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Reports in the series

The reports in the Indications of Public Health in the English Regions series address areas covered by the White Paper Choosing Health. Previous reports addressed the following topics: general health, lifestyles, ethnicity, child health, sexual health and mental health and can be found at www.apho.org.uk/apho/indications.htm. Topics to be addressed in future reports include older people, substance misuse and communicable diseases.

About the APHO

Please turn to the inside back cover of this report.



Foreword

Alcohol misuse represents a substantial cost to the NHS of £1.7 billion. We recognise that more progress needs to be made towards reducing harmful drinking and its impact as a contributor to ill health and inequalities in the English regions as evidenced so clearly by this report.

This document is a valuable resource for Directors of Public Health who have a key role to play as leaders in identifying health and social care priorities that will cause the greatest harm if left unaddressed and provide the greatest health and economic benefits if managed effectively. Having considered the impact of harmful drinking as identified in this report, we must take notice of the evidence that much of this harm is preventable.

I welcome this report and I know that it will assist both in understanding the problem and encourage public health leadership in finding innovative and creative ways of reducing the impact of harmful drinking on individuals, their families and the wider community.

A handwritten signature in black ink, which reads "Liam Donaldson". The signature is written in a cursive style with a long horizontal line extending to the right.

Sir Liam Donaldson
Chief Medical Officer for England

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1. Executive Summary

Background

As part of the series of *Indications of Public Health in the English Regions* commissioned from the Association of Public Health Observatories (APHO) by the Chief Medical Officer (CMO) for England, the North West Public Health Observatory (NWPHO) has published this report on alcohol. The topic of alcohol has been an emerging issue across Europe for a number of years. In 2006, the United Kingdom rated third highest across 25 EU member states for the number of drinks consumed in one sitting, with 24% of residents drinking five or more drinks on a day when they drink alcoholic beverages¹. The UK also has one of the highest rates of admission to hospital or an emergency room due to alcohol use in 15-16 year olds across EU countries².

Alcohol leads to a range of public health problems. Acute conditions, such as alcoholic poisoning, violence and accidents as well as the more chronic effects, such as alcohol-induced pancreatitis, chronic liver disease and stomach cancer all potentially lead to reduced health and wellbeing and at worst, loss of life. Alcohol affects all of society, from the burden on the NHS in terms of hospital admission and treatment in primary care, the economic burden due to loss of employment and reduced capacity to work, through to other negative effects of alcohol on the social and behavioural welfare of communities.

This Regional Indications report is produced alongside the new national strategy *Safe. Sensible. Social: The next steps in the National Alcohol Strategy*³ which was published in June 2007. The strategy outlines a coordinated response across a wide range of community groups, public sector agencies, commercial businesses and the media. Several next steps are highlighted that will continue the Government's commitment to reduce the harms and costs that alcohol has on the health and wellbeing of England's population.

- Sharpened criminal justice for drunken behaviour.
- A review of NHS alcohol spending.
- More help for people who want to drink less.
- Toughened enforcement of underage sales.
- Trusted guidance for parents and young people.
- Public information campaigns to promote a new 'sensible drinking' culture.
- Public consultation on alcohol pricing and promotion.
- Local alcohol strategies.

Among 36 different indicators, 84 separate sub-measures (by, for example, sex or age group) relating to individual, community and population implications of alcohol use and their effects on health and wellbeing are included in this report. The indicators primarily focus on the nine Government Office regions in England, but where possible, measures have been developed at a sub-regional level to allow greater use of alcohol indicators in the development of local alcohol strategies. These are made available in the associated web-based tool *Local Alcohol Profiles for England* (www.nwph.net/alcohol/lape) where data are available for each individual local authority in England. In addition, where the datasets allow, the indicators are presented by two different inequality-identifying classifications: the Index of Multiple Deprivation 2004 (IMD 2004)⁴ and a geodemographic classification⁵. These additional sub-regional measures enhance the interpretation of public health effects of alcohol on different sub-sections of the population to enable better-targeted local action.

¹ European Commission (2007). Attitudes towards alcohol. Special Eurobarometer. Available from: http://ec.europa.eu/health/ph_publication/eurobarometers_en.htm Accessed 2 August 2007.

² Hibell B, Anderson B, Bjarnason T, Ahlstrom S, Balakireia O, Kokkeri A and Morgan M (2004). The ESPAD report 2003. Alcohol and other drug use among students in 35 European countries. Stockholm, Sweden: Modintryckoffset AB.

³ Department of Health, Home Office, Department for Education and Skills and Department for Culture, Media and Sport (2007). *Safe, sensible, social. The next steps in the national alcohol strategy*. London: Department of Health.

⁴ English Indices of Deprivation 2004. Communities and Local Government. www.communities.gov.uk/index.asp?id=1510790

⁵ P2 People & Places is a geodemographic people classification that uses geography to classify people by where and how they live. © Beacon Dodsworth 2004-2005. www.p2peopleandplaces.co.uk

Alcohol indicators are either entirely related to alcohol (alcohol-specific) or are influenced only in part by alcohol (alcohol-attributable). Thus, all cases of alcoholic liver disease, mental/behavioural disorders due to alcohol and alcoholic poisoning are alcohol-specific. However, accidents, assaults, road traffic accidents, certain cancers, heart disease, and spontaneous abortion, for example, can be attributed to alcohol for a proportion of, but not all, cases (Appendix 1). For completeness, this report contains both alcohol-specific and alcohol-attributable indicators.

Indicator highlights

The main report is divided into sections based on the illustration in Figure i, which highlights the harm due to alcohol experienced across all of England. Each section contains different measures of the alcohol-related effect on the population. For example, alcohol sales affect all drinkers, but hazardous and harmful consumption occurs in only a proportion of drinkers and far less will commit anti-social behaviour, be admitted to hospital or experience other related harms. The tip of the iceberg is the reduction of life expectancy due to deaths related to alcohol consumption. A summary of key findings follows along with details of the indicators at the regional level (Appendix 4, Appendix 5) highlighting whether the regions show significantly high or low measures.

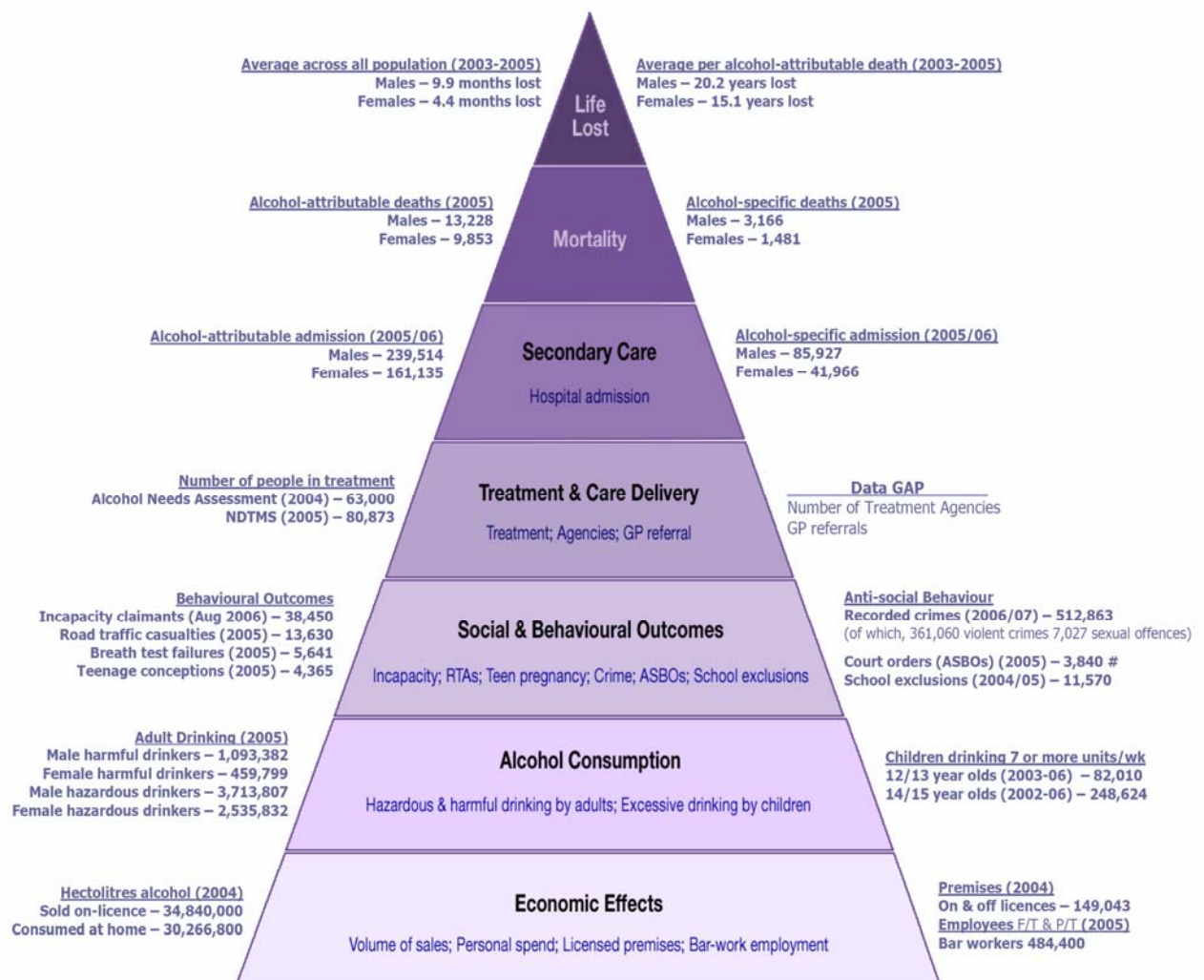


Figure i. Summary of alcohol measures illustrated in the various sections of this report. Figures here are annual totals for England attributable to alcohol (unless stated). See Appendix 4 and Appendix 5 for regional measures.

Key findings

1. There are very evident variations between regions across nearly all indicators, with life lost, rates of mortality, admission to hospital, incapacity due to alcoholism, visits to a pub/bar and binge, hazardous and harmful drinking all showing much higher levels in the more deprived regions of England compared to the more affluent regions.
2. For some indicators, the gap between regions is widening, thereby increasing health inequalities related to alcohol use. So, for example:
 - a. Months of life lost and mortality attributable to alcohol are typically increasing in the North East, North West and Yorkshire and The Humber, but decreasing or remaining static in the East of England, London and the South East.
 - b. All regions show an increase in rates of hospital admission but the increases are greater in the North East and North West for both males and females than in other regions. The next highest increases in rates of admission are in London, the South West and the South East, with by far the lowest increases in the East of England and the East Midlands.
 - c. At a sub-regional level, changes in binge drinking, in females in particular, show continuing increases in the north. All areas⁶ that showed a decrease between 1998-00 and 2003-05 were in the south, especially in London.
3. There are massive differences in the health consequences of alcohol use between richer and poorer local communities⁷ across all regions of England.
 - a. The most deprived fifth of the population of the country suffer two to three times greater loss of life attributable to alcohol; three to five times greater mortality due to alcohol-specific causes; and two to five times more admission to hospital because of alcohol than the more affluent areas.
 - b. The inequality ratio between measures of health in the poorest fifth compared with the richest fifth of the population is always greater in males than in females. Thus men are suffering greater inequalities related to alcohol use than women.
 - c. The poorest local authorities (those with the highest measures of multiple deprivation) also tend to have the highest recorded levels of health and social outcomes related to alcohol use: crime, anti-social behaviour orders, teenage conceptions, chronic liver disease, incapacity benefit claimant rates and unauthorised school absences.
4. A more detailed look at inequalities between different communities has been undertaken by comparing alcohol-related measures across different lifestyle groups. These use geography and behavioural information to classify people by where and how they live⁸ and reveal remarkable differences between the rich and the poor whilst also highlighting particular communities (see Box i for examples) that have additional alcohol issues:
 - a. The most deprived lifestyle group 'Urban Challenge', who are typically unemployed, low-income older smokers, have four to fifteen times greater alcohol-specific mortality and four to ten times greater alcohol-specific admission to hospital than the most affluent groups. Based on the population profile for this group provided here, interventions to reduce alcohol-related harms could for example, consider utilising specific supermarkets as a starting point⁹, where those in the 'Urban Challenge' group generally shop.
 - b. Whilst most lifestyle groups tend to show levels of alcohol-related harms in line with the level of deprivation experienced in their location, one group, 'New Starters', always shows higher levels of harm than would be expected from deprivation alone. These areas are characterised by young, highly qualified but not very well off people. Since

⁶ Strategic Health Authority areas as at 2002.

⁷ Measured at the small area geography of Lower Super Output Area (LSOA), which are designed to improve the reporting of small area statistics in England and Wales and are constrained to an average resident population of 1,500 people. National Statistics. www.statistics.gov.uk/geography/soa.asp

⁸ P2 People & Places. © Beacon Dodsworth 2004-2005. www.p2peopleandplaces.co.uk

⁹ Additional insight to determine local patterns of behaviour and attitudes will always add greater ability to develop interventions and social marketing campaigns specifically targeted at the local community.

they are already experiencing significantly high levels of mortality, life lost and admission to hospital due to alcohol use their location and prevalence in local communities should be used as a warning sign to authorities of where alcohol-related issues are likely to worsen in the future.

Box i: Descriptive examples of two geodemographic lifestyle groups*

Urban Challenge

Typified by unemployed, low income older people living in small council or housing association homes. Urban Challenge:

- read tabloid newspapers, like the Sun and the Mirror
- are unlikely to be interested in politics
- tend to be smokers
- like to do their grocery shopping at Asda.

New Starters

Primarily students and young adults highly qualified but low income, living in single or cohabiting bedsits or flats. New Starters:

- read broadsheet newspapers to keep up with world affairs
- are very interested in politics
- are very likely to smoke
- do grocery shopping as cheaply as possible, at chains such as Aldi and Lidl.

*These profiles describe the average characteristics of geographical areas and not the individuals resident within those areas (see Appendix 2 for the full list).

5. Life lost from mortality due to alcohol is increasing:
 - a. The rate of alcohol-specific mortality in people aged under 75 has increased between 2001 and 2005 from 10.8 to 12.5/100,000 (about a 4% increase per year) in men and from 5.1 to 5.7/100,000 (about a 3% increase per year) in women.
 - b. Each man in England dying from an alcohol-attributable cause loses an average of 20.2 years and each woman loses an average of 15.1 years.
 - c. The total contribution that alcohol makes to the life expectancy of the England population is on average a loss of 9.9 months for men (ranging from 12.6 months in the North West to 8.1 months in the East of England) and a loss of 4.4 months for women (ranging from 5.8 months in the North West to 3.6 months in the East of England).
6. The regional pattern in mortality and hospital admission due to alcohol are paralleled by patterns of excessive alcohol consumption.
 - a. There are an estimated 1.55 million people in England drinking at harmful¹⁰ levels and a further 6.3 million drinking at hazardous¹¹ levels (2005 measures). All national surveys show a similar regional pattern in that levels of hazardous and harmful drinking are consistently highest in the north (26-28% of men; 16-18% of women), central and eastern regions have the lowest levels (21-24% of men; 10-14% of women) and regions in the south are in the middle.
 - b. The proportion of people who binge drink¹² is highest in Yorkshire and The Humber (23% of men; 12% of women) and the North West (22% of men; 10% of women) and lowest in London (13% of men; 5% of women) and the South East (14% of men; 6% of women).
 - c. People living in the regions where population levels of drinking are highest now appear to be becoming 'normalised' towards heavier drinking since those classifying themselves as moderate drinkers in these regions actually consume more units of alcohol than those classifying themselves as moderate drinkers in other regions.
7. In all regions, people are now more likely to believe alcohol is a cause of crime. In the most recent surveys in England (2004/05-2005/06), 48% of people believed alcohol to be a major

¹⁰ Consumption of over 50 units per week for men and over 35 units per week for women.

