	6	6	4	5	6	7	6
Both daily and weekly	2	2	2	1	2	2	2	2	2
Other	2	2	3	4	3	3	3	4	4
All who kept a check	12	12	13	13	13	13	14	16	14
<i>Weighted base <sup>1</sup></i>									
All	2,625	3,847	2,560	2,716	2,650	1,949	1,718	1,717	
Men	1,284	1,832	1,211	1,342	1,212	912	809	847	
Women	1,341	2,016	1,352	1,374	1,438	1,036	908	875	
<i>Weighted base (000s) <sup>2</sup></i>									
All								35,645	38,342
Men								17,923	19,475
Women								17,721	18,867
<i>Unweighted base <sup>3</sup></i>									
All								1,690	1,670
Men								790	790
Women								900	880

1997 to 2007 percentages and bases weighted for unequal chance of selection.

1. Weighted for unequal chance of selection.

2. Weighted to population totals.

3. Figures for unweighted sample have been rounded independently. The sum of component items does not therefore necessarily add to the totals.

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**Table 3.6 Whether drinkers keep a check on units drunk: by gender and average weekly alcohol consumption, 2009**

Drinkers who had heard of units, Great Britain		Percentages			
	Total	Average weekly alcohol consumption			
		Less than 1 unit	1–10/1–7 units <sup>1</sup>	11–21/8–14 units <sup>1</sup>	22/15 units and over <sup>1</sup>
<b>All</b>					
Daily	3	2	2	4	5
Weekly	4	0	4	6	7
Both daily and weekly	2	1	2	3	1
Other	4	6	4	3	4
All who kept a check	13	9	12	14	16
<b>Men</b>					
Daily	4	2	2	4	7
Weekly	3	1	3	4	3
Both daily and weekly	1	2	1	3	0
Other	3	5	3	2	4
All who kept a check	12	10	9	13	15
<b>Women</b>					
Daily	2	2	2	3	3
Weekly	6	-	6	8	10
Both daily and weekly	2	0	3	2	2
Other	4	6	4	3	3
All who kept a check	14	9	15	17	18
<i>Weighted base (000s)<sup>2</sup></i>					
<i>All</i>	38,342	7,220	13,404	7,664	10,054
<i>Men</i>	19,475	2,685	6,414	4,934	4,826
<i>Women</i>	18,867	4,535	6,374	2,730	5,228
<i>Unweighted base<sup>3</sup></i>					
<i>All</i>	1,670	332	570	330	440
<i>Men</i>	790	100	280	200	210
<i>Women</i>	880	230	290	130	230

1. Number of units drunk by men/women.

2. Weighted to population totals.

3. Figures for unweighted sample have been rounded independently. The sum of component items does not therefore necessarily add to the totals shown.

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**Table 3.7 Percentage who had heard of daily drinking limits: by gender, 1997 to 2009**

Great Britain	Percentages									
	1997	1998	2000	2002	2004	2006	2007	2008 <sup>1</sup>	2008 <sup>2</sup>	2009 <sup>2</sup>
<b>All</b>										
Yes	54	58	64	60	61	69	69	70	70	75
No	37	34	29	30	29	22	23	20	21	17
Not sure	8	8	7	10	9	9	8	10	10	9
<b>Men</b>										
Yes	54	59	62	59	62	68	68	72	72	74
No	38	32	32	30	29	22	24	18	18	17
Not sure	8	9	6	10	9	9	8	10	9	8
<b>Women</b>										
Yes	54	57	66	61	61	69	70	68	67	75
No	37	35	27	30	29	22	22	22	23	16
Not sure	9	8	8	9	9	10	8	10	10	9
<i>Weighted base<sup>1</sup></i>										
<i>All</i>	3,637	5,510	3,442	3,613	3,511	2,472	2,225	2,242		
<i>Men</i>	1,707	2,550	1,613	1,729	1,572	1,125	1,029	1,062		
<i>Women</i>	1,930	2,960	1,829	1,884	1,939	1,347	1,196	1,180		
<i>Weighted base (000s)<sup>2</sup></i>										
<i>All</i>									46,596	48,055
<i>Men</i>									22,478	23,414
<i>Women</i>									24,119	24,641
<i>Unweighted base<sup>3</sup></i>										
<i>All</i>									2,240	2,110
<i>Men</i>									1,000	960
<i>Women</i>									1,240	1,150

1997 to 2007 percentages and bases weighted for unequal chance of selection.

1. Weighted for unequal chance of selection.

2. Weighted to population totals.

3. Figures for unweighted sample have been rounded independently. The sum of component items does not therefore necessarily add to the totals shown.

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**Table 3.8 Percentage who had heard of daily drinking limits: by gender and average weekly alcohol consumption, 1997 to 2009**

Great Britain														Percentages	
	1997	1998	2000	2002	2004	2006	2007 original method <sup>1</sup>	2007 updated method <sup>1</sup>	2008 <sup>2</sup>	2008 <sup>2</sup>	2009 <sup>2</sup>	2009 Weighted base (000s) <sup>3</sup>	2009 Unweighted base <sup>4</sup>		
<b>Men</b>															
Non-drinker	33	45	42	39	40	45	44	44	48	49	66	2,291	100		
Less than 1 unit	41	39	56	43	51	61	49	49	70	71	65	3,295	120		
1-10 units	54	58	62	60	62	70	70	69	71	72	72	7,544	300		
11-21 units	62	66	65	67	70	73	79	77	78	78	80	5,166	210		
22 units and over	64	67	70	66	71	75	74	75	81	81	83	5,117	220		
Total	54	59	62	59	62	68	68	68	72	72	74	23,414	960		
<b>Women</b>															
Non-drinker	43	36	43	39	37	46	45	45	46	44	58	4,429	200		
Less than 1 unit	47	49	64	54	57	64	63	62	64	63	70	5,222	260		
1-7 units	55	62	70	69	66	74	78	76	73	72	76	6,709	300		
8-14 units	63	65	74	67	68	77	82	81	76	76	84	2,847	140		
15 units and over	68	72	71	70	74	80	82	83	80	80	86	5,433	250		
Total	54	57	66	61	61	69	70	70	68	67	75	24,641	1,150		

Bases for earlier years can be found in Opinions (Omnibus) reports for each year.

1997 to 2007 percentages and bases weighted for unequal chance of selection.

1. In 2007 a methodology change was introduced to give a more accurate estimation of the number of units in strong beer and in a glass of wine. (See Appendix A).

2. Weighted for unequal chance of selection.

3. Weighted to population totals.

4. Figures for unweighted sample have been rounded independently. The sum of component items does not therefore necessarily add to the totals shown.

**Source:**

Opinions Survey, Office for National Statistics.

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

### 4.1 Introduction

Alcohol misuse can cause serious harm to a person's health. This chapter presents information on the prevalence of hazardous, harmful and dependent drinking, the number of deaths that are linked to alcohol and information on prescription drugs used for the treatment of alcohol dependence. Information on the cost of alcohol misuse to the NHS is considered.

Data on hazardous or harmful drinking and alcohol dependence are presented from the findings of the report, *Adult psychiatric morbidity in England: results of a household survey, 2007<sup>1</sup>* (APMS 2007). This is a national survey based on adults aged 16 and over living in private households in England and is the third survey of its kind. The APMS is published every seven years with the next survey due to take place in 2014 and the results due for publication in 2015/16.

This chapter also presents an estimate of NHS hospital admissions related to the consumption of alcohol.

Estimates of the number of alcohol-related admissions to hospital are calculated using information on patients' characteristics and diagnoses from the Hospital Episode Statistics (HES) databank<sup>2</sup>, together with estimates for the proportion of cases of

a particular disease or injury that are caused by alcohol consumption, known as alcohol-attributable fractions (AAFs). AAFs were calculated for 47 conditions where a causal relationship with alcohol consumption has been established using a method devised by North West Public Health Observatory (NWPHO<sup>3</sup>). For some conditions, alcohol consumption causes all cases and so all admissions for these conditions are included (e.g. alcoholic liver diseases), whereas other conditions are partially attributable to alcohol, meaning that only a fraction of these cases can be attributable to alcohol consumption (e.g. cancer of the oesophagus). Thirteen conditions were by definition wholly attributable to alcohol consumption and 34 conditions were partially attributable to alcohol consumption.

NWPHO also publish local level information on alcohol related admissions in the Local Alcohol Profiles for England (LAPE) available at [www.lape.org.uk](http://www.lape.org.uk) which can be used to supplement the information on alcohol related admissions available in this report.

A review of the methodology used to estimate alcohol related admissions took place in the form of a public consultation led by the NWPHO working with the Department of Health and the Health and Social Care Information Centre (HSCIC). The consultation was launched on 31 May 2012 and ran for 12 weeks. The responses to the consultation are currently being considered. Full details can be found on the NWPHO website at: [www.lape.org.uk](http://www.lape.org.uk)

Information on prescription items for the treatment of alcohol dependence are presented from Prescription Services<sup>4</sup>, a division of the NHS Business Services Authority (NHS BSA) by the HSCIC.

The latest data on deaths from causes directly linked to alcohol consumption in England and Wales are produced by the Office for National Statistics (ONS) in *Mortality statistics – Deaths registered in 2011*<sup>5</sup>. These are classified by the ICD-10 code and only causes of deaths that are defined by ONS as being wholly or predominantly caused by alcohol consumption are included. This chapter reports on deaths in England only.

Information on estimated costs to the NHS of alcohol misuse are also presented from the government paper, *Public Health Responsibility Deal*<sup>6</sup>. The figures quoted in this paper update the government paper, published in 2008 *The cost of alcohol harm to the NHS in England*<sup>7</sup>.

## 4.2 Hazardous, harmful and dependent drinking

The 2007 *Adult Psychiatric Morbidity Survey* (APMS) estimated the prevalence of hazardous or harmful drinking and dependent drinking. Hazardous drinking is a pattern of drinking which brings about the risk of physical or psychological harm. Harmful drinking is defined as a pattern of drinking which is likely to cause physical or psychological harm (a subset of hazardous drinking). Hazardous and harmful drinking were

assessed in the survey using the Alcohol Use Disorders Identification Test (AUDIT). This test, developed by the World Health Organisation (WHO), consists of ten questions with five predefined answers, each scoring zero to four points. In the APMS an audit score of eight or more indicated hazardous drinking and score of 16 or more indicated harmful drinking.

In 2007, a quarter of adults, aged 16 and over, in England (24%) were classified as hazardous drinkers. Men were twice as likely as women to be hazardous drinkers (33% of men compared to 16% of women). Younger men and women were more likely to be hazardous drinkers than older adults. A similar pattern was seen for harmful drinking. Six per cent of men and 2% of women were classified as harmful drinkers and the proportions were lower in older age groups.

Substance dependence is defined by the ICD-10 as a cluster of behavioural, cognitive and physiological phenomena that can develop after repeated substance use and that typically include a strong desire to take the substance, difficulties in controlling its use, persisting in its use despite harmful consequences, a higher priority given to drug use than to other activities and obligations, increased tolerance, and sometimes a physical withdrawal state.

The prevalence of alcohol dependence was measured in the APMS by the community version of the Severity of Alcohol Dependence Questionnaire (SADQ-C) and the resulting scores defined in terms of no dependence, mild, moderate and severe dependence. For comparability with

data collected in 2000, the prevalence of alcohol dependence has been determined for those aged 16 to 74. Alcohol dependence showed similar patterns to hazardous and harmful drinking. Overall, dependence was higher in men aged 16 to 74 than women in 2007 (9.3% of men compared to 3.6% of women) and was also higher among younger adults.

The prevalence of alcohol dependence in men decreased slightly between 2000 and 2007, with 11.5% of men aged 16 to 74 in 2000 dependent on alcohol, mostly at the mild level. This decreased to 9.3% in 2007, again mostly at the mild level. The same pattern was not seen among women where the levels remained similar.

The 2007 APMS also shows hazardous, harmful and dependent drinking by a number of other characteristics such as ethnicity, region, marital status and income. These can be found in [Chapter 9, pages 151 to 174, of the APMS report<sup>1</sup>](#).

## **4.3 Discussion of drinking with health professional and specialist treatment**

### **4.3.1 Discussion of drinking with health professionals**

Respondents to the Omnibus Survey 2009<sup>8</sup> (the last year that this survey covered alcohol), carried out by the ONS, were asked if, in the last year, they had had any discussions about drinking with their General Practitioner (GP), someone else at the surgery,

another doctor or any other medical professional.

In 2009, one in ten male drinkers and a slightly lower proportion of female drinkers (7%) had such discussions in the last year, the majority of these with their GP. There has been little change since 2000, when this question was first asked, in the proportions having such discussions ([Tables 4.17 to 4.19 and pages 77 to 79 of the report](#)).

### **4.3.2 Specialist alcohol treatment**

From April 2008, the Department of Health started collecting and monitoring data on specialist alcohol treatment, requiring providers of specialist treatment for alcohol misuse to submit data to the National Alcohol Treatment Monitoring System (NATMS). The aim is to provide an ongoing published dataset on specialist alcohol treatment in England similar to that already available for drug misuse treatment. A copy of the 2011/12 Alcohol Treatment in England report can be found on the Public Health England website<sup>9</sup>.

## **4.4 Alcohol-related hospital admissions**

This section describes trends in finished admission episodes with diseases, injuries and conditions that can be attributed to alcohol consumption. Work in this area was carried out by the North West Public Health Observatory (NWPHO) on commission by the Department of Health using Hospital Episode Statistics<sup>2</sup> (HES) data from the HSCIC. This is used to determine the

proportions of a wide range of diseases and injuries that can be partially attributed to alcohol as well as those that are, by definition, wholly attributable to alcohol.

This data was used in three national indicators created by the previous government; National Indicator 39, Vital Signs Indicator 26 and Public Service Agreement Indicator 25.2. These indicators have not been retained by the current government.

The Department of Health have developed an alcohol-related admissions indicator for inclusion in the Public Health Outcomes Framework<sup>10</sup>. Currently the preferred option is for an indicator which estimates alcohol related admissions based on primary diagnoses only (the narrow measure). The Public Health Outcomes Framework states that this is in order to “minimise the risk of perverse consequences from any changes in coding practice so the indicator rewards local areas for good performance”.

NWPHO also publish local level information on alcohol related admissions in the Local Alcohol Profiles for England (LAPE) available at [www.lape.org.uk](http://www.lape.org.uk)

Finished Admission Episodes (FAEs) represent the first period of inpatient care under one healthcare provider and are referred to here as ‘hospital admissions’.

Hospital admissions data on diagnoses are based on the tenth revision of the International Classification of Diseases

(ICD-10). The list of the ICD-10 codes for diseases, injuries and conditions found to be wholly or partly attributable to alcohol can be found in the tables to this chapter. For the purpose of this report, the diseases, injuries and conditions have been split into those which are wholly attributable to alcohol (‘alcohol-specific’) such as alcoholic liver disease or mental and behavioural disorders due to the use of alcohol, and those which are partly attributable to alcohol such as some cancers, accidents and injuries.

Estimates of the number of alcohol-related admissions to hospital are calculated using information on patients’ characteristics and diagnoses from the HES databank, together with estimates for the proportion of cases of a particular disease or injury that are caused by alcohol consumption, known as alcohol-attributable fractions (AAFs). AAFs were calculated for 47 conditions where a causal relationship with alcohol consumption has been established using a method devised by North West Public Health Observatory (NWPHO)<sup>3</sup>. For some conditions, alcohol consumption causes all cases and so all admissions for these conditions are included (e.g. alcoholic liver diseases), whereas other conditions are partially attributable to alcohol, meaning that only a fraction of these cases can be attributable to alcohol consumption (e.g. cancer of the oesophagus). Thirteen conditions were by definition wholly attributable to alcohol consumption and 34 conditions were partially attributable to alcohol consumption.

To construct alcohol related admission estimates, the AAFs are applied to the data on admitted patients (inpatients) collected in HSCIC HES databank. HES

is the national statistical data warehouse for England of the care provided by NHS hospitals and for NHS hospital patients treated elsewhere. The full list of diseases, injuries and conditions and the age and gender specific attributable fractions that are applied to the HES data can be found in Table A.3 within Appendix A.

For each episode of care in hospital, clinicians record the primary diagnosis and up to 19 secondary diagnoses. The primary diagnosis is defined in the NHS Data Dictionary as “the main condition treated or investigated during the relevant episode of healthcare”.

In order to estimate the number of admissions attributable to alcohol, a methodology is used which involves assigning an AAF to each hospital episode that contains at least one of the 47 conditions known to be associated with alcohol consumption in either the primary or one of the 19 secondary diagnosis positions. Where an episode involves more than one alcohol related diagnosis, the AAF associated with the diagnosis most strongly related to alcohol (the one with the highest AAF) is assigned. Where there are two or more codes with equally high AAFs the one which appears earliest in the diagnostic fields is selected. The estimate of the overall number of alcohol related admissions is then derived by summing the AAFs across all episodes.

Within this publication, two main measures of alcohol related admissions are presented: a broad measure and a narrow measure. The broad measure is derived by summing the alcohol attributable fraction associated with each admission based on the diagnosis most strongly associated with alcohol

out of all diagnoses (both primary and secondary). The narrow measure is constructed in a similar way but counts only the fraction associated with the diagnosis in the primary position. Within each of these measures, the data can be broken down into admissions that are wholly and partially attributable to alcohol, according to the required purpose.

In a number of cases, the epidemiological studies on which the AAFs were based estimated the increased risks of morbidity in the general population, rather than among those admitted to hospital. Where this is the case, applying these AAFs to admissions involves making the assumption that the AAFs for admitted patients are the same as those for the general population.

In some of the cases where an admission episode contains an alcohol-related condition in a secondary diagnosis field but not the primary diagnosis field, the condition may not have been a causal factor leading to the admission. Rather, it may be a complicating factor and affect the care that is given to the patient, potentially making treatment more costly. The estimates calculated based on the broad measure are felt to give a better estimate of the number of admissions to hospital caused or affected by alcohol consumption at a particular time or place and hence the pressure put on the health system, rather than a measure of admissions directly caused by alcohol.

Information based on the narrow measure provides a less complicated picture of trends in alcohol-related admissions over time, although it gives an incomplete picture of admissions resulting from or affected by alcohol



consumption. This is because in some cases, the secondary diagnoses will have been a contributing factor to the admission to hospital. This is particularly true of external causes of admission such as accidents and violence, which are never recorded as a primary diagnosis, but some of which can be attributed to alcohol.

These matters, together with a wider review of the methodology used to estimate alcohol related admissions took place in the form of a public consultation led by the NWPFO working with the Department of Health and the HSCIC. The consultation was launched on 31 May 2012, and ran for 12 weeks. The responses are currently being considered. Full details can be found on the NWPFO website: [www.lape.org.uk](http://www.lape.org.uk)

Estimates based on the broad measure are referred to throughout this chapter as alcohol related admissions, although the issues around the interpretation of these estimates should be borne in mind when interpreting this term. The presentation of estimates in future editions of this report will be reviewed in light of the outcome of this consultation.

#### **4.4.1 Alcohol-related admissions based on the broad measure (primary and secondary diagnoses) - admissions relating to wholly and partially attributable conditions combined**

In 2011/12, there were an estimated 1,220,300 admissions related to alcohol consumption where an alcohol-related disease, injury or condition was the primary reason for hospital admission or a secondary diagnosis (broad

measure). This is an increase of 4% on the 2010/11 figure (1,168,300) and more than twice as many as in 2002/03 (510,700) ([Table 4.1](#)).

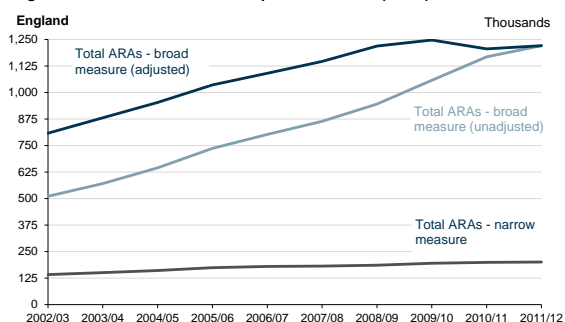
It is important to note that these comparisons over time in the broad measure are complicated by changes in recording practices over the period. All hospital episodes have a primary diagnosis, but the number of secondary diagnoses used depends on the circumstance. At a national level there has been an increase in the coding of secondary conditions. It is likely that this increase in secondary diagnoses is at least partly due to improvements in diagnosis and improvements in recording. This increase in secondary diagnoses affects the estimates based on the broad measure but not the estimates based on the narrow measure.

In order to estimate the trend once changes in recording practices are accounted for, a method has been developed to adjust the national figures so that the adjusted series is free from the effects of changes in recording practice over time. This method and the assumptions that underpin it are explained in [Appendix E](#).

The method produces adjusted figures for earlier years based on what they would be if coding practice for secondary diagnoses in each of those years had matched practice in 2011/12. Because the use of secondary coding positions was less in earlier years, this has the effect of increasing the estimated alcohol related admissions for those years.

Adjusted figures show a 51% increase from an estimated 807,700 alcohol related admissions in 2002/03 and a 1% increase from 1,205,500 in 2010/11 (Figure 4.1 and Table 4.11).

Figure 4.1 Alcohol-related NHS hospital admissions (ARAs) 2002/03 to 2011/12



Source: Hospital Episode Statistics, The Health and Social Care Information Centre and North West Public Health Observatory attributable fractions

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Of the estimated 1,220,300 alcohol related admissions (broad measure) in 2011/12, 75% (919,200) were due to conditions which were categorised as chronic, 8% (94,300) were for conditions categorised as acute and 17% (206,800) were for mental and behavioural disorders due to alcohol (Table 4.2).

In 2011/12, males were more likely to be admitted to hospital with alcohol related diseases, injuries and conditions than females, with 63% of the overall admissions being male patients (Table 4.3).

In 2011/12 there were 2,298 alcohol-related hospital admissions per 100,000 population in England. Among Strategic Health Authorities (SHAs) the rate of alcohol-related admissions varied from 3,156 per 100,000 population in North East SHA to 1,764 admissions per 100,000 population in South Central SHA. All rates, to allow meaningful

comparisons, are age and gender standardised. The mid-2011 population estimates were used to derive age-group and gender specific rates for each area. The age and gender standardised rate is obtained as a weighted sum of the age group and gender specific rates, where the weights are the proportion of the England population in each age and gender group. This is a change of method to previous years when the admission rates were standardised to the European Standard Population. Due to this change figures are not comparable with previous years (Table 4.5).

#### 4.4.2 Alcohol-related admissions based on the broad measure -admissions relating to wholly attributable conditions only

Out of the 1,220,300 alcohol-related admissions in 2011/12, approximately 304,200 were for diseases or injuries that were wholly attributable to alcohol consumption or 'alcohol-specific' (i.e. had an attributable fraction of 1). Of this group, mental and behaviour disorders due to the use of alcohol (ICD-10 code F10) was the most common alcohol-related diagnosis, accounting for two-thirds of these admissions (206,800). Additionally, there were around 49,500 admissions with alcoholic liver disease (ICD-10 code K70) and 36,200 admissions with the toxic effects of alcohol types which are common in alcoholic drinks (ICD-10 codes T51.0, T51.1 and T51.9) (Tables 4.1 and 4.3).



#### **4.4.3 Alcohol-related admissions based on the broad measure -admissions relating to partially attributable conditions only**

Out of the 1,220,300 admissions in 2011/12, around 916,100 admissions were for reasons that are partly attributable to alcohol consumption (i.e. the attributable fraction associated with the diagnosis (either primary or secondary) most strongly associated with alcohol consumption was less than 1). Nearly half of these partly attributable admissions were with hypertensive diseases (ICD-10 codes I10 – I15), accounting for approximately 454,500 admissions. The second highest condition in this category was cardiac arrhythmias (abnormal electrical activity in the heart, ICD-10 codes I47 – I48) with 217,400 admissions. Admissions with other partly attributable diseases, injuries or conditions were much lower in comparison (Tables 4.1 and 4.3).

#### **4.4.4 Alcohol-related admissions based on the narrow measure (primary diagnosis only) - admissions relating to wholly and partially attributable conditions combined**

In 2011/12, there were 200,900 admissions where the primary diagnosis was attributable to the consumption of alcohol (the narrow measure). This is a 1.0% increase since 2010/11 when there were 198,900 admissions of this type and a 41% increase since 2002/03 when there were around 142,000 such admissions (Table 4.6).

Of these, 76% (152,700) were due to conditions which were categorised as chronic, less than 1% (1,100) were for conditions categorised as acute and 23% (47,100) were for mental and behavioural disorders due to alcohol. As external causes such as accidents and violence are never recorded as primary diagnoses, the number (and percentage) of acute events will be understated (Table 4.7).

Overall in 2011/12 more males than females were admitted to hospital with a primary diagnosis of a condition attributable to alcohol (121,300 and 79,700 admissions respectively) (Table 4.8).

These figures are not affected by changes in secondary diagnosis coding practice.

#### **4.4.5 Alcohol-related admissions based on the narrow measure as a proportion of wider admission numbers**

Table 4.9 shows the proportion of all hospital admissions that are estimated to be alcohol related. It also shows the proportion of all cancers, all circulatory diseases and all diseases of the digestive system estimated to be alcohol related. This information is broken down by gender, and there are also data which shows estimates of the number of admissions that are caused by alcohol consumption as a proportion of admissions that can be caused by alcohol consumption (attributable percentage).

It is appropriate that the information found in Table 4.9 is based on the narrow measure only. In order to calculate the attributable percentage for

conditions that can be caused by alcohol consumption, the numerator and denominator must be on a compatible basis, and this can only be achieved by working with the narrow measure.

In 2011/12, there were 823,500 hospital admissions with a primary diagnosis of a disease that can be caused by alcohol consumption. Overall, 200,900 (24%) of these were estimated to be attributable to alcohol consumption. This accounts for 1.4% of all hospital admissions.

Overall, 79,700 (1.0%) of all hospital admissions among women were estimated to be alcohol related based on the narrow measure, compared with 121,300 (1.9%) among men.

Of all admissions with a primary diagnosis of circulatory disease, 5.8% (54,700) were attributable to alcohol consumption and of all admissions with a primary diagnosis of cancer, 2.2% (36,600) were attributable to alcohol consumption. In addition, 1.7% (31,400) of admissions with a primary diagnosis of diseases of the digestive system were estimated to be alcohol related (Table 4.9).

#### 4.4.6 Alcohol-related admissions based on the narrow measure -admissions relating to wholly attributable conditions only

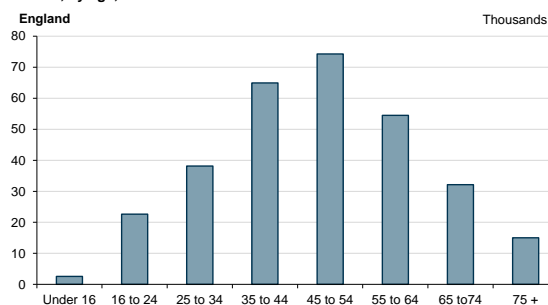
In 2011/12, there were around 70,300 admissions where the primary diagnosis was wholly attributable to alcohol. This is a 1.5% increase since 2010/11 when there were 69,300 admissions of this type and a 56%

increase since 2002/03 when there were around 45,000 such admissions.

Mental and behavioural disorders due to alcohol and alcoholic liver disease were the two most common primary reasons for hospitalisation (around 47,100 and 16,600 admissions respectively) (Table 4.6).

Among different age groups, those aged 75 and over had the lowest number of admissions of all adults where the primary or secondary diagnosis was wholly attributable to alcohol. There was a peak in admissions among those aged 45 to 54 (Table 4.4 and Figure 4.2).

Figure 4.2 Number of alcohol-related NHS hospital admissions where there was a primary or secondary diagnosis of a disease or condition wholly attributable to alcohol, by age, 2011/12



Source: Figures based on Hospital Episode Statistics admissions data and North West Public Health Observatory attributable fractions

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In 2011/12, there were 132 admissions per 100,000 population in England, where the primary diagnosis was wholly attributable to alcohol. Among SHAs the rate varied from 200 per 100,000 in North West SHA to 84 admissions per 100,000 population in East England SHA. All rates, to allow meaningful comparisons, are aged standardised. Mid-2011 population estimates were used to derive age-group and gender specific rates for each area. The age standardised rates are obtained as a

weighted sum of the age group and gender specific rates, where the weights are the proportion of the England population in each age and gender group. This is a change of method to previous years when the admission rates were standardised to the European Standard Population. Due to this change figures are not comparable with previous years (Table 4.10).

#### **4.4.7 Alcohol-related admissions based on the narrow measure -admissions relating to partially attributable conditions only**

Out of the 200,900 admissions in 2011/12 around 130,600 admissions were for reasons that are partly attributable to alcohol consumption. 28% of these partly attributable admissions were for cancer, accounting for approximately 36,600 admissions. The second highest condition in this category was cardiac arrhythmias (abnormal electrical activity in the heart, ICD-10 codes I47 – I48) with 35,100 (27%) admissions (Table 4.6).

## **4.5 Prescribing**

The two main drugs prescribed for the treatment of alcohol dependence in primary care settings and in NHS hospitals in England are Acamprosate Calcium (Campral) and Disulfiram (Antabuse).

Acamprosate Calcium helps restore chemical balance in the brain and prevents the feelings of discomfort associated with not drinking, therefore reducing the desire or craving to

consume alcohol. Disulfiram produces an acute sensitivity to alcohol resulting in a highly unpleasant reaction when the patient under treatment ingests even small amounts of alcohol.

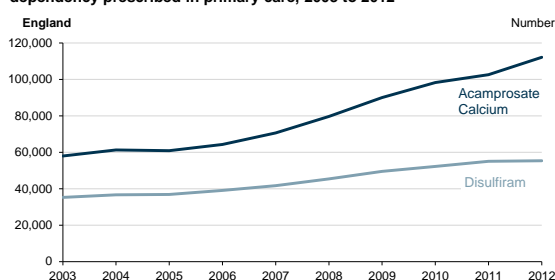
Presented here are data on prescription items and Net Ingredient Cost (NIC) for drugs used to treat alcohol dependence. Prescription items give a measure of how often a prescriber has decided to write a prescription for the treatment of alcohol dependence. The number of items is not a good measure of the volume of drugs prescribed as different practices may use different durations of supply. The NIC is the basic cost of a drug as listed in the Drug Tariff or price lists; it does not include discounts, dispensing costs, prescription charges or fees.