¹¹ Consumption of between 22 and 50 units per week for men and between 15 and 35 units per week for women.

¹² Men drinking over eight units and women drinking over six units of alcohol on their heaviest drinking day in the last week.

cause of crime compared with 36% two years earlier and 5.7% thought alcohol was the main cause of crime compared with only 3.7% two years earlier.

8. The potential effect of alcohol on regional economies follows the general pattern of worklessness across England, with the proportion of the working population claiming incapacity benefits due to alcoholism being three times higher in the North West than in the East of England. The North East has the second highest rate. However, the percentage of all claims that are due to alcoholism is highest in London, the South East, the South West and the North West.
9. With regard to personal economics, people living in northern regions purchase the greatest amounts of alcohol per week, as a proportion of total expenditure on both household foods and eating out, and central regions purchase the smallest amounts. When eating out, people living in the north of England spend a higher proportion of their meal costs on alcohol (36-38% of spend) than people in the south (28-29% of spend).
10. Although decreasing slightly in recent years, a greater proportion of the adult population regularly visits a pub or bar in the north of England than in the south. This in itself might not be a detrimental behaviour if it were linked with positive social interactions akin to the 'Pub is the Hub'¹³ initiative. However, as highlighted in this report, regular visits to a pub or bar (and similarly to a nightclub or disco) actually show the same regional divide as excessive alcohol consumption and its related harms. Thus, a great deal more work would be required to elicit the positive benefits of social interaction and community wellbeing from the northern binge drinking culture.

Alcohol Intelligence Gaps

Safe. Sensible. Social: The next steps in the National Alcohol Strategy has already identified that there are discrepancies between the different datasets pertaining to measure national trends in alcohol consumption, since HM Revenue and Customs (HMRC) excise data suggest that alcohol purchases are nearly double the self-reported consumption levels reported by the Office for National Statistics in the General Household Survey. The strategy goes on to say that the Government will review both data sources by the end of 2007 to identify which set of data may give the best picture of current consumption and trends, and will also review further data analyses that may be needed to identify any under-reporting of consumption, especially by particular population groups.

This Regional Indications report has also identified that, despite the wide range of other national sources containing data measuring alcohol consumption and attitudes towards alcohol use and its effects on communities, inconsistency between datasets and difficulties in accessing them severely hinder the production of good public health intelligence on alcohol.

- Currently, there are several national lifestyle surveys that provide measures of alcohol consumption across the whole of England and for its regions. However, there is only partial consistency between these separate surveys, definitions vary and there is some difficulty in obtaining a definitive picture of binge, harmful and hazardous drinking levels. Changes to survey instruments over time do not allow for reporting of accurate trends, in particular harmful and hazardous measures, which cannot be determined for 2003 and 2004. Also, indicator production below regional level is currently problematic, since sample sizes are insufficient in any single year.
- There are many datasets available documenting various measures relating to alcohol use. However, historic agreements on data collection and restricted access to detailed variables greatly limit or delay the intelligence that can be generated at a local level. Due to lack of

¹³ The Pub is the Hub was initiated by The Prince of Wales in response to the closure of many British country pubs and other rural services. www.princeofwales.gov.uk/personalprofiles/theprinceofwales/initiatives/the_pub_is_the_hub_1916389644.html

access to datasets, it is often difficult for health intelligence measures and indicators to stay in step with national policy drivers. As with other national datasets, more rapid responses to emerging public health intelligence needs could be better generated from lifestyle data if confidentiality and disclosure agreements were placed upon the outputs and analysis and not on data access.

- Despite this lack of access to some datasets, good intelligence exists at the regional level on alcohol-specific indicators, such as mortality, hospital admission, consumption in adults, road traffic accidents, incapacity to work and alcohol sales. There are also some good intelligence measuring indicators where alcohol has an attributable influence, such as crime, anti-social behaviour orders and teenage conceptions.
- However, there are also many alcohol intelligence gaps. For some of these potentially good intelligence could be generated but systems are not yet fully established or comprehensive; for example, treatment service and GP data, measuring alcohol consumption in children or school exclusions. For others, there is a distinct lack of good intelligence: alcohol economics, industry data on investment in marketing and promotion campaigns and information on the range and evaluation of local interventions.

2. Introduction

This is the eighth report in the series *Indications of Public Health in the English Regions* commissioned by the Chief Medical Officer (CMO) for England, produced on behalf of the Association of Public Health Observatories (APHO) by the North West Public Health Observatory (NWPHO).

As a public health issue, alcohol is known to lead to a range of acute and chronic health problems, many of which, at the worst end of the scale, will lead to premature mortality. A wide range of conditions are influenced by alcohol. There are acute effects, such as alcoholic poisoning, violence and accidents, as well as the more chronic effects, such as alcohol-induced pancreatitis, chronic liver disease and stomach cancer. The burden to the National Health Service (NHS) is large in terms of hospital treatment and treatment within primary care. However, the effects of alcohol are not just related to health and health services and the influence of alcohol on individuals in turn affects the population as a whole through loss of employment, economic capacity and community cohesion. In this wider context, alcohol negatively affects the wellbeing of both individuals and communities due to, for example, behavioural changes resulting in acts of violence, anti-social behaviour, accidents or crime, risky sexual activity leading to teenage conceptions and sexually transmitted infections, and truancy from school. Nevertheless, much economic development and inner city regeneration focuses to a large extent around leisure and entertainment, inevitably including alcohol. So, marketing and promotion by the alcohol industry, with the ultimate goal of increasing sales, all contribute to the UK economy, but at the same time, helps to perpetuate the increasing harms on the population that are illustrated in this report.

Published in June 2007, *Safe. Sensible. Social: The next steps in the National Alcohol Strategy*¹⁴ highlights progress since the *Alcohol Harm Reduction Strategy for England (2004)*¹⁵ and sets out a series of steps aimed at maintaining the Government's ambition to continue to reduce the harms and costs of alcohol on the population in England. The new strategy outlines a coordinated response across a wide range of areas including local communities, the police, local authorities, the NHS, voluntary organisations, the alcohol industry, the wider business community and the media.

This Regional Indications report, produced alongside the new national strategy, contains 84 separate measures (comprising 36 different indicators) relating to individual, community and population implications of alcohol use, with various measures of the effects this has on health and wellbeing. In particular, the report focuses on the nine English regions, but where possible, the situation in England has been put into a wider European context with comparators across the rest of the UK and other EU countries.

The indicators included in this report are either wholly related to alcohol (i.e. alcohol-specific) or influenced in part by alcohol (i.e. alcohol-attributable). For example, alcoholic liver disease, mental/behavioural disorders due to alcohol and alcoholic poisoning are all a direct result of alcohol consumption. However, for other conditions, such as accidents, assaults, road traffic accidents, certain cancers, heart disease and spontaneous abortion, alcohol is causally implicated in some, but not all, cases and an attributable fraction (proportion related to alcohol) has been utilised to calculate their numbers. A list of the many conditions known to be affected by alcohol use and the proportion that can be attributed to alcohol is listed in Appendix 1.

This collation of indicators primarily aims to show the differences (and similarities) between Government Office regions, with a view to raising the profile of alcohol in the development of health and wellbeing strategies locally and regionally. In addition, measures have been

¹⁴ Department of Health, Home Office, Department for Education and Skills and Department for Culture, Media and Sport (June 2007). *Safe, sensible, social. The next steps in the alcohol strategy*. London: Department of Health.

¹⁵ Strategy Unit (2004). *Alcohol harm reduction strategy for England*. London: Strategy Unit.

developed at a sub-regional level to allow greater use of alcohol indicators in the development of local alcohol strategies. These are available in the associated web-based tool *Local Alcohol Profiles for England* (www.nwph.net/alcohol/lape).

These analyses also highlight internal inequalities within regions to provide further commentary on regional comparisons in relation to alcohol related harms in different population subgroups. For this, where the datasets allow, the analysis concentrates on presenting the indicators by two different inequality-identifying classifications. First, the measures are analysed by the Index of Multiple Deprivation 2004 (IMD 2004) either by aggregating from small area geography (Lower Super Output Area) to quintiles of deprivation¹⁶ or if small area data are not available, by correlations at local authority level. Second, where small area data are available, we have undertaken analyses by a geodemographic classification, P² People & Places (Appendix 2). These additional sub-regional measures are presented to enhance the interpretation of public health effects of alcohol on different sections of the population to enable better targeted local action.

Finally, each chapter includes a section on data issues and definitions that detail the datasets used for each indicator, the analyses performed, and any gaps or limitations to the data that should be taken into consideration.

¹⁶ Where possible, we have presented the ratio of the indicator for the most deprived quintile of areas (Q5) to that in the least deprived quintile of areas (Q1). This ratio provides a measure of the inequality between areas based on deprivation.

3. Life Lost and Mortality

Indicators

- Months of life lost per person (under 75 years) due to alcohol;
- Years of life lost per person dying from alcohol-attributable conditions;
- Percentage of total deaths that are alcohol-specific;
- Percentage of total deaths that are alcohol-attributable;
- Rate of alcohol-specific mortality (under 75 years) per 100,000 population;
- Rate of alcohol-specific mortality (all ages) per 100,000 population;
- Rate of mortality from chronic liver disease including cirrhosis per 100,000 population;
- Rate of alcohol-attributable mortality (under 75 years) per 100,000 population;
- Rate of alcohol-attributable mortality (all ages) per 100,000 population.

Rationale and Evidence

Life expectancy is a key health inequalities measure, and current cross-Government Public Service Agreement (PSA) targets¹⁷ aim to reduce the gap between the worst areas and the average for the country. Life expectancy is related to the mandatory outcomes and indicators in Local Area Agreements (LAAs) to reduce inequalities in all cause all age mortality¹⁸. Months of life lost per person due to alcohol provides a measure of how much alcohol contributes to life expectancy in the general population. In contrast, other measures of mortality due to alcohol provide more specific information on different age groups and different sections of the population to enable a greater understanding of the health consequences of alcohol consumption. Through gaining a more comprehensive understanding of the different patterns of alcohol-attributable mortality, local interventions aiming to reduce the harmful impact of alcohol consumption and its consequences can be implemented.

Background

In England, rates of alcohol-attributable mortality remained at around 40 deaths per 100,000 between 2001 to 2004, but then fell to 35 in 2005. Rates of alcohol-specific mortality are much lower and show a slightly different trend, rising slightly from around 8 deaths per 100,000 in 2001 to around 9 in 2004, and falling to approximately 8 deaths in 2005. In contrast, over the last 10 years the numbers of deaths from chronic liver disease (CLD) including cirrhosis have been steadily increasing. In 2005, there were 5,488 deaths due to CLD, a 63% increase on figures for 1995. Just over 7 months of life are lost due to alcohol per person in England, a figure that remained stable between 2001-03 and 2002-04 (at around 7.5) falling slightly to 7.25 in 2003-05. This fall was due to a decrease in the number of alcohol-attributable deaths from around 23,000 per year in 2004 to around 21,000 in 2005. Across England, at a regional level, the average years of life lost per person dying from alcohol-attributable conditions varies from 18.5 to 21.7 years in males and from 13.2 to 16.4 years in females. Compared to other European countries, the United Kingdom has fairly low death rates for both chronic liver disease including cirrhosis and selected alcohol-related causes (Appendix 3, Table 62 and Table 63) while England and Wales has a relatively low rate of liver cirrhosis (Appendix 3, Table 64).

¹⁷ www.dh.gov.uk/en/Policyandguidance/Healthandsocialcaretopics/Healthinequalities

¹⁸ www.communities.gov.uk/index.asp?id=1164930

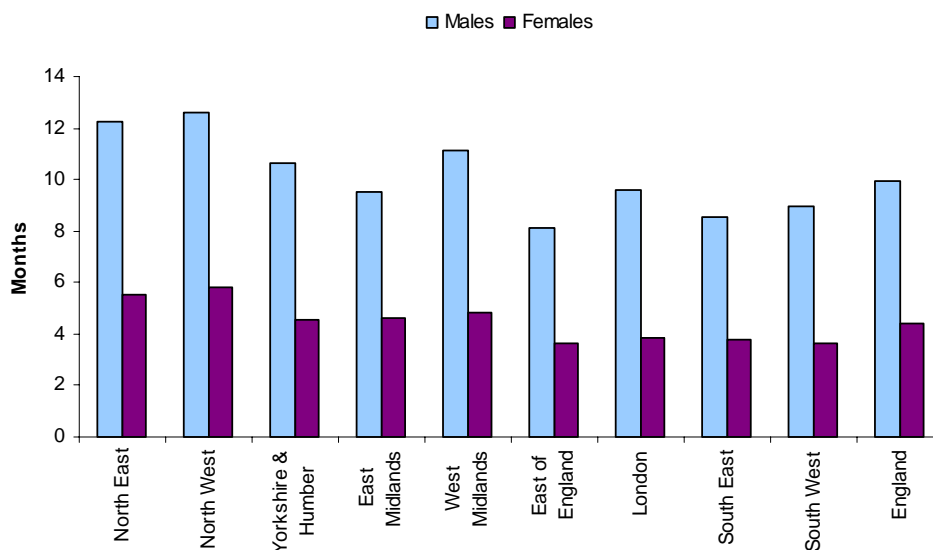
Regional Commentary

Months of life lost per person (under 75 years¹⁹) due to alcohol

Months of life lost is defined as the potential increase in life expectancy at birth that would be expected to occur if all alcohol-attributable deaths were prevented. During 2003-05, the North West had the highest number of months of life lost for males aged under 75 years, followed by the North East and West Midlands. The East of England and South East had the lowest number (Figure 1). Most regions experienced an increase in the number of months of male life lost due to alcohol between 2001-03 and 2003-05, particularly the North East, Yorkshire and The Humber and the North West. However, London, the South East and East of England all showed a decline in months of life lost over the same period (Table 1).

The number of months of life lost due to alcohol for females aged under 75 years is less than half that for men, but patterns between regions remain similar. For 2003-05, the North West had the highest number of months of life lost for females, followed by the North East and West Midlands. The East of England and South West had the lowest number (Figure 1). Between 2001-03 and 2003-05 the number of months of life lost due to alcohol for women increased in most regions, particularly in the North East, Yorkshire and The Humber and East Midlands. However, the number of months of life lost decreased in London and the South West over the same period (Table 1).

Figure 1: Months of life lost per person (under 75 years) due to alcohol, 2003-05.



Source: NWPHO from Office for National Statistics mortality data and mid-year population estimates

Table 1: Months of life lost per person (under 75 years) due to alcohol, 2001-03 to 2003-05.

		NE	NW	YH	EM	WM	EE	L	SE	SW	Eng
Males	2001-03	11.0	12.0	10.0	9.4	10.9	8.2	9.9	8.6	8.7	9.8
	2002-04	11.9	12.1	10.2	9.3	11.1	8.2	9.9	8.5	8.8	9.9
	2003-05	12.2	12.6	10.6	9.5	11.2	8.1	9.6	8.5	9.0	9.9
Females	2001-03	5.1	5.6	4.3	4.3	4.6	3.5	4.1	3.7	3.7	4.3
	2002-04	5.3	5.7	4.4	4.6	4.7	3.6	3.9	3.7	3.6	4.3
	2003-05	5.5	5.8	4.6	4.6	4.8	3.6	3.8	3.8	3.6	4.4

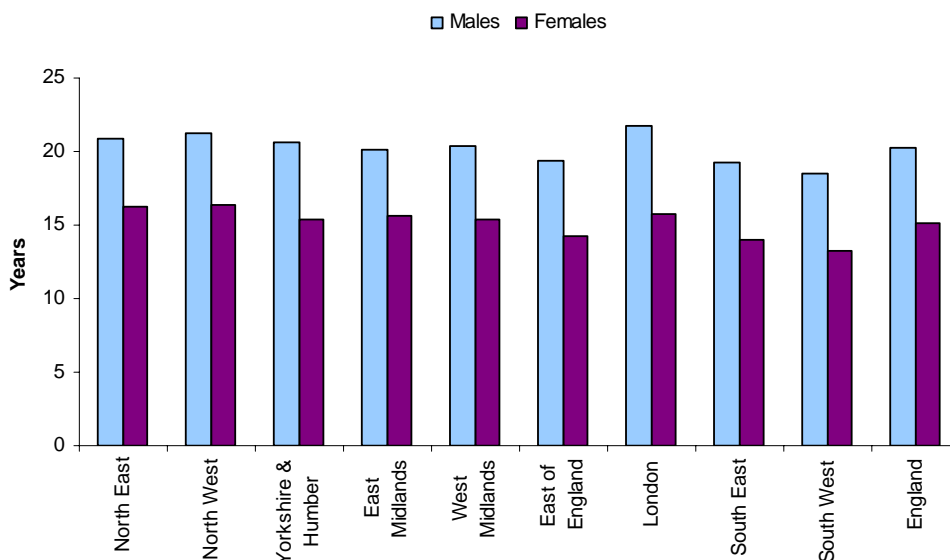
Source: NWPHO from Office for National Statistics mortality data and mid-year population estimates

¹⁹ Since accurate determination of cause of death is less likely in older individuals, months of life lost for all ages have not been calculated.

Years of life lost per person dying from alcohol-attributable conditions

Across the English regions, the average years of life lost per person dying from alcohol-attributable conditions varied from 18.5 to 21.7 years for males and from 13.2 to 16.4 years for females during 2003-05 (Figure 2). The greatest number of years of life lost was found in London for males and in the North West for females. The South West had the lowest number of years of life lost per person dying from alcohol-attributable conditions for both sexes.

Figure 2: Years of life lost per person dying from alcohol-attributable conditions, 2003-05.



Source: NWPHO from Office for National Statistics mortality data

Table 2: Years of life lost per person dying from alcohol-attributable conditions, 2003-05.

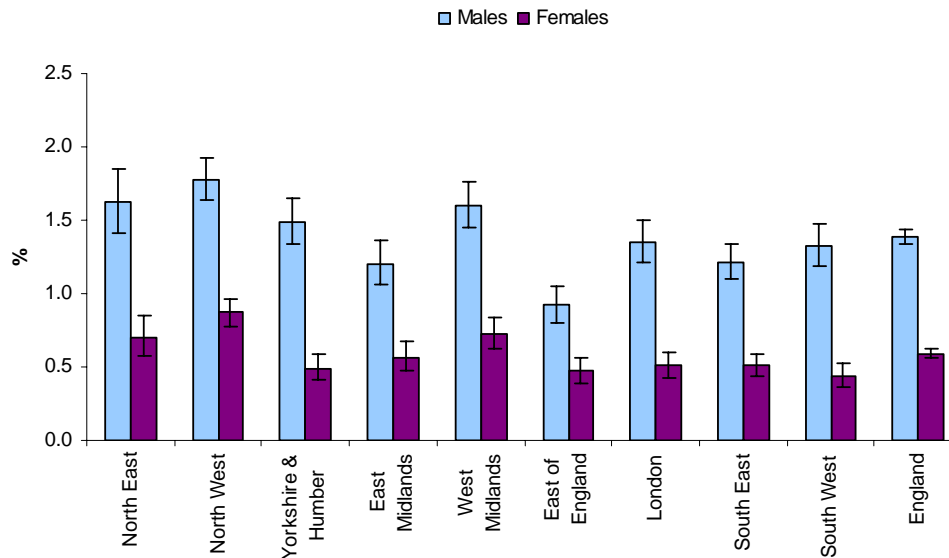
	NE	NW	YH	EM	WM	EE	L	SE	SW	Eng
Males	20.9	21.2	20.6	20.1	20.4	19.3	21.7	19.2	18.5	20.2
Females	16.3	16.4	15.4	15.6	15.3	14.3	15.7	14.1	13.2	15.1

Source: NWPHO from Office for National Statistics mortality data

Percentage of total deaths that are alcohol-specific

Across the regions, in 2005, the percentage of total deaths that were alcohol-specific for males was twice that for females with the exception of London where the proportion of deaths that were alcohol-specific were almost three times higher for males than females (Figure 3). For both sexes, the North West and the West Midlands had significantly higher percentages than England overall, while the East of England had a significantly lower percentage. Significantly lower percentages were also found in the South East (males only) and the South West (females only). Between 2001 and 2005, most regions experienced an increase in the percentage of total deaths that were alcohol-specific for both sexes (Table 3). The only exceptions to this were for males in London and females in the South West, where percentages remained stable.

Figure 3: Percentage of total deaths that are alcohol-specific, 2005.



Source: NPHO from Office for National Statistics mortality data

Table 3: Percentage of total deaths that are alcohol-specific, 2001-2005.

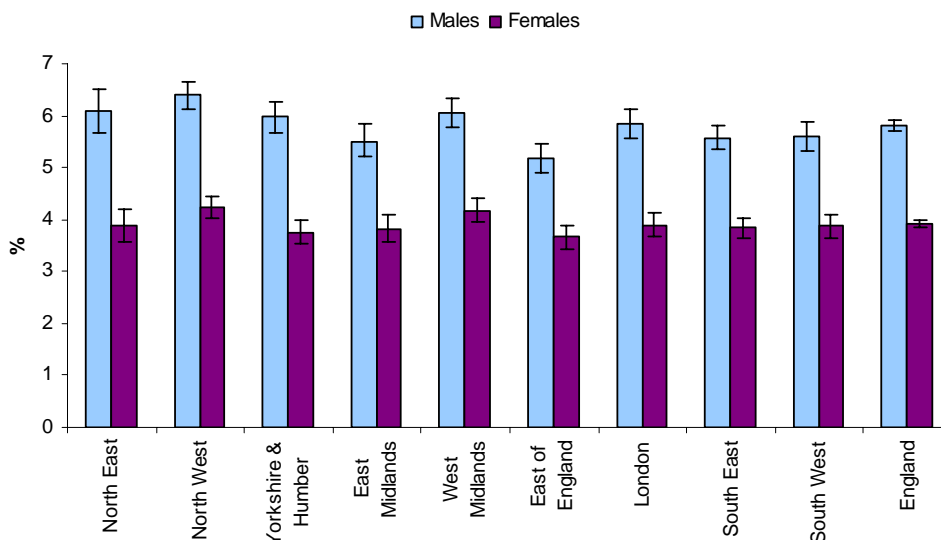
		NE	NW	YH	EM	WM	EE	L	SE	SW	Eng
Males	2001	1.19	1.45	1.03	1.00	1.29	0.83	1.34	1.02	0.91	1.13
	2002	1.32	1.47	0.98	1.02	1.39	0.85	1.29	1.07	0.98	1.16
	2003	1.35	1.65	1.26	1.10	1.62	0.87	1.33	1.13	1.03	1.27
	2004	1.63	1.73	1.32	1.03	1.52	0.85	1.37	1.08	1.14	1.29
	2005	1.62	1.77	1.49	1.21	1.60	0.92	1.35	1.22	1.33	1.39
Females	2001	0.65	0.70	0.44	0.43	0.61	0.38	0.45	0.39	0.44	0.49
	2002	0.50	0.69	0.42	0.53	0.60	0.40	0.49	0.44	0.40	0.50
	2003	0.73	0.70	0.49	0.48	0.56	0.36	0.52	0.42	0.39	0.51
	2004	0.77	0.87	0.59	0.69	0.70	0.46	0.46	0.45	0.44	0.59
	2005	0.70	0.87	0.49	0.57	0.73	0.47	0.51	0.51	0.44	0.59

Source: NPHO from Office for National Statistics mortality data

Percentage of total deaths that are alcohol-attributable

Across all regions, in 2005, males had a higher percentage of total deaths that were alcohol-attributable than females. The North West was the only region with a significantly higher percentage of total deaths that were alcohol-attributable (for both males and females) than England (Figure 4). The East of England was significantly lower than England for males only. Between 2001 and 2005 most regions experienced an increase in the percentage of total deaths in males that were alcohol-attributable (with the exception of London, which remained static). However, this increase was not found for females, where the majority of regions remained at a similar percentage (with the exception of the North East which decreased slightly and the South West which increased slightly) (Table 4).

Figure 4: Percentage of total deaths that are alcohol-attributable, 2005.



Source: NWPHO from Office for National Statistics mortality data

Table 4: Percentage of total deaths that are alcohol-attributable, 2001 to 2005.

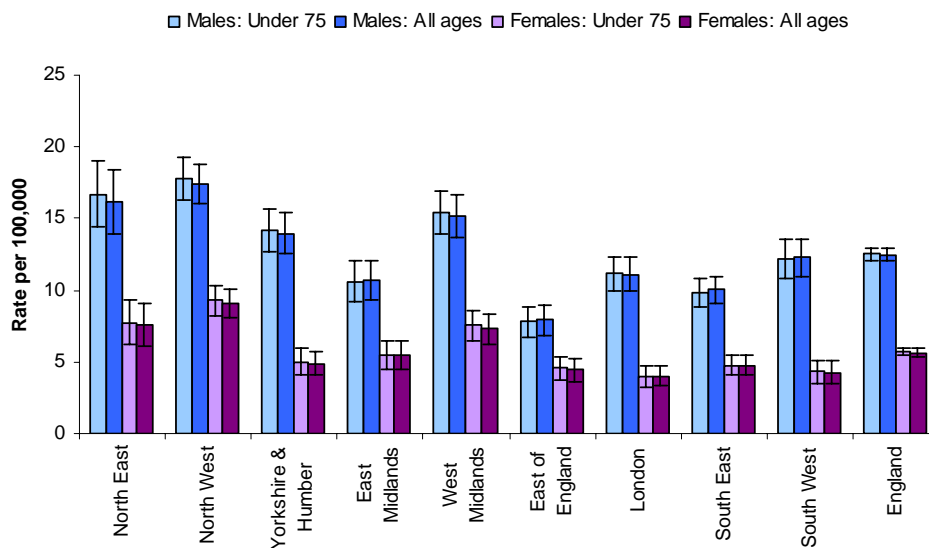
		NE	NW	YH	EM	WM	EE	L	SE	SW	Eng
Males	2001	5.48	6.01	5.21	5.29	5.73	4.97	5.85	5.39	5.13	5.48
	2002	5.61	5.99	5.27	5.30	5.82	5.07	5.95	5.38	5.20	5.53
	2003	5.68	6.10	5.51	5.32	6.07	5.07	6.09	5.46	5.24	5.63
	2004	6.13	6.23	5.67	5.36	6.11	5.12	6.01	5.43	5.42	5.72
	2005	6.07	6.39	5.97	5.51	6.05	5.16	5.84	5.58	5.60	5.80
Females	2001	4.01	4.16	3.75	3.83	4.16	3.69	3.95	3.77	3.83	3.91
	2002	3.87	4.09	3.72	3.98	4.14	3.76	3.90	3.87	3.83	3.91
	2003	3.98	4.08	3.72	3.85	4.01	3.58	3.95	3.83	3.77	3.86
	2004	4.12	4.26	3.95	4.00	4.22	3.77	3.89	3.83	3.91	3.99
	2005	3.88	4.23	3.76	3.82	4.17	3.66	3.89	3.84	3.87	3.91

Source: NWPHO from Office for National Statistics mortality data

Rate of alcohol-specific mortality (under 75 years and all ages) per 100,000 population

For the under 75 population, females generally experience rates of alcohol-specific mortality at less than half that for males (Figure 5). In 2005, the North East, North West and West Midlands had a significantly higher rate of alcohol-specific mortality for both males and females than England overall (Figure 5). Significantly lower levels were found for the East Midlands, East of England and South East (males) and the East of England, London and South West (females). Between 2001 and 2005, for both sexes, all regions apart from London (and the South West for females) experienced an increase in rates (Table 5). Rates of alcohol-specific mortality among men and women of all ages are similar in pattern to those in the under 75s (Figure 5). Between 2001 and 2005 most regions experienced an increase in rates for both sexes. However, decreases were seen in London (for both males and females) and the South West (for females only) (Table 5).

Figure 5: Rate of alcohol-specific mortality (directly standardised rate) per 100,000 population, 2005.



Source: NPHO from Office for National Statistics mortality data and mid-year population estimates

Table 5: Rate of alcohol-specific mortality (directly standardised rate) per 100,000 population, 2001 to 2005.

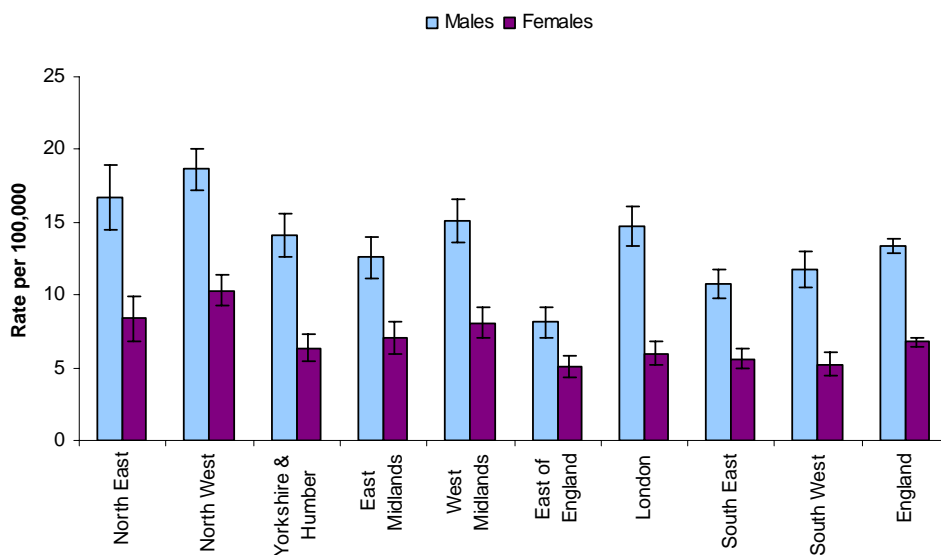
			NE	NW	YH	EM	WM	EE	L	SE	SW	Eng
Under 75	Males	2001	12.6	15.0	10.4	9.5	13.0	7.3	12.2	9.3	8.9	10.8
		2002	14.1	15.3	9.9	9.6	13.7	7.7	11.4	9.3	9.7	11.0
		2003	13.9	17.4	12.6	10.4	16.1	7.7	12.3	10.2	10.0	12.1
		2004	16.9	17.2	12.6	9.2	14.2	7.2	11.4	9.2	10.3	11.7
		2005	16.7	17.8	14.2	10.6	15.4	7.8	11.2	9.8	12.1	12.5
	Females	2001	7.4	7.9	4.7	4.4	6.1	3.7	4.2	3.9	4.5	5.1
		2002	5.7	8.1	4.4	5.2	6.1	3.9	4.1	4.4	4.3	5.1
		2003	8.1	7.9	5.3	5.0	5.8	3.5	4.7	3.9	4.0	5.2
		2004	8.4	9.2	6.1	6.5	6.9	4.1	3.9	4.1	4.2	5.7
		2005	7.8	9.3	5.0	5.5	7.5	4.5	4.0	4.8	4.3	5.7
All ages	Males	2001	12.5	15.0	10.3	9.5	12.9	7.4	12.3	9.3	8.9	10.8
		2002	13.8	15.1	9.8	9.6	13.6	7.8	11.4	9.5	9.6	11.0
		2003	13.8	16.9	12.4	10.6	15.9	7.7	12.1	10.1	9.9	12.0
		2004	16.6	17.0	12.5	9.2	14.1	7.2	11.2	9.1	10.4	11.6
		2005	16.2	17.4	14.0	10.7	15.2	7.9	11.1	10.0	12.3	12.5
	Females	2001	7.2	7.8	4.6	4.4	6.1	3.7	4.1	3.9	4.5	5.0
		2002	5.6	7.8	4.4	5.2	6.1	3.9	4.1	4.3	4.2	5.0
		2003	7.9	7.8	5.2	4.9	5.8	3.5	4.6	3.9	4.0	5.1
		2004	8.1	9.1	5.9	6.4	6.8	4.1	3.8	4.0	4.2	5.6
		2005	7.6	9.0	4.9	5.4	7.3	4.4	4.0	4.8	4.3	5.6

Source: NPHO from Office for National Statistics mortality data and mid-year population estimates

Rate of mortality from chronic liver disease including cirrhosis per 100,000 population

In 2005, levels of mortality from chronic liver disease (CLD) were significantly higher than England for the North West (both sexes) and North East (males only), and significantly lower for the East of England (both sexes), South East (both sexes), and South West (females only) (Figure 6). There are stark differences in mortality rates from CLD between the sexes, with the male mortality rates for some regions being more than twice the rate for females (London, South West, Yorkshire and The Humber). Over recent years the mortality rate from CLD has been steadily increasing in most regions, particularly for men in Yorkshire and The Humber and for women in the East Midlands (Table 6). A north-south divide is apparent in the trends in rates of mortality from CLD among males, with northern regions showing increased rates from 2003 to 2005, and southern regions (with the exception of the South West) showing a decrease in rates between 2003 and 2005. This obvious north-south divide is not repeated among females.