In 2012, there were 178,247 prescription items prescribed for the treatment of alcohol dependence in primary care settings or NHS hospitals and dispensed in the community. The majority of these prescription items (94%) were prescribed in a primary care setting (such as a GP surgery, pharmacist or clinic) with only 6% prescribed in NHS hospitals. Overall, this number has increased by 6.2% since 2011 when it was 167,764 and by 73% since 2003 when 102,741 items were prescribed in primary care and NHS hospitals. The Net Ingredient Cost (NIC) of these prescription items in 2012 was £2.93 million, an increase of 18% since 2011 when it was £2.49 million and a 70% since 2003 when it was £1.72 million.

Out of the two main drugs prescribed for the treatment of alcohol dependence, Acamprosate Calcium

continues to account for the majority of the prescription items, with 67% of the prescription items prescribed in primary care for alcohol dependence and NHS hospitals in 2012 being for this drug. However, in recent years there have been slightly more prescription items for Disulfiram than Acamprosate Calcium prescribed in NHS hospitals (51% of the items prescribed in hospitals in 2012 were for Disulfiram) (Table 4.12, Figures 4.3 and 4.4).

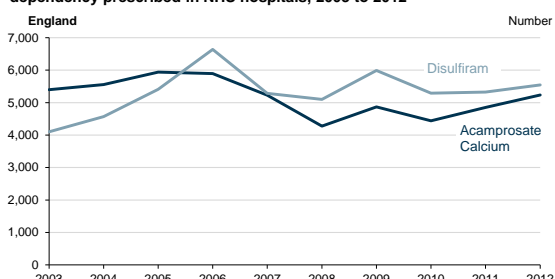
**Figure 4.3** Number of prescription items for the treatment of alcohol dependency prescribed in primary care, 2003 to 2012



Source: Prescribing Analysis and Cost Tool (PACT) from NHS Prescription Services of the NHS Business Services Authority. Health and Social Care Information Centre

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**Figure 4.4** Number of prescription items for the treatment of alcohol dependency prescribed in NHS hospitals, 2003 to 2012



Source: Prescription Cost Analysis (PCA) from NHS Prescription Services of the NHS Business Services Authority. Health and Social Care Information Centre

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In 2012, 315 prescription items per 100,000 population were dispensed for alcohol dependency. Among Strategic Health Authorities (SHA) the North West SHA had the highest number of prescription items per 100,000 population (541) and London SHA had the lowest (143).

The North West SHA had the highest number of prescription items per 100,000 population for Acamprosate Calcium (403), while Yorkshire & the Humber SHA had the highest number of prescription items for Disulfiram (205). London SHA had the lowest number of prescription items per 100,000 population for Acamprosate Calcium and Disulfiram (114 and 30 items respectively) (Table 4.13).

## 4.6 Deaths related to alcohol consumption

Alcohol misuse can be directly related to deaths from certain types of diseases, such as cirrhosis of the liver, and in some cases, may be associated with other causes of death, such as a stroke. Table 4.14 shows deaths from causes directly related to alcohol consumption as defined in *Alcohol-related deaths in the UK 2011*<sup>11</sup> by the Office for National Statistics (ONS). The ONS definition of alcohol-related deaths was updated in 2006 to ensure consistency across the UK<sup>12,13</sup> and currently only includes deaths where the cause is specifically or predominantly related to alcohol consumption and is also the underlying or main cause of death.

Using the current ONS definition, in England, in 2011 there were 6,923 deaths directly related to alcohol. This is a 26% increase since 2001 when there were 5,476 alcohol related deaths and a 3.8% increase from 2010 when there were 6,669 such deaths.

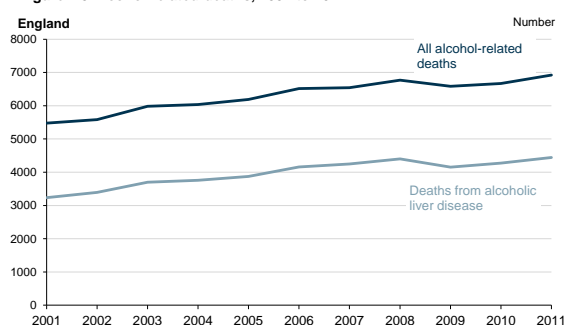
The most common cause of death linked to alcohol consumption was

alcoholic liver disease which accounted for 64% (4,441) of all alcohol-related deaths in 2011. This proportion has remained stable throughout the time series (Figure 4.5).

The number of deaths from alcohol-related fibrosis and cirrhosis of the liver were also high among the causes directly related to alcohol consumption accounting for 20% (1,384) of deaths in 2011.

The number of male deaths increased from 4,439 in 2010 to 4,518 in 2011 and the number of female deaths increased from 2,230 in 2010 to 2,405 in 2011. More men than women died from each of the causes directly related to alcohol, except for chronic hepatitis, where the reverse was true (Table 4.14).

Figure 4.5 Alcohol-related deaths, 2001 to 2011



Source: DH2 Mortality Statistics - Cause, No.s 28, 29, 30, 31 and 32, 2001, 2002, 2003, 2004, 2005 and Mortality Statistics: Deaths registered in 2006 to 2011, ONS

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In 2008, the North West Public Health Observatory (NWPHO) estimated the number of deaths that can be attributed in some way to alcohol using similar attributable fractions methodology to that for alcohol-related hospital admissions. For further details on the methodology used to develop the attributable fractions see the NWPHO report *Alcohol-attributable fractions for*

*England – alcohol-attributable deaths and hospital admissions*<sup>3</sup>. Applying this methodology to 2009 deaths data they estimated that in 2009 there were 15,401 deaths that were attributable to alcohol consumption (10,289 for men and 5,111 for women).

## 4.7 Costs to the NHS

In 2004, *The Alcohol Harm Reduction Strategy for England*<sup>14</sup> set out the then government's strategy for tackling the harms and costs of alcohol misuse in England. A follow up report was published in 2007 titled, *Safe. Sensible. Social. The next steps in the National Alcohol Strategy*<sup>15</sup>.

Information on estimated costs to the NHS of alcohol misuse show that it costs £3.5 billion every year, which is equal to £120 for every taxpayer. These estimates are presented in the government paper published in 2013, *Public Health Responsibility Deal*<sup>6</sup>. The cost of £3.5 billion is an updated figure to the one given in 2008 when the then government produced a report, *The cost of alcohol harm to the NHS in England*<sup>7</sup> where it estimated that the cost of alcohol harm to the NHS in England was £2.7 billion (in 2006/07 prices). These estimates take into account increases in unit costs as well as more recent and accurate data on alcohol consumption and harm.



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Table 4.1 Alcohol-related<sup>1</sup> NHS<sup>2</sup> hospital admissions<sup>3</sup> based on primary and secondary diagnoses, 2002/03 to 2011/12<sup>4,5</sup>

England		Number of admissions (rounded to nearest hundred)									
ICD-10 Code <sup>6</sup>		2002/03	2003/04	2004/05	2005/06	2006/07	2007/08	2008/09	2009/10	2010/11	2011/12
<b>Total</b>		<b>510,700</b>	<b>570,100</b>	<b>644,700</b>	<b>736,000</b>	<b>802,000</b>	<b>863,500</b>	<b>945,400</b>	<b>1,056,900</b>	<b>1,168,300</b>	<b>1,220,300</b>
<b>Total - Wholly attributable<sup>7</sup></b>		<b>131,100</b>	<b>150,600</b>	<b>173,600</b>	<b>196,700</b>	<b>210,300</b>	<b>222,600</b>	<b>237,800</b>	<b>265,200</b>	<b>287,200</b>	<b>304,200</b>
<b>F10 Mental and behavioural disorders due to use of alcohol</b>		<b>83,400</b>	<b>97,000</b>	<b>113,000</b>	<b>128,100</b>	<b>136,900</b>	<b>144,700</b>	<b>156,500</b>	<b>177,400</b>	<b>192,000</b>	<b>206,800</b>
F10.0	Acute intoxication	22,400	28,100	34,500	41,200	43,300	45,300	47,800	55,200	57,400	56,600
F10.1	Harmful use	18,300	20,700	24,500	27,600	30,500	31,900	35,900	41,100	48,700	64,700
F10.2	Dependence syndrome	29,500	33,200	37,200	40,300	42,400	45,100	48,500	54,700	59,100	57,700
F10.3	Withdrawal state	9,200	10,700	12,600	14,400	16,400	18,000	20,100	21,900	22,300	23,300
F10.4	Withdrawal state with delirium	1,200	1,300	1,300	1,400	1,400	1,200	1,200	1,200	1,100	1,200
F10.5	Psychotic disorder	600	500	600	600	500	500	400	500	400	400
F10.6	Amnesic syndrome	600	600	600	700	800	800	900	1,100	1,300	1,200
F10.7	Residual and late-onset psychotic disorder	500	500	500	500	500	500	500	600	700	700
F10.8	Other mental and behavioural disorders due to use of alcohol	100	100	100	100	100	100	100	100	100	100
F10.9	Unspecified mental and behavioural disorders due to use of alcohol	1,100	1,200	1,100	1,300	1,200	1,400	1,100	1,000	1,000	1,000
<b>K70 Alcoholic liver disease</b>		<b>25,700</b>	<b>28,600</b>	<b>31,500</b>	<b>34,400</b>	<b>37,700</b>	<b>38,300</b>	<b>39,600</b>	<b>43,100</b>	<b>47,400</b>	<b>49,500</b>
K70.0	Alcoholic fatty liver	400	400	600	600	600	700	800	1,000	1,100	1,100
K70.1	Alcoholic hepatitis	1,600	1,800	1,900	2,100	2,200	2,200	2,400	2,700	3,000	3,200
K70.2	Alcoholic fibrosis and sclerosis of liver	200	200	200	200	200	100	100	200	200	200
K70.3	Alcoholic cirrhosis of liver	7,200	8,000	9,100	10,200	11,600	12,500	13,900	16,400	19,500	21,400
K70.4	Alcoholic hepatic failure	1,100	1,200	1,300	1,500	1,700	1,800	2,100	2,600	3,000	3,400
K70.9	Alcoholic liver disease, unspecified	15,300	17,000	18,400	19,900	21,200	20,900	20,100	20,200	20,600	20,200
<b>T51<sup>8</sup> Toxic effect of alcohol</b>		<b>16,000</b>	<b>18,400</b>	<b>21,400</b>	<b>25,800</b>	<b>26,600</b>	<b>30,100</b>	<b>31,700</b>	<b>33,600</b>	<b>35,900</b>	<b>36,200</b>
T51.0	Toxic effect of ethanol	12,300	14,200	16,800	21,200	22,200	25,600	27,400	30,300	32,700	33,600
T51.1	Toxic effect of methanol	100	0	100	100	0	100	0	0	0	0
T51.9	Toxic effect of alcohol, unspecified	3,600	4,200	4,400	4,600	4,300	4,500	4,200	3,300	3,200	2,600
<b>Other wholly - attributable conditions</b>		<b>6,000</b>	<b>6,700</b>	<b>7,700</b>	<b>8,500</b>	<b>9,200</b>	<b>9,500</b>	<b>10,100</b>	<b>11,200</b>	<b>11,800</b>	<b>11,700</b>
E24.4	Alcohol-induced pseudo-Cushing's syndrome	0	0	0	0	0	0	0	0	0	0
G31.2	Degeneration of nervous system due to alcohol	400	400	400	500	500	600	500	700	700	600
G62.1	Alcoholic polyneuropathy	200	200	300	300	300	300	300	300	400	400
G72.1	Alcoholic myopathy	100	100	0	100	100	100	100	100	100	100
I42.6	Alcoholic cardiomyopathy	800	800	900	900	900	1,000	1,000	1,100	1,100	1,100
K29.2	Alcoholic gastritis	1,200	1,200	1,500	1,600	1,600	1,500	1,800	1,900	2,000	2,100
K86.0	Chronic pancreatitis (alcohol induced)	3,100	3,800	4,400	5,000	5,700	5,900	6,300	7,000	7,400	7,400
X45	Accidental poisoning by and exposure to alcohol	200	100	200	200	100	100	200	200	100	200
<b>Total - partly attributable<sup>9</sup></b>		<b>379,700</b>	<b>419,400</b>	<b>471,100</b>	<b>539,300</b>	<b>591,700</b>	<b>641,000</b>	<b>707,600</b>	<b>791,700</b>	<b>881,100</b>	<b>916,100</b>
<b>Accidents and injuries</b>		<b>20,000</b>	<b>21,000</b>	<b>21,900</b>	<b>23,300</b>	<b>23,600</b>	<b>23,800</b>	<b>25,100</b>	<b>27,000</b>	<b>26,200</b>	<b>25,200</b>
W78-W79	Inhalation of gastric contents/Inhalation and ingestion of food causing obstruction of the respiratory tract	200	200	200	300	300	400	500	700	700	800
W00-W19	Fall injuries	17,400	18,300	19,200	20,400	20,700	20,900	22,000	23,800	23,000	22,000
W24-W31	Work/machine injuries	1,400	1,500	1,500	1,600	1,600	1,500	1,500	1,500	1,400	1,400
W32-W34	Firearm injuries	200	200	200	200	200	200	200	100	100	100
W65-W74	Drowning	0	0	0	0	0	100	0	0	100	0
X00-X09	Fire injuries	600	600	700	700	700	700	700	700	700	600
X31	Accidental excessive cold	100	100	100	100	100	100	100	200	200	100
<b>Violence</b>		<b>21,700</b>	<b>24,000</b>	<b>26,100</b>	<b>28,500</b>	<b>29,000</b>	<b>28,000</b>	<b>28,200</b>	<b>28,100</b>	<b>28,800</b>	<b>27,800</b>
X60-X84, Y10-Y33	Intentional self-harm/Event of undetermined intent	14,200	16,000	17,500	19,400	19,200	19,100	19,500	19,600	20,700	20,400
X85-Y09	Assault	7,500	8,100	8,700	9,200	9,800	8,900	8,700	8,500	8,100	7,400
<b>Transport accidents</b>		<b>5,700</b>	<b>5,800</b>	<b>5,800</b>	<b>6,200</b>	<b>6,000</b>	<b>6,000</b>	<b>5,400</b>	<b>5,300</b>	<b>5,000</b>	<b>5,000</b>
V02-V04 (.1, .9), V06.1, V09.2, V09.3	Pedestrian traffic accidents	1,100	1,100	1,100	1,200	1,200	1,200	1,100	1,100	1,000	1,000
for codes see footnote 10	Road traffic accidents – non-pedestrian	4,500	4,600	4,600	4,900	4,700	4,600	4,200	4,200	3,800	3,800
V90-V94	Water transport accidents	100	100	100	100	100	100	100	100	100	100
V95-V97	Air/space transport accidents	0	0	0	0	0	0	0	0	0	0
<b>Spontaneous abortion</b>		<b>8,700</b>	<b>8,700</b>	<b>9,000</b>	<b>9,600</b>	<b>9,000</b>	<b>9,000</b>	<b>8,900</b>	<b>9,300</b>	<b>8,800</b>	<b>8,600</b>
O03	Spontaneous abortion	8,700	8,700	9,000	9,600	9,000	9,000	8,900	9,300	8,800	8,600
<b>Digestive</b>		<b>14,000</b>	<b>14,800</b>	<b>15,400</b>	<b>17,100</b>	<b>18,100</b>	<b>19,200</b>	<b>20,600</b>	<b>22,200</b>	<b>25,000</b>	<b>27,500</b>
K22.6	Gastro-oesophageal laceration-haemorrhage syndrome	1,100	1,100	1,100	1,200	1,200	1,200	1,200	1,200	1,100	1,100
K73, K74	Unspecified liver disease	5,800	6,400	6,900	8,100	8,700	9,500	10,400	11,800	14,200	15,900
K85, K86.1	Acute and chronic pancreatitis	3,300	3,400	3,400	3,500	3,600	3,600	3,700	3,900	4,100	4,300
I85	Oesophageal varices	3,700	3,900	3,900	4,200	4,600	4,900	5,300	5,400	5,600	6,200
<b>Cancer</b>		<b>29,400</b>	<b>30,300</b>	<b>31,100</b>	<b>33,100</b>	<b>35,200</b>	<b>35,800</b>	<b>36,900</b>	<b>36,900</b>	<b>37,600</b>	<b>37,600</b>
C00-C14	Malignant neoplasm of lip, oral cavity and pharynx	5,200	5,500	6,000	6,600	7,600	8,000	9,100	9,700	10,300	10,400
C15	Malignant neoplasm of oesophagus	7,800	7,900	7,900	8,500	8,400	8,000	8,000	7,400	7,100	6,900
C32	Malignant neoplasm of larynx	1,200	1,300	1,300	1,400	1,400	1,500	1,500	1,500	1,500	1,500
C18	Malignant neoplasm of colon	2,800	2,700	2,600	2,700	2,500	2,400	2,400	2,200	2,200	2,300
C20	Malignant neoplasm of rectum	2,800	2,700	2,500	2,700	2,400	2,200	2,200	2,100	2,100	2,200
C22	Malignant neoplasm of liver and intrahepatic bile ducts	500	500	500	600	600	600	700	700	700	700
C50	Malignant neoplasm of breast	9,100	9,700	10,300	10,800	12,200	13,000	13,100	13,300	13,600	13,700
<b>Hypertensive diseases</b>		<b>136,000</b>	<b>159,400</b>	<b>191,200</b>	<b>228,700</b>	<b>262,200</b>	<b>292,700</b>	<b>333,500</b>	<b>383,900</b>	<b>436,700</b>	<b>454,500</b>
I10-I15	Hypertensive diseases	136,000	159,400	191,200	228,700	262,200	292,700	333,500	383,900	436,700	454,500
<b>Cardiac arrhythmias</b>		<b>87,000</b>	<b>95,700</b>	<b>106,200</b>	<b>121,600</b>	<b>132,700</b>	<b>146,300</b>	<b>163,000</b>	<b>182,300</b>	<b>204,500</b>	<b>217,400</b>
I47-I48	Cardiac arrhythmias	87,000	95,700	106,200	121,600	132,700	146,300	163,000	182,300	204,500	217,400
<b>Other partly-attributable conditions</b>		<b>57,200</b>	<b>59,700</b>	<b>64,300</b>	<b>71,300</b>	<b>75,900</b>	<b>80,100</b>	<b>86,100</b>	<b>96,600</b>	<b>108,600</b>	<b>112,500</b>
G40-G41	Epilepsy and Status epilepticus	48,800	51,300	56,700	63,100	67,600	71,800	77,300	86,500	97,200	100,700
I60-I62, I69.0-I69.2	Haemorrhagic stroke	2,900	2,800	2,700	2,700	2,600	2,400	2,400	2,400	2,300	2,200
I63-I66, I69.3, I69.4	Ischaemic stroke	1,600	1,500	1,400	1,400	1,200	1,100	1,200	1,200	1,300	1,300
L40 excluding cirrhosis L40.5	Psoriasis	4,000	4,100	3,400	4,200	4,500	4,800	5,100	6,500	7,800	8,300

1. The number of alcohol-related admissions is based on methodology developed by the North West Public Health Observatory (NWPHO). This methodology includes a wide range of diseases, injuries and conditions in which alcohol plays a part and estimates the proportion of cases that are attributable to the consumption of alcohol. Finished admission episodes are identified where an alcohol-related diagnosis is recorded in any of the 20 (14 from 2002/03 to 2006/07 and 7 prior to 2002/03) primary and secondary diagnosis fields in a Hospital Admission Statistics record. For each of these episodes, an attributable fraction is applied, based on the diagnostic codes, age group and gender of the patient. Where there is more than one alcohol-related condition among the diagnostic codes, the condition with the largest attributable fraction is used. Where there are two or more codes with the maximum attributable fraction, the code from the earliest diagnostic position is used. This method is employed to avoid double counting of the admission episodes related to alcohol and therefore each episode contributes to one cell in the table. The total number of alcohol-related admissions is arrived at by summing up the number of episodes counted against each alcohol-related condition.

2. The data include activity in English NHS hospitals and English NHS commissioned activity in the independent sector.

3. A finished admission episode is the first period of inpatient care under one healthcare provider. Finished admission episodes are counted against the year in which the admission episode finishes. Admissions do not represent the number of inpatients, as a person may have more than one admission within the year.

4. Figures have not been adjusted for shortfalls in data (i.e. the data are ungrossed).

5. Data includes only ordinary, day cases and maternity admissions, where the age and sex of the patient was known and where the region of residence was one of the English regions or no fixed abode or unknown.

6. See Appendix A for further information about International Classification of Diseases.

7. Wholly attributable conditions are alcohol-specific by definition and so have an attributable fraction of one.

8. The totals shown for T51 - Toxic effect of alcohol, do not include the full breakdown for ICD-10 code T51, only T51.0, T51.1 and T51.9 as these cover types of alcohol most commonly found in alcoholic drinks.

9. Partially attributable conditions are those where some but not all cases are a result of alcohol consumption and so have an attributable fraction of less than one

10. ICD-10 codes for road traffic accidents: V12-V14 (.3 -.9), V19.4-V19.6, V19.9, V20-V28 (.3 -.9), V29-V79 (.4 -.9), V80.3-V80.5, V81.1, V82.1, V82.9, V83.0-V86 (.0 -.3), V87.0-V87.9, V89.2, V89.3, V89.9.

11. Admission numbers for 2002/03 to 2006/07 have been updated to include records relating to disease codes K73 (chronic hepatitis) and L40 (psoriasis), that were excluded unintentionally from the previous figures. As a result the latest figures are slightly higher than those published in the 2009 report. The minimum effect at a national level is to increase the total number of admissions by 543 admissions (0.07%) in 2005/06, whilst the maximum effect is an increase of 2,946 (0.37%) in 2006/07.

12. Due to very minor revisions to historic data, the overall totals presented in row 6 of this table are 100 less than the totals presented in Table 4.1 of *Statistics on Alcohol, England 2011* for 2002/03 and each year from 2005/06 to 2009/10.

13. All figures are rounded to the nearest hundred. Therefore a figure of '0' corresponds to an unrounded number of less than 50.

#### Sources:

Figures based on:

Hospital Episode Statistics, Health and Social Care Information Centre - Data for total number of admissions for each ICD-10 code.

North West Public Health Observatory - Attributable fractions for alcohol-related ICD-10 codes.

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**Table 4.2 Alcohol-related<sup>1</sup> NHS<sup>2</sup> hospital admissions<sup>3</sup> based on primary and secondary diagnoses, by whether condition is categorised as acute, chronic or due to mental and behavioural disorders due to use of alcohol<sup>4</sup> 2002/03 to 2011/12<sup>5,6</sup>**

England	Number of admissions (rounded to nearest hundred)									
	2002/03 <sup>8</sup>	2003/04 <sup>8</sup>	2004/05 <sup>8</sup>	2005/06 <sup>8</sup>	2006/07 <sup>8</sup>	2007/08 <sup>8</sup>	2008/09 <sup>8</sup>	2009/10 <sup>8</sup>	2010/11 <sup>8</sup>	2011/12 <sup>8</sup>
<b>Total</b>	<b>510,700</b>	<b>570,100</b>	<b>644,700</b>	<b>736,000</b>	<b>802,000</b>	<b>863,500</b>	<b>945,400</b>	<b>1,056,900</b>	<b>1,168,300</b>	<b>1,220,300</b>
Acute	63,500	69,400	75,400	83,900	85,300	88,100	90,500	94,200	96,100	94,300
Chronic	363,800	403,700	456,200	524,000	579,900	630,800	698,400	785,400	880,200	919,200
Mental and behavioural disorders due to use of alcohol	83,400	97,000	113,000	128,100	136,900	144,700	156,500	177,400	192,000	206,800

1. The number of alcohol-related admissions is based on methodology developed by the North West Public Health Observatory (NWPHO). This methodology includes a wide range of diseases, injuries and conditions in which alcohol plays a part and estimates the proportion of cases that are attributable to the consumption of alcohol. Finished admission episodes are identified where an alcohol-related diagnosis is recorded in any of the 20 (14 from 2002/03 to 2006/07 and 7 prior to 2002/03) primary and secondary diagnosis fields in a Hospital Admission Statistics record. For each of these episodes, an attributable fraction is applied, based on the diagnostic codes, age group and gender of the patient. Where there is more than one alcohol-related condition among the diagnostic codes, the condition with the largest attributable fraction is used. Where there are two or more codes with the maximum attributable fraction, the code from the earliest diagnostic position is used. This method is employed to avoid double counting of the admission episodes related to alcohol and therefore each episode contributes to one cell in the table.

The total number of alcohol-related admissions is arrived at by summing up the number of episodes counted against each alcohol-related condition.

2. The data include activity in English NHS hospitals and English NHS commissioned activity in the independent sector.

3. A finished admission episode is the first period of inpatient care under one healthcare provider. Finished admission episodes are counted against the year in which the admission episode finishes. Admissions do not represent the number of inpatients, as a person may have more than one admission within the year.

4. For the purpose of the analyses which appears in this table, each of the 47 alcohol related conditions which appear in table 4.1 have been classified as either acute, chronic or as a mental and behavioural disorder due to use of alcohol. This has been done using the classification defined and used by North West Public Health Observatory (NWPHO) and published in the 'NI39 Subanalysis by 10 conditions' available at [www.lape.org.uk/natind.html](http://www.lape.org.uk/natind.html)

5. Figures have not been adjusted for shortfalls in data (i.e. the data are ungrossed).

6. Data includes only ordinary, day cases and maternity admissions, where the age and sex of the patient was known and where the region of residence was one of the English regions or no fixed abode or unknown.

7. See Appendix A for further information about International Classification of Diseases.

8. Admission numbers for 2003/03 to 2006/07 have been updated to include records relating to disease codes K73 (chronic hepatitis) and L40 (psoriasis), that were excluded unintentionally from the previous figures. As a result the latest figures are slightly higher than those published in the 2009 report. The minimum effect at a national level is to increase the total number of admissions by 543 admissions (0.07%) in 2005/06, whilst the maximum effect is an increase of 2,946 (0.37%) in 2006/07.

#### Sources:

Figures provided are based on:

Hospital Episode Statistics, Health and Social Care Information Centre - Data for total number of admissions for each ICD-10 code.

North West Public Health Observatory - Attributable fractions for alcohol-related ICD-10 codes.

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**Table 4.3 Alcohol-related<sup>1</sup> NHS<sup>2</sup> hospital admissions<sup>3</sup> based on primary and secondary diagnoses, by gender, 2011/12<sup>4,5</sup>**

England		Number of admissions (rounded to nearest hundred)		
ICD-10 Code <sup>6</sup>		All persons	Males	Females
<b>Total</b>		<b>1,220,300</b>	<b>766,000</b>	<b>454,300</b>
<b>Total - Wholly attributable<sup>7</sup></b>		<b>304,200</b>	<b>209,100</b>	<b>95,100</b>
<b>F10</b>	<b>Mental and behavioural disorders due to use of alcohol</b>	<b>206,800</b>	<b>149,400</b>	<b>57,400</b>
F10.0	Acute intoxication	56,600	40,500	16,100
F10.1	Harmful use	64,700	46,600	18,100
F10.2	Dependence syndrome	57,700	41,500	16,100
F10.3	Withdrawal state	23,300	17,500	5,800
F10.4	Withdrawal state with delirium	1,200	900	300
F10.5	Psychotic disorder	400	300	100
F10.6	Amnesic syndrome	1,200	900	300
F10.7	Residual and late-onset psychotic disorder	700	500	200
F10.8	Other mental and behavioural disorders due to use of alcohol	100	100	0
F10.9	Unspecified mental and behavioural disorders due to use of alcohol	1,000	600	400
<b>K70</b>	<b>Alcoholic liver disease</b>	<b>49,500</b>	<b>33,900</b>	<b>15,500</b>
K70.0	Alcoholic fatty liver	1,100	700	300
K70.1	Alcoholic hepatitis	3,200	2,000	1,200
K70.2	Alcoholic fibrosis and sclerosis of liver	200	100	100
K70.3	Alcoholic cirrhosis of liver	21,400	15,100	6,300
K70.4	Alcoholic hepatic failure	3,400	2,300	1,100
K70.9	Alcoholic liver disease, unspecified	20,200	13,700	6,500
<b>T51<sup>8</sup></b>	<b>Toxic effect of alcohol</b>	<b>36,200</b>	<b>16,600</b>	<b>19,600</b>
T51.0	Toxic effect of ethanol	33,600	15,400	18,200
T51.1	Toxic effect of methanol	0	0	0
T51.9	Toxic effect of alcohol, unspecified	2,600	1,200	1,400
<b>Other wholly - attributable conditions</b>		<b>11,700</b>	<b>9,200</b>	<b>2,500</b>
E24.4	Alcohol-induced pseudo-Cushing's syndrome	0	-	0
G31.2	Degeneration of nervous system due to alcohol	600	500	100
G62.1	Alcoholic polyneuropathy	400	300	100
G72.1	Alcoholic myopathy	100	0	0
I42.6	Alcoholic cardiomyopathy	1,100	1,000	100
K29.2	Alcoholic gastritis	2,100	1,500	600
K86.0	Chronic pancreatitis (alcohol induced)	7,400	5,800	1,500
X45	Accidental poisoning by and exposure to alcohol	200	100	100
<b>Total - partly attributable<sup>9</sup></b>		<b>916,100</b>	<b>556,900</b>	<b>359,200</b>
<b>Accidents and injuries</b>		<b>25,200</b>	<b>15,500</b>	<b>9,600</b>
W78-W79	Inhalation of gastric contents/Inhalation and ingestion of food causing obstruction of the respiratory tract	800	400	400
W00-W19	Fall injuries	22,000	13,400	8,600
W24-W31	Work/machine injuries	1,400	1,100	300
W32-W34	Firearm injuries	100	100	0
W65-W74	Drowning	0	0	0
X00-X09	Fire injuries	600	400	200
X31	Accidental excessive cold	100	0	100
<b>Violence</b>		<b>27,800</b>	<b>14,100</b>	<b>13,700</b>
X80-X84, Y10-Y33	Intentional self-harm/Event of undetermined intent	20,400	8,000	12,400
X85-Y09	Assault	7,400	6,100	1,300
<b>Transport accidents</b>		<b>5,000</b>	<b>4,100</b>	<b>800</b>
V02-V04 (1, 9), V06.1, V09.2, V09.3	Pedestrian traffic accidents	1,000	800	200
for codes see footnote 10	Road traffic accidents – non-pedestrian	3800	3,200	600
V90-V94	Water transport accidents	100	100	0
V95-V97	Air/space transport accidents	0	0	0
<b>Spontaneous abortion</b>		<b>8,600</b>	<b>-</b>	<b>8,600</b>
O03	Spontaneous abortion	8,600	-	8,600
<b>Digestive</b>		<b>27,500</b>	<b>17,200</b>	<b>10,300</b>
K22.6	Gastro-oesophageal laceration-haemorrhage syndrome	1,100	600	500
K73, K74	Unspecified liver disease	15,900	9,500	6,400
K85, K86.1	Acute and chronic pancreatitis	4,300	2,800	1,500
I85	Oesophageal varices	6,200	4,300	1,900
<b>Cancer</b>		<b>37,600</b>	<b>18,800</b>	<b>18,800</b>
C00-C14	Malignant neoplasm of lip, oral cavity and pharynx	10,400	8,400	2,000
C15	Malignant neoplasm of oesophagus	6,900	5,500	1,400
C32	Malignant neoplasm of larynx	1,500	1,300	200
C18	Malignant neoplasm of colon	2,300	1,500	700
C20	Malignant neoplasm of rectum	2,200	1,700	500
C22	Malignant neoplasm of liver and intrahepatic bile ducts	700	500	200
C50	Malignant neoplasm of breast	13,700	-	13,700
<b>Hypertensive diseases</b>		<b>454,500</b>	<b>300,200</b>	<b>154,300</b>
I10-I15	Hypertensive diseases	454,500	300,200	154,300
<b>Cardiac arrhythmias</b>		<b>217,400</b>	<b>131,800</b>	<b>85,500</b>
I47-I48	Cardiac arrhythmias	217,400	131,800	85,500
<b>Other partly-attributable conditions</b>		<b>112,500</b>	<b>55,000</b>	<b>57,500</b>
G40-G41	Epilepsy and Status epilepticus	100,700	47,800	52,900
I60-I62, I69.0-I69.2	Haemorrhagic stroke	2,200	1,500	700
I63-I66, I69.3, I69.4	Ischaemic stroke	1,300	1,300	0
L40 excluding cirrhosis L40.5	Psoriasis	8,300	4,400	3,900

1. The number of alcohol-related admissions is based on methodology developed by the North West Public Health Observatory (NWPHO). This methodology includes a wide range of diseases, injuries and conditions in which alcohol plays a part and estimates the proportion of cases that are attributable to the consumption of alcohol. Finished admission episodes are identified where an alcohol-related diagnosis is recorded in any of the 20 (14 from 2002/03 to 2006/07 and 7 prior to 2002/03) primary and secondary diagnosis fields in a Hospital Episode Statistics record. For each of these episodes, an attributable fraction is applied, based on the diagnostic codes, age group and gender of the patient. Where there is more than one alcohol-related condition among the diagnostic codes, the condition with the largest attributable fraction is used. Where there are two or more codes with the maximum attributable fraction, the code from the earliest diagnostic position is used. This method is employed to avoid double counting of the admission episodes related to alcohol and therefore each episode contributes to one cell in the table. The total number of alcohol-related admissions is arrived at by summing up the number of episodes counted against each alcohol-related condition.

2. The data include activity in English NHS hospitals and English NHS commissioned activity in the independent sector.

3. A finished admission episode is the first period of inpatient care under one healthcare provider. Finished admission episodes are counted against the year in which the admission episode finishes. Admissions do not represent the number of inpatients, as a person may have more than one admission within the year.

4. Figures have not been adjusted for shortfalls in data (i.e. the data are ungrossed).

5. Data includes only ordinary, day cases and maternity admissions, where the age and sex of the patient was known and where the region of residence was one of the English regions or no fixed abode or unknown.

6. See Appendix A for further information about International Classification of Diseases.

7. Wholly attributable conditions are alcohol-specific by definition and so have an attributable fraction of one.

8. The totals shown for T51 - Toxic effect of alcohol, do not include the full breakdown for ICD-10 code T51, only T51.0, T51.1 and T51.9 as these cover types of alcohol most commonly found in alcoholic drinks.

9. Partially attributable conditions are those where some but not all cases are a result of alcohol consumption and so have an attributable fraction of less than one.

10. ICD-10 codes for road traffic accidents: V12-V14 (.3 -.9), V19.4-V19.6, V19.9, V20-V28 (.3 -.9), V29-V79 (.4 -.9), V80.3-V80.5, V81.1, V82.1, V82.9, V83.0-V86 (.0 -.3), V87.0-V87.9, V89.2, V89.3, V89.9.

11. A '-' indicates there were no observations.

12. All figures are rounded to the nearest hundred. Therefore a figure of '0' corresponds to an unrounded number of less than 50.

#### Sources:

Figures based on:

Hospital Episode Statistics, Health and Social Care Information Centre - Data for total number of admissions for each ICD-10 code.

North West Public Health Observatory - Attributable fractions for alcohol-related ICD-10 codes.

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**Table 4.4 Alcohol-related<sup>1</sup> NHS<sup>2</sup> hospital admissions<sup>3</sup> based on primary and secondary diagnoses, by age, 2011/12<sup>4,5</sup>**

England	Number of admissions (rounded to nearest hundred)								
	Total	Under 16 <sup>6</sup>	16 to 24	25 to 34	35 to 44	45 to 54	55 to 64	65 to 74	75 and over
<b>Total</b>	<b>1,220,300</b>	<b>2,600</b>	<b>53,000</b>	<b>73,700</b>	<b>118,300</b>	<b>183,300</b>	<b>234,500</b>	<b>248,000</b>	<b>306,900</b>
Wholly-attributable <sup>7</sup>	304,200	2,600	22,600	38,200	64,900	74,200	54,500	32,200	15,000
Partly-attributable <sup>8</sup>	916,100	-	30,400	35,600	53,300	109,100	180,000	215,800	291,900

1. The number of alcohol-related admissions is based on methodology developed by the North West Public Health Observatory (NWPHO). This methodology includes a wide range of diseases, injuries and conditions in which alcohol plays a part and estimates the proportion of cases that are attributable to the consumption of alcohol. Finished admission episodes are identified where an alcohol-related diagnosis is recorded in any of the 20 (14 from 2002/03 to 2006/07 and 7 prior to 2002/03) primary and secondary diagnosis fields in a Hospital Episode Statistics record. For each of these episodes, an attributable fraction is applied, based on the diagnostic codes, age group and gender of the patient. Where there is more than one alcohol-related condition among the diagnostic codes, the condition with the largest attributable fraction is used. Where there are two or more codes with the maximum attributable fraction, the code from the earliest diagnostic position is used.

This method is employed to avoid double counting of the admission episodes related to alcohol and therefore each episode contributes to one cell in the table. The total number of alcohol-related admissions is arrived at by summing up the number of episodes counted against each alcohol-related condition.

2. The data include activity in English NHS hospitals and English NHS commissioned activity in the independent sector.

3. A finished admission episode is the first period of inpatient care under one healthcare provider. Finished admission episodes are counted against the year in which the admission episode finishes. Admissions do not represent the number of inpatients, as a person may have more than one admission within the year.

4. Figures have not been adjusted for shortfalls in data (i.e. the data are ungrossed).

5. Data includes only ordinary, day cases and maternity admissions, where the age and sex of the patient was known and where the region of residence was one of the English regions or no fixed abode or unknown.

6. The attributable fractions are not applicable to children under 16, therefore data is only shown for wholly-attributable admissions for this age group, where the attributable fraction is one.

7. Wholly-attributable conditions are alcohol-specific by definition and so have an attributable fraction of one.

8. Partially-attributable conditions are those where some but not all cases are a result of alcohol consumption and so have an attributable fraction of less than one.

9. A '-' indicates there were no observations.

#### Sources:

Figures based on:

Hospital Episode Statistics, Health and Social Care Information Centre - Data for total number of admissions for each ICD-10 code.

North West Public Health Observatory - Attributable fractions for alcohol-related ICD-10 codes.

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**Table 4.5 Alcohol-related<sup>1</sup> NHS<sup>2</sup> hospital admissions<sup>3</sup> based on primary and secondary diagnoses, by Strategic Health Authority(SHA) and Primary Care Trust (PCT), 2011/12<sup>4,5</sup>**

England			Number of admissions (rounded to nearest hundred)					
			Total		Wholly-attributable <sup>6</sup>		Partly-attributable <sup>7</sup>	
			Number of admissions per 100,000		Number of admissions per 100,000		Number of admissions per 100,000	
			Admissions	population <sup>8</sup>	Admissions	population <sup>8</sup>	Admissions	population <sup>8</sup>
<b>England</b>			<b>1,220,300</b>	<b>2,298</b>	<b>304,200</b>	<b>573</b>	<b>916,100</b>	<b>1,725</b>
<b>North East SHA</b>	<b>Q30</b>	<b>E18000001</b>	<b>84,800</b>	<b>3,156</b>	<b>22,900</b>	<b>879</b>	<b>61,900</b>	<b>2,277</b>
County Durham PCT	5ND	E16000085	15,700	2,890	4000	769	11,700	2,121
Darlington PCT	5J9	E16000041	2,900	2,693	800	727	2,200	1,966
Gateshead PCT	5KF	E16000050	6,200	2,994	1800	900	4,400	2,094
Hartlepool PCT	5D9	E16000019	3,000	3,191	800	907	2,200	2,284
Middlesbrough PCT	5KM	E16000053	5,300	4,070	1700	1,312	3,600	2,758
Newcastle PCT	5D7	E16000017	8,700	3,450	2500	936	6,200	2,514
North Tyneside PCT	5D8	E16000018	7,400	3,540	2100	1,029	5,300	2,511
Northumberland Care Trust	TAC	E17000001	9,900	2,766	2100	657	7,800	2,109
Redcar & Cleveland PCT	5QR	E16000146	4,800	3,312	1100	857	3,700	2,456
South Tyneside PCT	5KG	E16000051	5,700	3,607	1500	1,021	4,200	2,586
Stockton-On-Tees Teaching PCT	5E1	E16000020	5,500	2,877	1400	712	4,100	2,165
Sunderland Teaching PCT	5KL	E16000052	9,600	3,412	3100	1,109	6,600	2,303
<b>North West SHA</b>	<b>Q31</b>	<b>E18000002</b>	<b>199,900</b>	<b>2,795</b>	<b>62,300</b>	<b>876</b>	<b>137,600</b>	<b>1,918</b>
Ashton, Leigh & Wigan PCT	5HG	E16000032	10,600	3,333	3100	962	7,500	2,371
Blackburn with Darwen Teaching Care Trust Plus	TAP	E17000006	4,700	3,521	1600	1,107	3,100	2,414
Blackpool PCT	5HP	E16000033	4,900	3,284	1700	1,227	3,200	2,057
Bolton PCT	5HQ	E16000148	6,200	2,312	1800	653	4,400	1,659
Bury PCT	5JX	E16000043	4,800	2,599	1400	758	3,400	1,841
Central & Eastern Cheshire PCT	5NP	E16000095	10,400	2,072	2400	502	8,000	1,569
Central Lancashire PCT	5NG	E16000088	12,400	2,614	3100	647	9,300	1,967
Cumbria PCT	5NE	E16000086	13,700	2,405	3100	617	10,600	1,788
East Lancashire PCT	5NH	E16000089	11,500	2,963	3200	834	8,300	2,129
Halton & St. Helens PCT	5NM	E16000093	9,600	3,126	3300	1,082	6,300	2,044
Heywood, Middleton & Rochdale PCT	5NQ	E16000096	6,100	3,047	2000	959	4,100	2,088
Knowsley PCT	5J4	E16000038	4,700	3,329	1600	1,110	3,200	2,220
Liverpool PCT	5NL	E16000092	14,800	3,424	5900	1,337	8,900	2,087
Manchester PCT	5NT	E16000149	13,100	3,568	5100	1,254	8,000	2,314
North Lancashire PCT	5NF	E16000087	8,100	2,213	1800	593	6,200	1,620
Oldham PCT	5J5	E16000039	5,700	2,732	1800	827	4,000	1,906
Salford PCT	5F5	E16000025	8,700	3,997	3900	1,754	4,800	2,243
Sefton PCT	5NJ	E16000090	8,200	2,699	2300	834	5,900	1,865
Stockport PCT	5F7	E16000026	7,900	2,662	2400	827	5,500	1,834
Tameside & Glossop PCT	5LH	E16000062	7,500	2,970	2400	934	5,100	2,036
Trafford PCT	5NR	E16000097	5,600	2,472	1500	665	4,000	1,807
Warrington PCT	5J2	E16000037	5,600	2,768	1800	881	3,800	1,887
Western Cheshire PCT	5NN	E16000094	5,800	2,218	1500	635	4,200	1,583
Wirral PCT	5NK	E16000091	9,200	2,741	3500	1,099	5,800	1,642
<b>Yorkshire &amp; Humber SHA</b>	<b>Q32</b>	<b>E18000003</b>	<b>126,900</b>	<b>2,390</b>	<b>31,500</b>	<b>599</b>	<b>95,400</b>	<b>1,792</b>
Barnsley PCT	5JE	E16000042	6,300	2,644	1300	569	5,000	2,075
Bradford & Airedale PCT	5NY	E16000102	13,800	2,984	3700	764	10,100	2,221
Calderdale PCT	5J6	E16000040	5,000	2,485	1400	697	3,600	1,789
Doncaster PCT	5N5	E16000078	8,100	2,620	1700	576	6,300	2,044
East Riding of Yorkshire PCT	5NW	E16000100	8,500	2,138	1400	404	7,100	1,733
Hull PCT	5NX	E16000101	7,800	3,239	2500	979	5,300	2,260
Kirklees PCT	5N2	E16000075	8,700	2,124	2100	511	6,500	1,613
Leeds PCT	5N1	E16000074	18,200	2,581	6200	841	12,100	1,740
North East Lincolnshire PCT	TAN	E17000005	4,000	2,390	700	457	3,300	1,933
North Lincolnshire PCT	5EF	E16000021	4,100	2,320	600	362	3,500	1,958
North Yorkshire & York PCT	5NV	E16000099	17,200	1,937	3300	411	13,900	1,526
Rotherham PCT	5H8	E16000031	7,000	2,651	1600	623	5,400	2,028
Sheffield PCT	5N4	E16000077	10,600	2,016	2800	528	7,800	1,488
Wakefield District PCT	5N3	E16000076	7,600	2,267	2000	623	5,500	1,643
<b>East Midlands SHA</b>	<b>Q33</b>	<b>E18000004</b>	<b>96,900</b>	<b>2,089</b>	<b>21,700</b>	<b>476</b>	<b>75,200</b>	<b>1,613</b>
Bassetlaw PCT	5ET	E16000023	3,000	2,459	700	576	2,300	1,884
Derby City PCT	5N7	E16000080	5,700	2,413	1700	724	4,000	1,689
Derbyshire County PCT	5N6	E16000079	17,600	2,198	4100	535	13,500	1,662
Leicester City PCT	5PC	E16000113	6,300	2,320	1700	566	4,600	1,755
Leicestershire County & Rutland PCT	5PA	E16000112	12,200	1,659	2100	303	10,100	1,356
Lincolnshire PCT	5N9	E16000082	17,000	2,094	3000	421	14,000	1,673
Northampton PCT	5PD	E16000114	13,700	2,006	2800	401	10,900	1,606
Nottingham City PCT	5EM	E16000022	6,800	2,717	2400	907	4,400	1,810
Nottinghamshire County PCT	5N8	E16000081	14,600	2,038	3100	457	11,400	1,581

**Table 4.5 Alcohol-related<sup>1</sup> NHS<sup>2</sup> hospital admissions<sup>3</sup> based on primary and secondary diagnoses, by Strategic Health Authority(SHA) and Primary Care Trust (PCT), 2011/12<sup>4,5</sup> - Continued**

England			Number of admissions (rounded to nearest hundred)							
			Total		Wholly-attributable <sup>6</sup>		Partly-attributable <sup>7</sup>			
			Admissions	Number of admissions per 100,000 population <sup>8</sup>	Admissions	Number of admissions per 100,000 population <sup>8</sup>	Admissions	Number of admissions per 100,000 population <sup>8</sup>		
England			1,220,300	2,298	304,200	573	916,100	1,725		
West Midlands SHA			Q34	E18000005	129,000	2,285	29,400	529	99,600	1,756
Birmingham East & North PCT			5PG	E16000117	9,100	2,387	2300	603	6,700	1,784
Coventry Teaching PCT			5MD	E16000070	8,000	2,766	2300	771	5,700	1,995
Dudley PCT			5PE	E16000115	9,000	2,725	1800	586	7,200	2,139
Heart of Birmingham Teaching PCT			5MX	E16000073	7,000	3,495	2200	980	4,700	2,515
Herefordshire PCT			5CN	E16000015	3,700	1,743	700	374	3,000	1,369
North Staffordshire PCT			5PH	E16000118	4,700	2,045	900	403	3,900	1,642
Sandwell PCT			5PF	E16000116	9,200	3,214	2400	801	6,800	2,413
Shropshire County PCT			5M2	E16000065	6,300	1,781	1000	329	5,300	1,452
Solihull PCT			5QW	E17000004	4,100	1,852	1000	481	3,100	1,371
South Birmingham PCT			5M1	E16000064	7,800	2,381	2500	736	5,300	1,645
South Staffordshire PCT			5PK	E16000120	13,900	2,069	2400	362	11,500	1,707
Stoke on Trent PCT			5PJ	E16000119	6,500	2,581	1500	576	5,100	2,005
Telford & Wrekin PCT			5MK	E16000071	3,400	2,130	700	422	2,700	1,708
Walsall Teaching PCT			5M3	E16000066	6,400	2,386	1400	522	5,000	1,864
Warwickshire PCT			5PM	E16000122	11,500	1,975	2300	410	9,200	1,565
Wolverhampton City PCT			5MV	E16000072	6,400	2,648	1400	583	5,000	2,065
Worcestershire PCT			5PL	E16000121	12,000	1,914	2700	459	9,300	1,455
East England SHA			Q35	E18000006	125,400	2,049	23,000	390	102,400	1,660
Bedfordshire PCT			5P2	E16000104	8,200	1,997	1500	350	6,800	1,648
Cambridgeshire PCT			5PP	E16000124	13,600	2,169	2700	435	10,800	1,734
Great Yarmouth & Waveney PCT			5PR	E16000126	6,400	2,553	1300	617	5,100	1,935
Hertfordshire PCT			5QV	E16000150	19,900	1,818	3600	324	16,300	1,495
Luton PCT			5GC	E16000029	4,200	2,568	800	456	3,400	2,112
Mid Essex PCT			5PX	E16000130	6,900	1,756	1000	258	5,900	1,498
Norfolk PCT			5PQ	E16000125	19,100	2,146	3700	473	15,400	1,674
North East Essex PCT			5PW	E16000129	6,400	1,838	1300	430	5,100	1,408
Peterborough PCT			5PN	E16000123	4,200	2,540	1100	594	3,200	1,945
South East Essex PCT			5P1	E16000103	8,400	2,186	1200	351	7,100	1,835
South West Essex PCT			5PY	E16000131	8,300	2,120	1200	304	7,100	1,815
Suffolk PCT			5PT	E16000127	13,100	1,933	2300	374	10,700	1,559
West Essex PCT			5PV	E16000128	6,700	2,225	1200	415	5,400	1,809
London SHA			Q36	E18000007	156,000	2,402	39,800	545	116,200	1,858
Barking & Dagenham PCT			5C2	E16000009	4,000	2,832	900	560	3,100	2,272
Barnet PCT			5A9	E16000006	6,800	2,175	1400	427	5,400	1,748
Bexley Care Trust			TAK	E17000002	4,800	2,104	900	418	3,800	1,685
Brent Teaching PCT			5K5	E16000045	6,100	2,552	1400	532	4,600	2,020
Bromley PCT			5A7	E16000004	6,100	1,941	1100	368	5,000	1,574
Camden PCT			5K7	E16000047	4,100	2,377	1500	800	2,600	1,577
City & Hackney Teaching PCT			5C3	E16000010	4,000	2,477	1500	783	2,500	1,694
Croydon PCT			5K9	E16000049	7,500	2,425	1500	437	6,000	1,988
Ealing PCT			5HX	E16000035	7,800	2,913	2100	672	5,700	2,242
Enfield PCT			5C1	E16000008	6,300	2,415	1100	384	5,200	2,031
Greenwich Teaching PCT			5A8	E16000005	4,800	2,428	1200	503	3,600	1,925
Hammersmith & Fulham PCT			5H1	E16000030	3,700	2,994	1300	977	2,400	2,017
Haringey Teaching PCT			5C9	E16000013	4,900	2,726	1300	631	3,500	2,095
Harrow PCT			5K6	E16000046	4,300	1,967	700	297	3,600	1,669
Havering PCT			5A4	E16000002	5,300	2,126	800	347	4,500	1,780
Hillingdon PCT			5AT	E16000007	6,200	2,578	1400	517	4,800	2,060
Hounslow PCT			5HY	E16000036	5,000	2,546	1300	569	3,800	1,978
Islington PCT			5K8	E16000048	4,500	3,158	1400	872	3,100	2,286
Kensington & Chelsea PCT			5LA	E16000056	2,800	2,105	900	602	1,900	1,503
Kingston PCT			5A5	E16000003	2,800	2,055	600	379	2,300	1,675
Lambeth PCT			5LD	E16000058	4,800	2,418	1800	783	3,000	1,635
Lewisham PCT			5LF	E16000060	4,900	2,378	1400	573	3,500	1,804
Newham PCT			5C5	E16000012	5,500	2,962	1500	619	4,100	2,343
Redbridge PCT			5NA	E16000083	5,600	2,431	1100	446	4,500	1,985
Richmond & Twickenham PCT			5M6	E16000067	3,100	1,846	700	414	2,400	1,432
Southwark PCT			5LE	E16000059	4,800	2,500	1800	791	3,100	1,709
Sutton & Merton PCT			5M7	E16000068	7,400	2,165	1800	474	5,600	1,691
Tower Hamlets PCT			5C4	E16000011	3,700	2,673	1200	689	2,500	1,984
Waltham Forest PCT			5NC	E16000084	5,700	2,884	1400	614	4,200	2,271
Wandsworth PCT			5LG	E16000061	4,800	2,322	1400	586	3,300	1,736
Westminster PCT			5LC	E16000057	4,100	2,312	1500	759	2,600	1,553

**Table 4.5 Alcohol-related<sup>1</sup> NHS<sup>2</sup> hospital admissions<sup>3</sup> based on primary and secondary diagnoses, by Strategic Health Authority(SHA) and Primary Care Trust (PCT), 2011/12<sup>4,5</sup> - Continued**

England			Number of admissions (rounded to nearest hundred)					
			Total		Wholly-attributable <sup>6</sup>		Partly-attributable <sup>7</sup>	
			Number of admissions per 100,000 population <sup>8</sup>		Number of admissions per 100,000 population <sup>8</sup>		Number of admissions per 100,000 population <sup>8</sup>	
			Admissions	population <sup>8</sup>	Admissions	population <sup>8</sup>	Admissions	population <sup>8</sup>
<b>England</b>			<b>1,220,300</b>	<b>2,298</b>	<b>304,200</b>	<b>573</b>	<b>916,100</b>	<b>1,725</b>
<b>South East Coast SHA</b>	<b>Q37</b>	<b>E18000008</b>	<b>91,900</b>	<b>1,933</b>	<b>19,300</b>	<b>429</b>	<b>72,600</b>	<b>1,504</b>
Brighton & Hove City PCT	5LQ	E16000063	6,200	2,449	2500	936	3,600	1,513
East Sussex Downs & Weald PCT	5P7	E16000109	7,800	1,889	1400	408	6,400	1,481
Eastern & Coastal Kent PCT	5QA	E16000132	16,000	1,962	3100	414	12,900	1,549
Hastings & Rother PCT	5P8	E16000110	4,700	2,150	900	493	3,800	1,657
Medway PCT	5L3	E16000055	5,000	2,052	1000	366	4,100	1,685
Surrey PCT	5P5	E16000107	22,100	1,888	4000	353	18,100	1,535
West Kent PCT	5P9	E16000111	12,300	1,718	2600	369	9,700	1,350
West Sussex PCT	5P6	E16000108	17,600	1,931	3700	449	13,900	1,482
<b>South Central SHA</b>	<b>Q38</b>	<b>E18000009</b>	<b>73,300</b>	<b>1,764</b>	<b>17,500</b>	<b>418</b>	<b>55,800</b>	<b>1,346</b>
Berkshire East PCT	5QG	E16000137	7,000	1,937	1600	407	5,400	1,530
Berkshire West PCT	5QF	E16000136	5,600	1,294	1200	261	4,400	1,032
Buckinghamshire PCT	5QD	E16000134	8,300	1,552	1400	266	6,900	1,286
Hampshire PCT	5QC	E16000133	25,200	1,777	5500	410	19,700	1,368
Isle of Wight PCT	5QT	E16000147	2,200	1,355	600	452	1,600	902
Milton Keynes PCT	5CQ	E16000016	5,300	2,459	1200	491	4,100	1,968
Oxfordshire PCT	5QE	E16000135	10,100	1,624	2300	374	7,700	1,250
Portsmouth City Teaching PCT	5FE	E16000027	4,600	2,471	1900	968	2,700	1,504
Southampton City PCT	5L1	E16000054	5,200	2,505	1800	810	3,400	1,695
<b>South West SHA</b>	<b>Q39</b>	<b>E18000010</b>	<b>125,000</b>	<b>2,139</b>	<b>28,100</b>	<b>522</b>	<b>96,800</b>	<b>1,617</b>
Bath & North East Somerset PCT	5FL	E16000028	3,500	1,889	800	464	2,700	1,425
Bournemouth & Poole PCT	5QN	E16000143	8,900	2,488	2400	721	6,500	1,767
Bristol PCT	5QJ	E16000139	10,800	2,879	3300	833	7,500	2,046
Cornwall & Isles Of Scilly PCT	5QP	E16000144	13,800	2,232	3200	584	10,600	1,648
Devon PCT	5QQ	E16000145	16,600	1,872	3700	486	12,800	1,385
Dorset PCT	5QM	E16000142	10,000	1,894	1800	428	8,300	1,466
Gloucestershire PCT	5QH	E16000138	14,100	2,175	2800	461	11,300	1,714
North Somerset PCT	5M8	E16000069	4,900	2,114	1000	461	4,000	1,652
Plymouth Teaching PCT	5F1	E16000024	6,900	2,731	1700	667	5,200	2,064
Somerset PCT	5QL	E16000141	12,700	2,075	2300	441	10,400	1,634
South Gloucestershire PCT	5A3	E16000001	5,600	2,066	1100	404	4,500	1,663
Swindon PCT	5K3	E16000044	4,300	2,156	1000	466	3,300	1,690
Torbay Care Trust	TAL	E17000003	3,700	2,446	1200	873	2,500	1,573
Wiltshire PCT	5QK	E16000140	9,100	1,810	1800	379	7,300	1,431

1. The number of alcohol-related admissions is based on methodology developed by the North West Public Health Observatory (NWPHO). This methodology includes a wide range of diseases, injuries and conditions in which alcohol plays a part and estimates the proportion of cases that are attributable to the consumption of alcohol. Finished admission episodes are identified where an alcohol-related diagnosis is recorded in any of the 20 (14 from 2002/03 to 2006/07 and 7 prior to 2002/03) primary and secondary diagnosis fields in a Hospital Episode Statistics record. For each of these episodes, an attributable fraction is applied, based on the diagnostic codes, age group and gender of the patient.

Where there is more than one alcohol-related condition among the diagnostic codes, the condition with the largest attributable fraction is used. Where there are two or more codes with the maximum attributable fraction, the code from the earliest diagnostic position is used. This method is employed to avoid double counting of the admission episodes related to alcohol and therefore each episode contributes to one cell in the table. The total number of alcohol-related admissions is arrived at by summing up the number of episodes counted against each alcohol-related condition.

2. The data include activity in English NHS hospitals and English NHS commissioned activity in the independent sector.

3. A finished admission episode is the first period of inpatient care under one healthcare provider. Finished admission episodes are counted against the year in which the admission episode finishes. Admissions do not represent the number of inpatients, as a person may have more than one admission within the year.

4. Figures have not been adjusted for shortfalls in data (i.e. the data are ungrossed).

5. Data includes only ordinary, day cases and maternity admissions, where the age and sex of the patient was known and where the region of residence was one of the English regions. The England admissions total differs from the sum of the 10 individual SHAs as cases of no fixed or unknown abode are included in the England figure but excluded from the individual SHA figures.

6. Wholly attributable conditions are alcohol-specific by definition and so have an attributable fraction of one.

7. Partially attributable conditions are those where some but not all cases are a result of alcohol consumption and so have an attributable fraction of less than one.

8. Admissions per 100,000 population are age and gender standardised. Mid-2011 population estimates were used to derive age-group and gender specific rates for each area. The age and gender standardised rate is obtained as a weighted sum of the age group and gender specific rates, where the weights are the proportion of the England population in each age and gender group. This is a change of method to previous years when the admission rates were standardised to the European Standard Population. Due to this change figures are not comparable with previous years.

#### Sources:

Figures based on:

Hospital Episode Statistics, Health and Social Care Information Centre - Data for total number of admissions for each ICD-10 code.

North West Public Health Observatory - Attributable fractions for alcohol-related ICD-10 codes.