Figure 6: Rate of mortality (directly standardised rate) from chronic liver disease including cirrhosis per 100,000 population, 2005.



Source: National Centre for Health Outcomes Development from National Statistics

Table 6: Rate of mortality (directly standardised rate) from chronic liver disease including cirrhosis per 100,000 population, 2001 to 2005.

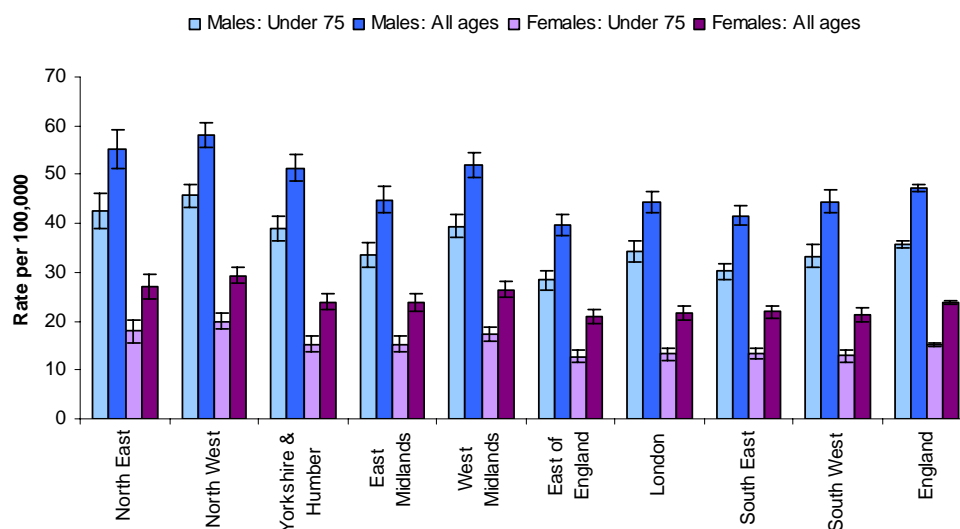
		NE	NW	YH	EM	WM	EE	L	SE	SW	Eng
Males	2001	13.7	16.7	10.7	10.2	12.8	8.0	14.9	11.4	9.9	12.1
	2002	15.0	17.2	10.4	10.3	13.9	8.3	16.1	10.6	9.8	12.4
	2003	15.4	18.4	13.1	11.7	15.5	9.1	16.4	11.7	10.7	13.5
	2004	17.9	18.3	14.0	11.1	14.4	8.0	15.4	10.6	11.1	13.2
	2005	16.7	18.7	14.1	12.6	15.1	8.1	14.8	10.8	11.8	13.4
Females	2001	9.0	9.5	5.8	5.5	7.0	4.5	6.6	5.5	5.4	6.4
	2002	7.3	9.9	5.6	6.3	7.3	4.8	6.8	5.8	5.1	6.6
	2003	10.4	9.9	6.6	6.5	6.8	4.8	7.3	5.7	5.2	6.8
	2004	9.4	10.8	6.8	7.6	7.8	5.2	6.1	5.8	4.8	7.0
	2005	8.4	10.3	6.4	7.1	8.1	5.1	6.0	5.6	5.3	6.8

Source: National Centre for Health Outcomes Development from National Statistics

Rate of alcohol-attributable mortality (under 75 years and all ages) per 100,000 population

In 2005, the highest alcohol-attributable mortality rates for under 75 year olds were in the North West for both sexes (Figure 7). Rates were significantly higher than England in the North East (both sexes), North West (both sexes), West Midlands (both sexes) and Yorkshire and The Humber (males only). Significantly lower rates were found in the East of England (both sexes), South East (both sexes), London (females only) and South West (females only). Between 2001 and 2005, trends in rates varied between regions. Among men, a large increase was seen in Yorkshire and The Humber and a large decrease was evident in London. For women, a larger than average decrease was also seen in London. For all ages, in 2005, rates of alcohol-attributable mortality were similar in pattern to those among the under 75s (Figure 7). Again, trends between 2001 and 2005 varied between regions, with far larger than average decreases seen in London for both males and females, and a large increase found for males in Yorkshire and The Humber (Table 7).

Figure 7: Rate of alcohol-attributable mortality (directly standardised rate) per 100,000 population, 2005.



Source: NWPHO from Office for National Statistics mortality data and mid-year population estimates

Table 7: Rate of alcohol-attributable mortality (directly standardised rate) per 100,000 population, 2001 to 2005.

			NE	NW	YH	EM	WM	EE	L	SE	SW	Eng
Under 75	Males	2001	40.2	44.5	34.6	33.4	38.9	28.7	37.8	32.0	31.4	35.4
		2002	41.6	43.6	35.6	33.5	38.9	30.1	37.3	31.4	31.9	35.5
		2003	41.6	45.0	37.3	34.2	41.9	29.4	38.3	31.9	31.3	36.3
		2004	46.0	44.3	36.6	32.5	39.6	28.0	35.8	30.3	30.9	35.2
		2005	42.6	45.7	38.9	33.5	39.5	28.5	34.3	30.2	33.3	35.6
	Females	2001	18.8	20.2	14.7	14.5	16.8	12.6	15.3	13.2	13.7	15.3
		2002	16.5	19.5	14.7	15.9	16.6	13.2	14.7	13.4	13.6	15.2
		2003	18.8	19.3	15.7	15.5	15.9	12.5	15.3	13.4	12.9	15.2
		2004	19.5	20.3	15.9	16.6	17.3	12.7	13.7	13.3	12.6	15.5
		2005	17.9	20.0	15.3	15.2	17.3	12.8	13.3	13.5	12.8	15.1
All ages	Males	2001	53.9	58.5	47.4	45.9	52.0	40.3	49.6	43.7	43.1	47.8
		2002	54.6	57.4	47.9	45.9	52.2	41.7	48.8	43.3	43.5	47.9
		2003	54.8	57.8	49.4	46.5	54.9	40.6	49.9	43.4	43.1	48.3
		2004	58.0	56.8	48.7	43.4	51.9	39.1	45.9	41.1	42.1	46.6
		2005	55.1	58.1	51.3	44.8	52.0	39.7	44.4	41.7	44.5	47.2
	Females	2001	28.6	30.2	24.0	24.1	26.8	21.5	24.0	22.0	22.3	24.6
		2002	26.9	29.4	24.1	25.4	26.6	22.2	23.4	22.5	22.4	24.6
		2003	28.8	29.5	24.7	24.8	26.1	21.2	24.4	22.5	22.0	24.6
		2004	29.0	29.7	25.1	25.2	26.6	21.3	22.0	21.6	21.2	24.2
		2005	27.1	29.3	23.9	23.8	26.4	21.0	21.5	21.9	21.4	23.8

Source: NWPHO from Office for National Statistics mortality data and mid-year population estimates

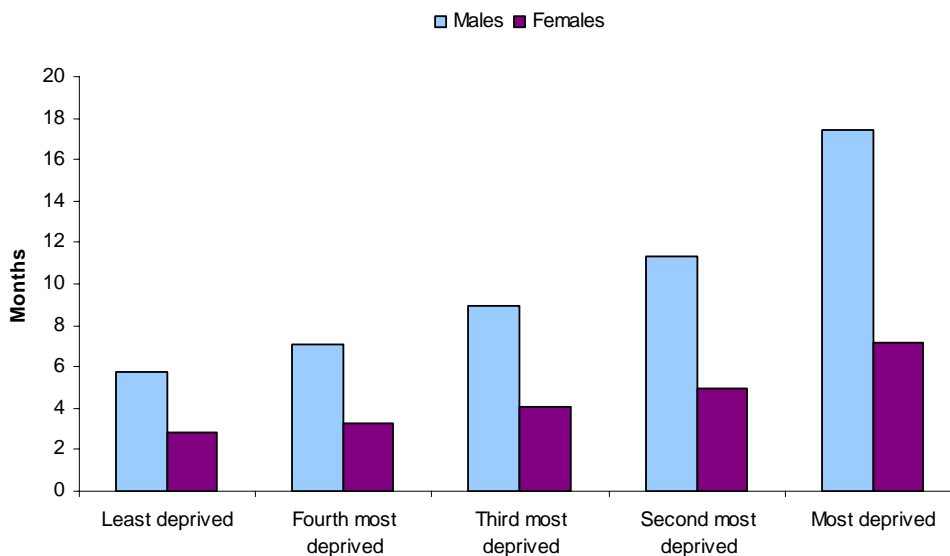
Sub-regional Inequalities

Months of life lost per person (under 75 years) due to alcohol

Inequalities are presented in this report by comparing measures across national quintiles of the Index of Multiple Deprivation 2004 (IMD 2004) and by observing the ratio between the least deprived and most deprived quintiles: a higher ratio shows greater inequality.

Analysis of months of life lost due to alcohol-attributable conditions (2003-05) by IMD 2004 quintile shows a loss of around 6 months (males) and 3 months (females) in the least deprived quintile rising to around 18 months (males) and 7 months (females) in the most deprived quintile (Figure 8). This gives a ratio of 3.0 for males and 2.5 for females for 2005, demonstrating strong links with deprivation for both sexes. A similar pattern is found regionally (Table 8).

Figure 8: Months of life lost due to alcohol by Index of Multiple Deprivation 2004 quintile. England, 2003-05.



Source: NWPFO from Office for National Statistics mortality data and mid-year population estimates

Table 8: Months of life lost due to alcohol by Index of Multiple Deprivation 2004 quintile, 2003-05.

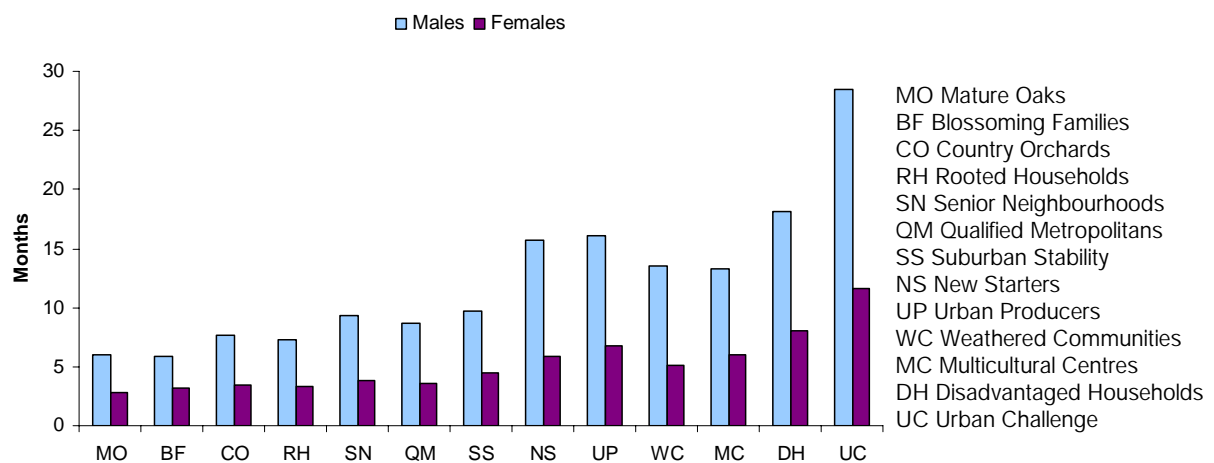
		Least deprived	Fourth most deprived	Third most deprived	Second most deprived	Most deprived	Inequality ratio
Males	NE	5.3	6.2	8.6	11.0	18.6	3.5
	NW	6.4	7.0	9.0	12.6	20.3	3.2
	YH	5.4	6.7	8.1	10.5	17.4	3.2
	EM	6.0	6.6	9.1	10.9	17.0	2.8
	WM	5.8	8.2	9.7	12.3	17.5	3.0
	EE	5.4	7.0	8.8	11.8	16.9	3.1
	L	4.6	6.9	8.2	10.7	13.6	3.0
	SE	6.2	7.4	10.2	11.7	20.1	3.2
	SW	5.5	7.1	9.2	11.3	17.8	3.2
	Eng	5.8	7.1	9.0	11.4	17.5	3.0
Females	NE	2.8	2.8	4.2	5.8	7.6	2.7
	NW	3.0	3.2	4.7	5.4	9.3	3.1
	YH	2.9	3.1	4.2	4.9	6.4	2.2
	EM	3.1	3.9	4.4	5.1	7.2	2.3
	WM	3.0	3.9	4.1	5.5	7.1	2.4
	EE	2.8	3.0	4.2	4.7	6.8	2.4
	L	2.2	3.1	3.3	4.2	5.1	2.3
	SE	3.0	3.4	4.0	5.5	7.3	2.4
	SW	2.6	2.8	3.6	4.5	7.2	2.8
	Eng	2.9	3.3	4.0	5.0	7.2	2.5

Source: NWPFO from Office for National Statistics mortality data and mid-year population estimates

A more detailed look at inequalities has been undertaken by comparing alcohol-related measures across different geodemographic lifestyle groups²⁰. These use geography and behavioural information to classify people by where and how they live. The groups are ordered from the least deprived 'Mature Oaks' to the most deprived 'Urban Challenge' allowing patterns different from that expected by deprivation alone to stand out.

Analysis by geodemographic classification shows the expected link between deprivation and months of life lost (Figure 9), with the least deprived 'Mature Oaks' showing the second lowest level for men and the lowest level for women and the most deprived group 'Urban Challenge' the highest for both sexes. 'New Starters' have more loss of life than might be expected given their level of deprivation. Conversely, for males, 'Country Orchards', 'Senior Neighbourhoods' and 'Weathered Communities' show a lower than expected level. A similar picture emerges by region (Table 9), which shows greater variation between months of life lost in the more deprived groups, from 'New Starters' through to 'Urban Challenge', than in the less deprived groups.