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Table 4.6 NHS<sup>1</sup> hospital admissions<sup>2</sup> with a primary diagnosis<sup>3</sup> wholly<sup>4</sup> or partly<sup>5</sup> attributable to alcohol, 2002/03 to 2011/12<sup>6,7,8</sup>

England		Number of admissions (rounded to nearest hundred)									
ICD-10 Code <sup>9</sup>		2002/03	2003/04	2004/05	2005/06	2006/07	2007/08	2008/09	2009/10	2010/11	2011/12
<b>Total</b>		<b>142,000</b>	<b>151,000</b>	<b>160,500</b>	<b>173,900</b>	<b>179,900</b>	<b>181,300</b>	<b>185,800</b>	<b>194,800</b>	<b>198,900</b>	<b>200,900</b>
<b>Total - Wholly attributable<sup>4</sup></b>		<b>45,000</b>	<b>49,500</b>	<b>55,200</b>	<b>59,600</b>	<b>61,400</b>	<b>62,400</b>	<b>63,300</b>	<b>68,400</b>	<b>69,300</b>	<b>70,300</b>
<b>F10</b>	<b>Mental and behavioural disorders due to use of alcohol</b>	<b>28,500</b>	<b>31,800</b>	<b>36,000</b>	<b>39,500</b>	<b>40,300</b>	<b>41,200</b>	<b>42,500</b>	<b>46,900</b>	<b>46,800</b>	<b>47,100</b>
F10.0	Acute intoxication	7,500	9,800	12,200	15,400	15,900	15,800	16,000	18,300	18,500	18,400
F10.1	Harmful use	2,400	2,500	2,900	2,900	2,500	2,700	2,900	2,900	2,900	3,000
F10.2	Dependence syndrome	10,100	10,200	10,300	9,300	8,800	8,500	8,300	9,200	9,000	8,700
F10.3	Withdrawal state	5,900	6,800	8,000	9,300	10,700	11,800	13,300	14,600	14,500	15,100
F10.4	Withdrawal state with delirium	900	1,000	1,000	1,100	1,100	900	1,000	900	900	900
F10.5	Psychotic disorder	500	400	500	500	400	400	300	400	300	300
F10.6	Amnesic syndrome	300	300	200	200	300	200	300	300	300	200
F10.7	Residual and late-onset psychotic disorder	200	200	200	200	100	200	100	100	200	200
F10.8	Other mental and behavioural disorders due to use of alcohol	100	100	100	100	100	0	0	0	0	0
F10.9	Unspecified mental and behavioural disorders due to use of alcohol	600	600	600	600	500	600	400	300	300	300
<b>K70</b>	<b>Alcoholic liver disease</b>	<b>11,500</b>	<b>12,200</b>	<b>13,100</b>	<b>13,800</b>	<b>14,500</b>	<b>14,300</b>	<b>14,200</b>	<b>14,700</b>	<b>15,700</b>	<b>16,600</b>
K70.0	Alcoholic fatty liver	100	200	200	200	200	200	200	200	200	200
K70.1	Alcoholic hepatitis	1,100	1,200	1,200	1,300	1,400	1,400	1,500	1,600	1,700	1,900
K70.2	Alcoholic fibrosis and sclerosis of liver	100	100	100	100	100	100	100	100	100	100
K70.3	Alcoholic cirrhosis of liver	3,100	3,400	3,800	4,200	4,800	4,800	4,900	5,700	6,300	7,100
K70.4	Alcoholic hepatic failure	800	800	900	1,000	1,100	1,100	1,400	1,600	1,900	2,100
K70.9	Alcoholic liver disease, unspecified	6,300	6,500	6,800	7,000	7,000	6,700	6,100	5,600	5,500	5,300
<b>T51<sup>10</sup></b>	<b>Toxic effect of alcohol</b>	<b>1,300</b>	<b>1,400</b>	<b>1,600</b>	<b>1,400</b>	<b>1,400</b>	<b>1,700</b>	<b>1,400</b>	<b>1,200</b>	<b>1,200</b>	<b>1,100</b>
T51.0	Toxic effect of ethanol	800	900	1,000	1,000	900	1,100	1,000	900	900	900
T51.1	Toxic effect of methanol	0	0	0	0	0	0	0	0	0	0
T51.9	Toxic effect of alcohol, unspecified	500	500	500	400	500	500	400	200	200	200
<b>Other wholly - attributable conditions</b>		<b>3,800</b>	<b>4,100</b>	<b>4,500</b>	<b>4,900</b>	<b>5,200</b>	<b>5,200</b>	<b>5,200</b>	<b>5,600</b>	<b>5,600</b>	<b>5,500</b>
E24.4	Alcohol-induced pseudo-Cushing's syndrome	0	0	0	0	-	0	0	0	0	-
G31.2	Degeneration of nervous system due to alcohol	200	300	300	300	300	300	200	300	300	300
G62.1	Alcoholic polyneuropathy	100	100	100	100	100	100	100	100	100	100
G72.1	Alcoholic myopathy	0	100	0	100	0	0	0	0	0	0
I42.6	Alcoholic cardiomyopathy	200	200	200	200	200	200	200	200	200	100
K29.2	Alcoholic gastritis	900	1,000	1,200	1,300	1,300	1,300	1,500	1,600	1,700	1,800
K86.0	Chronic pancreatitis (alcohol induced)	2,200	2,500	2,700	3,000	3,200	3,300	3,100	3,300	3,300	3,200
X45	Accidental poisoning by and exposure to alcohol	-	-	-	-	-	-	-	-	-	-
<b>Total - partly attributable<sup>5</sup></b>		<b>97,100</b>	<b>101,500</b>	<b>105,300</b>	<b>114,300</b>	<b>118,500</b>	<b>119,000</b>	<b>122,500</b>	<b>126,500</b>	<b>129,600</b>	<b>130,600</b>
<b>Accidents and injuries</b>											
W78-W79	Inhalation of gastric contents/Inhalation and ingestion of food causing obstruction of the respiratory tract	-	-	-	-	-	-	-	-	-	-
W00-W19	Fall injuries	-	-	-	-	-	-	-	-	-	-
W24-W31	Work/machine injuries	-	-	-	-	-	-	-	-	-	-
W32-W34	Firearm injuries	-	-	-	-	-	-	-	-	-	-
W65-W74	Drowning	-	-	-	-	-	-	-	-	-	-
X00-X09	Fire injuries	-	-	-	-	-	-	-	-	-	-
X31	Accidental excessive cold	-	-	-	-	-	-	-	-	-	-
<b>Violence</b>											
X60-X84, Y10-Y33	Intentional self-harm/Event of undetermined intent	-	-	-	-	-	-	-	-	-	-
X85-Y09	Assault	-	-	-	-	-	-	-	-	-	-
<b>Transport accidents</b>											
V02-V04 (.1, .9), V06.1, V09.2, V09.3	Pedestrian traffic accidents	-	-	-	-	-	-	-	-	-	-
for codes see footnote 13	Road traffic accidents – non-pedestrian	-	-	-	-	-	-	-	-	-	-
V90-V94	Water transport accidents	-	-	-	-	-	-	-	-	-	-
V95-V97	Air/space transport accidents	-	-	-	-	-	-	-	-	-	-
<b>Spontaneous abortion</b>		<b>8,700</b>	<b>8,700</b>	<b>9,000</b>	<b>9,500</b>	<b>9,000</b>	<b>9,000</b>	<b>8,900</b>	<b>9,300</b>	<b>8,800</b>	<b>8,700</b>
O03	Spontaneous abortion	8,700	8,700	9,000	9,500	9,000	9,000	8,900	9,300	8,800	8,700
<b>Digestive</b>		<b>10,000</b>	<b>10,300</b>	<b>10,500</b>	<b>11,300</b>	<b>11,800</b>	<b>12,200</b>	<b>12,500</b>	<b>13,000</b>	<b>13,700</b>	<b>15,100</b>
K22.6	Gastro-oesophageal laceration-haemorrhage syndrome	900	900	900	1,000	1,000	1,000	900	900	900	900
K73, K74	Unspecified liver disease	2,200	2,400	2,300	2,700	2,700	2,800	2,800	2,900	3,500	3,900
K85, K86.1	Acute and chronic pancreatitis	3,200	3,400	3,600	3,700	3,900	4,000	4,200	4,500	4,600	4,900
I85	Oesophageal varices	3,600	3,600	3,700	3,900	4,200	4,400	4,600	4,600	4,600	5,300
<b>Cancer</b>		<b>27,800</b>	<b>28,800</b>	<b>29,700</b>	<b>32,000</b>	<b>34,200</b>	<b>34,600</b>	<b>35,600</b>	<b>35,900</b>	<b>36,500</b>	<b>36,600</b>
C00-C14	Malignant neoplasm of lip, oral cavity and pharynx	4,600	4,800	5,200	5,800	6,600	6,900	7,700	8,200	8,700	8,800
C15	Malignant neoplasm of oesophagus	7,400	7,600	7,600	8,300	8,300	7,900	7,800	7,300	7,000	6,800
C32	Malignant neoplasm of larynx	1,100	1,100	1,200	1,300	1,300	1,300	1,300	1,300	1,300	1,300
C18	Malignant neoplasm of colon	2,900	2,700	2,700	2,800	2,700	2,700	2,700	2,600	2,600	2,600
C20	Malignant neoplasm of rectum	2,800	2,800	2,600	2,800	2,600	2,400	2,400	2,300	2,300	2,500
C22	Malignant neoplasm of liver and intrahepatic bile ducts	500	500	500	600	700	700	800	800	1,000	1,000
C50	Malignant neoplasm of breast	8,600	9,300	9,900	10,400	12,000	12,700	12,900	13,300	13,600	13,600
<b>Hypertensive diseases</b>		<b>3,600</b>	<b>5,000</b>	<b>6,200</b>	<b>7,700</b>	<b>9,100</b>	<b>6,600</b>	<b>7,700</b>	<b>8,500</b>	<b>9,300</b>	<b>8,200</b>
I10-I15	Hypertensive diseases	3,600	5,000	6,200	7,700	9,100	6,600	7,700	8,500	9,300	8,200
<b>Cardiac arrhythmias</b>		<b>25,000</b>	<b>26,100</b>	<b>27,000</b>	<b>29,400</b>	<b>30,200</b>	<b>31,700</b>	<b>32,400</b>	<b>33,600</b>	<b>34,400</b>	<b>35,100</b>
I47-I48	Cardiac arrhythmias	25,000	26,100	27,000	29,400	30,200	31,700	32,400	33,600	34,400	35,100
<b>Other partly-attributable conditions</b>		<b>22,000</b>	<b>22,600</b>	<b>22,900</b>	<b>24,300</b>	<b>24,300</b>	<b>24,800</b>	<b>25,200</b>	<b>26,200</b>	<b>26,800</b>	<b>27,000</b>
G40-G41	Epilepsy and Status epilepticus	14,500	15,100	16,200	17,300	17,500	17,800	18,200	18,500	18,900	18,900
I60-I62, I69.0-I69.2	Haemorrhagic stroke	3,500	3,500	3,500	3,700	3,600	3,700	3,800	3,900	4,000	4,000
I63-I66, I69.3, I69.4	Ischaemic stroke	1,600	1,600	1,700	1,600	1,600	1,600	1,600	1,800	1,900	2,000
L40 excluding cirrhosis L40.5	Psoriasis	2,400	2,300	1,500	1,700	1,500	1,600	1,600	2,100	2,000	2,100

1. The data include activity in English NHS hospitals and English NHS commissioned activity in the independent sector.

2. A finished admission episode is the first period of inpatient care under one healthcare provider. Finished admission episodes are counted against the year in which the admission episode finishes. Admissions do not represent the number of inpatients, as a person may have more than one admission within the year.

3. 'Primary diagnosis only' alcohol related admission estimates are derived by summing the alcohol attributable fraction (AAF) associated with the alcohol related condition which appears in the primary diagnosis field (where there is one, out of the 47 such conditions identified in Table A.3 within Appendix A) regardless of whether or not there is an alcohol related condition with a higher AAF in one of the secondary diagnosis positions.

4. Wholly attributable conditions are alcohol-specific by definition and so have an attributable fraction of one.

5. Partially attributable conditions are those where some but not all cases are a result of alcohol consumption and so have an attributable fraction of less than one.

6. Figures have not been adjusted for shortfalls in data (i.e. the data are ungressed).

7. Data includes only ordinary, day cases and maternity admissions, where the age and sex of the patient was known and where the region of residence was one of the English regions or no fixed abode or unknown.

8. Figures for 2002/03 to 2006/07 are slightly different to those published in previous *Statistics on Alcohol: England* reports as more ICD-10 codes have been included in the group of wholly-attributable diseases, conditions and injuries and these data only include those records where age and sex were known, whereas previous data included records where age and/or sex was not specified.

9. See Appendix A for further information about International Classification of Diseases.

10. The totals shown for T51 - Toxic effect of alcohol, do not include the full breakdown for ICD-10 code T51, only T51.0, T51.1 and T51.9 as these cover types of alcohol most commonly found in alcoholic drinks.

11. A '-' indicates there were no observations. This is due the ICD-10 codes against which a '-' is recorded belonging to a group known as 'cause codes'. Such conditions are always recorded as a secondary diagnosis, and are never recorded in the primary position. They include acute conditions/injuries such as accidents, violence, etc (see rows 42 to 56 for the full list).

12. All figures are rounded to the nearest hundred. Therefore a figure of '0' corresponds to an unrounded number of less than 50.

13. ICD-10 codes for road traffic accidents: V12-V14 (.3 -.9), V19.4-V19.6, V19.9, V20-V28 (.3 -.9), V29-V79 (.4 -.9), V80.3-V80.5, V81.1, V82.1, V82.9, V83.0-V86 (.0 -.3), V87.0-V87.9, V89.2, V89.3, V89.9.

#### Sources:

Figures based on:

Hospital Episode Statistics, Health and Social Care Information Centre - Data for total number of admissions for each ICD-10 code.

North West Public Health Observatory - Attributable fractions for alcohol-related ICD-10 codes.

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**Table 4.7 NHS<sup>2</sup> hospital admissions<sup>3</sup> with a primary diagnosis<sup>4</sup> attributable to alcohol<sup>1</sup>, by whether condition is categorised as acute, chronic or due to mental and behavioural disorders due to use of alcohol<sup>5</sup> 2002/03 to 2011/12<sup>6,7</sup>**

England	Number of admissions (rounded to nearest hundred)									
	2002/03	2003/04	2004/05	2005/06	2006/07	2007/08	2008/09	2009/10	2010/11	2011/12
<b>Total</b>	<b>142,000</b>	<b>151,000</b>	<b>160,500</b>	<b>173,900</b>	<b>179,900</b>	<b>181,300</b>	<b>185,800</b>	<b>194,800</b>	<b>198,900</b>	<b>200,900</b>
Acute	1,300	1,400	1,600	1,400	1,400	1,700	1,400	1,200	1,200	1,100
Chronic	112,300	117,800	122,900	133,000	138,200	138,500	141,900	146,800	150,900	152,700
Mental and behavioural disorders due to use of alcohol	28,500	31,800	36,000	39,500	40,300	41,200	42,500	46,900	46,800	47,100

1. The number of alcohol-related admissions is based on methodology developed by the North West Public Health Observatory (NWPHO). This methodology includes a wide range of diseases, injuries and conditions in which alcohol plays a part and estimates the proportion of cases that are attributable to the consumption of alcohol. Finished admission episodes are identified where an alcohol-related diagnosis is recorded in any of the 20 (14 from 2002/03 to 2006/07 and 7 prior to 2002/03) primary and secondary diagnosis fields in a Hospital Admission Statistics record. For each of these episodes, an attributable fraction is applied, based on the diagnostic codes, age group and gender of the patient. Where there is more than one alcohol-related condition among the diagnostic codes, the condition with the largest attributable fraction is used. Where there are two or more codes with the maximum attributable fraction, the code from the earliest diagnostic position is used. This method is employed to avoid double counting of the admission episodes related to alcohol and therefore each episode contributes to one cell in the table.

The total number of alcohol-related admissions is arrived at by summing up the number of episodes counted against each alcohol-related condition.

2. The data include activity in English NHS hospitals and English NHS commissioned activity in the independent sector.

3. The number of alcohol-related admissions is based on methodology developed by the North West Public Health Observatory (NWPHO). Finished admission episodes are identified where an alcohol-related diagnosis is recorded in the first of the 20 (14 from 2002/03 to 2006/07 and 7 prior to 2002/03) primary and secondary diagnosis fields in a Hospital Episode Statistics record.

4. 'Primary diagnosis only' alcohol related admission estimates are derived by summing the alcohol attributable fraction (AAF) associated with the alcohol related condition which appears in the primary diagnosis field (where there is one, out of the 47 such conditions identified in Table A.3 within Appendix A) regardless of whether or not there is an alcohol related condition with a higher AAF in one of the secondary diagnosis positions.

5. A finished admission episode is the first period of inpatient care under one healthcare provider. Finished admission episodes are counted against the year in which the admission episode finishes. Admissions do not represent the number of inpatients, as a person may have more than one admission within the year.

6. For the purpose of the analyses which appears in this table, each of the 47 alcohol related conditions which appear in table 4.1 have been classified as either acute, chronic or as a mental and behavioural disorder due to use of alcohol. This has been done using the classification defined and used by North West Public Health Observatory (NWPHO) and published in the 'NI39 Subanalysis by 10 conditions' available at

[www.lape.org.uk/natind.html](http://www.lape.org.uk/natind.html)

7. Figures have not been adjusted for shortfalls in data (i.e. the data are ungrossed).

8. Data includes only ordinary, day cases and maternity admissions, where the age and sex of the patient was known and where the region of residence was one of the English regions or no fixed abode or unknown.

9. See Appendix A for further information about International Classification of Diseases.

10. Admission numbers for 2003/03 to 2006/07 have been updated to include records relating to disease codes K73 (chronic hepatitis) and L40 (psoriasis), that were excluded unintentionally from the previous figures. As a result the latest figures are slightly higher than those published in the 2009 report. The minimum effect at a national level is to increase the total number of admissions by 543 admissions (0.07%) in 2005/06, whilst the maximum effect is an increase of 2,946 (0.37%) in 2006/07.

#### Sources:

Figures based on:

Hospital Episode Statistics, Health and Social Care Information Centre - Data for total number of admissions for each ICD-10 code.

North West Public Health Observatory - Attributable fractions for alcohol-related ICD-10 codes.

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**Table 4.8 NHS<sup>1</sup> hospital admissions<sup>2</sup> with a primary diagnosis<sup>3</sup> wholly<sup>4</sup> or partly<sup>5</sup> attributable to alcohol, by gender, 2011/12<sup>6/7</sup>**

England		Number of admissions (rounded to nearest hundred)		
ICD10-Code <sup>8</sup>		All persons	Males	Females
<b>Total</b>		<b>200,900</b>	<b>121,300</b>	<b>79,700</b>
<b>Total - Wholly attributable<sup>4</sup></b>		<b>70,300</b>	<b>48,800</b>	<b>21,600</b>
<b>F10</b>	<b>Mental and behavioural disorders due to use of alcohol</b>	<b>47,100</b>	<b>32,600</b>	<b>14,400</b>
F10.0	Acute intoxication	18,400	12,100	6,200
F10.1	Harmful use	3,000	2,000	1,000
F10.2	Dependence syndrome	8,700	5,800	2,900
F10.3	Withdrawal state	15,100	11,300	3,800
F10.4	Withdrawal state with delirium	900	700	200
F10.5	Psychotic disorder	300	200	100
F10.6	Amnesic syndrome	200	200	100
F10.7	Residual and late-onset psychotic disorder	200	100	0
F10.8	Other mental and behavioural disorders due to use of alcohol	0	0	0
F10.9	Unspecified mental and behavioural disorders due to use of alcohol	300	200	100
<b>K70</b>	<b>Alcoholic liver disease</b>	<b>16,600</b>	<b>11,300</b>	<b>5,300</b>
K70.0	Alcoholic fatty liver	200	100	100
K70.1	Alcoholic hepatitis	1,900	1,100	800
K70.2	Alcoholic fibrosis and sclerosis of liver	100	0	0
K70.3	Alcoholic cirrhosis of liver	7,100	5,100	2,000
K70.4	Alcoholic hepatic failure	2,100	1,400	700
K70.9	Alcoholic liver disease, unspecified	5,300	3,600	1,700
<b>T51<sup>9</sup></b>	<b>Toxic effect of alcohol</b>	<b>1,100</b>	<b>600</b>	<b>500</b>
T51.0	Toxic effect of ethanol	900	500	400
T51.1	Toxic effect of methanol	0	0	0
T51.9	Toxic effect of alcohol, unspecified	200	100	100
<b>Other wholly - attributable conditions</b>		<b>5,500</b>	<b>4,200</b>	<b>1,300</b>
E24.4	Alcohol-induced pseudo-Cushing's syndrome	-	-	-
G31.2	Degeneration of nervous system due to alcohol	300	200	100
G62.1	Alcoholic polyneuropathy	100	100	0
G72.1	Alcoholic myopathy	0	0	0
I42.6	Alcoholic cardiomyopathy	100	100	0
K29.2	Alcoholic gastritis	1,800	1,300	500
K86.0	Chronic pancreatitis (alcohol induced)	3,200	2,500	700
X45	Accidental poisoning by and exposure to alcohol	-	-	-
<b>Total - partly attributable<sup>5</sup></b>		<b>130,600</b>	<b>72,500</b>	<b>58,100</b>
<b>Accidents and injuries</b>		<b>-</b>	<b>-</b>	<b>-</b>
W78-W79	Inhalation of gastric contents/Inhalation and ingestion of food causing obstruction of the respiratory tract	-	-	-
W00-W19	Fall injuries	-	-	-
W24-W31	Work/machine injuries	-	-	-
W32-W34	Firearm injuries	-	-	-
W65-W74	Drowning	-	-	-
X00-X09	Fire injuries	-	-	-
X31	Accidental excessive cold	-	-	-
<b>Violence</b>		<b>-</b>	<b>-</b>	<b>-</b>
X60-X84, Y10-Y33	Intentional self-harm/Event of undetermined intent	-	-	-
X85-Y09	Assault	-	-	-
<b>Transport accidents</b>		<b>-</b>	<b>-</b>	<b>-</b>
V02-V04 (.1, .9), V06.1, V09.2, V09.3	Pedestrian traffic accidents	-	-	-
for codes see footnote 13	Road traffic accidents – non-pedestrian	-	-	-
V90-V94	Water transport accidents	-	-	-
V95-V97	Air/space transport accidents	-	-	-
<b>Spontaneous abortion</b>		<b>8,700</b>	<b>-</b>	<b>8,700</b>
O03	Spontaneous abortion	8,700	-	8,700
<b>Digestive</b>		<b>15,100</b>	<b>10,300</b>	<b>4,800</b>
K22.6	Gastro-oesophageal laceration-haemorrhage syndrome	900	500	400
K73, K74	Unspecified liver disease	3,900	2,400	1,500
K85, K86.1	Acute and chronic pancreatitis	4,900	3,600	1,400
I85	Oesophageal varices	5,300	3,800	1,600
<b>Cancer</b>		<b>36,600</b>	<b>18,300</b>	<b>18,300</b>
C00-C14	Malignant neoplasm of lip, oral cavity and pharynx	8,800	7,100	1,700
C15	Malignant neoplasm of oesophagus	6,800	5,600	1,200
C32	Malignant neoplasm of larynx	1,300	1,100	100
C18	Malignant neoplasm of colon	2,600	1,900	800
C20	Malignant neoplasm of rectum	2,500	1,900	600
C22	Malignant neoplasm of liver and intrahepatic bile ducts	1,000	700	300
C50	Malignant neoplasm of breast	13,600	-	13,600
<b>Hypertensive diseases</b>		<b>8,200</b>	<b>6,000</b>	<b>2,300</b>
I10-I15	Hypertensive diseases	8,200	6,000	2,300
<b>Cardiac arrhythmias</b>		<b>35,100</b>	<b>21,600</b>	<b>13,400</b>
I47-I48	Cardiac arrhythmias	35,100	21,600	13,400
<b>Other partly-attributable conditions</b>		<b>27,000</b>	<b>16,300</b>	<b>10,700</b>
G40-G41	Epilepsy and Status epilepticus	18,900	10,200	8,600
I60-I62, I69.0-I69.2	Haemorrhagic stroke	4,000	2,800	1,100
I63-I66, I69.3, I69.4	Ischaemic stroke	2,000	2,000	0
L40 excluding cirrhosis L40.5	Psoriasis	2,100	1,200	900

- The data include activity in English NHS hospitals and English NHS commissioned activity in the independent sector.
- A finished admission episode is the first period of inpatient care under one healthcare provider. Finished admission episodes are counted against the year in which the admission episode finishes. Admissions do not represent the number of inpatients, as a person may have more than one admission within the year.
- 'Primary diagnosis is only' alcohol related admission estimates are derived by summing the alcohol attributable fraction (AAF) associated with the alcohol related condition which appears in the primary diagnosis field (where there is one, out of the 47 such conditions identified in Table A.3 within Appendix A) regardless of whether or not there is an alcohol related condition with a higher AAF in one of the secondary diagnosis positions.
- Wholly attributable conditions are alcohol-specific by definition and so have an attributable fraction of one.
- Partially attributable conditions are those where some but not all cases are a result of alcohol consumption and so have an attributable fraction of less than one.
- Figures have not been adjusted for shortfalls in data (i.e. the data are ungrossed).
- Admissions data includes only ordinary, day cases and maternity admissions, where the age and sex of the patient was known and where the region of residence was one of the English regions or no fixed abode or unknown.
- See Appendix A for further information about International Classification of Diseases.
- The totals shown for T51 - Toxic effect of alcohol, do not include the full breakdown for ICD-10 code T51, only T51.0, T51.1 and T51.9 as these cover types of alcohol most commonly found in alcoholic drinks.
- A '-' indicates there were no observations.
- All figures are rounded to the nearest hundred. Therefore a figure of '0' corresponds to an unrounded number of less than 50.
- There are a group of ICD-10 codes known as 'cause codes'. Such conditions are always recorded as a secondary diagnosis, and are never recorded in the primary position. They include acute conditions/injuries such as accidents, violence, etc (see rows 42 to 56 for the full list).
- ICD-10 codes for road traffic accidents: V12-V14 (.3 -.9), V19.4-V19.6, V19.9, V20-V28 (.3 -.9), V29-V79 (.4 -.9), V80.3-V80.5, V81.1, V82.1, V82.9, V83.0-V86 (.0 -.3), V87.0-V87.9, V89.2, V89.3, V89.9.

#### Sources:

Figures based on:  
Hospital Episode Statistics, Health and Social Care Information Centre - Data for total number of admissions for each ICD-10 code.  
North West Public Health Observatory - Attributable fractions for alcohol-related ICD-10 codes.

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**Table 4.9 NHS<sup>1</sup> hospital admissions<sup>2</sup>, by gender, with a primary diagnosis of a disease or condition which can be alcohol related, and of those, estimates of the number and percentage where the primary diagnosis<sup>3</sup> was alcohol related (i.e. attributable to alcohol), 2011/12<sup>4,5</sup>**

England		Number of admissions (rounded to nearest hundred)								
ICD-10 Code <sup>6</sup>		All persons			Men			Women		
		Admissions <sup>5</sup>	Attributable number	Attributable percentage	Admissions <sup>5</sup>	Attributable number	Attributable percentage	Admissions <sup>5</sup>	Attributable number	Attributable percentage
	<b>All admissions</b>	<b>14,859,400</b>	<b>200,900</b>	<b>1.4</b>	<b>6,506,800</b>	<b>121,300</b>	<b>1.9</b>	<b>8,352,600</b>	<b>79,700</b>	<b>1.0</b>
<b>C00-D48</b>	<b>All cancers</b>	<b>1,664,700</b>	<b>36,600</b>	<b>2.2</b>	<b>811,300</b>	<b>18,300</b>	<b>2.3</b>	<b>853,400</b>	<b>18,300</b>	<b>2.1</b>
<b>I00-I99</b>	<b>All circulatory diseases</b>	<b>940,000</b>	<b>54,700</b>	<b>5.8</b>	<b>539,400</b>	<b>36,300</b>	<b>6.7</b>	<b>400,500</b>	<b>18,400</b>	<b>4.6</b>
<b>K00-K93</b>	<b>All diseases of the digestive system</b>	<b>1,806,200</b>	<b>31,400</b>	<b>1.7</b>	<b>880,500</b>	<b>21,700</b>	<b>2.5</b>	<b>925,600</b>	<b>9,700</b>	<b>1.0</b>
<b>All diseases which can be caused by alcohol consumption</b>		<b>823,500</b>	<b>200,900</b>	<b>24</b>	<b>354,600</b>	<b>121,300</b>	<b>34</b>	<b>468,900</b>	<b>79,700</b>	<b>17</b>
<b>Alcohol related admissions - Wholly attributable<sup>7</sup></b>		<b>70,300</b>	<b>70,300</b>	<b>100</b>	<b>48,800</b>	<b>48,800</b>	<b>100</b>	<b>21,600</b>	<b>21,600</b>	<b>100</b>
<b>F10</b>	<b>Mental and behavioural disorders due to use of alcohol</b>	<b>47,100</b>	<b>47,100</b>	<b>100</b>	<b>32,600</b>	<b>32,600</b>	<b>100</b>	<b>14,400</b>	<b>14,400</b>	<b>100</b>
F10.0	Acute intoxication	18,400	18,400	100	12,100	12,100	100	6,200	6,200	100
F10.1	Harmful use	3,000	3,000	100	2,000	2,000	100	1,000	1,000	100
F10.2	Dependence syndrome	8,700	8,700	100	5,800	5,800	100	2,900	2,900	100
F10.3	Withdrawal state	15,100	15,100	100	11,300	11,300	100	3,800	3,800	100
F10.4	Withdrawal state with delirium	900	900	100	700	700	100	200	200	100
F10.5	Psychotic disorder	300	300	100	200	200	100	100	100	100
F10.6	Amnesic syndrome	200	200	100	200	200	100	100	100	100
F10.7	Residual and late-onset psychotic disorder	200	200	100	100	100	100	0	0	100
F10.8	Other mental and behavioural disorders due to use of alcohol	0	0	100	0	0	100	0	0	100
F10.9	Unspecified mental and behavioural disorders due to use of alcohol	300	300	100	200	200	100	100	100	100
<b>K70</b>	<b>Alcoholic liver disease</b>	<b>16,600</b>	<b>16,600</b>	<b>100</b>	<b>11,300</b>	<b>11,300</b>	<b>100</b>	<b>5,300</b>	<b>5,300</b>	<b>100</b>
K70.0	Alcoholic fatty liver	200	200	100	100	100	100	100	100	100
K70.1	Alcoholic hepatitis	1,900	1,900	100	1,100	1,100	100	800	800	100
K70.2	Alcoholic fibrosis and sclerosis of liver	100	100	100	0	0	100	0	0	100
K70.3	Alcoholic cirrhosis of liver	7,100	7,100	100	5,100	5,100	100	2,000	2,000	100
K70.4	Alcoholic hepatic failure	2,100	2,100	100	1,400	1,400	100	700	700	100
K70.9	Alcoholic liver disease, unspecified	5,300	5,300	100	3,600	3,600	100	1,700	1,700	100
<b>T518</b>	<b>Toxic effect of alcohol</b>	<b>1,100</b>	<b>1,100</b>	<b>100</b>	<b>600</b>	<b>600</b>	<b>100</b>	<b>500</b>	<b>500</b>	<b>100</b>
T51.0	Toxic effect of ethanol	900	900	100	500	500	100	400	400	100
T51.1	Toxic effect of methanol	0	0	100	0	0	100	0	0	100
T51.9	Toxic effect of alcohol, unspecified	200	200	100	100	100	100	100	100	100
<b>Other wholly - attributable conditions</b>		<b>5,500</b>	<b>5,500</b>	<b>100</b>	<b>4,200</b>	<b>4,200</b>	<b>100</b>	<b>1,300</b>	<b>1,300</b>	<b>100</b>
E24.4	Alcohol-induced pseudo-Cushing's syndrome	-	-	-	-	-	-	-	-	-
G31.2	Degeneration of nervous system due to alcohol	300	300	100	200	200	100	100	100	100
G62.1	Alcoholic polyneuropathy	100	100	100	100	100	100	0	0	100
G72.1	Alcoholic myopathy	0	0	100	0	0	100	0	0	100
I42.6	Alcoholic cardiomyopathy	100	100	100	100	100	100	0	0	100
K29.2	Alcoholic gastritis	1,800	1,800	100	1,300	1,300	100	500	500	100
K86.0	Chronic pancreatitis (alcohol induced)	3,200	3,200	100	2,500	2,500	100	700	700	100
X45	Accidental poisoning by and exposure to alcohol	-	-	-	-	-	-	-	-	-
<b>Alcohol related admissions - partly attributable<sup>9</sup></b>		<b>753,200</b>	<b>130,600</b>	<b>17</b>	<b>305,800</b>	<b>72,500</b>	<b>24</b>	<b>447,300</b>	<b>58,100</b>	<b>13</b>
<b>Accidents and injuries</b>		-	-	-	-	-	-	-	-	-
W78-W79	Inhalation of gastric contents/Inhalation and ingestion of food causing obstruction of the respiratory tract	-	-	-	-	-	-	-	-	-
W00-W19	Fall injuries	-	-	-	-	-	-	-	-	-
W24-W31	Work/machine injuries	-	-	-	-	-	-	-	-	-
W32-W34	Firearm injuries	-	-	-	-	-	-	-	-	-
W65-W74	Drowning	-	-	-	-	-	-	-	-	-
X00-X09	Fire injuries	-	-	-	-	-	-	-	-	-
X31	Accidental excessive cold	-	-	-	-	-	-	-	-	-
<b>Violence</b>		-	-	-	-	-	-	-	-	-
X60-X84, Y10-Y33	Intentional self-harm/Event of undetermined intent	-	-	-	-	-	-	-	-	-
X85-Y09	Assault	-	-	-	-	-	-	-	-	-
<b>Transport accidents</b>		-	-	-	-	-	-	-	-	-
V02-V04 (1, 9), V06.1, V09.2, V09.3	Pedestrian traffic accidents	-	-	-	-	-	-	-	-	-
For codes see footnote 10	Road traffic accidents – non-pedestrian	-	-	-	-	-	-	-	-	-
V90-V94	Water transport accidents	-	-	-	-	-	-	-	-	-
V95-V97	Air/space transport accidents	-	-	-	-	-	-	-	-	-
<b>Spontaneous abortion</b>		<b>40,500</b>	<b>8,700</b>	<b>21</b>	-	-	-	<b>40,500</b>	<b>8,700</b>	<b>21</b>
O03	Spontaneous abortion	40,500	8,700	21	-	-	-	40,500	8,700	21
<b>Digestive</b>		<b>41,100</b>	<b>15,100</b>	<b>37</b>	<b>23,900</b>	<b>10,300</b>	<b>43</b>	<b>17,200</b>	<b>4,800</b>	<b>28</b>
K22.6	Gastro-oesophageal laceration-haemorrhage syndrome	2,000	900	44	1,200	500	44	800	400	43
K73, K74	Unspecified liver disease	6,200	3,900	63	3,300	2,400	72	2,900	1,500	51
K85, K86.1	Acute and chronic pancreatitis	24,600	4,900	20	14,200	3,600	25	10,400	1,400	13
I85	Oesophageal varices	8,200	5,300	65	5,200	3,800	73	3,000	1,600	52
<b>Cancer</b>		<b>365,400</b>	<b>36,600</b>	<b>10</b>	<b>117,600</b>	<b>18,300</b>	<b>16</b>	<b>247,700</b>	<b>18,300</b>	<b>7</b>
C00-C14	Malignant neoplasm of lip, oral cavity and pharynx	20,600	8,800	43	14,800	7,100	48	5,800	1,700	30
C15	Malignant neoplasm of oesophagus	29,000	6,800	23	20,600	5,600	27	8,400	1,200	14
C32	Malignant neoplasm of larynx	4,600	1,300	27	3,700	1,100	30	900	100	17
C18	Malignant neoplasm of colon	83,500	2,600	3	45,900	1,900	4	37,600	800	2
C20	Malignant neoplasm of rectum	40,900	2,500	6	27,000	1,900	7	14,000	600	4
C22	Malignant neoplasm of liver and intrahepatic bile ducts	9,400	1,000	11	5,700	700	13	3,700	300	7
C50	Malignant neoplasm of breast	177,300	13,600	8	-	-	-	177,300	13,600	8
<b>Hypertensive diseases</b>		<b>37,200</b>	<b>8,200</b>	<b>22</b>	<b>21,200</b>	<b>6,000</b>	<b>28</b>	<b>16,000</b>	<b>2,300</b>	<b>14</b>
I10-I15	Hypertensive diseases	37,200	8,200	22	21,200	6,000	28	16,000	2,300	14
<b>Cardiac arrhythmias</b>		<b>114,600</b>	<b>35,100</b>	<b>31</b>	<b>63,700</b>	<b>21,600</b>	<b>34</b>	<b>50,800</b>	<b>13,400</b>	<b>26</b>
I47-I48	Cardiac arrhythmias	114,600	35,100	31	63,700	21,600	34	50,800	13,400	26
<b>Other partly-attributable conditions</b>		<b>154,500</b>	<b>27,000</b>	<b>17</b>	<b>79,400</b>	<b>16,300</b>	<b>20</b>	<b>75,200</b>	<b>10,700</b>	<b>14</b>
G40-G41	Epilepsy and Status epilepticus	46,200	18,900	41	24,800	10,200	41	21,400	8,600	40
I60-I62, I69.0-I69.2	Haemorrhagic stroke	24,500	4,000	16	12,500	2,800	23	11,900	1,100	9
I63-I66, I69.3, I69.4	Ischaemic stroke	77,300	2,000	3	38,600	2,000	5	38,700	0	0
L40 excluding cirrhosis L40.5	Psoriasis	6,600	2,100	32	3,500	1,200	34	3,100	900	30

1. The data include activity in English NHS hospitals and English NHS commissioned activity in the independent sector.

2. A finished admission episode is the first period of inpatient care under one healthcare provider. Finished admission episodes are counted against the year in which the admission episode finishes. Admissions do not represent the number of inpatients, as a person may have more than one admission within the year.

3. 'Primary diagnosis' only alcohol related admission estimates are derived by summing the alcohol attributable fraction (AAF) associated with the alcohol related condition which appears in the primary diagnosis field (where there is one, out of the 47 such conditions identified in Table A.3 within Appendix A) regardless of whether or not there is an alcohol related condition with a higher AAF in one of the secondary diagnosis positions.

4. Figures have not been adjusted for shortfalls in data (i.e. the data are ungrossed).

5. Admission data includes only ordinary, day cases and maternity admissions, where the age and sex of the patient was known and where the region of residence was one of the English regions or no fixed abode or unknown.

6. See Appendix A for further information about International Classification of Diseases.

7. Wholly attributable conditions are alcohol-specific by definition and so have an attributable fraction of one.

8. The totals shown for T51 - Toxic effect of alcohol, do not include the full breakdown for ICD-10 code T51, only T51.0, T51.1 and T51.9 as these cover types of alcohol most commonly found in alcoholic drinks.

9. Partially attributable conditions are those where some but not all cases are a result of alcohol consumption and so have an attributable fraction of less than one.

10. ICD-10 codes for road traffic accidents: V12-V14 (3 - 9), V19.4-V19.6, V19.9, V20-V28 (3 - 9), V29-V79 (4 - 9), V80.3-V80.5, V81.1, V82.1, V82.9, V83.0-V86 (0 - 3), V87.0-V87.9, V89.2, V89.3, V89.9.

11. A '-' indicates there were no observations.

12. All admissions have been rounded to the nearest hundred. Therefore a figure of 0 in either the 'Admissions' or 'Attributable number' columns corresponds to an unrounded figure of less than 50.

13. There are a group of ICD-10 codes known as 'cause codes'. Such conditions are always recorded as a secondary diagnosis, and are never recorded in the primary position. They include acute conditions/injuries such as accidents, violence, etc (see rows 42 to 56 for the full list).

#### Sources:

Figures based on:

Hospital Episode Statistics, Health and Social Care Information Centre - Data for total number of admissions for each ICD-10 code.

North West Public Health Observatory - Attributable fractions for alcohol-related ICD-10 codes.

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**Table 4.10 NHS<sup>1</sup> hospital admissions<sup>2</sup> with a primary diagnosis<sup>3</sup> wholly<sup>4</sup> or partly attributable<sup>5</sup> to alcohol, by Strategic Health Authority (SHA) and Primary Care Trust (PCT), 2011/12<sup>6,7</sup>**

England				Number of admissions (rounded to nearest hundred)							
				Total		Wholly-attributable <sup>6</sup>		Partly-attributable <sup>7</sup>			
				Number of admissions per 100,000		Number of admissions per 100,000		Number of admissions per 100,000			
				Admissions	population <sup>8</sup>	Admissions	population <sup>8</sup>	Admissions	population <sup>8</sup>		
England				200,900	378	70,300	132	130,600	246		
North East SHA				Q30	E18000001	13,200	497	4,800	186	8,400	311
County Durham PCT				5ND	E16000085	2,200	423	700	144	1,500	279
Darlington PCT				5J9	E16000041	400	394	100	134	300	260
Gateshead PCT				5KF	E16000050	1,100	540	400	181	700	359
Hartlepool PCT				5D9	E16000019	400	448	100	156	300	292
Middlesbrough PCT				5KM	E16000053	700	546	300	228	400	318
Newcastle PCT				5D7	E16000017	1,500	571	500	200	900	371
North Tyneside PCT				5D8	E16000018	1,300	645	500	270	800	375
Northumberland Care Trust				TAC	E17000001	1,700	491	600	178	1,100	314
Redcar & Cleveland PCT				5QR	E16000146	500	373	100	109	400	264
South Tyneside PCT				5KG	E16000051	800	516	300	206	500	310
Stockton-On-Tees Teaching PCT				5E1	E16000020	800	393	200	114	500	279
Sunderland Teaching PCT				5KL	E16000052	1,700	606	800	292	900	313
North West SHA				Q31	E18000002	33,300	467	14,200	200	19,100	267
Ashton, Leigh & Wigan PCT				5HG	E16000032	1,700	514	800	237	900	277
Blackburn with Darwen Teaching Care Trust Plus				TAP	E17000006	700	481	300	228	300	253
Blackpool PCT				5HP	E16000033	900	604	400	272	500	332
Bolton PCT				5HQ	E16000148	1,000	353	400	136	600	217
Bury PCT				5JX	E16000043	700	398	300	161	400	237
Central & Eastern Cheshire PCT				5NP	E16000095	1,600	330	700	137	1,000	193
Central Lancashire PCT				5NG	E16000088	2,100	440	800	175	1,300	265
Cumbria PCT				5NE	E16000086	3,300	587	700	139	2,600	448
East Lancashire PCT				5NH	E16000089	1,700	433	700	184	1,000	249
Halton & St. Helens PCT				5NM	E16000093	1,500	479	700	248	700	231
Heywood, Middleton & Rochdale PCT				5NQ	E16000096	1,000	475	400	183	600	291
Knowsley PCT				5J4	E16000038	700	513	300	242	400	270
Liverpool PCT				5NL	E16000092	2,500	569	1200	277	1,300	292
Manchester PCT				5NT	E16000149	2,300	564	1200	279	1,100	285
North Lancashire PCT				5NF	E16000087	1,400	400	400	147	900	253
Oldham PCT				5J5	E16000039	900	429	400	160	600	269
Salford PCT				5F5	E16000025	1,400	634	800	338	700	295
Sefton PCT				5NJ	E16000090	1,300	457	600	234	700	223
Stockport PCT				5F7	E16000026	1,100	391	500	163	700	228
Tameside & Glossop PCT				5LH	E16000062	1,300	497	600	250	600	247
Trafford PCT				5NR	E16000097	800	373	300	134	500	239
Warrington PCT				5J2	E16000037	900	428	400	206	500	222
Western Cheshire PCT				5NN	E16000094	900	362	300	132	600	229
Wirral PCT				5NK	E16000091	1,700	533	900	293	800	240
Yorkshire & Humber SHA				Q32	E18000003	20,400	385	7,200	137	13,200	248
Barnsley PCT				5JE	E16000042	900	373	300	133	600	240
Bradford & Airedale PCT				5NY	E16000102	2,400	490	800	166	1,600	324
Calderdale PCT				5J6	E16000040	900	450	400	189	500	261
Doncaster PCT				5N5	E16000078	1,200	395	400	143	800	252
East Riding of Yorkshire PCT				5NW	E16000100	1,300	336	300	84	1,000	253
Hull PCT				5NX	E16000101	1,300	507	600	230	700	277
Kirklees PCT				5N2	E16000075	1,300	324	400	106	900	218
Leeds PCT				5N1	E16000074	2,900	404	1300	185	1,500	219
North East Lincolnshire PCT				TAN	E17000005	500	322	100	63	400	260
North Lincolnshire PCT				5EF	E16000021	500	315	100	64	400	250
North Yorkshire & York PCT				5NV	E16000099	2,600	304	700	91	1,800	213
Rotherham PCT				5H8	E16000031	1,200	445	400	154	800	291
Sheffield PCT				5N4	E16000077	2,100	397	800	146	1,300	251
Wakefield District PCT				5N3	E16000076	1,300	398	500	152	800	246
East Midlands SHA				Q33	E18000004	17,000	370	5,300	117	11,700	253
Bassetlaw PCT				5ET	E16000023	600	461	200	180	300	281
Derby City PCT				5N7	E16000080	1,100	445	500	187	600	258
Derbyshire County PCT				5N6	E16000079	2,800	353	900	118	1,900	235
Leicester City PCT				5PC	E16000113	1,300	454	500	172	800	282
Leicestershire County & Rutland PCT				5PA	E16000112	2,200	306	600	79	1,700	227
Lincolnshire PCT				5N9	E16000082	2,500	324	500	73	2,000	252
Northampton PCT				5PD	E16000114	2,600	375	800	115	1,800	261
Nottingham City PCT				5EM	E16000022	1,500	575	600	230	900	345
Nottinghamshire County PCT				5N8	E16000081	2,500	350	700	108	1,700	241

**Table 4.10 NHS<sup>1</sup> hospital admissions<sup>2</sup> with a primary diagnosis<sup>3</sup> wholly<sup>4</sup> or partly attributable<sup>5</sup> to alcohol, by Strategic Health Authority (SHA) and Primary Care Trust (PCT), 2011/12<sup>6,7</sup> - Continued**

England				Number of admissions (rounded to nearest hundred)							
				Total		Wholly-attributable <sup>6</sup>		Partly-attributable <sup>7</sup>			
				Admissions	Number of admissions per 100,000 population <sup>8</sup>	Admissions	Number of admissions per 100,000 population <sup>8</sup>	Admissions	Number of admissions per 100,000 population <sup>8</sup>		
England				200,900	378	70,300	132	130,600	246		
West Midlands SHA				Q34	E18000005	22,000	393	7,400	133	14,600	260
Birmingham East & North PCT				5PG	E16000117	1,700	435	600	165	1,000	270
Coventry Teaching PCT				5MD	E16000070	1,300	449	500	168	800	281
Dudley PCT				5PE	E16000115	1,500	451	500	155	1,000	297
Heart of Birmingham Teaching PCT				5MX	E16000073	1,300	553	700	281	600	272
Herefordshire PCT				5CN	E16000015	700	330	200	88	500	242
North Staffordshire PCT				5PH	E16000118	900	417	400	169	600	248
Sandwell PCT				5PF	E16000116	1,400	467	600	196	800	271
Shropshire County PCT				5M2	E16000065	1,000	296	200	58	800	238
Solihull PCT				5QW	E17000004	900	426	300	168	600	259
South Birmingham PCT				5M1	E16000064	1,200	373	500	157	700	216
South Staffordshire PCT				5PK	E16000120	2,500	375	600	93	1,900	282
Stoke on Trent PCT				5PJ	E16000119	1,300	529	600	225	800	304
Telford & Wrekin PCT				5MK	E16000071	600	352	200	103	400	248
Walsall Teaching PCT				5M3	E16000066	1,100	413	300	119	800	294
Warwickshire PCT				5PM	E16000122	1,700	299	500	88	1,200	211
Wolverhampton City PCT				5MV	E16000072	1,000	426	300	110	800	316
Worcestershire PCT				5PL	E16000121	1,900	319	500	93	1,400	226
East England SHA				Q35	E18000006	19,000	315	5,000	84	14,000	231
Bedfordshire PCT				5P2	E16000104	1,200	293	300	79	900	215
Cambridgeshire PCT				5PP	E16000124	2,100	338	600	94	1,500	244
Great Yarmouth & Waveney PCT				5PR	E16000126	900	383	300	153	600	230
Hertfordshire PCT				5QV	E16000150	3,000	271	700	60	2,300	212
Luton PCT				5GC	E16000029	700	390	200	121	500	269
Mid Essex PCT				5PX	E16000130	1,100	276	200	54	900	222
Norfolk PCT				5PQ	E16000125	3,200	388	900	121	2,300	267
North East Essex PCT				5PW	E16000129	1,000	291	300	93	700	198
Peterborough PCT				5PN	E16000123	600	368	200	119	400	249
South East Essex PCT				5P1	E16000103	1,000	281	200	59	800	222
South West Essex PCT				5PY	E16000131	1,100	283	200	47	900	236
Suffolk PCT				5PT	E16000127	2,000	307	500	83	1,500	223
West Essex PCT				5PV	E16000128	1,000	341	300	93	700	248
London SHA				Q36	E18000007	26,800	371	10,200	133	16,500	239
Barking & Dagenham PCT				5C2	E16000009	600	393	300	159	400	235
Barnet PCT				5A9	E16000006	1,100	331	300	92	800	238
Bexley Care Trust				TAK	E17000002	800	350	300	138	500	212
Brent Teaching PCT				5K5	E16000045	900	349	300	108	600	242
Bromley PCT				5A7	E16000004	1,000	306	300	96	700	210
Camden PCT				5K7	E16000047	900	455	400	187	500	268
City & Hackney Teaching PCT				5C3	E16000010	900	467	400	217	500	249
Croydon PCT				5K9	E16000049	1,200	353	400	117	800	236
Ealing PCT				5HX	E16000035	1,200	404	400	136	800	268
Enfield PCT				5C1	E16000008	1,000	364	300	98	700	265
Greenwich Teaching PCT				5A8	E16000005	800	374	300	138	500	236
Hammersmith & Fulham PCT				5H1	E16000030	600	410	200	140	400	270
Haringey Teaching PCT				5C9	E16000013	900	439	300	133	600	306
Harrow PCT				5K6	E16000046	600	250	100	54	400	195
Havering PCT				5A4	E16000002	700	282	200	84	500	198
Hillingdon PCT				5AT	E16000007	1,000	379	300	127	600	252
Hounslow PCT				5HY	E16000036	800	354	300	122	500	232
Islington PCT				5K8	E16000048	900	536	300	171	600	365
Kensington & Chelsea PCT				5LA	E16000056	500	371	200	123	300	249
Kingston PCT				5A5	E16000003	400	296	100	96	300	200
Lambeth PCT				5LD	E16000058	1,100	446	500	191	600	255
Lewisham PCT				5LF	E16000060	900	371	400	149	500	222
Newham PCT				5C5	E16000012	1,000	401	400	150	500	251
Redbridge PCT				5NA	E16000083	900	359	400	148	500	211
Richmond & Twickenham PCT				5M6	E16000067	500	290	200	86	400	204
Southwark PCT				5LE	E16000059	1,100	481	500	221	600	260
Sutton & Merton PCT				5M7	E16000068	1,200	338	500	119	800	220
Tower Hamlets PCT				5C4	E16000011	800	463	400	215	400	248
Waltham Forest PCT				5NC	E16000084	900	404	400	156	500	248
Wandsworth PCT				5LG	E16000061	900	360	300	117	500	243
Westminster PCT				5LC	E16000057	800	401	400	180	400	221

**Table 4.10 NHS<sup>1</sup> hospital admissions<sup>2</sup> with a primary diagnosis<sup>3</sup> wholly<sup>4</sup> or partly attributable<sup>5</sup> to alcohol, by Strategic Health Authority (SHA) and Primary Care Trust (PCT), 2011/12<sup>6,7</sup> - Continued**

England			Number of admissions (rounded to nearest hundred)					
			Total		Wholly-attributable <sup>6</sup>		Partly-attributable <sup>7</sup>	
			Admissions	Number of admissions per 100,000 population <sup>8</sup>	Admissions	Number of admissions per 100,000 population <sup>8</sup>	Admissions	Number of admissions per 100,000 population <sup>8</sup>
<b>England</b>			<b>200,900</b>	<b>378</b>	<b>70,300</b>	<b>132</b>	<b>130,600</b>	<b>246</b>
<b>South East Coast SHA</b>			<b>14,300</b>	<b>309</b>	<b>4,300</b>	<b>95</b>	<b>10,000</b>	<b>214</b>
	<b>Q37</b>	<b>E18000008</b>						
Brighton & Hove City PCT	5LQ	E16000063	1,000	397	600	204	500	193
East Sussex Downs & Weald PCT	5P7	E16000109	1,200	325	300	102	900	223
Eastern & Coastal Kent PCT	5QA	E16000132	2,800	349	800	108	1,900	241
Hastings & Rother PCT	5P8	E16000110	800	383	200	109	600	274
Medway PCT	5L3	E16000055	700	274	200	82	500	192
Surrey PCT	5P5	E16000107	3,200	280	800	74	2,400	206
West Kent PCT	5P9	E16000111	2,000	281	600	79	1,400	202
West Sussex PCT	5P6	E16000108	2,500	296	700	90	1,800	205
<b>South Central SHA</b>			<b>11,800</b>	<b>283</b>	<b>3,700</b>	<b>88</b>	<b>8,100</b>	<b>195</b>
	<b>Q38</b>	<b>E18000009</b>						
Berkshire East PCT	5QG	E16000137	1,000	275	300	72	700	203
Berkshire West PCT	5QF	E16000136	900	209	200	53	700	156
Buckinghamshire PCT	5QD	E16000134	1,300	246	200	46	1,100	200
Hampshire PCT	5QC	E16000133	3,900	283	1,300	94	2,700	189
Isle of Wight PCT	5QT	E16000147	400	294	200	150	200	144
Milton Keynes PCT	5CQ	E16000016	800	349	200	92	600	257
Oxfordshire PCT	5QE	E16000135	1,700	266	400	60	1,300	207
Portsmouth City Teaching PCT	5FE	E16000027	800	438	500	230	400	208
Southampton City PCT	5L1	E16000054	900	421	400	195	500	226
<b>South West SHA</b>			<b>19,500</b>	<b>347</b>	<b>5,200</b>	<b>97</b>	<b>14,300</b>	<b>250</b>
	<b>Q39</b>	<b>E18000010</b>						
Bath & North East Somerset PCT	5FL	E16000028	400	247	100	68	300	179
Bournemouth & Poole PCT	5QN	E16000143	1,400	424	500	150	900	274
Bristol PCT	5QJ	E16000139	1,600	422	600	148	1,000	274
Cornwall & Isles Of Scilly PCT	5QP	E16000144	2,100	366	700	124	1,500	242
Devon PCT	5QQ	E16000145	2,800	343	600	78	2,300	265
Dorset PCT	5QM	E16000142	1,400	288	400	97	1,000	191
Gloucestershire PCT	5QH	E16000138	2,700	421	600	98	2,100	323
North Somerset PCT	5M8	E16000069	700	318	200	78	500	240
Plymouth Teaching PCT	5F1	E16000024	900	345	300	104	600	241
Somerset PCT	5QL	E16000141	1,900	325	400	71	1,500	253
South Gloucestershire PCT	5A3	E16000001	800	286	200	64	600	222
Swindon PCT	5K3	E16000044	700	340	200	77	500	263
Torbay Care Trust	TAL	E17000003	700	501	200	186	500	315
Wiltshire PCT	5QK	E16000140	1,300	265	300	70	1,000	195

1. The data include activity in English NHS hospitals and English NHS commissioned activity in the independent sector.

2. A finished admission episode is the first period of inpatient care under one healthcare provider. Finished admission episodes are counted against the year in which the admission episode finishes. Admissions do not represent the number of inpatients, as a person may have more than one admission within the year.

3. 'Primary diagnosis only' alcohol related admission estimates are derived by summing the alcohol attributable fraction (AAF) associated with the alcohol related condition which appears in the primary diagnosis field (where there is one, out of the 47 such conditions identified in Table A.3 within Appendix A) regardless of whether or not there is an alcohol related condition with a higher AAF in one of the secondary diagnosis positions.

4. Wholly attributable conditions are alcohol-specific by definition and so have an attributable fraction of one.

5. Partially attributable conditions are those where some but not all cases are a result of alcohol consumption and so have an attributable fraction of less than one.

6. Figures have not been adjusted for shortfalls in data (i.e. the data are ungrossed).

7. Admission data includes only ordinary, day cases and maternity admissions, where the age and sex of the patient was known and where the region of residence was one of the English regions or no fixed abode or unknown. The England admissions total differs from the sum of the 10 individual SHAs as cases of no fixed or unknown abode are included in the England figure but excluded from the individual SHA figures.

8. Admissions per 100,000 population are aged standardised. Mid-2011 population estimates were used to derive age-group and gender specific rates for each area. The age standardised rates are obtained as a weighted sum of the age group and gender specific rates, where the weights are the proportion of the England population in each age and gender group. This is a change of method to previous years when the admission rates were standardised to the European Standard Population. Due to this change figures are not comparable with previous years.

#### Sources:

Figures based on:

Hospital Episode Statistics, Health and Social Care Information Centre - Data for total number of admissions for each ICD-10 code.

North West Public Health Observatory - Attributable fractions for alcohol-related ICD-10 codes.

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**Table 4.11 Alcohol-related<sup>1</sup> NHS<sup>2</sup> hospital admission<sup>3</sup> estimates derived using the unadjusted broad measure, adjusted broad measure and narrow measure, 2002/03 to 2011/12<sup>4</sup>**

England	Number of admissions (rounded to nearest hundred)										% change 2002/03 to 2011/12
	2002/03	2003/04	2004/05	2005/06	2006/07	2007/08	2008/09	2009/10	2010/11	2011/12	
<b>Total ARAs - broad measure<sup>1</sup> (unadjusted)</b>	510,700	570,100	644,700	736,000	802,000	863,500	945,400	1,056,900	1,168,300	1,220,300	138.9
<b>Total ARAs - broad measure<sup>1</sup> (adjusted<sup>5</sup>)</b>	807,700	880,800	952,700	1,035,500	1,090,500	1,146,300	1,219,000	1,247,200	1,205,500	1,220,300	51.1
<b>Total ARAs - narrow measure<sup>1</sup></b>	141,700	150,600	160,200	173,600	179,700	181,300	185,800	194,800	198,900	200,900	41.8

1. Each of the 3 alcohol-related admissions (ARAs) totals are underpinned by a methodology developed by the North West Public Health Observatory (NWPHO). This methodology includes a wide range of diseases, injuries and conditions in which alcohol plays a part and estimates the proportion of cases that are attributable to the consumption of alcohol. For the broad measure, finished admission episodes are identified where an alcohol-related diagnosis is recorded in any of the 20 (14 from 2002/03 to 2006/07 and 7 prior to 2002/03) primary and secondary diagnosis fields in a Hospital Admission Statistics record. For each of these episodes, an attributable fraction is applied, based on the diagnostic codes, age group and gender of the patient. Where there is more than one alcohol-related condition among the diagnostic codes, the condition with the largest attributable fraction is used. Where there are two or more codes with the maximum attributable fraction, the code from the earliest diagnostic position is used. This method is employed to avoid double counting of the admission episodes related to alcohol and therefore each episode contributes to one cell in the table.

The total number of ARAs is arrived at by summing up the number of episodes counted against each alcohol-related condition. Alcohol related admission estimates based on the narrow measure are derived by summing the alcohol attributable fraction (AAF) associated with the alcohol related condition which appears in the primary diagnosis field (where there is one, out of the 47 such conditions identified in Table A.3 within Appendix A) regardless of whether or not there is an alcohol related condition with a higher AAF in one of the secondary diagnosis positions.

2. The data include activity in English NHS hospitals and English NHS commissioned activity in the independent sector.

3. A finished admission episode is the first period of inpatient care under one healthcare provider. Finished admission episodes are counted against the year in which the admission episode finishes. Admissions do not represent the number of inpatients, as a person may have more than one admission within the year.

4. Data includes only ordinary, day cases and maternity admissions, where the age and sex of the patient was known and where the region of residence was one of the English regions or no fixed abode or unknown.

5. Alcohol related admission estimates based on the 'adjusted broad measure' are derived by applying the methodology described in Appendix E to the unadjusted broad measure in an attempt to adjust for changes in recording practices in relation to secondary diagnoses in recent years. The methodology relies on several important assumptions which are listed in Appendix E.

6. Due to very minor revisions to historic data, the overall totals for broad measure (unadjusted) are 100 less than the totals presented in Table 4.11 of *Statistics on Alcohol, England 2012* for 2002/03 and each year from 2005/06 to 2009/10.

#### Sources:

Hospital Episode Statistics, The Health and Social Care Information Centre

North West Public Health Observatory - Attributable fractions for alcohol-related ICD-10 codes.