Figure 9: Months of life lost due to alcohol by geodemographic classification. England, 2003-05.



Source: NWPFO from Office for National Statistics mortality data and mid-year population estimates

Table 9: Months of life lost due to alcohol by geodemographic classification, 2003-05.

		MO	BF	CO	RH	SN	QM	SS	NS	UP	WC	MC	DH	UC
Males	NE	4.8	5.8	8.4	7.3	12.7	7.7	9.5	20.5	15.9	24.3	13.4	18.4	31.2
	NW	5.8	7.0	7.6	8.1	10.7	7.9	11.0	19.5	19.1	16.4	15.3	21.9	30.1
	YH	6.1	5.3	6.9	6.9	8.7	9.1	8.9	14.9	16.3	13.7	13.4	18.5	28.0
	EM	6.4	5.6	7.5	6.6	9.7	8.4	9.5	14.4	15.6	13.7	14.2	15.3	25.4
	WM	6.3	6.2	8.6	8.1	10.9	10.7	10.4	16.2	17.6	16.7	14.0	16.2	26.4
	EE	5.9	5.2	7.4	6.4	8.5	8.5	9.7	15.0	14.2	10.1	11.4	14.5	24.4
	L	4.8	4.3	8.6	7.2	8.5	8.4	8.5	12.6	13.0	12.0	12.3	9.1	11.9
	SE	6.1	6.2	7.6	7.9	8.8	9.8	9.8	16.6	14.9	14.7	10.5	16.6	26.6
	SW	5.7	5.2	7.8	7.2	9.7	10.3	9.4	18.3	14.9	23.7	11.7	15.4	24.7
	Eng	6.0	5.8	7.7	7.3	9.4	8.7	9.7	15.7	16.1	13.5	13.3	18.2	28.5
Females	NE	2.2	3.9	3.3	3.0	4.7	3.6	4.8	8.1	7.0	7.5	6.9	7.8	10.9
	NW	2.8	3.3	3.8	3.7	5.1	3.7	5.3	8.6	8.3	6.7	7.4	10.5	13.0
	YH	2.8	3.0	3.5	3.3	3.6	4.8	4.6	4.7	6.1	5.1	5.2	7.8	9.5
	EM	3.0	3.6	4.5	3.6	3.3	5.1	5.1	7.8	6.3	4.3	5.7	6.6	12.9
	WM	3.1	3.1	3.8	3.8	4.4	3.1	4.5	3.8	7.6	5.7	6.6	7.3	9.6
	EE	2.7	2.7	3.2	3.2	3.6	3.8	4.0	5.5	5.8	5.0	5.4	4.5	14.7
	L	1.6	2.8	2.6	2.9	3.2	3.7	3.6	4.9	5.2	4.7	4.1	6.1	1.0
	SE	2.9	3.6	2.9	3.5	3.6	3.0	4.5	6.0	6.4	5.2	4.9	6.9	13.0
	SW	2.6	2.6	3.0	2.8	4.2	2.9	3.9	6.2	5.7	6.2	5.2	6.8	11.2
	Eng	2.8	3.2	3.4	3.4	3.9	3.6	4.5	5.9	6.7	5.1	6.0	8.1	11.7

Source: NWPFO from Office for National Statistics mortality data and mid-year population estimates

²⁰ P2 People & Places. © Beacon Dodsworth 2004-2005. www.p2peopleandplaces.co.uk (See Appendix 2)

Rate of alcohol-specific mortality (under 75 years and all ages) per 100,000 population

Rate of alcohol-attributable mortality (under 75 years and all ages) per 100,000 population

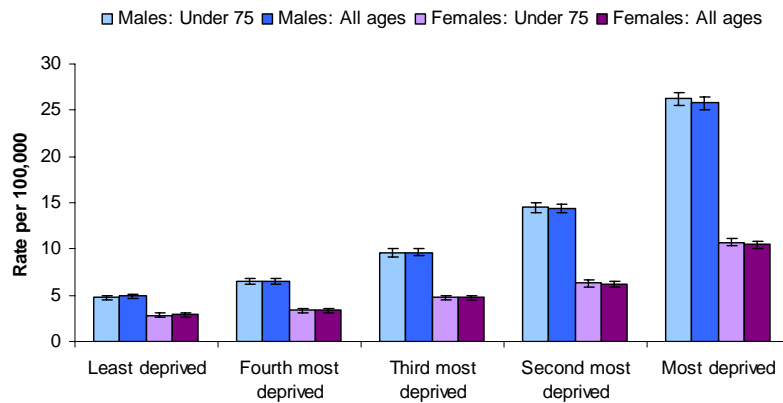
Analysis of alcohol-specific mortality (2001-05) among those aged under 75 by the Index of Multiple Deprivation 2004 reveals a range of 5 deaths (males) and 3 deaths (females) per 100,000 in the least deprived quintile to 26 (males) and 11 (females) in the most deprived quintile (Figure 10). This gives a higher inequality ratio for males (5.5) than for females (3.7) and shows a stronger link with deprivation than alcohol-attributable deaths. Each region shows a similar link with deprivation (Table 10). Ratios are lowest in London for males and females, and highest in the North East for males and the North West for females. Rates for all ages, both nationally (Figure 10) and regionally (Table 10), are similar to those seen for the under 75 population, with a higher ratio seen for males than females again.

Geodemographic classification analyses for alcohol-specific mortality (under 75 years and all ages) reveal more variation in rates. However, the link with deprivation is still evident for both males and females, with 'Mature Oaks' having a much lower rate of deaths per 100,000 population than 'Urban Challenge' (Figure 11). The rate for 'New Starters' is higher than might be expected given the level of deprivation. In addition, 'Suburban Stability', 'Weathered Communities', 'Multicultural Centres', 'Disadvantaged Households' and 'Urban Producers' may have slightly lower rates than might be expected for both sexes. A similar pattern emerges for each region (Table 11), with the less deprived categories showing less variability than the more deprived categories.

Nationally, for those aged under 75, the rate of alcohol-attributable deaths (2001-05) ranges from 21 deaths (males) and 10 deaths (females) per 100,000 in the least deprived IMD 2004 quintile to 64 (males) and 25 (females) in the most deprived (a ratio of 3.0 for males and 2.4 for females). Ratios are lowest in the East Midlands for males and London for females, and highest in the North East for males and the North West for females (Table 12). For all ages, the national rate ranges from 32 (males) and 19 (females) in the least deprived quintile to 77 (males) and 35 (females) in the most deprived (an inequality ratio of 2.4 for males and 1.8 for females) (Figure 12). As with the under 75 population, ratios for all ages are lowest in the East Midlands for males and London for females, and highest in the North East for males and the North West for females (rates shown in Table 12).

Nationally, analysis of alcohol-attributable deaths (2001-05) by geodemographic classification also shows a link with deprivation for both the under 75 population and all ages. 'Mature Oaks', the least deprived category, has a much lower rate of mortality per 100,000 population for both males and females than 'Urban Challenge', the most deprived category (Figure 13). 'New Starters' have a greater rate than might be expected for both sexes given the relatively lower level of deprivation. This pattern is fairly consistent across all regions (Table 13). Between regions, the least deprived categories such as 'Mature Oaks' show less variability than the more deprived categories such as 'Urban Challenge'.

Figure 10: Rate of alcohol-specific mortality (directly standardised rate) per 100,000 population by Index of Multiple Deprivation 2004 quintile. England, 2001-05.



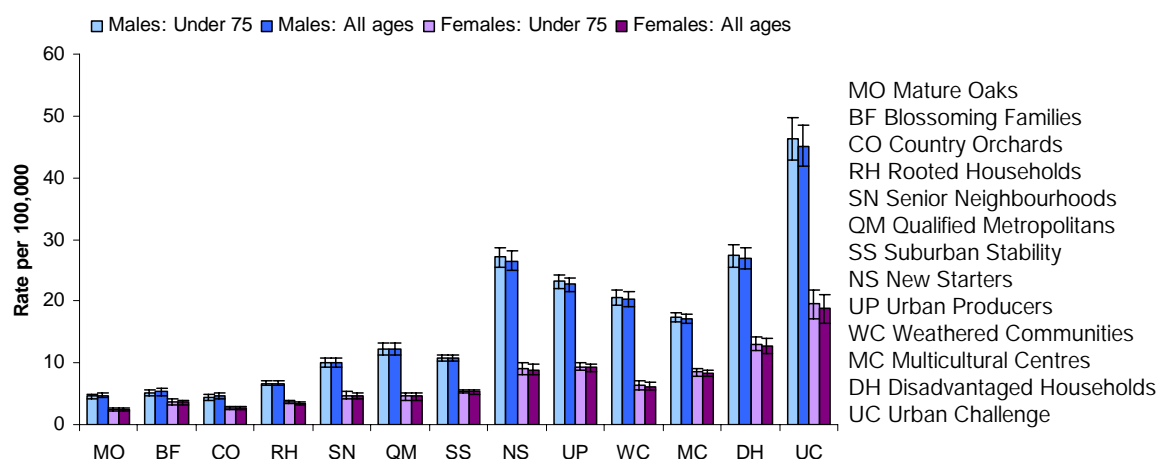
Source: NPHO from Office for National Statistics mortality data and mid-year population estimates

Table 10: Rate of alcohol-specific mortality (directly standardised rate) per 100,000 population by Index of Multiple Deprivation 2004 quintile, 2001-05.

			Least deprived	Fourth most deprived	Third most deprived	Second most deprived	Most deprived	Inequality ratio
Under 75	Males	NE	2.9	4.7	7.7	13.8	26.3	9.1
		NW	5.7	6.6	9.3	16.7	32.1	5.6
		YH	3.5	5.8	7.4	11.9	24.6	7.0
		EM	5.1	5.5	7.6	12.2	24.0	4.7
		WM	5.3	7.7	11.3	16.8	29.1	5.5
		EE	3.6	5.8	8.4	13.0	23.8	6.6
		L	3.9	7.4	10.4	13.8	17.9	4.6
		SE	5.4	7.3	12.3	17.4	32.1	5.9
		SW	4.9	6.1	9.9	15.0	29.8	6.1
	Eng	4.8	6.5	9.6	14.5	26.2	5.5	
	Females	NE	3.5	3.0	5.8	7.6	11.1	3.2
		NW	3.2	3.8	6.3	7.7	15.7	4.9
		YH	2.6	2.7	4.2	5.7	8.6	3.3
		EM	2.8	4.0	5.5	6.1	10.1	3.6
		WM	3.1	4.6	4.5	8.5	11.3	3.6
		EE	2.8	2.6	4.6	6.3	9.2	3.3
		L	2.5	3.0	3.5	4.7	5.8	2.3
		SE	2.9	3.7	5.2	6.2	11.4	3.9
SW		2.7	2.9	4.1	5.3	12.8	4.7	
Eng	2.9	3.4	4.7	6.3	10.7	3.7		
All ages	Males	NE	2.9	4.8	7.7	13.5	25.7	8.9
		NW	5.6	6.6	9.3	16.4	31.5	5.6
		YH	3.5	5.8	7.3	11.8	24.1	6.9
		EM	5.3	5.8	7.7	12.0	23.7	4.5
		WM	5.4	7.8	11.3	16.6	28.4	5.3
		EE	3.8	6.0	8.4	12.9	23.6	6.2
		L	4.0	7.3	10.4	13.8	17.8	4.5
		SE	5.5	7.4	12.4	17.0	31.9	5.8
		SW	5.1	6.1	9.9	15.1	29.2	5.7
	Eng	4.9	6.6	9.6	14.3	25.8	5.3	
	Females	NE	3.5	3.0	5.7	7.4	10.7	3.1
		NW	3.2	3.8	6.2	7.5	15.2	4.8
		YH	2.5	2.6	4.1	5.5	8.4	3.4
		EM	2.9	3.9	5.4	6.0	9.9	3.4
		WM	3.2	4.5	4.5	8.3	11.0	3.4
		EE	2.8	2.6	4.5	6.1	9.0	3.2
		L	2.6	2.9	3.6	4.6	5.7	2.2
		SE	2.9	3.7	5.2	6.3	11.0	3.8
SW		2.7	2.8	4.1	5.3	12.6	4.7	
Eng	2.9	3.3	4.7	6.2	10.5	3.6		

Source: NPHO from Office for National Statistics mortality data and mid-year population estimates

Figure 11: Rate of alcohol-specific mortality (directly standardised rate) per 100,000 population by geodemographic classification. England, 2001-05.



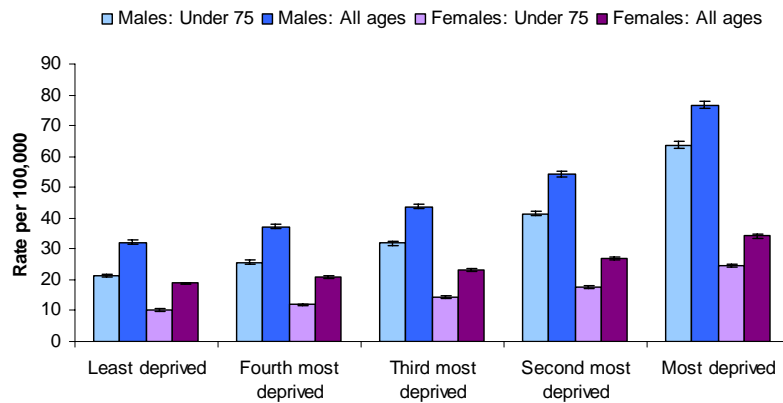
Source: NWPCHO from Office for National Statistics mortality data and mid-year population estimates

Table 11: Rate of alcohol-specific mortality (directly standardised rate) per 100,000 population by geodemographic classification, 2001-05.