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**Table 4.12 Number of prescription items<sup>1</sup>, net ingredient cost<sup>2</sup> and average net ingredient cost per item of drugs prescribed<sup>3</sup> for the treatment of alcohol dependence dispensed in the community, 2003 to 2012**

England <sup>4,5</sup>	Numbers / £									
	2003 <sup>5</sup>	2004	2005	2006	2007 <sup>6</sup>	2008 <sup>6</sup>	2009	2010	2011	2012
<b>Prescription items</b>										
Acamprosate Calcium	63,387	66,863	66,851	70,216	75,842	83,983	94,921	102,679	107,389	117,405
Disulfiram	39,354	41,218	42,261	45,652	46,936	50,440	55,524	57,502	60,375	60,842
<b>Total</b>	<b>102,741</b>	<b>108,081</b>	<b>109,112</b>	<b>115,868</b>	<b>122,778</b>	<b>134,423</b>	<b>150,445</b>	<b>160,181</b>	<b>167,764</b>	<b>178,247</b>
<b>Prescribed in primary care</b>										
Acamprosate Calcium	57,987	61,310	60,912	64,322	70,615	79,708	90,051	98,242	102,536	112,169
Disulfiram	35,254	36,651	36,851	39,015	41,652	45,343	49,533	52,214	55,052	55,299
<b>Total</b>	<b>93,241</b>	<b>97,961</b>	<b>97,763</b>	<b>103,337</b>	<b>112,267</b>	<b>125,051</b>	<b>139,584</b>	<b>150,456</b>	<b>157,588</b>	<b>167,468</b>
<b>Prescribed in NHS hospitals</b>										
Acamprosate Calcium	5,400	5,553	5,939	5,894	5,227	4,275	4,870	4,437	4,853	5,236
Disulfiram	4,100	4,567	5,410	6,637	5,284	5,097	5,991	5,288	5,323	5,543
<b>Total</b>	<b>9,500</b>	<b>10,120</b>	<b>11,349</b>	<b>12,531</b>	<b>10,511</b>	<b>9,372</b>	<b>10,861</b>	<b>9,725</b>	<b>10,176</b>	<b>10,779</b>
<b>Net Ingredient Cost (£ 000s)</b>										
Acamprosate Calcium	1,302	1,370	1,362	1,456	1,532	1,634	1,589	1,624	1,707	2,165
Disulfiram	420	456	599	686	715	767	791	790	786	768
<b>Total</b>	<b>1,722</b>	<b>1,516</b>	<b>1,960</b>	<b>2,142</b>	<b>2,247</b>	<b>2,400</b>	<b>2,380</b>	<b>2,414</b>	<b>2,493</b>	<b>2,933</b>
<b>Average Net Ingredient Cost per item (£)</b>										
Acamprosate Calcium	21	20	20	21	20	19	17	16	16	18
Disulfiram	11	11	14	15	15	15	14	14	13	13
<b>Total</b>	<b>17</b>	<b>14</b>	<b>18</b>	<b>18</b>	<b>18</b>	<b>18</b>	<b>16</b>	<b>15</b>	<b>15</b>	<b>16</b>

1. Prescriptions are written on a prescription form known as a FP10. Each single item written on the form is counted as a prescription item.

2. Net Ingredient Cost (NIC) is the basic cost of a drug. It does not take account of discounts, dispensing costs, fees or prescription charge income.

3. This information was obtained from the Prescribing Analysis and Cost Tool (PACT) system, which covers prescriptions prescribed by GPs, nurses, pharmacists and others in England and dispensed in the community in the UK and prescriptions written in hospitals /clinics that are dispensed in the community. Prescriptions dispensed in hospitals and private prescriptions are not included in PACT data.

4. Prescribing Analysis and Cost (PACT) from NHS Prescription Services of the Business Service Authority. Health and Social Care Information Centre

5. Prescription item numbers for items prescribed in NHS hospitals for this year are only available rounded to the nearest 100.

6. Figures for 2007 and 2008 have been updated by the NHS Prescription Services of the Business Services Authority.

**Source:**

Prescribing Analysis and Cost (PACT) from NHS Prescription Services of the Business Service Authority. Health and Social Care Information Centre

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**Table 4.13 Number of prescription items<sup>1</sup> and prescription items per 100,000 population for the treatment of alcohol dependence prescribed in primary care<sup>2</sup> and dispensed in the community, by Strategic Health Authority<sup>3</sup>, 2012**

England			Numbers					
			Prescription items			Prescription items per 100,000 population <sup>6</sup>		
			Acamprosate			Acamprosate		
			Total	Calcium	Disulfiram	Total	Calcium	Disulfiram
England <sup>4,5</sup>			167,468	112,169	55,299	315	211	104
Q30	E18000001	North East	12,941	9,975	2,966	498	384	114
Q31	E18000002	North West	38,157	28,445	9,712	541	403	138
Q32	E18000003	Yorkshire and the Humber	24,015	13,152	10,863	454	249	205
Q33	E18000004	East Midlands	10,299	5,530	4,769	227	122	105
Q34	E18000005	West Midlands	19,548	13,347	6,201	349	238	111
Q35	E18000006	East of England	20,250	11,784	8,466	345	201	144
Q36	E18000007	London	11,738	9,313	2,425	143	114	30
Q37	E18000008	South East Coast	8,461	6,627	1,834	189	148	41
Q38	E18000009	South Central	8,403	5,046	3,357	201	121	80
Q39	E18000010	South West	13,176	8,672	4,504	249	164	85

1. Prescriptions are written on a prescription form known as a FP10. Each single item written on the form is counted as a prescription item.

2. This information was obtained from the Prescribing Analysis and Cost Tool (PACT) system, which covers prescriptions prescribed by GPs, nurses, pharmacists and others in England and dispensed in the community in the UK. Prescriptions written in hospitals /clinics that are dispensed in the community, prescriptions dispensed in hospitals and private prescriptions are not included in PACT data.

3. For data at SHA level, prescriptions written by a prescriber located in a particular SHA but dispensed outside that SHA will be included in the SHA in which the prescriber is based.

4. Prescriptions written in England but dispensed outside England are included.

5. Including unidentified Doctors (not possible for NHS Prescription Services of the Business Service Authority to allocate to a SHA).

6. Office for National Statistics (ONS) estimated resident population mid-2011 which are based on the 2011 Census. All age group figures have been used to calculate prescription items per 100,000 population. Information on ONS population data is available at:

<http://www.ons.gov.uk/ons/publications/re-reference-tables.html?edition=tcn%3A77-231847>

#### Source:

Prescribing Analysis and Cost (PACT) from the NHS Prescription Services of the Business Service Authority. Health and Social Care Information Population figures are 2010 Mid-Year Population Estimates, supplied by the Office for National Statistics, Population Estimates Unit.

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**Table 4.14 Alcohol-related deaths<sup>1,2</sup> by gender, 2001 to 2011**

England		Numbers										
ICD 10 code <sup>3</sup>		2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
<b>All persons</b>		<b>5,476</b>	<b>5,582</b>	<b>5,981</b>	<b>6,036</b>	<b>6,191</b>	<b>6,517</b>	<b>6,541</b>	<b>6,768</b>	<b>6,584</b>	<b>6,669</b>	<b>6,923</b>
F10	Mental and behavioural disorders due to alcohol	484	430	433	462	539	506	484	637	596	626	427
I42.6	Alcoholic cardiomyopathy	108	122	99	94	75	83	75	80	98	74	106
K70	Alcoholic liver disease	3,236	3,392	3,697	3,759	3,874	4,160	4,249	4,400	4,154	4,275	4,441
K73	Chronic hepatitis - not elsewhere specified	70	72	58	63	58	68	68	62	70	50	3
K74	Fibrosis and cirrhosis of the liver (excluding K74.3-K74.5)	1,406	1,407	1,511	1,466	1,427	1,490	1,432	1,367	1,435	1,399	1,384
K86.0	Alcoholic induced chronic pancreatitis	33	32	32	43	52	41	48	48	41	54	5
X45	Accidental poisoning by and exposure to alcohol	126	112	127	130	151	149	157	153	168	173	360
	Other causes <sup>4</sup>	13	15	24	19	15	20	28	21	22	18	45
<b>Men</b>		<b>3,576</b>	<b>3,631</b>	<b>3,970</b>	<b>3,922</b>	<b>4,096</b>	<b>4,272</b>	<b>4,236</b>	<b>4,473</b>	<b>4,316</b>	<b>4,439</b>	<b>4,518</b>
F10	Mental and behavioural disorders due to alcohol	337	306	320	326	400	349	321	434	424	445	300
I42.6	Alcoholic cardiomyopathy	95	93	88	78	59	74	66	68	78	64	93
K70	Alcoholic liver disease	2,146	2,275	2,513	2,461	2,602	2,769	2,814	2,966	2,750	2,877	2,943
K73	Chronic hepatitis - not elsewhere specified	22	16	14	14	12	14	10	16	23	6	0
K74	Fibrosis and cirrhosis of the liver (excluding K74.3-K74.5)	858	835	909	904	869	918	865	829	880	874	872
K86.0	Alcoholic induced chronic pancreatitis	19	24	22	34	43	33	35	39	29	37	5
X45	Accidental poisoning by and exposure to alcohol	90	70	86	91	100	96	106	110	117	120	257
	Other causes <sup>4</sup>	9	12	18	14	11	19	19	11	15	16	28
<b>Women</b>		<b>1,900</b>	<b>1,951</b>	<b>2,011</b>	<b>2,114</b>	<b>2,095</b>	<b>2,245</b>	<b>2,305</b>	<b>2,295</b>	<b>2,268</b>	<b>2,230</b>	<b>2,405</b>
F10	Mental and behavioural disorders due to alcohol	147	124	113	136	139	157	163	203	172	181	127
I42.6	Alcoholic cardiomyopathy	13	29	11	16	16	9	9	12	20	10	13
K70	Alcoholic liver disease	1,090	1,117	1,184	1,298	1,272	1,391	1,435	1,434	1,404	1,398	1,498
K73	Chronic hepatitis - not elsewhere specified	48	56	44	49	46	54	58	46	47	44	3
K74	Fibrosis and cirrhosis of the liver (excluding K74.3-K74.5)	548	572	602	562	558	572	567	538	555	525	512
K86.0	Alcoholic induced chronic pancreatitis	14	8	10	9	9	8	13	9	12	17	0
X45	Accidental poisoning by and exposure to alcohol	36	42	41	39	51	53	51	43	51	53	103
	Other causes <sup>4</sup>	4	3	6	5	4	1	9	10	7	2	17

1. Deaths occurring in each calendar year.

2. Data may include non-residents.

3. See Appendix A for further information about International Classification of Disease.

4. Some causes linked to alcohol consumption as defined by ONS resulted in a small number of deaths per year (less than ten). These have been grouped together and listed as 'other causes'. This includes the following ICD 10 codes: G31.2, G62.1, K29.2, X65 and Y15.

5. In January 2011 ONS introduced a new version of ICD-10 (version 2010) which replaced version 2001.2. This means that figures for 2011 will not be directly comparable to figures for 2001 - 2010. Analysis to assess the impact of the new coding has shown that between 2010 and 2011 some codes have shown a huge increase but this has been offset by a similar decrease in other code(s). Further information can be found on pages 4 - 5 of the ONS Statistical Bulletin: [http://www.ons.gov.uk/ons/dcp171778\\_276681.pdf](http://www.ons.gov.uk/ons/dcp171778_276681.pdf)

**Source:**

DH2 Mortality Statistics - Cause, No.s 28, 29, 30, 31 and 32, 2001, 2002, 2003, 2004, 2005 and Mortality statistics: Deaths registered in 2006 to 2011, Office for National Statistics.

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# Appendix A: Key sources

**Alcohol attributable fractions**

**Affordability data**

**General Lifestyle Survey**

**Health Survey for England**

**Hospital Episode Statistics**

**Infant Feeding Survey**

**International Classification of Diseases and related health problems (ICD)**

**Living Costs and Food Survey (LCFS)**

**Mortality statistics**

**Organisation for Economic Co-operation and Development (OECD) Health Data**

**Omnibus Survey**

**Prescription data**

**Psychiatric Morbidity Surveys**

**Smoking, Drinking & Drug Use among Young People in England**

Most of the sources referred to in this publication are National Statistics. National Statistics are produced to high professional standards set out in the Code of Practice for Official Statistics. It is a statutory requirement that National Statistics should observe the Code of Practice for Official Statistics. The United Kingdom Statistics Authority (UKSA) assesses all National Statistics for compliance with the Code of Practice.

Some of the statistics included in this publication are not National Statistics and are included here to provide a fuller picture; some of these are Official Statistics, whilst others are neither National Statistics nor Official Statistics. Those which are Official Statistics should still conform to the Code of Practice for Official Statistics, although this is not a statutory requirement. Those that are neither National Statistics nor Official Statistics may not conform to the Code of Practice for Official Statistics. Unless otherwise stated, all sources contained within this publication are considered robust. A brief explanation and short review of the quality of each of the sets of statistics used in this publication are provided below.

## Alcohol attributable fractions

The North West Public Health Observatory (NWPHO) have developed alcohol attributable fractions (AAFs) which take into account the level of risk all injuries and diseases attributable to alcohol consumption have on a patient being admitted to hospital. With commission from the Department of Health these AAF have been applied to data from Hospital Episode Statistics (HES) and Office for National Statistics (ONS) to give an estimation of the number of hospital admissions attributable to alcohol. Within this publication, two main measures of alcohol related admissions are presented: a broad

measure and a narrow measure. The broad measure is derived by summing the alcohol attributable fraction associated with each admission based on the diagnosis most strongly associated with alcohol out of all diagnoses (both primary and secondary). The narrow measure which is constructed in a similar way but counts only the fraction associated with the diagnosis in the primary position. Within each of these measures, the data can be broken down into admissions that are wholly and partially attributable to alcohol, according to the required purpose.

**Tables 4.1 to 4.5 and Table 4.11** show the number of admissions into hospital based on primary and secondary diagnoses attributable to the consumption of alcohol; **Tables 4.6 to 4.10** show the number of admissions based on the primary diagnosis only.

The number of alcohol-related admissions is based on the methodology developed by the NWPHO, which uses 47 indicators for alcohol-related illnesses, determining the proportion of a wide range of diseases and injuries that can be partly attributed to alcohol as well as those that are, by definition, wholly attributable to alcohol. Wholly attributable conditions are alcohol-specific by definition and so have an attributable fraction of one, whereas partially attributable conditions are those where some, but not all cases can be ascribed to alcohol consumption so have an attributable fraction of less than one. Where there is more than one alcohol-related condition among the diagnostic codes the condition with the largest condition is used. Where there are two or more codes with the maximum attributable fraction, the code from the earliest position is used. This method is employed to avoid double counting of the admission episodes related to alcohol and therefore each episode contributes to one cell in the table. The total number of alcohol-related admissions is arrived at by summing up the number of episodes counted against each alcohol-related condition.

Further information on the methodology can be found at;  
<http://www.nwph.net/nwpho/publications/AlcoholAttributableFractions.pdf>

A list of the ICD-10 codes used and the alcohol attributable fractions applied to each of these by age and sex can be found in **Tables A.2 and A.3**

The application of the NWPHO methodology was updated in summer 2010. As such, information about episodes estimated to be alcohol related may be slightly different from previously published data.

A review of the methodology used to estimate alcohol related admissions took place in the form of a public consultation led by the NWPHO working with the Department of Health and the Health and Social Care Information Centre (HSCIC). The consultation was launched on 31 May 2012 and ran for 12 weeks. The responses are currently being considered. Full details can be found on the NWPHO website at: [www.lape.org.uk](http://www.lape.org.uk)

## Affordability data

An important adjustment was introduced for the first time in *Statistics on Alcohol: England, 2011* so that the revised Real Households' Disposable Income (RHDI) index tracks, exclusively, 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. This meant that 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 alcohol index, and so 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 alcohol index

The alcohol price index in [Table 2.2](#) shows how much the average price of alcohol has changed compared with the base price (1980 in this bulletin).

The retail prices index (RPI) shows how much the prices of all items have changed compared with the base price (1980).

The relative alcohol price index is calculated in the following way:

$$(\text{alcohol price index} / \text{retail prices index}) * 100$$

This shows how the average price of alcohol has changed since the base (1980) compared with prices of all other items. A value greater than 100 shows that the price of alcohol has increased by more than inflation during that period, for example between January 1980 and 2012, the price of alcohol increased by 349.4%. After considering inflation at 263.1%, alcohol prices increased by 23.8% over the period, as shown by the relative index of 123.8.

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 obtained by carrying out the following 2 steps;

1. Calculate real households' disposable income index / total number of UK adults aged 18 and over
2. Rebase the resulting series so that 1980 = 100%.

Affordability of alcohol gives a measure of the relative affordability of alcohol, by comparing the relative changes in the price of alcohol, with changes in households' disposable income per capita over the same period (with both allowing for inflation). It is calculated in the following way;

$$(\text{adjusted real households' disposable income index} / \text{relative alcohol price index}) * 100$$

If the affordability index is above 100, then alcohol is relatively more affordable than in the base year, 1980. For example, in 2012 alcohol prices were 349.4% higher than in 1980 but, after taking inflation and households' disposable income per capita into account, alcohol was 60.9% more affordable, as shown by the affordability index of 160.9.

Price Indices and Inflation, Office for National Statistics. Available at:

<http://www.statistics.gov.uk/hub/economy/prices-output-and-productivity/price-indices-and-inflation>

Economic and Labour Market Review, Office for National Statistics. Available at:

<http://www.ons.gov.uk/ons/publications/index.html>

Final Mid-Year Population Estimates (2001 census based), Office for National Statistics. Available at:

<http://www.statistics.gov.uk/hub/population/population-change/population-estimates/index.html>

Affordability data can be found in Chapter 2 – Drinking behaviour among adults and children.

Both the unadjusted RHD index and the unadjusted affordability of alcohol index (as used in *Statistics on Alcohol: England 2010* and prior publications) are presented alongside the revised indices for comparability purposes in *Statistics on Alcohol: England 2011*.

# General Lifestyle Survey

From 2008, the General Household Survey (GHS) became a module of the Integrated Household Survey (IHS). In recognition, the survey was renamed the General Lifestyle Survey (GLF). Please refer to the IHS web page for further information:

<http://www.esds.ac.uk/government/ghs/>

The GLF collects information on a range of topics from people living in private households in Great Britain. Questions about drinking alcohol were included in the GLF every two years from 1978 to 1998. Following the review of the GHS, the questions about drinking in the last seven days form part of the continuous survey, and have been included every year from 2000 onwards. Questions designed to measure average weekly alcohol consumption were included from 2000 to 2002 and again in 2005 and 2006 but were not included in the 2007 questionnaire. Before 1988 questions about drinking were asked only of those aged 18 and over, but since then respondents aged 16 and 17 have answered the questions using a self-completion questionnaire.

## Updated method of converting volumes drunk to units

GHS 2007 presents an updated method of converting what respondents say they drink into standard alcohol units. In recent years, new types of alcoholic drink have been introduced, the alcohol content of some drinks has increased, and alcoholic drinks are now sold in more variable quantities than used to be the case. The GHS, in common with other surveys, has partially taken this into account: since 1998, alcopops and strong beer, lager and cider have been included as separate categories. However, it has recently also become necessary to reconsider the assumptions made in obtaining estimates of alcohol consumption, taking into account the following:

- increases in the size of glass in which wine is served on licensed premises;
- the increased alcoholic strength of wine;
- better estimates of the alcoholic strengths of beers, lagers and ciders.

For wine, it was decided to adopt a method which requires a question to be asked about glass size, which has the advantage that future changes in the average size of glass will be taken into account automatically.

It should be noted, that changing the way in which alcohol consumption estimates are derived does not in itself reflect a real change in drinking among the adult population.

The changes in conversion factors are summarised in [Table A.1](#).

Estimating alcohol consumption from survey data: updated method of converting volumes to units, 2007, Office for National Statistics. Available at:



<http://www.ons.gov.uk/ons/guide-method/method-quality/specific/gss-methodology-series/gss-methodology-series--37--estimating-alcohol-consumption-from-survey-data--updated-method-of-converting-volumes-to-units.pdf>.

In addition to the revised method, a new question about wine glass size was included in the GLF survey in 2008. Respondents are now asked whether they have consumed small (125 ml), standard (175 ml) or large (250 ml) glasses of wine. The data from this question are used when calculating the number of units of alcohol consumed by the respondent. It is now assumed that a small glass contains 1.5 units, a standard glass contains 2 units and a large glass contains 3 units. However, in 2006 and 2007 it was assumed that all respondents drank from a standard (175 ml) glass containing 2 units. The updated method has made little difference overall in the GLF, but has slightly reduced the proportion of women exceeding 3 units on their heaviest drinking day in the week before interview. There are two reasons for this. Firstly, when glass size was analysed by sex and age, for most groups the average size was close to the average assumed under the previous method but for women aged 45-64 average size was lower and for men and women aged 65 and over it was much lower. Secondly, approximately 60% of the units of alcohol consumed by women come from wine whereas only around 25% of men's units do so. This means that any change to the calculation of units of alcohol coming from wine has a much greater effect on the total units for women than on the total for men.

### **Move to calendar year**

Previous GHS reports were based on data collected over a full financial year from April to the following March. In 2005, the timeframe for the survey was changed from a financial year basis to calendar year basis. Where questions were the same in 2005 as in 2004/05, the final quarter of the 2004/05 collection has been added to the nine months of the 2005 survey data in order to provide estimates based on a full calendar year, and to ensure any seasonal variation is accounted for. However, questions on weekly alcohol consumption were not asked in 2004/05. As the 2004 survey ran from April 2004 to March 2005 any new questions introduced in the 2005 survey were only asked from April 2005. Thus data for these questions cannot be combined with estimates from the last quarter of the previous survey to give seasonally representative data. In order to assess the effect of this on the estimates of alcohol consumption, data for 2002, the last survey in which the questions covered the full year, were examined. The GHS 2005 report concluded that there was no statistically significant difference in average weekly consumption between April to December 2002 and January to March 2003. The GHS therefore assumes that the absence of data for January to March 2005 has not significantly affected the estimates of average weekly alcohol consumption. The bases shown in the GHS 2005 report for such questions (including weekly alcohol consumption) have been scaled to account for this. Future GHS surveys will run from January to December.

In 2011, 7,960 households in Great Britain took part in the GLF and around 15,000 interviews were conducted with adults aged 16 and older. The household response rate was 72 per cent.



## Longitudinal data

Another change in 2005 was that, in line with European requirements, the GHS adopted a longitudinal sample design, in which households remain in the sample for four years (waves) with one quarter of the sample being replaced each year. Thus approximately three quarters of the 2005 sample were re-interviewed in 2006. A major advantage of the longitudinal component of the design is that it is more efficient at detecting statistically significant estimates of change over time than the previous cross-sectional design. This is because an individual's responses to the same question at different points in time tend to be positively correlated, and this reduces the standard errors of estimates of change.

## Changes to the GLF

Following consultation with users, the ONS determined not to continue GLF in its current format. Full details are available from the ONS website in the 'Response to the future of the GLF survey consultation' document: <http://www.ons.gov.uk/ons/about-ons/user-engagement/consultations-and-surveys/archived-consultations/2011/the-future-of-the-glf-survey/response-to-the-future-of-the-glf-survey-consultation.pdf>.

Questions on drinking (except average weekly alcohol consumption) are to be instead included in the new ONS Opinions and Lifestyles Survey. Average weekly alcohol consumption were included in the Health Survey for England for 2011 and 2012. Further information on the consultation can also be found on the ONS consultation page.

General Lifestyle Survey 2011. Office for National Statistics 2013. Available at: <http://www.ons.gov.uk/ons/rel/ghs/general-lifestyle-survey/2011/index.html>

The General Lifestyle Survey is a National Statistic.

## Health Survey for England

The Health Survey for England (HSE) is an annual survey, monitoring the health of the population which is currently commissioned by the Health and Social Care Information Centre (the HSCIC), and before April 2005 was commissioned by the Department of Health. The HSE has been designed and carried out since 1994 by the Joint Health Surveys Unit of the National Centre for Social Research (NatCen) and the Department of Epidemiology and Public Health at University College London Medical School (UCL). All surveys have covered the adult population aged 16 and over living in private households in England. Since 1995, the surveys have also covered children aged two to 15 living in households selected for the survey, and since 2001 infants aged under two have been included as well as older children. Trend tables are also published each year updating key trends on a number of health areas.

Each survey in the series includes core questions and measurements such as blood pressure, anthropometric measurements and analysis of saliva and urine samples, as well as modules of questions on specific issues that vary from year to year. In recent years, the core sample has also been augmented by an additional boosted sample from a specific population subgroup, such as minority ethnic groups, older people or, as in 2006 and 2007, children.

This statistical report uses data from HSE 2007 and 2011. The primary focus of the 2007 HSE report was knowledge, attitudes and behaviour in respect of healthy lifestyles. The report investigated associated lifestyle factors such as physical activity, diet, smoking and drinking, and also assessed the immediate impact of the smoking ban in public places introduced in England in July 2007 as a secondary focus.

Non-response weighting was introduced to the HSE in 2003, and has been used in all subsequent years. All 2007 data in the HSE 2007 are weighted. The unweighted bases show the number of participants involved, whereas, the weighted bases show the relative sizes of the various sample elements after weighting, reflecting their proportions in the English population, so that data from different columns can be combined in their correct proportions. The absolute size of the weighted bases has no particular significance, since they have been scaled to the achieved sample size. Further details are provided within the HSE 2007.

Since 1995, children's data have each year been weighted to adjust for the probability of selection, since a maximum of two children are selected in each household. This ensures that children from larger households are not under-represented. Since 2003, non-response weighting has also been applied in addition to selection weighting.

Chapter 6 of HSE 2011 contains further details on drinking units.

Data from the HSE 2011 are used in Chapter 2  
Health Survey for England 2011: Health, social care and lifestyles. Available at:

*Main report:*

<http://www.hscic.gov.uk/catalogue/PUB09300>

Data from the HSE 2007 are used in Chapter 3.

Health Survey for England 2007: Healthy lifestyles: Knowledge, Attitudes and behaviour.  
Available at:

*Main report:*

<http://www.hscic.gov.uk/pubs/hse07healthylifestyles>

*Trend tables:*

<http://www.hscic.gov.uk/article/2021/Website-Search?productid=1361&q=hse+trend+tables+2007&sort=Relevance&size=10&page=2&area=both#top>

The Health Survey for England is a National Statistic.

# Hospital Episode Statistics

Hospital Episode Statistics (HES) is a data warehouse containing details of all admissions to NHS hospitals in England. NHS hospital admissions in England have been recorded using the HES system 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 is available from 1989-90 onwards. During this time there have been ongoing improvements in data quality and coverage, which particularly affect earlier data years. As well as this, there have been a number of changes to the classifications used within HES records. Changes have also been made to the organisation of the NHS. Figures have not been adjusted for shortfalls in data (i.e. the data are ungrossed)

HES data are classified using International Classification of Diseases (ICD). The 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 International Classification of Diseases, Tenth Revision (ICD-10), published by the World Health Organisation (WHO) is currently in use.

A finished admission episode (FAE) is the first period of inpatient care under one consultant within one healthcare provider. Finished admission episodes are counted against the year in which the admission episode finishes. Please note that admissions do not represent the number of inpatients, as a person may have more than one admission within the year.

The primary diagnosis is the first of up to 20 (14 from 2002-03 to 2006-07 and 7 prior to 2002-03) diagnosis fields in the Hospital Episode Statistics (HES) data set and provides the main reason why the patient was admitted to hospital. As well as the primary diagnosis, there are up to 19 (13 from 2002-03 to 2006-07 and 6 prior to 2002-03) secondary diagnosis fields in Hospital Episode Statistics (HES) that show other diagnoses relevant to the episode of care.

Tables 4.1 to 4.5 and Table 4.11 in Chapter 4 of this report are based on finished admission episodes where an alcohol related diagnosis is recorded in any of the 20 primary and secondary diagnosis fields in a HES record. Tables 4.6 to 4.10 are based on finished admission episodes with a primary diagnosis of a disease, injury or condition wholly or partially attributable to the consumption of alcohol. The ICD-10 codes used, as developed by the North West Public Health Observatory (NWPHO) are shown in Table A.2, Table A.3 and Table A.4. Further information on the work alcohol attributable fractions as developed by the NWPHO can be found at the beginning of this appendix.

The HES Service was run by Northgate Information Solutions on behalf of the Health and Social Care Information Centre. Northgate Information Solutions will continue to process the data until the HSCIC take over for the 2013-14 data.

The website <http://www.hscic.gov.uk/hes> is run by the HES team at the Health and Social Care Information Centre.

## Infant Feeding Survey

Statistics on drinking during pregnancy are taken from Infant Feeding Survey (IFS) 2010. The (IFS) covers the population of new mothers in the United Kingdom, and is carried out every 5 years, the first in 1975. In 2010, the survey was conducted by IFF Research with a sample size of around 10,800 by the end of stage 3 of the survey. The main aim of the survey is to provide figures on the incidence, prevalence and duration of breastfeeding and other feeding practises. The survey also collects information on the smoking and drinking behaviours of women before, during and after pregnancy. England level figures have been presented for this report.

Drinking during pregnancy is reported on in Chapter 2 – Drinking behaviour among adults and children.

Infant Feeding 2010, The Health and Social Care Information Centre. 2012. Available at: <http://www.hscic.gov.uk/catalogue/PUB08694>

The Infant Feeding Survey is a National Statistic.

## International Classification of Diseases and related health problems (ICD)

The Tenth Revision of the ICD codes (ICD-10) is the latest in a series of classifications started in 1993, and incorporates a major reorganisation of the structure and groupings used in the ninth revision (ICD-9). An alphanumeric coding scheme replaced the numeric one, e.g. alcohol dependence syndrome changed from 303 in ICD 9 to F10.2 in ICD 10. The regrouping of classifications means that classifications may not map precisely between the two revisions - the nearest equivalent to ICD 9 571.1 (acute alcoholic hepatitis), is the ICD 10 code K70.1 (alcoholic hepatitis) and ICD 10 code K70.9 (alcoholic liver disease, unspecified).

Deaths in England and Wales were classified using ICD 9 to 2000 and by ICD 10 for 1999, and 2001 onwards. Hospital Episode Statistics (HES) have been classified using ICD 10 for 1995/96 onwards.

ICD 10 codes are used in this bulletin in Chapter 4 – Alcohol-related costs, ill health and mortality and are shown in [Table A.2](#), [Table A.3](#) and [Table A.4](#).

## Living Costs and Food Survey

In 2008 the Expenditure and Food Survey (EFS) was renamed as the Living Costs and Food Survey (LCFS) when it became part of the Integrated Household Survey (IHS) run by the Office for National Statistics (ONS). The Expenditure and Food Survey (EFS) was formed by bringing together the Family Expenditure Survey and the National Food Survey (FES and NFS). The LCFS provides data on food purchases and expenditure. Historical estimates based on NFS are available from 1940 to 2000. Households selected for the LCF 2011 were asked to complete an interview covering information about the household, regular items of household expenditure and income details. Following this, all adults within the household are asked to keep a diary to record all items of expenditure in the following two weeks. Children aged 7 to 15 years are also asked to keep a record of their personal expenditure. Note that the diaries record expenditure and quantities of purchases of food and drink rather than consumption of food and drink.