			MO	BF	CO	RH	SN	QM	SS	NS	UP	WC	MC	DH	UC
Under 75	Males	NE	3.2	4.1	3.5	6.7	10.1	8.5	10.4	30.2	21.9	38.2	17.2	26.1	49.7
		NW	4.9	8.5	5.3	7.7	11.6	9.7	12.9	36.1	29.2	30.0	21.9	34.3	49.3
		YH	4.2	4.5	3.5	6.1	6.5	16.3	8.9	26.1	21.2	22.4	15.9	26.6	42.9
		EM	5.2	3.8	5.1	5.4	6.7	12.4	9.3	25.8	20.2	22.1	16.3	23.0	40.9
		WM	5.4	5.7	6.4	8.2	13.1	17.6	12.1	31.3	28.2	31.9	18.9	27.1	50.2
		EE	3.7	4.4	3.3	4.9	8.5	10.7	10.4	22.0	18.8	17.2	11.7	20.5	39.0
		L	3.9	3.5	11.4	6.5	8.5	10.7	9.6	19.6	15.9	15.7	16.0	15.9	0.0
		SE	4.6	5.2	4.0	8.1	9.3	16.5	11.7	29.6	24.9	24.4	14.6	21.0	40.1
	SW	4.7	4.8	3.7	6.3	12.2	19.7	11.6	35.4	21.0	35.0	16.3	21.2	38.8	
	Eng	4.6	5.2	4.5	6.7	10.0	12.2	10.9	27.1	23.1	20.6	17.3	27.3	46.3	
	Females	NE	2.1	5.2	3.4	3.8	8.2	7.7	5.5	16.7	10.3	18.1	8.7	11.8	17.4
		NW	3.1	4.4	3.1	4.8	7.3	4.3	7.4	17.0	13.0	10.6	11.0	18.7	22.1
		YH	2.4	2.3	2.0	3.0	4.3	5.1	5.1	6.5	8.0	7.1	6.3	10.4	16.9
		EM	3.0	3.8	3.9	3.7	2.6	6.4	6.2	11.4	8.6	4.4	7.4	10.8	20.7
		WM	3.1	3.2	3.1	4.9	4.7	3.8	6.0	5.3	11.7	8.4	10.4	12.5	14.9
		EE	2.4	2.9	2.5	2.6	4.9	4.4	4.4	8.1	7.7	5.9	9.0	4.3	21.5
L		0.9	2.4	0.6	2.3	4.1	4.8	4.1	5.9	4.7	5.2	4.6	3.7	0.0	
SE		2.3	4.4	2.4	4.0	3.8	3.7	4.6	9.4	8.4	7.8	7.0	11.4	21.8	
SW	2.6	2.6	2.4	2.6	5.0	3.5	5.0	11.2	7.5	14.0	6.9	12.2	20.5		
Eng	2.5	3.6	2.7	3.6	4.7	4.6	5.4	9.1	9.4	6.4	8.5	13.1	19.5		
All ages	Males	NE	3.6	3.9	3.4	6.8	9.7	8.2	10.4	29	21.5	36.7	16.8	25.4	48.5
		NW	4.9	8.3	5.7	7.5	11.4	11.1	12.6	35.4	28.7	29.7	21.6	33.6	47.8
		YH	4.1	4.6	3.7	6.0	6.7	15.6	8.7	25.4	21.2	21.5	15.7	26.0	41.5
		EM	5.5	4.3	5.4	5.6	7.0	12	9.5	25.6	19.6	21.8	16.0	23.2	39.9
		WM	5.3	5.4	6.5	8.4	13.0	18.7	12.2	30.1	27.4	31.0	18.7	26.6	48.8
		EE	3.9	4.5	3.5	5.0	8.6	10.3	10.4	22.3	18.6	16.5	11.7	20.2	37.4
		L	4.2	3.7	11.0	6.4	8.5	10.9	9.5	19.1	15.5	15.7	15.8	15.3	0.0
		SE	4.8	5.5	3.9	8.1	9.4	16.2	11.7	29.0	25.0	24.0	14.6	20.9	40.9
	SW	4.9	4.6	3.9	6.3	12.2	19.4	11.7	34.6	20.7	33.6	16.5	21.4	38.1	
	Eng	4.7	5.3	4.6	6.7	10.0	12.3	10.8	26.5	22.8	20.3	17.1	26.9	45.1	
	Females	NE	2.2	5.0	3.2	3.9	8.3	7.3	5.4	16.1	10	17.4	8.5	11.3	16.9
		NW	3.0	4.2	3.1	4.8	7.4	4.5	7.3	16.5	12.7	10.2	10.7	18.1	21.3
		YH	2.4	2.3	2.2	2.8	4.2	4.9	5.0	6.4	7.8	6.8	6.2	10.0	16.4
		EM	3.1	3.9	3.8	3.6	2.5	6.2	6.1	11.3	8.6	4.6	7.1	10.4	19.9
		WM	3.1	3.4	3.1	4.7	4.6	4.4	6.0	5.5	11.4	8.3	10.1	12.3	14.3
		EE	2.4	2.7	2.5	2.6	4.9	4.4	4.3	7.9	7.6	5.7	8.7	4.5	20.7
L		0.9	2.3	0.8	2.4	4.1	4.8	4.1	5.8	4.6	5.1	4.4	3.5	0.0	
SE		2.4	4.4	2.6	3.9	3.8	3.6	4.6	9.4	8.2	7.5	7.1	10.9	21.0	
SW	2.6	2.8	2.4	2.6	5.0	3.6	5.0	10.9	7.3	14.9	6.9	11.7	20.1		
Eng	2.5	3.6	2.7	3.5	4.7	4.5	5.3	8.9	9.2	6.2	8.3	12.7	18.8		

Source: NWPCHO from Office for National Statistics mortality data and mid-year population estimates

Figure 12: Rate of alcohol-attributable mortality (directly standardised rate) per 100,000 population by Index of Multiple Deprivation 2004 quintile. England, 2001-05.



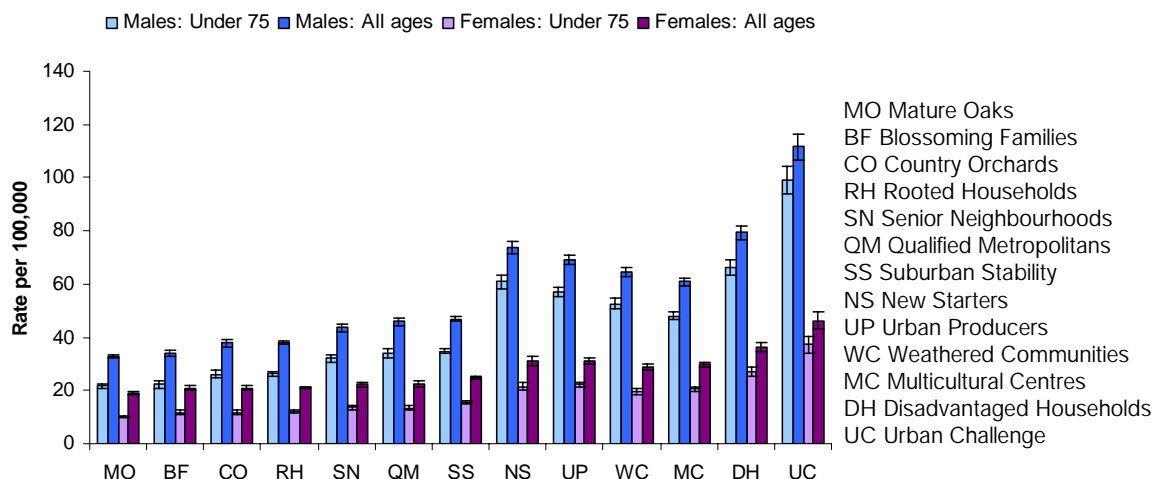
Source: NPHO from Office for National Statistics mortality data and mid-year population estimates

Table 12: Rate of alcohol-attributable mortality (directly standardised rate) per 100,000 population by Index of Multiple Deprivation 2004 quintile, 2001-05.

			Least deprived	Fourth most deprived	Third most deprived	Second most deprived	Most deprived	Inequality ratio
Under 75	Males	NE	18.8	22.2	29.1	39.1	65.0	3.5
		NW	23.0	26.1	31.8	45.3	73.4	3.2
		YH	19.7	23.6	28.7	37.1	60.3	3.1
		EM	21.7	24.6	30.6	39.3	60.4	2.8
		WM	21.9	27.9	33.9	45.2	65.0	3.0
		EE	19.8	25.3	31.6	40.9	60.6	3.1
		L	18.4	25.8	31.2	41.6	53.4	2.9
		SE	22.8	27.6	36.1	45.8	74.2	3.3
		SW	20.6	25.2	32.1	39.3	67.6	3.3
	Eng	21.3	25.7	31.8	41.5	63.8	3.0	
	Females	NE	10.1	10.9	14.8	19.0	24.4	2.4
		NW	10.8	12.5	16.2	19.7	30.9	2.9
		YH	9.9	10.8	13.8	16.3	21.7	2.2
		EM	10.7	13.0	15.3	17.8	24.0	2.2
		WM	10.5	13.4	13.9	19.9	25.0	2.4
		EE	10.0	10.9	13.8	17.1	23.1	2.3
		L	9.4	11.2	12.8	15.7	19.3	2.1
		SE	10.5	12.5	15.3	18.2	25.7	2.4
		SW	9.9	11.0	12.9	15.5	25.3	2.6
Eng		10.3	11.9	14.2	17.5	24.6	2.4	
All ages	Males	NE	29.7	33.4	42.3	52.5	78.3	2.6
		NW	33.8	38.4	44.4	59.4	87.4	2.6
		YH	30.8	35.2	41.0	49.5	73.6	2.4
		EM	32.5	36.4	42.4	51.9	72.6	2.2
		WM	33.4	40.3	47.1	59.0	78.0	2.3
		EE	30.7	36.8	42.9	52.5	72.5	2.4
		L	28.9	36.6	42.2	52.7	64.9	2.2
		SE	33.6	39.2	48.0	58.3	86.8	2.6
		SW	31.2	36.4	44.0	51.6	79.1	2.5
	Eng	32.1	37.3	43.8	54.1	76.7	2.4	
	Females	NE	18.9	19.5	24.7	29.4	34.3	1.8
		NW	19.2	21.9	25.8	29.8	41.2	2.1
		YH	18.7	19.3	23.2	25.5	31.1	1.7
		EM	19.3	21.9	24.6	27.3	33.1	1.7
		WM	19.2	23.2	23.8	29.8	34.7	1.8
		EE	18.3	19.8	22.8	25.7	31.7	1.7
		L	17.6	19.8	21.7	24.1	28.3	1.6
		SE	19.2	21.1	24.0	27.4	34.8	1.8
		SW	18.0	19.6	21.8	24.6	34.9	1.9
Eng		18.8	20.7	23.4	26.9	34.2	1.8	

Source: NPHO from Office for National Statistics mortality data and mid-year population estimates

Figure 13: Rate of alcohol-attributable mortality (directly standardised rate) per 100,000 population by geodemographic classification. England, 2001-05.



Source: NPHO from Office for National Statistics mortality data and mid-year population estimates

Table 13: Rate of alcohol-attributable mortality (directly standardised rate) per 100,000 population by geodemographic classification, 2001-05.

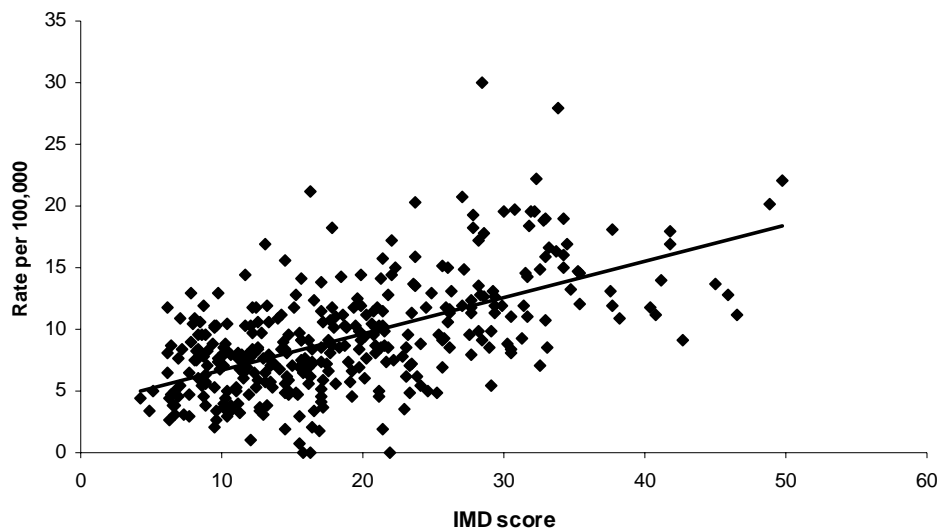
			MO	BF	CO	RH	SN	QM	SS	NS	UP	WC	MC	DH	UC
Under 75	Males	NE	19.5	20.5	25.6	24.5	38.6	28.3	33.8	76.1	48.3	54.5	87.5	67.0	106.8
		NW	21.9	27.4	26.8	29.1	36.0	32.7	38.6	76.7	55.6	67.2	67.0	77.6	105.0
		YH	20.6	20.0	25.0	25.2	27.4	34.1	31.6	54.7	45.2	55.3	56.5	64.8	89.9
		EM	23.1	20.7	27.1	24.1	31.0	33.2	34.1	60.7	48.0	53.3	49.1	59.5	92.5
		WM	23.3	24.4	28.5	27.9	36.4	39.6	36.7	66.9	49.7	62.0	65.7	62.3	100.8
		EE	20.6	20.2	25.5	24.2	29.4	29.2	34.8	55.6	40.8	49.6	45.9	54.6	84.9
		L	18.8	17.5	31.2	26.1	32.1	33.6	32.4	51.6	45.4	48.8	46.6	48.2	49.8
		SE	22.5	23.3	25.2	29.2	30.8	38.7	35.4	64.2	42.7	59.2	54.6	60.0	90.9
	Females	SW	21.3	21.1	24.9	25.3	34.1	38.2	34.1	67.8	45.0	51.5	85.7	57.0	88.0
		Eng	21.8	22.3	26.1	26.4	32.2	34.2	34.7	60.9	48.0	57.0	52.7	66.2	99.0
		NE	9.2	13.5	12.6	11.7	17.3	15.9	16.2	27.4	22.1	32.6	21.5	26.8	33.3
		NW	11.0	12.2	13.2	14.0	17.6	14.1	18.2	30.3	27.7	26.1	24.5	34.0	40.6
		YH	9.8	10.3	11.8	11.3	13.8	12.2	15.2	17.3	19.6	20.9	17.9	23.7	33.2
		EM	10.6	12.5	14.6	12.6	11.7	16.5	17.1	25.8	21.2	16.5	19.4	24.5	41.0
		WM	10.4	11.0	12.6	13.7	14.1	11.7	16.0	17.8	25.4	22.2	22.3	26.7	31.0
		EE	9.4	10.6	11.3	10.7	14.2	13.2	13.9	20.4	20.0	19.7	19.4	14.7	42.2
L	7.5	9.7	9.9	10.8	12.1	14.3	13.6	18.4	18.1	17.6	15.6	21.5	20.5		
All ages	Males	SE	10.3	12.8	10.6	12.9	12.3	11.2	15.8	22.5	21.4	19.3	18.0	25.1	45.4
		SW	10.5	9.6	10.3	10.7	13.8	10.8	14.5	22.7	17.9	26.3	18.9	24.2	35.1
		Eng	10.1	11.6	11.8	12.2	13.7	13.5	15.6	21.5	22.2	19.4	20.6	27.2	37.2
		NE	31.5	34.1	34.9	37.1	48.9	38.1	47.8	88.6	62.3	67.1	102.5	79.2	119.7
		NW	33.5	39.7	39.6	41.5	47.8	48.1	51.9	92.2	69.7	80.6	81.3	90.8	119.1
		YH	31.5	30.9	36.5	37.7	39.4	46.2	43.6	68.1	57.9	68.3	69.5	78.1	101.5
		EM	34.0	33.3	38.7	35.7	43.8	46.1	46.8	73.9	59.6	64.0	62.1	72.6	103.4
		WM	35.4	36.9	41.9	40.5	48.3	54.4	49.2	80.6	63.6	74.1	77.5	76.5	114.5
	Females	EE	31.5	32.3	37.0	35.5	40.5	41.8	45.9	68.1	52.0	61.1	56.8	65.6	95.9
		L	29.6	28.9	40.4	36.8	43.4	44.7	43.6	62.4	55.5	59.7	58.0	60.5	56.6
		SE	33.6	34.8	36.6	40.7	42.2	49.9	47.0	77.1	54.5	71.4	64.0	71.1	103.2
		SW	31.7	32.8	36.3	36.5	45.3	50.0	46.2	80.6	57.2	63.3	88.0	69.1	97.7
		Eng	32.9	34.2	37.8	38.1	43.6	45.8	46.9	73.7	60.8	69.2	64.6	79.3	111.7
		NE	19.4	22.4	20.9	21.3	25.8	24.5	26.8	38.4	31.6	47.7	31.2	35.9	43.3
		NW	20.4	21.8	22.9	23.2	26.8	26.6	28.2	41.6	37.6	37.2	34.4	43.7	50.4
		YH	18.9	19.4	20.8	20.5	22.7	21.9	24.3	26.9	28.3	31.2	26.9	32.8	40.8
EM	19.8	22.1	23.6	21.2	21.1	27.2	26.8	36.0	30.1	26.7	27.5	33.4	51.3		
WM	19.8	22.1	22.9	23.2	23.5	22.9	25.8	28.5	34.2	31.5	32.1	36.9	40.4		
EE	18.6	20.0	20.3	19.1	22.4	24.0	22.3	30.1	28.0	30.9	26.9	22.2	49.6		
L	16.4	19.5	18.4	19.5	21.0	22.7	22.6	27.0	26.2	26.3	24.3	28.1	26.7		
SE	19.5	21.5	19.7	21.7	20.6	20.0	24.0	31.5	29.3	28.0	27.1	32.9	52.5		
SW	18.7	19.2	19.2	19.5	22.5	19.5	23.2	32.5	26.1	36.2	28.0	31.6	43.2		
Eng	19.2	21.0	20.9	21.1	22.4	22.4	24.8	31.1	31.1	28.7	29.7	36.4	46.2		

Source: NPHO from Office for National Statistics mortality data and mid-year population estimates

Mortality from chronic liver disease including cirrhosis per 100,000 population

Analysis of local authority level data showed a positive association between the rate of mortality from chronic liver disease including cirrhosis per 100,000 population and deprivation, using the Index of Multiple Deprivation 2004 (Scatterplot 1).