Historical estimates of household purchases between 1974 and 2000 have been adjusted to align with the level of estimates from the Family Expenditure Survey in 2000. These estimates of household purchases are broadly comparable with estimates of household purchases from the LCSF and EFS which commenced in April 2001.

The aligned estimates are generally higher than the original ones and indicate that the scaling has partially corrected for under-reporting in the NFS. Under-reporting is likely to be lower in the LCSF because it does not focus on diet but on expenditure across the board and is largely based on till receipts. However it is necessary to be aware that there is a change in methodology which makes the estimate of the year on year change unreliable

between 2000 and 2001/02. The largest adjustments were for confectionery, alcoholic drinks, beverages and sugar and preserves. Details of the adjustments to the NFS estimates can be found in Family Food 2002/03.

The latest consumption and purchased quantities of alcoholic drinks from the 2011 LCFS can be found in the Family Food module of the LCFS 2011 published by the Department for Environment, Food and Rural Affairs (DEFRA) and the Office for National Statistics.

Data from the Living Costs and Food Survey can be found in Chapter 2 – Drinking behaviour among adults and children.

Expenditure and Family Food Datasets of the Living Costs and Food Survey (LCFS) 2011. DEFRA and ONS. Available at:

<http://www.defra.gov.uk/statistics/foodfarm/food/familyfood/datasets/>

The Living Cost and Food Survey is a National Statistic.

## Mortality statistics

The Office for National Statistics (ONS) produces annual statistics on numbers of deaths by cause in England and Wales. Registered deaths in England and Wales are classified using ICD 9 to 2000 and by ICD 10 for both 1999, and from 2001 onwards. A list of the codes used are presented in [Table A.4](#). The majority of information published using ONS mortality data on drinking relate to England and Wales, and therefore differ from those shown in this report, which covers England only. This information is presented in Chapter 4 of this report – Drinking-related costs, ill-health and mortality, and has been obtained from the ONS mortality statistics data set.

In 2006, ONS revised their definition of alcohol-related deaths to include a number of extra diseases that are wholly attributable to alcohol consumption. They do not currently consider deaths from causes that can be partly attributable to alcohol, however the North West Public Health Observatory (NWPHO) report, Alcohol-attributable fractions for England, does include analysis of deaths that can be attributed to alcohol consumption based on the same methodology as that for alcohol-related hospital admissions (see above).

Mortality statistics: Deaths registered in 2011, Office for National Statistics, 2012. Available at:

<http://www.ons.gov.uk/ons/rel/vsob1/mortality-statistics--deaths-registered-in-england-and-wales--series-dr-/2011/index.html>

<http://www.statistics.gov.uk/hub/health-social-care/health-of-the-population/causes-of-death/index.html>

Mortality Statistics produced by ONS are National Statistics

## **Organisation for Economic Co-operation and Development (OECD) Health Data 2011 – Frequently Requested Data**

Released during November 2012, this report offers the most comprehensive source of comparable statistics on health and health systems across OECD countries. It is an essential tool for health researchers and policy advisors in governments, the private sector and the academic community, to carry out comparative analyses and draw lessons from international comparisons of diverse health care systems. Data from this report can be found in Chapter 2 (Drinking behaviour in Adults and Children)

Health at a Glance 2012. Organisation for Economic Co-operation and Development, 2012.  
<http://www.oecd.org/els/health-systems/HealthAtAGlanceEurope2012.pdf>

Definitions. Sources and Methods can be found at:

[http://www.oecd.org/document/30/0,3746,en\\_2649\\_33929\\_12968734\\_1\\_1\\_1\\_1,00.html](http://www.oecd.org/document/30/0,3746,en_2649_33929_12968734_1_1_1_1,00.html)

## **Omnibus Survey**

The Opinions Survey is a multi-purpose survey carried out by the Office for National Statistics for use by government departments and other public or non-profit making bodies. Interviewing is carried out every month and each month's questionnaire covers a variety of topics, reflecting different users' requirements. In 2009, interviews were conducted with around 1,200 adults aged 16 or over, throughout Great Britain each month, during the period in which questions on alcohol were included.

Questions on drinking are included on an ad-hoc basis, usually for two months. In 2009, data on drinking was collected during April and May and included: Consumption of different types of drink; Drinking in the last week; Keeping a check on alcohol consumption; Knowledge of daily drinking limits; Frequency of Purchases and Awareness of unit labelling. In this bulletin information on Drinking-related knowledge and behaviour is reported in Chapter 3 – Knowledge and attitudes to alcohol.

The Omnibus Survey is currently discontinued so information from the last publication, *Drinking: Adults' behaviour and knowledge in 2009*<sup>2</sup> is used, in chapter 2.

Drinking: Adults' Behaviour and Knowledge in 2009, Office for National Statistics. Available at:



<http://www.ons.gov.uk/ons/release-calendar/index.html?pagetype=calendar-entry&pageSize=50&newquery=drinking+behaviour&sortBy=releaseDate&sortDirection=D ESCENDING&releaseDateRangeType=allDates>

The Omnibus Surveys are National Statistics.

## Prescription data

There are two main drugs prescribed for the treatment of alcohol dependence; Acamprosate Calcium (Campral) and Disulfiram (Antabuse).

Information on prescription items prescribed in primary care settings in England are obtained from the Prescribing Analysis and Cost Tool (PACT) system. The PACT 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 are also included but prescriptions dispensed in hospitals and private prescriptions are not included in PACT data.

Prescriptions are written on a prescription form known as a FP10. Each single item written 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.

NHS Prescription Services have stated that due to the complex and manual processes involved there may be inaccuracies in capturing prescription information which are then reflected in the data. Internal quality assurance processes exist and currently the prescription processing activity is internally audited to 97.5 per cent accuracy (i.e. at least 97.5 per cent of prescriptions are recorded accurately).

Preparations where the number of items dispensed is small are more likely to be significantly affected by any processing errors.

## Psychiatric Morbidity Surveys

A series of national surveys of psychiatric morbidity have been commissioned by the Department of Health, the Scottish Executive and the National Assembly for Wales and carried out by the Office for National Statistics (ONS). Each survey has covered a different population group for example, adults aged 16 to 64 living in private households, prisoners, adults living in institutions, homeless people, people with psychotic disorders, children and adolescents, and young people looked after by local authorities.



The survey of psychiatric morbidity among adults in private households in Great Britain was first carried out in 1993 with a second survey conducted in 2000. In 2007 The Health and Social Care Information Centre commissioned the National Centre for Social Research (NatCen) to carry out a third Adult psychiatric morbidity survey (APMS) covering adults living in private households in England.

The survey assessed the prevalence of hazardous and harmful drinking using the Alcohol Use Disorders Identification Test (AUDIT). This is a questionnaire consisting of ten questions, which can each score a maximum of four points. For the purpose of the survey anyone who scored a total of over eight on the AUDIT test was considered to be a hazardous drinker, while those scoring over 16 were considered to be harmful drinkers. The questions included in the AUDIT questionnaire can be found in [Table A.5](#).

The AUDIT test was designed by the World Health Organisation as a tool to identify hazardous, harmful and dependent drinkers. [Table A.6](#) shows which questions are designed to identify hazardous, harmful and dependent drinking. The AUDIT manual for primary care workers suggests that a cut-off score of eight will capture most of the drinkers who can be classed as hazardous or harmful. The identification of these types of drinking behaviours is based on which of the ten questions in the test the respondent scored points on. Therefore it would be possible to score less than 16 points on the test, yet score most of the points on the harmful drinking questions.

The survey assessed alcohol dependence from answers to a different self-completion questionnaire (Severity of Alcohol Dependence Questionnaire) which consists of 20 questions focusing on the three components of dependence: loss of control, symptomatic behaviour and binge drinking. The 2007 APMS used the community version of the Severity of Alcohol Dependence Questionnaire (SADQ-C). The questions included in the SADQ-C questionnaire can be found in questionnaire documentation in Appendix E of the Adult psychiatric morbidity survey report.

Adult psychiatric morbidity in England, 2007: results of a household survey. The Health and Social Care Information Centre. Available at:

<http://www.hscic.gov.uk/pubs/psychiatricmorbidity07>

This report is a National Statistic.

## Smoking, Drinking & Drug Use among Young People in England

Between 1982 and 2003, surveys of secondary school children in England were carried out for the Department of Health. This was done by the Office of Population Census and Surveys (OPCS) between 1982 and 1994, by the Office for National Statistics (ONS) between 1994 and 1999 and by the National Centre for Social Research (NatCen) and the

National Foundation for Educational Research (NFER) between 2000 and 2003. Since 2004, the survey has been run by NatCen and NFER on behalf of the Health and Social Care Information Centre.

From 1982 to 1988, the survey was solely concerned with monitoring trends of young people and smoking. In 1988, questions on alcohol consumption were added and have been included in the survey ever since. The 1998 survey was also expanded to include questions on drug use. The core of the questionnaire comprises of questions about the prevalence of drug use, smoking and drinking and, since 2000, the remainder of the questionnaire focuses, in alternate years, on either smoking and drinking or drug taking. The most recent survey in the series, Smoking, Drinking and Drug Use among Young People in England in 2010 (SDD10).focused on smoking and drinking..

The target population for the survey is secondary school children in England, in years 7 to 11, from almost all types of school (comprehensive, secondary modern, grammar and other secondary schools), both state and public. Only special schools and hospital schools are excluded from the survey.

The survey uses a stratified design in which every eligible child has an equal chance of inclusion in the study. The survey is conducted using a confidential questionnaire, which the pupils fill in individually. Fieldwork for the SDD 2011 report was carried out during the autumn term of 2011 and 219 schools agreed to take part in the survey, resulting in 6,519 completed questionnaires.

### Changes to questions on alcohol

The questionnaire development for the 2002 survey included cognitive testing of questions about alcohol consumption in the last week. This cognitive development work focused on children's comprehension of the categories of drink asked about in the survey and the language used in the questionnaire.

The cognitive work on alcohol consumption found that:

- 'Alcopops' was a widely used and commonly understood term among young people, but 'pre-mixed alcoholic drinks' was not;
- There was some confusion about how strong shandy should be before it counted as a proper alcoholic drink; and
- There were some brands and types of drink, such as champagne, that young people have difficulty classifying.

As a result of these findings a number of changes were made in 2002 to the questions asking about alcohol consumption in the last week.

First, references to 'alcopops and pre-mixed alcoholic drinks' were replaced with just 'alcopops'. Second, a question asking about the composition of shandy usually drunk was added to the end of the set of questions asking about drinking shandy in the last week.

Finally, an additional set of questions was added, asking whether any types of alcohol had been drunk, other than the categories already asked about (i.e. alcopops; beer, lager and cider; Martini and sherry; shandy; spirits and liqueurs; and wine). The examples of spirits and liqueurs and alcopops given were updated to reflect those young people were most likely to have drunk or least likely to be able to classify.

These changes are likely to have only a very minor effect on comparability and estimates of alcohol consumption in the last week for the following reasons.

- Where new questions were introduced, these were placed at the end of a section to minimise any effect on how preceding questions were answered.
- Analysis of the quantities of other alcoholic drinks that were reported suggested that the 'other types of alcohol' questions were not completed very reliably. Therefore answers from this additional set of questions have not been included in survey estimates of amount of alcohol drunk, and comparability with how these estimates were derived in surveys before 2002 has been retained.
- The questions measuring drinking in the last week are regularly updated to reflect changes in the drinks market: 'alcopops' was introduced as a new category of drink in 1996 and the list of example brands is updated annually. Therefore estimates have not been strictly comparable year-on-year.

### Converting consumption of alcohol into units

Since 1990, the multipliers used to convert drinks into units of alcohol have been based on those first used in the 1990 General Household Survey (GHS). In the intervening years, there have been significant changes to the way English people drink. The average alcohol content of beer and wine has increased, and standard glass sizes in pubs, bars and restaurants are now more diverse. In response, the 2006 GHS and the Health Survey for England (HSE) both published in January 2008, introduced changes in the method by which reported alcohol consumption by adults is converted into units of alcohol. To conform with changes to these surveys, the way in which estimates of alcohol consumption are calculated in this survey has also been revised this year. The original and revised equivalents used in Smoking, Drinking and Drug Use among Young People in England to estimate the number of units drunk are shown in [Table A.7](#).

Smoking, Drinking and Drug Use among Young People in England in 2011. Health and Social Care Information Centre, 2012. Available at:

<http://www.hscic.gov.uk/catalogue/PUB06921>

This is a National Statistic.

## List of Tables

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- A.2 ICD-10 codes for alcohol related hospital admissions
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**Table A.1 Original and improved factors for converting alcohol volume to units**

Type of drink	Usual volume (ml)	Original conversion factor (units)	Improved conversion factor (units)
<b>Normal strength beer, lager, cider</b>			
half pint	284	1.0	1.0
small can/bottle	330	1.0	1.5
large can/bottle	440	1.5	2.0
<b>Strong beer, lager, cider (ABV = 6%)</b>			
half pint	284	1.5	2.0
small can/bottle	330	1.5	2.0
large can/bottle	440	2.3	3.0
<b>Table wine</b>			
glass – 125 ml	125	.	1.5
glass – 175 ml	175	.	2.0
glass – 250 ml/small can	250	.	3.0
glass - size unspecified	170	1.0	2.0
<b>Fortified wine</b>			
small glass	50	1.0	1.0
<b>Spirits</b>			
single	25	1.0	1.0
<b>Alcopops</b>			
bottle	275	1.5	1.5

## Table A.2 ICD-10 codes for alcohol related hospital admissions

ICD-10 code and definition	
<b>Wholly attributable</b>	
<b>F10</b>	<b>Mental and behavioural disorders due to use of alcohol</b>
F10.0	Acute intoxication
F10.1	Harmful use
F10.2	Dependence syndrome
F10.3	Withdrawal state
F10.4	Withdrawal state with delirium
F10.5	Psychotic disorder
F10.6	Amnesic syndrome
F10.7	Residual and late-onset psychotic disorder
F10.8	Other mental and behavioural disorders due to use of alcohol
F10.9	Unspecified mental and behavioural disorders due to use of alcohol
<b>K70</b>	<b>Alcoholic liver disease</b>
K70.0	Alcoholic fatty liver
K70.1	Alcoholic hepatitis
K70.2	Alcoholic fibrosis and sclerosis of liver
K70.3	Alcoholic cirrhosis of liver
K70.4	Alcoholic hepatic failure
K70.9	Alcoholic liver disease, unspecified
<b>T51</b>	<b>Toxic effect of alcohol</b>
T51.0	Toxic effect of ethanol
T51.1	Toxic effect of methanol
T51.9	Toxic effect of alcohol, unspecified
<b>Other wholly - attributable conditions</b>	
E24.4	Alcohol-induced pseudo-Cushing's syndrome
G31.2	Degeneration of nervous system due to alcohol
G62.1	Alcoholic polyneuropathy
G72.1	Alcoholic myopathy
I42.6	Alcoholic cardiomyopathy
K29.2	Alcoholic gastritis
K86.0	Chronic pancreatitis (alcohol induced)
X45	Accidental poisoning by and exposure to alcohol
<b>Partly attributable</b>	
<b>Accidents and injuries</b>	
W78-W79	Inhalation of gastric contents/Inhalation and ingestion of food causing obstruction of the respiratory tract
W00-W19	Fall injuries
W24-W31	Work/machine injuries
W32-W34	Firearm injuries
W65-W74	Drowning
X00-X09	Fire injuries
X31	Accidental excessive cold
<b>Violence</b>	
X60-X84, Y10-Y33	Intentional self-harm/Event of undetermined intent
X85-Y09	Assault
<b>Transport accidents</b>	
V02-V04 (.1, .9), V06.1, V09.2, V09.3	Pedestrian traffic accidents
for codes see footnote	Road traffic accidents – non-pedestrian
V90-V94	Water transport accidents
V95-V97	Air/space transport accidents
<b>Spontaneous abortion</b>	
O03	Spontaneous abortion
<b>Digestive</b>	
K22.6	Gastro-oesophageal laceration-haemorrhage syndrome
K73, K74	Unspecified liver disease
K85, K86.1	Acute and chronic pancreatitis
I85	Oesophageal varices
<b>Cancer</b>	
C00-C14	Malignant neoplasm of lip, oral cavity and pharynx
C15	Malignant neoplasm of oesophagus
C32	Malignant neoplasm of larynx
C18	Malignant neoplasm of colon
C20	Malignant neoplasm of rectum
C22	Malignant neoplasm of liver and intrahepatic bile ducts
C50	Malignant neoplasm of breast
<b>Hypertensive diseases</b>	
I10-I15	Hypertensive diseases
<b>Cardiac arrhythmias</b>	
I47-I48	Cardiac arrhythmias
<b>Other partly-attributable conditions</b>	
G40-G41	Epilepsy and Status epilepticus
I60-I62, I69.0-I69.2	Haemorrhagic stroke
I63-I66, I69.3, I69.4	Ischaemic stroke
L40 excluding cirrhosis	Psoriasis
L40.5	

Note: ICD-10 codes for non-pedestrian road traffic accidents are V12-V14 (.3 -.9), V19.4-V19.6, V19.9, V20-V28 (.3 -.9), V29-V79 (.4 -.9), V80.3-V80.5, V81.1, V82.1, V82.9, V83.0-V86 (.0 -.3), V87.0-V87.9, V89.2, V89.3, V89.9

**Table A.3 Indicator Conditions and Fractions**

Category	ICD code	ICD name	Alcohol Attributable Fraction																Change from previous definition			
			0-15		16-24		25-34		35-44		45-54		55-64		65-74		75+					
			M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F				
Alcohol specific (Chronic)	1 E24.4	Alcohol-induced pseudo-Cushing's syndrome	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
	1 G31.2	Degeneration of nervous system due to alcohol	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
	1 G62.1	Alcoholic polyneuropathy	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
	1 G72.1	Alcoholic myopathy	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
	1 I42.6	Alcoholic cardiomyopathy	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
	1 K29.2	Alcoholic gastritis	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
	1 K70	Alcoholic liver disease	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	K70 split out from K70+K74. K70 on own is wholly attributed		
	1 K86.0	Chronic pancreatitis (alcohol induced)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Alcohol specific (Mental/Beh)	2 F10	Mental and behavioural disorders due to use of alcohol	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Alcohol specific (Acute)	3 T51.0	Ethanol poisoning	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
	3 T51.1	Methanol poisoning	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
	3 T51.9	Toxic effect of alcohol, unspecified	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
	3 X45	Accidental poisoning by and exposure to alcohol	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Accidents & Injury (Acute)	4 W00-W19	Fall injuries	0.00	0.00	0.22	0.14	0.22	0.14	0.22	0.14	0.22	0.14	0.22	0.14	0.12	0.04	0.12	0.04				
	4 W24-W31	Work/machine injuries	0.00	0.00	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07			
	4 W32-W34	Firearm injuries	0.00	0.00	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25			
	4 W65-W74	Drowning	0.00	0.00	0.34	0.34	0.34	0.34	0.34	0.34	0.34	0.34	0.34	0.34	0.34	0.34	0.34	0.34	0.34			
	4 W78-W79	Inhalation of gastric contents/Inhalation and ingestion of food causing obstruction of the respiratory tract	0.00	0.00	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25			
	4 X00-X09	Fire injuries	0.00	0.00	0.38	0.38	0.38	0.38	0.38	0.38	0.38	0.38	0.38	0.38	0.38	0.38	0.38	0.38	0.38			
	4 X31	Accidental excessive cold	0.00	0.00	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25			
	Violence (Acute)	5 X60-X84, Y10-Y33	Intentional self-harm/Event of undetermined intent	0.00	0.00	0.34	0.35	0.34	0.33	0.35	0.34	0.37	0.34	0.36	0.32	0.31	0.25	0.27	0.20			
Transport accidents (Acute)	5 X85-Y09	Assault	0.00	0.00	0.27	0.27	0.27	0.27	0.27	0.27	0.27	0.27	0.27	0.27	0.27	0.27	0.27	0.27	0.27			
	6 §§	Pedestrian traffic accidents	0.00	0.00	0.35	0.16	0.45	0.19	0.46	0.21	0.46	0.21	0.23	0.03	0.23	0.03	0.23	0.03	All AFs have changed			
	6 §	Road traffic accidents (driver/rider)	0.00	0.00	0.21	0.09	0.33	0.15	0.24	0.12	0.24	0.12	0.09	0.03	0.09	0.03	0.09	0.03	All AFs have changed			
	6 V90-V94	Water transport accidents	0.00	0.00	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20			
	6 V95-V97	Air/space transport accidents	0.00	0.00	0.16	0.16	0.16	0.16	0.16	0.16	0.16	0.16	0.16	0.16	0.16	0.16	0.16	0.16	0.16			
	Spontaneous abortion (Acute)	7 O03	Spontaneous abortion	0.00	0.00	0.00	0.23	0.00	0.21	0.00	0.22	0.00	0.21	0.00	0.20	0.00	0.15	0.00	0.12			
Digestive (Chronic)	8 K22.6	Gastro-oesophageal laceration-haemorrhage syndrome	0.00	0.00	0.47	0.47	0.47	0.47	0.47	0.47	0.47	0.47	0.47	0.47	0.47	0.47	0.47	0.47	0.47			
	8 K73, K74	Chronic hepatitis, not elsewhere classified and Fibrosis and cirrhosis of liver	0.00	0.00	0.77	0.67	0.76	0.59	0.74	0.60	0.79	0.59	0.77	0.57	0.71	0.48	0.61	0.38		K74 split out from K70+K74 and K73 added. AFs differ to those for K70+K74		
	8 K85, K86.1	Acute and chronic pancreatitis	0.00	0.00	0.27	0.19	0.27	0.16	0.26	0.16	0.30	0.16	0.27	0.14	0.22	0.10	0.16	0.07	All AFs have changed			
	8 I85	Oesophageal varices	0.00	0.00	0.77	0.67	0.76	0.59	0.74	0.60	0.79	0.59	0.77	0.57	0.71	0.48	0.61	0.38	All AFs have changed			
	Cancer (Chronic)	9 C00-C14	Malignant neoplasm of lip, oral cavity and pharynx	0.00	0.00	0.50	0.40	0.50	0.35	0.49	0.36	0.53	0.35	0.50	0.33	0.44	0.26	0.36	0.20		All AFs have changed	
	9 C15	Malignant neoplasm of oesophagus	0.00	0.00	0.32	0.23	0.31	0.20	0.30	0.20	0.34	0.20	0.32	0.18	0.26	0.14	0.20	0.10	All AFs have changed			
	9 C32	Malignant neoplasm of larynx	0.00	0.00	0.34	0.25	0.33	0.21	0.32	0.22	0.36	0.21	0.34	0.20	0.28	0.15	0.22	0.11	All AFs have changed			
	10 C16	Malignant neoplasm of stomach																No longer included				
	10 C18	Malignant neoplasm of colon	0.00	0.00	0.05	0.03	0.05	0.03	0.04	0.03	0.05	0.03	0.05	0.03	0.04	0.02	0.03	0.01	All AFs have changed			
	10 C20	Malignant neoplasm of rectum	0.00	0.00	0.08	0.06	0.08	0.05	0.08	0.05	0.09	0.05	0.08	0.05	0.07	0.03	0.05	0.03	All AFs have changed			
Other chronic diseases (low AF)	10 C22	Malignant neoplasm of liver and intrahepatic bile ducts	0.00	0.00	0.16	0.11	0.15	0.10	0.15	0.10	0.17	0.10	0.16	0.09	0.13	0.07	0.10	0.05		All AFs have changed		
	10 C50	Malignant neoplasm of breast	0.00	0.00	0.00	0.09	0.00	0.08	0.00	0.09	0.00	0.09	0.00	0.08	0.00	0.06	0.00	0.04	All AFs have changed			
	10 I10-I15	Hypertensive diseases	0.00	0.00	0.34	0.24	0.33	0.19	0.32	0.20	0.37	0.20	0.34	0.18	0.27	0.13	0.20	0.09	All AFs have changed			
	10 I47-I48	Cardiac arrhythmias	0.00	0.00	0.35	0.36	0.36	0.35	0.37	0.35	0.38	0.35	0.37	0.33	0.34	0.27	0.30	0.22				
	10 I50-I51	Heart failure	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00				
	Other diseases (low AF)	11 G40-G41	Epilepsy and Status epilepticus	0.00	0.00	0.56	0.64	0.58	0.59	0.58	0.61	0.61	0.61	0.61	0.57	0.51	0.45	0.42	0.35			
	11 I60-I62, I69.0-I69.2	Haemorrhagic stroke	0.00	0.00	0.31	0.20	0.30	0.15	0.27	0.15	0.34	0.15	0.30	0.13	0.24	0.10	0.16	0.06	All AFs have changed			
	11 I63-I66, I69.3, I69.4	Ischaemic stroke	0.00	0.00	0.16	0.03	0.13	0.00	0.08	0.00	0.18	0.00	0.12	0.00	0.06	0.00	0.00	0.00	All AFs have changed			
	11 L40 excluding cirrhosis L40.5	Psoriasis	0.00	0.00	0.34	0.33	0.34	0.33	0.35	0.33	0.36	0.32	0.35	0.31	0.33	0.26	0.30	0.22				
§ V12-V14 (.3 -.9), V19.4-V19.6, V19.9, V20-V28 (.3 -.9), V29-V79 (.4 -.9), V80.3-V80.5, V81.1, V82.1, V82.9, V83.0-V86 (.0 -.3), V87.0-V87.9, V89.2, V89.3, V89.9																						
§§ V02-V04 (.1, .9), V06.1, V09.2, V09.3																						

**Table A.4 National Statistics definition of alcohol-related deaths**

ICD-10 code and definition	
F10	Mental and behavioural disorders due to use of alcohol
G31.2	Degeneration of nervous system due to alcohol
G62.1	Alcoholic polyneuropathy
I42.6	Alcoholic cardiomyopathy
K29.2	Alcoholic gastritis
K70	Alcoholic liver disease
K73	Chronic hepatitis, not elsewhere classified
K74	Fibrosis and cirrhosis of liver (Excluding K74.3–K74.5 – Biliary cirrhosis)
K86.0	Alcohol induced chronic pancreatitis
X45	Accidental poisoning by and exposure to alcohol
X65	Intentional self-poisoning by and exposure to alcohol
Y15	Poisoning by and exposure to alcohol, undetermined intent



**Table A5 Alcohol use disorders identification test (AUDIT)**

Question and responses	Score	Question and responses	Score
<b>How often do you have a drink containing alcohol?</b>		<b>How often during the last year have you needed a drink first thing in the morning to get you going after a heavy drinking session?</b>	
Never	0	Never	0
Monthly or less	1	Less than monthly	1
Two to four times a month	2	Monthly	2
Two to three times a week	3	weekly	3
Four or more times a week	4	Daily or almost daily	4
<b>How many standard drinks containing alcohol do you have on a typical day when you are drinking?</b>		<b>How often during the last year have you had a feeling of guilt or remorse after drinking?</b>	
1 or 2	0	Never	0
3 or 4	1	Less than monthly	1
5 or 6	2	Monthly	2
7 to 9	3	weekly	3
10 or more	4	Daily or almost daily	4
<b>How often do you have six or more drinks on any one occasion?</b>		<b>How often during the last year have you been unable to remember what happened the night before because you had been drinking?</b>	
Never	0	Never	0
Less than monthly	1	Less than monthly	1
Monthly	2	Monthly	2
weekly	3	weekly	3
Daily or almost daily	4	Daily or almost daily	4
<b>How often during the last year have you found that you were unable to stop drinking once you had started?</b>		<b>Have you or someone else been injured because of your drinking?</b>	
Never	0	No	0
Less than monthly	1	Yes, but not in the last year	2
Monthly	2	Yes, during in the last year	4
weekly	3		
Daily or almost daily	4		
<b>How often during the last year have you failed to do what was expected of you because of drinking?</b>		<b>Has a relative, friend, doctor or other health worker been concerned about your drinking or suggested that you should cut down?</b>	
Never	0	No	0
Less than monthly	1	Yes, but not in the last year	2
Monthly	2	Yes, during in the last year	4
weekly	3		
Daily or almost daily	4		

1. A standard drink is half a pint of beer, a single measure of spirits or a small glass of wine

**Table A.6 Domains and item content of Alcohol Use Disorders Identification Test**

Domains	Question number	Item Content
Hazardous alcohol use	1	Frequency of drinking
	2	Typical quantity
	3	Frequency of heavy drinking
Dependence syndromes	4	Impaired control over drinking
	5	Increased salience of drinking
	6	Morning drinking
Harmful alcohol use	7	Guilt after drinking
	8	Blackouts
	9	Alcohol-related injuries
	10	Others concerned about drinking

**Table A.7 Approximations used in Smoking, Drinking and Drug use among Young People, to calculate alcohol consumption**

Types of drink and measures asked about		Alcohol units (original)	Alcohol units (revised)
<b>Beer, Lager, Cider</b>			
	Less than half pint	0.5 units	0.5 units
	Half pint	1 unit	1 unit
	Small can	1 unit	1.5 units
	Bottle	1 unit	1.5 units
	Large can	1.5 units	2 units
	Pint	2 units	2 units
<b>Shandy</b>			
	Less than half pint	0.25 units	0.25 units
	Half pint	0.5 units	0.5 units
	Small can	0.5 units	0 units
	Bottle	0.5 units	0 units
	Large can	0.75 units	0 units
	Pint	1 unit	1 unit
<b>Wine<sup>1</sup></b>			
	Less than 1 glass	0.5 units	0.5 units
	Glass	1 unit	2 units
<b>Martini and Sherry</b>			
	Less than 1 glass	0.5 units	0.5 units
	Glass	1 unit	1 unit
<b>Spirits (e.g. whisky, vodka, gin) and liquers</b>			
	Less than 1 glass	0.5 units	0.5 units
	Glass	1 unit	1 unit
<b>Alcopops (e.g. hooch etc.) or pre-mixed alcoholic drinks (e.g. Barcardi Breezer, Metz, Smirnoff Ice etc.)</b>			
	Less than 1 bottle	0.5 units	0.75 units
	Can	1 unit	1.5 units
	Bottle	1 unit	1.5 units

1. In calculating alcohol consumption, a 125ml glass of wine is treated as containing one unit of alcohol

## Appendix B: Cross-departmental policies

### The NHS advises that<sup>1</sup>:

- adult women should not regularly drink more than 2 to 3 units of alcohol a day;
- adult men should not regularly drink more than 3 to 4 units of alcohol a day; and
- pregnant women or women trying to conceive should avoid drinking alcohol. If they do choose to drink, to minimise the risk to the baby they should not drink more than 1-2 units of alcohol once or twice a week and should not get drunk.
- after an episode of heavy drinking, it is advisable to refrain from drinking for 48 hours to allow tissues to recover

### The Government's Alcohol Strategy

The Government's Alcohol Strategy was published on 23 March 2012 and is available at: [www.homeoffice.gov.uk/publications/alcohol-drugs/alcohol/alcohol-strategy](http://www.homeoffice.gov.uk/publications/alcohol-drugs/alcohol/alcohol-strategy)

The Alcohol Strategy is targeted at harmful drinkers, problem pubs and irresponsible shops and sets out radical plans to turn the tide against irresponsible drinking. It addresses both health and social harms describing coordinated actions across Government, including a strong package of health measures. The Strategy sets ambitions to reduce the number of people (i) drinking above the NHS guidelines (ii) 'binge drinking' and (iii) the number of alcohol related deaths as well as other ambitions, such as to see a change in behaviour where people think it is not acceptable to drink in ways that could cause harm to themselves or others.