Scatterplot 1: Rate of mortality (directly standardised rate) from chronic liver disease including cirrhosis per 100,000 population and the Index of Multiple Deprivation 2004. England local authorities, 2005.



Source: National Centre for Health Outcomes Development from National Statistics

Data Issues

From January 2001 information on cause of death in England and Wales has been coded to the Tenth Revision of the International Classification of Diseases (ICD-10)²¹. ICD-10 more closely reflects current medical knowledge than ICD-9. In order to maintain consistency in trends on mortality statistics due to alcohol no measures prior to 2001 (ICD-9) have been included in this report. Since accurate determination of cause of death is less likely in older individuals, as well as for reasons of measuring premature mortality, the mortality indicators have been calculated both for all ages and for ages under 75.

Indicator Definitions*Months of life lost per person (under 75 years) due to alcohol*

This is an estimate of the potential increase in life expectancy at birth that would be expected to occur if all alcohol-attributable deaths were prevented.

Alcohol-attributable deaths in persons aged under 75 years are estimated for five year age groups, as described above. Only deaths in persons aged under 75 years are included in the analysis. Potential years of life lost (PYLL) as a result of these alcohol-attributable deaths are estimated by reference to national life tables published by the Government Actuary's Department. Potential years of life lost are then averaged across the total population, with direct standardisation against the European Standard Population. Population denominators were mid-year estimates from the Office for National Statistics.

Years of life lost per person dying from alcohol-attributable conditions

Alcohol-attributable deaths in persons all ages are estimated for five year age groups as described above. Potential years of life lost as a result of alcohol-attributable deaths are estimated by reference to national life tables published by the Government Actuary's

²¹ www.statistics.gov.uk/about/classifications/icd10/default.asp

Department. PYLL are then summed for each region and divided by the number of alcohol-attributable deaths.

Percentage of total deaths that are alcohol-specific

The total number of alcohol-specific deaths in a region divided by the total number of deaths.

Percentage of total deaths that are alcohol-attributable

The total number of alcohol-attributable deaths in a region divided by the total number of deaths.

Rate of alcohol-specific mortality (under 75 years and all ages) per 100,000 population

The number of deaths in people under 75 years or of all ages, classified by year of occurrence, where the underlying cause of death was a condition directly attributable to excessive alcohol consumption. The indicator is expressed as a directly age standardised rate per 100,000 resident population. Population denominators were mid-year estimates from the Office for National Statistics.

Alcohol-specific deaths are a subset of all alcohol-attributable deaths, and cover deaths from conditions such as acute alcohol poisoning or alcoholic liver disease or alcoholic cardiomyopathy, where excessive alcohol consumption is a contributory factor in all cases.

Mortality from chronic liver disease including cirrhosis per 100,000 population

Deaths from chronic liver disease including cirrhosis classified by underlying cause of death (ICD-10: K70, K73-K74, ICD-9: 571 adjusted), and year of registration. The indicator is expressed as a rate per 100,000 resident population, with population denominators supplied by the Office for National Statistics. This indicator was supplied by the National Centre for Health Outcomes Development (NCHOD) using data from National Statistics.

Rate of alcohol-attributable mortality (under 75 years and all ages) per 100,000 population

An estimate of the number of deaths in people aged under 75 years or of all ages, classified by year of occurrence, where the underlying cause of death was a condition thought to be directly or indirectly attributable to excessive alcohol consumption. The indicator is expressed as a directly age standardised rate per 100,000 resident population. Population denominators were mid-year estimates from the Office for National Statistics.

The estimation process takes into account the fact that for many conditions excessive alcohol consumption is known to be a contributory factor to some, but not all, cases.

Alcohol-specific and –attributable deaths were derived from the Public Health Mortality File, which is based on the original cause of death recorded on the death certificate. Deaths were identified where the ICD-10 code for the underlying cause of death was included in the list of alcohol-attributable conditions (Appendix 1). Each death was assigned an attributable count corresponding to the attributable fraction for that condition.

4. Secondary Care – Hospital Admission

Indicators

- Rate of alcohol-specific hospital admission per 100,000 population;
- Rate of alcohol-attributable hospital admission per 100,000 population.

Rationale and Evidence

Levels of hospital admission for alcohol-attributable and alcohol-specific conditions provide an indication of the level of harm associated with alcohol in the population, as well as the burden that alcohol consumption places on health services each year in the UK. However, since only the most severe cases will be admitted to hospital, actual levels of harm among the population are likely to be much higher.

Background

In England, rates of alcohol-specific hospital admission increase sharply with increasing age, peaking in the 45-64 year old age group, but then declining in the older age groups. For those aged under 15, the admission rate for females exceeds that of males, but in older age groups the rate for males exceeds the female rate. In contrast, rates of alcohol-attributable admissions rise steadily with increasing age. As the list of alcohol-attributable conditions include a number of chronic diseases associated with older adulthood (ischaemic heart disease [IHD], hypertension and cancer), this age-related increase is not entirely unexpected. Rates for males exceed those for females in all age groups.

In England, rates of alcohol-attributable admission increased by around 28% for both males and females between 2001/02 and 2005/06. In males, around 43% of this increase was due to a rise in admission for mental/behavioural disorders associated with acute or long-term harmful alcohol use (ICD-10 code F10). Chronic diseases (which include cancers of the oropharynx and breast, ischaemic heart disease, hypertension and other heart disease) accounted for a further 33% of the total increase in males. For females, three groups of conditions each accounted for around a quarter of the total increase: mental/behavioural disorders (27%); accidents and falls (25%); and chronic diseases (24%).

The percentage of 15-16 year olds hospitalised or admitted to an emergency room due to alcohol use is the only available hospital admission related measure that is comparable to other European countries. This data comes from the ESPAD report²² that compares alcohol and other drug use among students in 35 European countries. Here, the percentage of 15-16 year olds hospitalised or admitted to an emergency room due to alcohol use in the UK is higher than most other countries for females, but around average for males (Appendix 3, Table 65). The UK also shows a slightly different pattern to most other European countries, with a higher percentage of females admitted due to alcohol use than males (also seen in Isle of Man and Finland).

²² Hibell B, Anderson B, Bjarnason T, Ahlstrom S, Balakireia O, Kokkeri A and Morgan M (2004). The ESPAD report 2003. Alcohol and other drug use among students in 35 European countries. Stockholm, Sweden: Modintryckoffset AB.

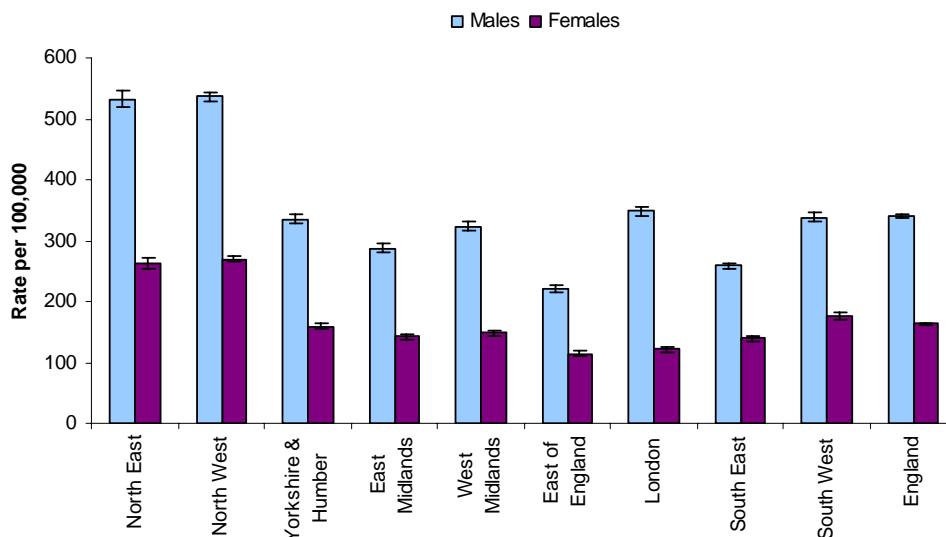
Regional Commentary

Rate of alcohol-specific hospital admission per 100,000 population

Figure 14 shows the annual admission rates for alcohol-specific conditions for males and females in each region, and for England as a whole, for 2005/06. Rates were significantly higher than England for the North East and North West (for both sexes) and the South West (females only), and significantly lower for the East Midlands, West Midlands, East of England and South East (for both sexes) and London (females only).

In England, between 2001/02 and 2005/06, the rates of admission for alcohol-specific conditions increased by 42% for males and 47% for females (Table 14). There was little or no significant change in the rates between 2001/02 and 2002/03, with large increases occurring in subsequent years. This increasing trend was reflected in all regions, with the largest relative increase recorded in London for both sexes, and the smallest in Yorkshire and The Humber for males and East Midlands for females.

Figure 14: Rate of hospital admission for alcohol-specific conditions (directly standardised rate) per 100,000 population, 2005/06.



Sources: Hospital Episode Statistics and Office for National Statistics (mid-year population estimates)

Table 14: Rate of hospital admissions for alcohol-specific conditions (directly standardised rate) per 100,000 population, 2001/02 to 2005/06.

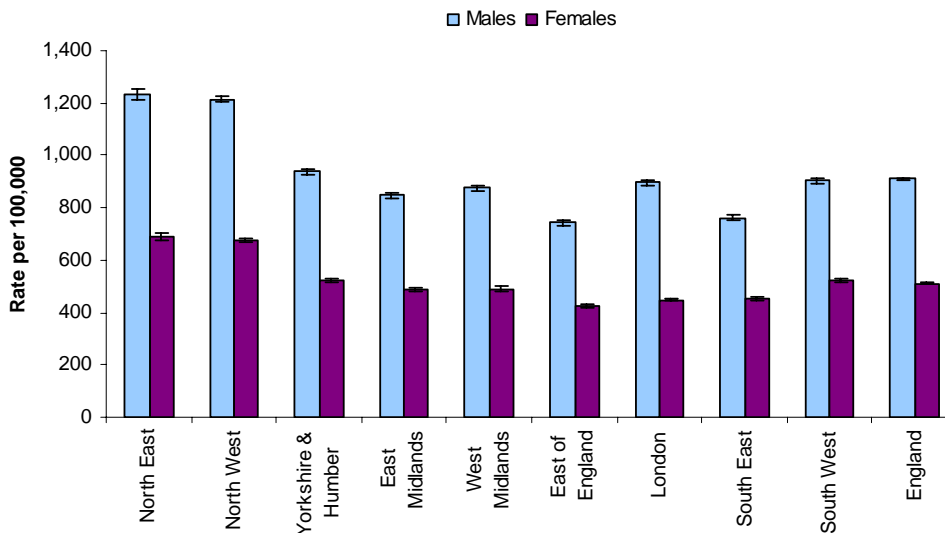
		NE	NW	YH	EM	WM	EE	L	SE	SW	Eng
Males	2001/02	383.5	386.8	255.7	213.7	224.4	154.6	221.6	179.0	234.1	239.8
	2002/03	375.9	392.9	265.7	214.0	239.6	162.1	250.0	180.9	237.4	248.0
	2003/04	416.1	439.4	286.0	240.3	271.8	187.8	276.0	207.4	266.0	277.4
	2004/05	464.4	486.8	311.6	269.7	285.8	203.6	306.5	236.3	306.3	307.0
	2005/06	532.1	536.3	335.0	287.9	323.3	221.5	348.1	259.1	338.6	339.7
Females	2001/02	189.0	188.2	119.4	109.2	103.8	76.3	72.8	89.5	108.3	111.8
	2002/03	193.3	188.1	121.6	103.0	106.4	77.1	84.9	89.9	109.5	113.8
	2003/04	203.9	218.2	127.2	119.1	119.3	92.3	97.3	104.5	123.4	129.0
	2004/05	224.4	240.7	137.5	131.6	127.3	102.9	110.5	124.2	149.8	144.8
	2005/06	263.5	270.1	159.4	142.1	147.8	114.4	121.4	139.2	176.3	164.1

Sources: Hospital Episode Statistics and Office for National Statistics (mid-year population estimates)

Rate of alcohol-attributable hospital admission per 100,000 population

For alcohol-attributable admission in 2005/06, there was slightly less inter-regional variation than seen for alcohol-specific admissions for both males and females, but overall patterns were similar (Figure 15). Rates were significantly higher than England for the North East, North West and Yorkshire and The Humber (for both sexes) and the South West (females only), and significantly lower for the East Midlands, West Midlands, East of England and South East (for both sexes) and London (females only). Increases in annual rates were seen in all regions between 2001/02 and 2005/06 (Table 15), although overall these were proportionally smaller than seen for the alcohol-specific rates (Table 15). The largest increase was seen in London for both sexes, and the smallest in Yorkshire and The Humber for males and East Midlands for females.

Figure 15: Rate of hospital admission for alcohol-attributable conditions (directly standardised rate) per 100,000 population, 2005/06.



Sources: Hospital Episode Statistics and Office for National Statistics (mid-year population estimates)

Table 15: Rate of hospital admission for alcohol-attributable conditions (directly standardised rate) per 100,000 population, 2001/02 to 2005/06.