### Public Health Responsibility Deal

The Public Health Responsibility Deal was formally launched in March 2011. It challenges businesses and other organisations to play their role in creating an environment that supports people to make informed, balanced, healthier choices.

Around 125 companies are signed up to alcohol pledges that support the overall commitment to help people drink within the guidelines.

Industry has already taken action, making pledges in a range of areas.

This includes a pledge to give consumers a wider choice of lower strength products to help take one billion units out of the market by 2015, over 30 companies are signed up; and a pledge that 80% of bottles and cans will have health and alcohol unit information clearly labelled by the end of this year - with 92 companies signed up.

The focus going forward will be to deliver the existing pledges; however, we will strengthen these while focusing on areas that will make the biggest difference such as the industry's pledge to remove one billion units of alcohol from the market by 2015. This would be a drop of around 2% of units of alcohol sold. It is estimated that in a decade, this will result in many hundreds fewer alcohol-related deaths; many thousands fewer hospital admissions and

alcohol-related crimes, as well as substantial savings to health services and crime costs each year.

## Improving Information

Clear and easily understood information is central to ensuring that everyone is aware of the lower-risk guidelines and the risks of drinking above the guidelines, as many people who drink do not realise how much they are drinking.

A voluntary labelling agreement to provide unit and health information, including a pregnancy warning, on 80% of bottles and cans is one of the collective pledges under the Public Health Responsibility Deal. A large number (91) of major producers and retailers have signed up to this pledge and supporting guidance<sup>3</sup> has been produced by the Portman Group.

An alcohol Change4Life campaign was launched for the first time in March 2012 and a second campaign ran in March 2013. The Change4Life alcohol campaign, includes elements such as TV ads, a Drinks Checker, digital advertising, eCRM and radio etc, advises people of the health risks of drinking above the lower-risk guidelines and provides a range of hints, tips and tools to encourage people to check their drinking to help them drink within the guidelines.

Not everything that has to be done, is best done by Government. Drinkaware is an alcohol education charity, funded by cash donations and in-kind support from the alcohol industry. Five board members from the industry, five with a health or other professional interest in alcohol and three, who have no professional interest in alcohol, including the chair, govern it. Drinkaware has become a well-known brand, recognised by over two-thirds of its target audience and there are more than 5 million visits a year to their website.

An Audit of Drinkaware was recommended in the 2009 addendum to the Memorandum of Understanding between Drinkaware, government and the alcohol industry. The Drinkaware trustees asked Sir Hugh Taylor to chair an Independent Review Panel to commission, oversee and publish the Audit to ensure that it was rigorous, independent and transparent. The report is available on the Panel's website at [www.independentreview.org.uk](http://www.independentreview.org.uk). The Audit will provide invaluable guidance as Drinkaware shapes its strategy and plans for the organisation in the coming years.

The Government has asked Dame Sally Davies, the Chief Medical Officer, to oversee a review of the alcohol guidelines, to ensure these are founded on the best science and so that the guidelines help people at all stages of life to make informed choices about their drinking.

## Licensing

The Government has legislated via the Police Reform and Social Responsibility Act 2011<sup>4</sup> to overhaul the Licensing Act 2003 and to rebalance it in favour of local communities. These

reforms give the police and licensing authorities more local powers to shape their night-time economies and to tackle irresponsible premises, particularly those selling alcohol to children. Local health bodies are now Responsible Authorities under the Licensing Act and allow them to make a fuller contribution to reducing acute harms from alcohol.

Evidence suggests that increased outlet density is linked to alcohol-related harms. As part of a consultation published by the Home Office on 28 November 2012, which concluded on 6 February 2013, the Government has sought views on the introduction of a new density power that would enable licensing authorities to consider local health harms specifically when introducing Cumulative Impact Policies. This would be framed under a limited licensing objective 'protecting and improving public health'. A response will be published in due course and will be made available on the Home Office website.

## **Pricing**

The Government sought views on a number of measures set out in the Alcohol Strategy, including proposals to tackle the availability of cheap alcohol, in a consultation published by the Home Office on 28 November, which concluded on 6 February.

The consultation included a range of proposals, not just a 45p per unit minimum unit price (MUP), but also a possible ban on multi-buy offers. A response will be published in due course and will be made available on the Home Office website.

## **Alcohol Interventions**

The Department of Health is supporting the NHS to put in place high quality services to prevent, mitigate and treat effectively alcohol-related health harm. The relevant services range from identification and brief advice to specialist services to treat dependent drinkers. From April 2013, the Department of Health has funded the inclusion of an alcohol risk assessment in the NHS Health Check, so that people will be given brief advice to help them cut down if they need to. The support given will depend on the individuals' needs and might involve some brief advice or a referral to specialist alcohol service(s), if needed.

## **Local action**

Public Health England (PHE) is the new Executive Agency of the Department of Health with the role of supporting local authorities responsible for public health. PHE will provide data, evidence and support to local authorities and NHS partners to enable them to reduce the harmful impact from alcohol in local communities.

PHE will also encourage greater use of effective interventions, such as brief interventions, alcohol interventions in secondary NHS care and the treatment of dependent drinkers.

As part of the new Public Health framework, local government will be given the responsibility, backed by ring-fenced budgets, to improve people's health – this includes responsibility for tackling problem drinking.

From April 2013, upper tier and unitary local authorities will receive a ring-fenced public health grant. This will include funding for alcohol misuse prevention and treatment.

Health and Wellbeing Boards will bring together councils, the NHS and local communities to understand local needs and priorities through the Joint Strategic Needs Assessment (JSNA) and develop a joint Health and Wellbeing strategy, which will set out how they will work together to meet these needs. The boards will be able to promote integration of health and social care services with health-related services like criminal justice services, education or housing. This will help join up services around individual's needs and improve health and wellbeing outcomes for the local population.

## References

1. <http://www.nhs.uk/Change4Life/Pages/drink-less-alcohol.aspx>
2. <https://responsibilitydeal.dh.gov.uk/>
3. <http://www.portman-group.org.uk/assets/documents/Alcohol%20labelling%20compliance%20and%20monitoring%20process%202011.pdf>
4. <http://services.parliament.uk/bills/2010-11/policereformandsocialresponsibility.html>
5. [www.nwph.net/alcohol/lape](http://www.nwph.net/alcohol/lape)



# Appendix C: Editorial notes

## Editorial Notes

For the purpose of clarity, prevalence figures in the bulletin are shown in accordance with the Health and Social Care Information Centre publication conventions.

These are as follows:

- . not available
- zero
- 0 less than 0.5

Numbers greater than or equal to 0.5 are rounded to the nearest integer, ten or hundred. Totals may not sum due to rounding.

Most numbers in the bulletin discussed in the text are presented in a table; the relevant table number is given at the end of the last paragraph in the discussion around each table. If data described in a chapter are not presented in a table, appropriate references are provided to indicate the source used to obtain this information.

## Appendix D: Further information

This annual report draws together statistics on alcohol. It is expected the next report will be published in 2014. This report forms part of a suite of statistical reports. Other reports cover smoking, drug use and obesity, nutrition and physical activity. All reports are currently updated annually and are available on the Health and Social Care Information Centre website.

We value your feedback and your constructive comments on this report would be welcomed. Questions concerning any data in this publication, or requests for further information, should be addressed to:

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LS1 6AE

Telephone: 0845 300 6016  
Email: [enquiries@hscic.gov.uk](mailto:enquiries@hscic.gov.uk)

The 2006, 2007, 2008, 2009, 2010, 2011 and 2012 reports, also published by the Health and Social Care Information Centre can be found at:

<http://www.hscic.gov.uk/pubs/alcohol12>

<http://www.hscic.gov.uk/pubs/alcohol11>

<http://www.hscic.gov.uk/pubs/alcohol10>

<http://www.hscic.gov.uk/pubs/alcohol09>

<http://www.hscic.gov.uk/pubs/alcohol08>

<http://www.hscic.gov.uk/pubs/alcohol07>

<http://www.hscic.gov.uk/pubs/alcohol06>

Earlier editions of this report were published by the Department of Health (DH). Information about their statistics and surveys is available on the DH website at:

<http://webarchive.nationalarchives.gov.uk/20130107105354/http://dh.gov.uk/health/category/publications/>

## Alcohol Concern

Alcohol Concern is a national agency working to reduce the level of alcohol misuse. It has a library in which most of the source documents cited in this bulletin are available.

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

## Crime in England and Wales

The British Crime Survey (BCS) and police recorded crime statistics are complementary series, and together these two sources provide a more comprehensive picture of crime than could be obtained from either series alone.

For the crime types it covers, the BCS can provide a better reflection of the extent of household and personal crime because it includes crimes that are not reported to the police and crimes which are not recorded by them. The BCS does not aim to provide a total count of crime, but to give robust and consistent estimates of trends in crime over time.

Crimes detected in England and Wales 2011/12. Home Office 2012. Available

at:



[https://www.gov.uk/government/uploads/system/uploads/attachment\\_data/file/116435/hosb0812.pdf](https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/116435/hosb0812.pdf)

## Department for Transport

The Department for Transport website contains material for local government, the transport sector, passengers and motorists.

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

## HM Revenue and Customs

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

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

## Home Office

Further information and other research and development statistics (RDS) Home Office publications can be found on the internet at:

## **Mental health of children and young people in Great Britain, 2004**

Mental Health of Children and Young People in Great Britain, 2004 carried out by the Office for National Statistics on behalf of the Department of Health and the Scottish Executive provides information about the prevalence of mental disorders among young people aged 5 to 16 in Great Britain living in private households. The survey examines the relationship between mental disorder and aspects of children's lives, including alcohol consumption. It was carried out between March and June 2004 and a sample size of around 8,000 children and young people aged 5 to 16 was achieved. It also provides profiles of children in each of the main disorder categories; emotional, conduct, hyperkinetic and autistic spectrum disorders, including comparisons with alcohol consumption. The report uses the term 'mental disorders' as defined by the International Classification of Diseases, tenth revision (ICD-10).

Mental health of children and young people in Great Britain, 2004, Office for National Statistics  
Available at:

<http://www.esds.ac.uk/doc/5269/mrdoc/pdf/5269technicalreport.pdf>

and

Three years on: Survey of the development and emotional well-being of children and young people. Office for National Statistics. Available at:



[http://www.playfieldinstitute.co.uk/information/pdfs/publications/general/Three\\_years\\_on\\_Survey\\_of\\_the\\_development\\_and\\_emotional\\_well\\_being\\_of\\_children\\_and\\_young\\_people.pdf](http://www.playfieldinstitute.co.uk/information/pdfs/publications/general/Three_years_on_Survey_of_the_development_and_emotional_well_being_of_children_and_young_people.pdf)

## **Office for National Statistics**

Information about National Statistics can be found at:

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

## **The Institute of Alcohol Studies**

The Institute of Alcohol Studies (IAS) is an educational body with the basic aims of increasing knowledge of alcohol and the social and health consequences of its misuse, encouraging and supporting the adoption of effective measures for the management and prevention of alcohol-related problems. The Institute is financially independent of both Government and the drinks industry, limited by guarantee and is supported by the Alliance House Foundation, a registered educational charity.

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

## The Portman Group

The Portman Group is not a trade association, but a pan-industry organisation whose purpose is to help prevent misuse of alcohol and to promote sensible drinking. An independent company, limited by guarantee, The Portman Group was set up in 1989 by the UK's leading drinks manufacturers, which together supply about 95% of the alcohol sold in the UK.

[www.portman-group.org.uk/](http://www.portman-group.org.uk/)

## Psychiatric morbidity surveys

A survey in 1997 of psychiatric morbidity among prisoners shows prevalence figures of drinking among people before being sentenced to prison. Similar surveys of adults living in institutions, homeless people and people with psychotic disorders have also been carried out. An overview of alcohol dependence in these surveys was published in 1998. These surveys are listed below

Psychiatric morbidity among prisoners in England and Wales, 1997. Office for National Statistics, 1998. Available at:

<http://www.ons.gov.uk/ons/rel/psychiatric-morbidity/psychiatric-morbidity-among-prisoners/psychiatric-morbidity-among-prisoners--summary-report/psychiatric-morbidity---among-prisoners--summary-report.pdf>

Adults with a psychotic disorder living in households, 2000. Office for National Statistics, 2002. Available at:

<http://www.ons.gov.uk/ons/rel/psychiatric-morbidity/adults-with-a-psychotic-disorder-living-in-private-households/adults-with-a-psychotic-disorder-living-in-private-households/adults-with-psychotic-disorder-living-in-private-households.pdf>

Farrell, M. et al. Substance Misuse and Psychiatric Co-morbidity: An Overview of the OPCS National Psychiatric Morbidity Survey. Addictive Behaviours. 1998. 23:909-918.

## Reported Road Casualties Great Britain 2011

This report provides more detailed information about accident circumstances, vehicle involvement and the consequent casualties in 2011, along with some of the key trends in accidents and casualties.

Reported Road Casualties Great Britain: 2011 - Annual Report. Department for Transport. Available at:

for



[https://www.gov.uk/government/uploads/system/uploads/attachment\\_data/file/9280/rrcgb2011-complete.pdf](https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/9280/rrcgb2011-complete.pdf)

### **Scottish Schools Adolescent Lifestyle and Substance Use Survey (SALSUS) National Report: Smoking, Drinking and Drug Use among 13 and 15 Year Olds in Scotland in 2008**

The Scottish Schools Adolescent Lifestyle and Substance Use Survey (SALSUS) was established by the Scottish Executive to provide a broad-based approach to the monitoring of substance use in the context of other lifestyle, health and social factors.

SALSUS continues the national series of biennial surveys of smoking, drinking and drug use among secondary school children which began in 1982 in order to obtain information on smoking. In 1990, the survey included questions to establish alcohol prevalence and in 1998 questions on drug use were introduced. The survey became known as the Scottish Schools Adolescent and Lifestyle Survey (SALSUS) in 2002 with the introduction of other lifestyle and social factors. The survey in 2010 provides information at national level only. All secondary schools (both state and independent) were invited to take part in SALSUS, with a target sample of 37,000 pupils.

Scottish Schools Adolescent Lifestyle and Substance Use Survey (SALSUS) - National Report 2010. The Scottish Executive. Available at:



[http://www.drugmisuse.isdscotland.org/publications/abstracts/salsus\\_national10.htm](http://www.drugmisuse.isdscotland.org/publications/abstracts/salsus_national10.htm)

### **Young people and crime: findings from the 2006 Offending, Crime and Justice Survey**

The Offending, Crime and Justice Survey (OCJS) is the national longitudinal, self-report offending survey for England and Wales. The survey, covering people living in private households, was first conducted in 2003 and was repeated annually until 2006.

The main aim of the survey is to examine the extent of offending, anti-social behaviour and drug use among the household population, particularly among young people aged from 10 to 25. The survey covers offences against households, individuals and businesses. In addition to 'mainstream' offences such as burglary, shoplifting and assault, it also covers fraud and technology offences.

Young People and Crime: Findings from the 2006 Offending, Crime and Justice Survey. Home Office. Available at:

<http://www.cjp.org.uk/publications/archive/young-people-and-crime-findings-from-the-2006-offending-crime-and-justice-survey-15-07-2008/>

## **World Health Organisation**

Hazardous, harmful and dependent drinking are defined by the World Health Organisation in the Alcohol Use Disorders identification Test (AUDIT) manual. Available at:

[whqlibdoc.who.int/hq/2001/WHO\\_MS\\_D\\_MSB\\_01.6a.pdf](http://whqlibdoc.who.int/hq/2001/WHO_MS_D_MSB_01.6a.pdf)

## **Sensible Drinking: Report of an inter-departmental working group**

[http://webarchive.nationalarchives.gov.uk/+/www.dh.gov.uk/en/publicationsandstatistics/publications/publicationspolicyandguidance/dh\\_4084701](http://webarchive.nationalarchives.gov.uk/+/www.dh.gov.uk/en/publicationsandstatistics/publications/publicationspolicyandguidance/dh_4084701)

# Appendix E: Quantification of the impact of changes in recording practices of secondary diagnoses on national alcohol related admission (ARA) estimates

The alcohol-related hospital admissions figures presented in [Table 4.1](#) of this report were derived by summing the alcohol attributable fraction (AAF) associated with each admission based on the diagnosis most strongly related to alcohol (the one with the highest AAF) out of both the 'primary diagnosis' and 'secondary diagnoses'. This is known as the 'broad measure'. There is also an alternative measure of alcohol related admissions, known as the 'narrow measure' based on the primary diagnosis field only. This is discussed in paragraph A2.6 below and figures based on the narrow measure are available in [Table 4.5](#).

Up to 20 diagnoses can be recorded for each hospital episode. The 'primary diagnosis' is defined as the main condition treated or investigated during the relevant episode of healthcare. There are also up to 19 'secondary diagnoses', which describe other conditions the patient may have that are relevant to the treatment being provided. All episodes have a primary diagnosis, but the number of secondary diagnoses used (if any) depends on the circumstance. In 2011/12, three quarters of admission episodes involved at least one secondary diagnosis, over half had two or more, over a third had three or more, and over a quarter had four or more. Just over one per cent had twelve or more. The average (mean) number of secondary diagnoses was 2.6.

At a national level there have been improvements in recording practices in relation to secondary diagnoses in recent years. This has led to increases in the proportion of admissions which have secondary conditions associated with them. This is illustrated in [Figure E.1](#), which is based on all admission episodes (not just those that are alcohol related).

Between 2002/03 and 2011/12, the percentage of admission episodes with at least one secondary diagnosis increased from 58% to 77% and the number with four or more secondary diagnoses increased from 10% to 28%.

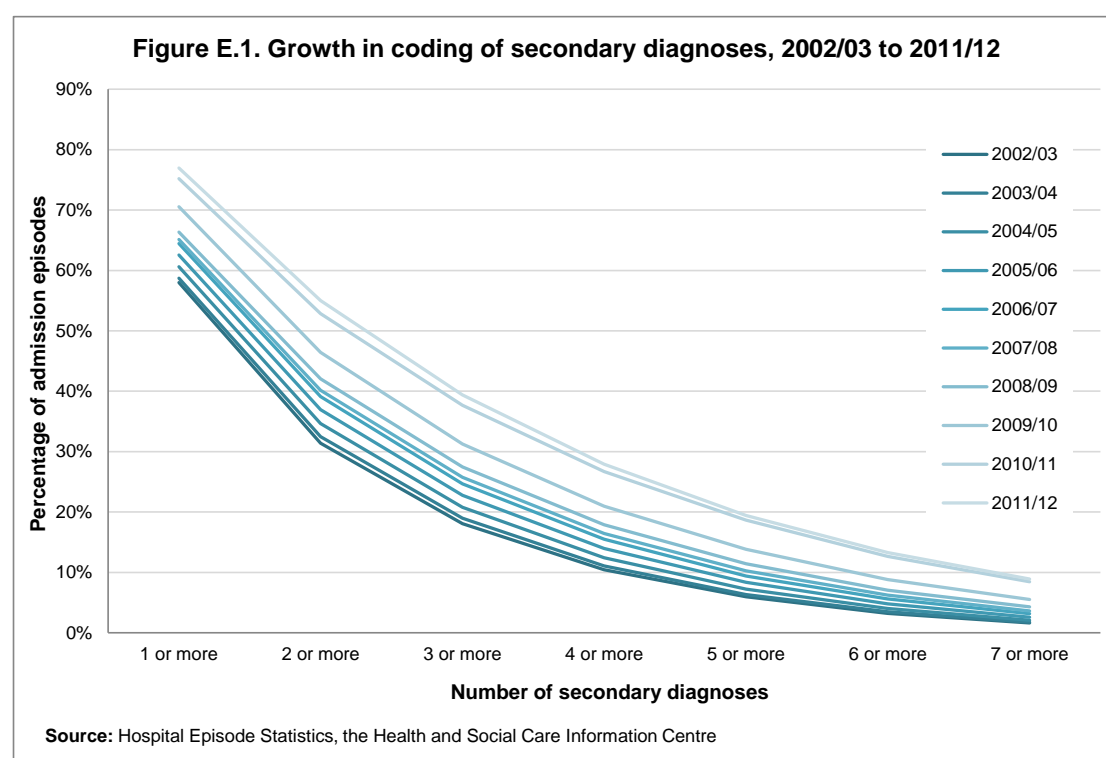




Table 4.1 of this report shows that the overall number of alcohol related admissions increased from 510,700 in 2002/03 to 1,220,300 in 2011/12, in percentage terms an increase of 139%. However, it is likely that this increase is at least partly the result of improvements in recording practices in relation to secondary diagnoses, and that alcohol related admissions figures for earlier years would have been higher had 2011/12 recording conditions existed in those years.

The alcohol related admission estimates presented in Table 4.6 are 'primary only' estimates and are assumed to be unaffected by the changes in recording practices which affect figures in Table 4.1. 'Primary only' estimates are derived by summing the AAF associated with the alcohol related condition which appears in the primary diagnosis field (where there is one) regardless of whether or not there is an alcohol related condition with a higher AAF in one of the secondary diagnosis positions. Based on Table 4.6 figures, the overall number of alcohol related admissions increased from 142,000 in 2002/03 to 200,900 in 2011/12, an increase of 42%. This is substantially less than the 139% increase shown in Table 4.1 figures (broad measure) over the same period.

In spite of the difficulties associated with the broad measure, both the broad and narrow measure are presented in *'Statistics on Alcohol: England'* compendia reports. The broad measure gives a better estimate of the number of admissions to hospital caused or affected by alcohol consumption at a particular time or place and hence the pressure put on the health system. The narrow measure provides an uncomplicated picture of trends in alcohol-related admissions over time and offers some benefits for direct comparisons between areas.

In order to aid interpretation of the observed figures, a methodology has been devised to estimate what the overall Table 4.1 figures would have been for each year from 2002/03 to 2010/11 had the secondary coding conditions that existed in 2011/12 existed in each of these years. This methodology has only been applied to overall estimates which relate to all conditions as there is a possibility that unreliable results would occur if applied to individual conditions or groups of conditions. This is the second year that this methodology has been applied. *Statistics on Alcohol: England, 2012* applied the coding conditions of year 2010/11 to years 2002/03 to 2009/10.

This methodology is intended to be applied annually as, in spite of the improvements in the recording of secondary diagnoses illustrated in Figure E.1, there are likely to be further improvements in the future. It should also be borne in mind that since the adjustment for any given year is affected by the data for the most recent year in the series and so adjusted data should be considered provisional as it will be subject to revision when the next year's data is available.

The methodology is underpinned by the following important assumptions:

- The overall count of secondary diagnoses of all types of conditions (not just those that are alcohol related) was under recorded in all secondary diagnosis positions (2 to 20) in each year from 2002/03.
- This can be adjusted for by obtaining the number of secondary diagnoses counts as a proportion of the number of the primary diagnosis count for every secondary diagnosis position in 2011/12. This proportion was 77.0% for the first secondary diagnosis position, 55.0% for the second secondary diagnosis position, etc.
- The corresponding proportions for 2002/03 based on observed data are only 58.0% and 31.4% for the first and secondary diagnosis positions respectively. Had 2011/12 secondary recording conditions existed in each of the other years, it is assumed that the count for the first and second secondary diagnosis positions would also have been 77.0% and 55.0% of the primary diagnosis count respectively in those years too (and similarly for all the other secondary diagnosis positions).

- This effectively means there are extra secondary diagnosis counts to disperse for every secondary diagnosis position for each year from 2002/03 to 2010/11. Once done, this is assumed to account for the under reporting in each year from 2002/03 to 2010/11.
- Having adjusted for the overall shortfall in secondary diagnoses counts (for all conditions) for each year from 2002/03 to 2010/11, the number of secondary diagnoses relating to just conditions which are related to alcohol consumption (47 are identified in [Table A.3](#) in [Appendix A](#) of this report) needs to be calculated.
- This is done by calculating the proportion of all secondary diagnoses counts in the observed data (ie data unadjusted for the shortfall in secondary diagnoses counts) which occur due to mentions of conditions which are related to alcohol consumption (termed 'probability of a mention of an alcohol-related condition') and applying this to newly adjusted secondary diagnosis count. This is done for every secondary diagnosis position in each year.
- This requires an assumption to be made that the proportion of alcohol related conditions that were under reported in each year was exactly the same as the proportion of non-alcohol related conditions that were under reported. Therefore the observed probability of a mention of an alcohol-related condition is equal to the true probability (ie the probability had there not been any under reporting).<sup>1</sup>
- By definition, 2011/12 data cannot be adjusted for any shortfall in secondary diagnosis recording. In this year, there were 751,400 mentions of an alcohol related condition in the primary diagnosis fields (one of the 47 identified in [Table A.3](#) in [Appendix A](#) of this report). In total, there were also 4,908,900 mentions of an alcohol related condition in one of the secondary diagnosis fields. Together, there were 5,660,300 mentions of an alcohol related condition in any diagnosis position. Once adjusted for shortfalls in secondary diagnosis recording in each year from 2002/03 to 2010/11, it is estimated that the number of mentions of an alcohol related condition in any diagnosis position ranged from 3,746,300 in 2002/03 to 5,591,800 in 2010/11.
- It is important to recognise that none of the figures in the bullet point above tells us how many admissions there were with at least one alcohol related condition in either the primary or one of the 19 secondary diagnosis positions. This is because there may be more than one mention of an alcohol related condition for any given admission. Where there is just one mention, it's possible for this to occur in the primary position only, or in one of the secondary positions only.
- As stated earlier, the methodology used to derive the figures in [Table 4.1](#) involves assigning an AAF to each admission based on the diagnosis most strongly related to alcohol across both the primary and 19 secondary diagnosis positions. Where there is more than one mention of an alcohol related condition, the one with the highest AAF is used. Using this method, it is estimated that there were 1,220,300 alcohol related admissions in 2011/12.
- In 2011/12, the overall ratio of mentions of an alcohol related condition in any of the diagnosis positions to the estimated number of alcohol related admissions was 4.64 (5,660,300 divided by 1,220,300). Although the observed data shows that this ratio increased from 4.43 in 2002/03 to 4.63 in 2009/10, had the secondary coding conditions that existed in 2010/11 existed in each year from

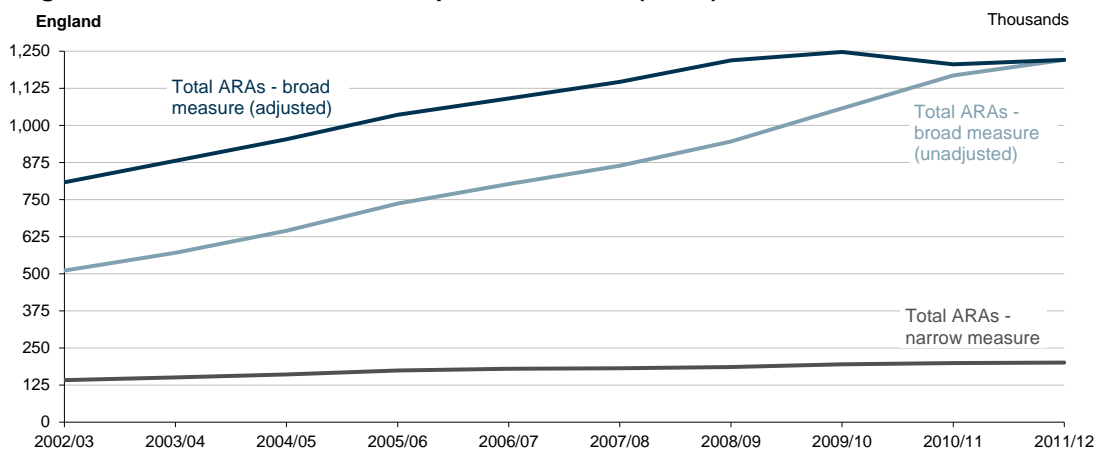
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<sup>1</sup> There is some evidence to suggest that this assumption may not hold true. The observed data shows that the standard deviation in the probability of a mention of an alcohol-related condition in the primary position was approximately 7 times less than the equivalent figure for secondary diagnosis positions, suggesting that the probabilities calculated for secondary diagnosis positions may themselves have been affected by changes in recording practices over time. However using anything other than probabilities derived from observed data risks eliminating the trend.

2002/03 to 2009/10, it is assumed that this ratio would also have been 4.64 (ie equal to the 2011/12 ratio) in each of these years too.

- As described above, after adjustment it is estimated that the number of mentions of an alcohol related condition in any diagnosis position was 3,746,300 in 2002/03 and 5,591,800 in 2010/11. By assuming that the true ratio of mentions of an alcohol related condition in any of the diagnosis positions to the number of alcohol related admissions was 4.64 throughout the series, we conclude that the adjusted estimate of alcohol related conditions was 807,700 in 2002/03 and 1,205,500 in 2010/11. Overall, the adjusted series shows an increase from 807,700 in 2002/03 to 1,220,300 in 2011/12, an increase of 51.1%. Adjusted estimates for each year from 2002/03 to 2010/11 are presented in Table 4.11 and Figure E.2 below.

**Figure E.2 Alcohol-related NHS hospital admissions (ARAs) 2002/03 to 2011/12**



**Source:** Hospital Episode Statistics, The Health and Social Care Information Centre and North West Public Health Observatory attributable fractions

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The HSCIC welcomes comments from users on this methodology with a view to refining it in the future should this lead to an improvement. Comments can be sent by email to [enquiries@hscic.gov.uk](mailto:enquiries@hscic.gov.uk)

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