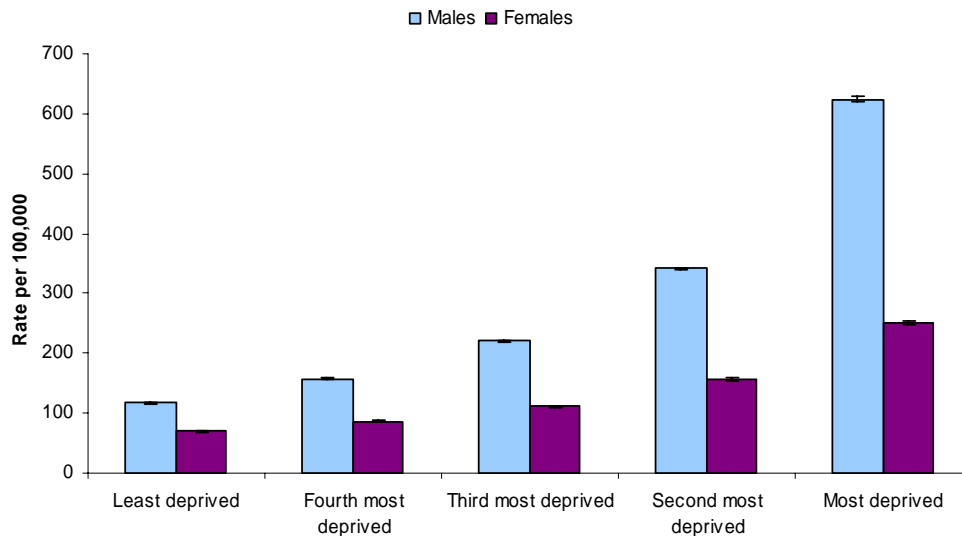
		NE	NW	YH	EM	WM	EE	L	SE	SW	Eng
Males	2001/02	1,008.6	971.0	800.2	718.8	665.6	594.4	626.6	575.4	699.5	714.2
	2002/03	999.5	972.7	816.5	687.0	685.6	615.9	689.6	597.4	707.4	730.1
	2003/04	1,066.0	1,055.9	853.7	749.9	749.7	663.7	743.8	643.7	769.7	787.1
	2004/05	1,133.1	1,122.6	886.5	788.7	791.1	692.9	806.5	687.2	836.9	835.6
	2005/06	1,232.1	1,214.5	937.7	846.5	876.7	742.9	896.3	761.5	902.1	909.0
Females	2001/02	554.2	531.3	439.7	424.1	376.9	336.3	311.1	331.0	386.2	395.9
	2002/03	558.0	528.1	453.0	398.2	389.3	347.2	349.9	344.6	394.5	405.8
	2003/04	580.2	579.6	467.3	431.0	418.8	378.0	374.7	368.8	424.0	435.1
	2004/05	618.0	616.4	485.0	453.4	441.0	396.3	410.2	405.7	472.3	465.7
	2005/06	689.2	674.3	522.1	487.1	490.5	424.5	449.1	452.2	522.2	510.4

Sources: Hospital Episode Statistics and Office for National Statistics (mid-year population estimates)

Sub-regional Inequalities

Admission rates for alcohol-specific conditions for both males and females show a strong positive association with deprivation (Figure 16), with rates being especially high for the most deprived quintile. The same pattern is found for each region (Table 16). The ratio of admission rates between the most deprived and least deprived quintiles illustrates inequalities within a region, with a higher ratio indicating a greater inequality. Nationally, the ratio for males (5.3) is higher than that for females (3.6). For both males and females, the lowest ratios were found in London and the highest in the South East.

Figure 16: Rate of hospital admission for alcohol-specific conditions (directly standardised rate) per 100,000 population by Index of Multiple Deprivation 2004 quintile. England, 2001/02-2005/06.



Sources: Hospital Episode Statistics and Office for National Statistics (mid-year population estimates)

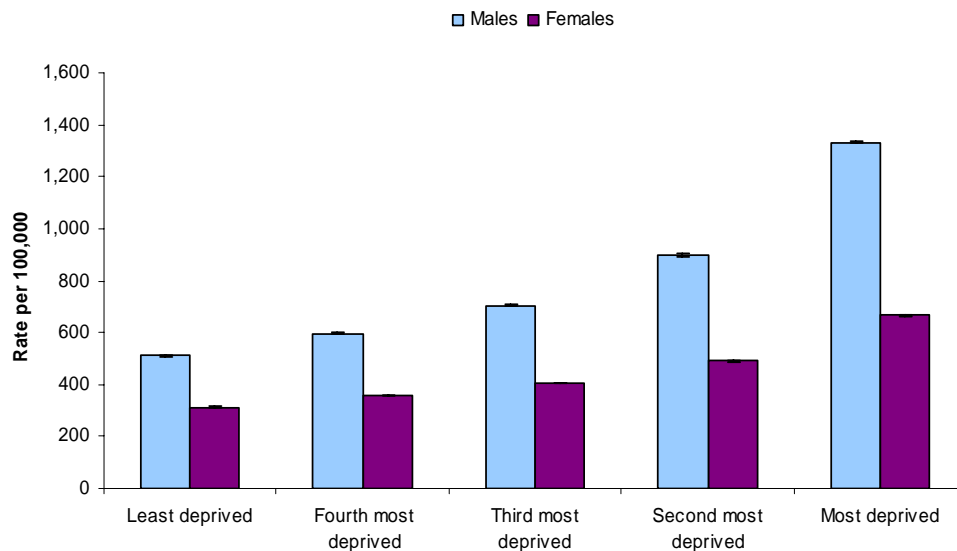
Table 16: Rate of hospital admission for alcohol-specific conditions (directly standardised rate) per 100,000 population by Index of Multiple Deprivation 2004 quintile, 2001/02-2005/06.

		Least deprived	Fourth most deprived	Third most deprived	Second most deprived	Most deprived	Inequality ratio
Males	NE	126.0	159.0	226.1	380.4	748.6	5.9
	NW	152.5	191.0	263.4	424.5	845.0	5.5
	YH	119.9	147.6	191.0	284.6	549.6	4.6
	EM	107.2	140.4	200.9	308.6	557.8	5.2
	WM	105.1	140.8	199.2	328.2	506.4	4.8
	EE	105.2	141.4	189.7	306.7	547.0	5.2
	L	104.7	151.0	211.8	321.0	476.5	4.6
	SE	118.2	168.7	254.2	372.2	712.7	6.0
	SW	133.3	176.3	251.9	400.2	773.1	5.8
	Eng	117.2	157.3	220.1	341.4	624.7	5.3
Females	NE	77.1	100.2	126.2	201.8	336.5	4.4
	NW	92.5	111.4	151.7	219.2	374.6	4.1
	YH	74.1	83.1	102.6	135.0	214.6	2.9
	EM	62.4	83.3	105.8	146.6	235.6	3.8
	WM	63.8	78.9	100.2	148.7	189.5	3.0
	EE	61.1	75.2	96.9	141.5	208.3	3.4
	L	54.4	69.5	78.3	108.1	142.0	2.6
	SE	70.8	92.9	128.0	173.4	294.0	4.2
	SW	79.8	95.9	126.6	186.4	287.0	3.6
	Eng	69.4	87.0	111.7	156.5	250.7	3.6

Sources: Hospital Episode Statistics and Office for National Statistics (mid-year population estimates)

As with alcohol-specific conditions, the rate of admission for alcohol-attributable conditions for both males and females show a strong positive association with deprivation (Figure 18). The same pattern is found for each region (Table 18). Nationally, the inequality ratio for males (2.6) is slightly higher than that for females (2.1), and both are lower than those found for alcohol-specific admission. For both males and females, the lowest ratios were found in London and the highest in the North East, North West and South East.

Figure 18: Rate of hospital admission for alcohol-attributable conditions (directly standardised rate) per 100,000 population by Index of Multiple Deprivation 2004 quintile. England, 2001/02-2005/06.



Sources: Hospital Episode Statistics and Office for National Statistics (mid-year population estimates)

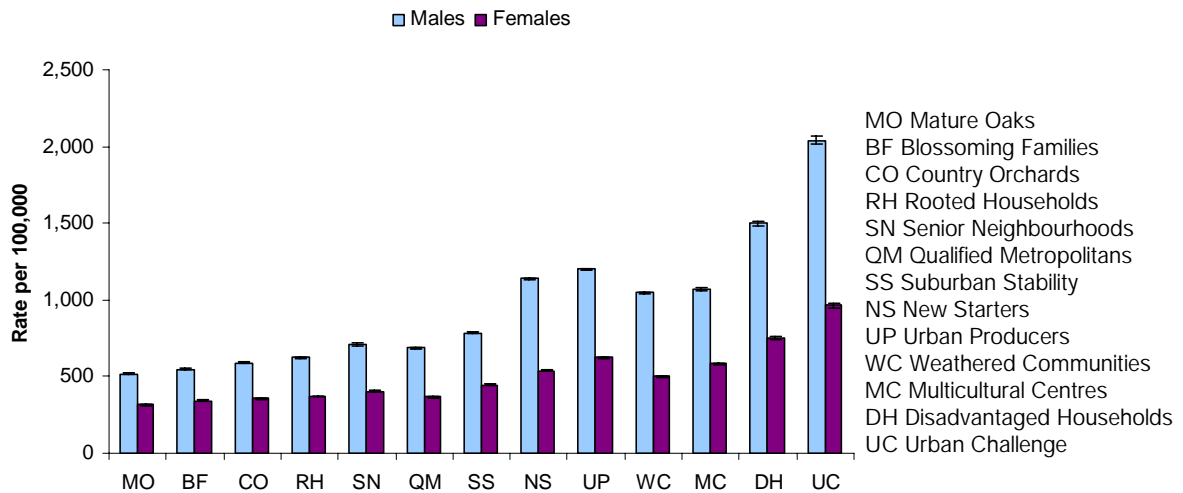
Table 18: Rate of hospital admission for alcohol-attributable conditions (directly standardised rate) per 100,000 population by Index of Multiple Deprivation 2004 quintile, 2001/02-2005/06.

		Least deprived	Fourth most deprived	Third most deprived	Second most deprived	Most deprived	Inequality ratio
Males	NE	558.0	634.1	764.0	1,014.0	1,577.8	2.8
	NW	592.4	669.7	796.6	1,048.3	1,649.6	2.8
	YH	521.3	600.2	682.0	862.3	1,306.7	2.5
	EM	495.2	584.8	700.8	874.0	1,273.4	2.6
	WM	471.0	536.5	636.5	846.5	1,149.3	2.4
	EE	514.8	590.5	682.8	866.8	1,233.4	2.4
	L	461.7	543.2	651.1	824.5	1,048.0	2.3
	SE	495.0	596.8	727.7	915.7	1,376.0	2.8
	SW	560.7	640.4	751.9	964.5	1,504.0	2.7
	Eng	510.5	595.9	703.0	897.6	1,333.0	2.6
Females	NE	355.5	405.7	451.5	576.2	804.4	2.3
	NW	362.5	404.1	471.8	586.1	835.8	2.3
	YH	330.5	361.5	404.1	479.2	651.4	2.0
	EM	309.4	358.2	409.9	494.4	673.5	2.2
	WM	295.2	331.0	376.3	464.7	582.5	2.0
	EE	307.9	345.9	388.0	471.9	598.1	1.9
	L	271.6	305.7	342.1	407.7	477.6	1.8
	SE	305.1	357.0	419.1	501.5	687.2	2.3
	SW	342.0	379.3	431.2	523.9	705.9	2.1
	Eng	313.0	356.7	405.4	489.7	665.5	2.1

Sources: Hospital Episode Statistics and Office for National Statistics (mid-year population estimates)

Alcohol-attributable admission rates also vary by geodemographic classification (Figure 19). Within regions, admission rates show a two to three-fold difference between geodemographic classifications, with the highest and lowest admission rates for both sexes (Table 17) lower than that for alcohol-specific admission. ‘New Starters’ have particularly high admission rates given the level of income deprivation experienced in those areas.

Figure 19: Rate of hospital admission for alcohol-attributable conditions (directly standardised rate) per 100,000 population by geodemographic classification. England, 2001/02-2005/06.



Sources: Hospital Episode Statistics and Office for National Statistics (mid-year population estimates)

Table 19: Rate of hospital admission for alcohol-attributable conditions (directly standardised rate) per 100,000 population by geodemographic classification, 2001/02-2005/06.

	MO	BF	CO	RH	SN	QM	SS	NS	UP	WC	MC	DH	UC		
Males	NE	594.5	611.0	662.6	688.9	798	753.9	885.6	1,414.7	1,360.1	1,801.2	1,242.3	1,814.4	2,322.6	
	NW	596.8	681.7	642.7	745.0	779.8	741.1	944.6	1,416.7	1,530.9	1,359.9	1,340.1	1,840.2	2,234.0	
	YH	521.1	553.7	600.2	624.6	685.0	659.9	762.6	1,112.5	1,156.1	1,199.2	1,043.3	1,471.7	1,865.4	
	EM	519.2	517.3	600.3	598.0	741.3	723.0	778.0	1,207.2	1,143.8	1,102.7	996.7	1,215.8	1,964.6	
	WM	484.5	487.3	534.3	550.4	695.2	797.2	695.5	1,112.9	1,045.8	1,157.1	930.2	1,200.0	1,514.4	
	EE	501.9	529.5	590.7	594.4	658.5	666.5	712.4	1,118.3	1,013.5	962.3	907.8	1,149.1	1,793.2	
	L	446.5	534.8	561.1	564.9	629.0	695.5	716.8	975.1	942.7	940.5	811.5	991.6	1,293.6	
	SE	488.2	523.9	541.6	612.4	695.9	635.4	755.2	1,084.4	1,096.4	861.5	911.6	1,228.7	1,943.6	
	SW	576.1	583.2	606.9	658.5	775.1	749.8	837.3	1,332.3	1,221.7	1,462.8	1,103.6	1,484.4	2,050.1	
	Eng	516.7	549.3	589.2	624.5	709.9	687.2	784.1	1,137.3	1,200.7	1,046.6	1,069.5	1,498.0	2,041.9	
	Females	NE	381.8	394.3	419.3	423.5	471.3	411.3	520.8	716.9	715.2	833.4	681.9	908.3	1,039.9
		NW	365.6	417.3	372.9	441.0	457.1	436.5	542.9	682.7	794.6	670.6	728.1	909.9	1,066.3
		YH	320.8	342.6	388.1	367.4	412.8	367.4	435.8	530.9	603.0	617.9	555.2	718.7	860.1
		EM	319.7	329.4	373.9	362.9	406.8	394.5	450.9	588.9	616.1	531.2	562.6	663.3	962.9
WM		299.5	315.9	327.1	337.5	398.7	388.3	400.9	518.4	555.4	544.5	511.9	616.1	751.6	
EE		298.7	319.0	355.7	339.8	384.8	397.4	398.0	541.0	532.2	470.0	492.1	574.9	863.7	
L		252.9	312.0	308.3	313.1	328.5	359.9	375.5	446.0	456.2	440.8	430.3	525.3	591.1	
SE		300.1	327.2	325.6	366.3	391.1	361.9	444.4	544.4	584.2	446.4	503.1	632.7	1,002.6	
SW		343.9	356.6	366.5	390.5	428.6	385.4	475.5	610.5	639.2	696.2	594.5	676.9	885.2	
Eng		314.9	340.8	358.5	369.8	402.1	366.2	447.0	539.0	627.3	500.1	583.7	753.2	963.8	

Sources: Hospital Episode Statistics and Office for National Statistics (mid-year population estimates)

Data Issues

These indicators take no account of multiple admissions, and do not attempt to capture the total amount of hospital activity associated with alcohol misuse. As the indicators combine a large number of conditions, both acute and chronic, and are associated with both the short and long-term effects of alcohol consumption, they may not be sensitive enough for monitoring short-term trends in small areas. As with all Hospital Episode Statistics (HES)-based indicators, regional and/or temporal variations in coding and reporting practices may make comparisons more difficult. This may be due in part to an increased willingness to record alcohol-attributable diagnoses on the part of the hospital clinical staff and/or coders. Counting people admitted for alcohol-specific or alcohol-attributable conditions provides an insight into the scale of alcohol-related health impact in different communities, in terms of the burden of illness and injury that is treated in hospital settings. At present, equivalent measures of impact are not readily available for primary care (including general practice and community-based treatment centres), for social care, or for treatment at hospital accident and emergency departments.

Indicator Definitions

Rate of alcohol-specific hospital admission per 100,000 population

The number of people admitted to hospital during a specified time period with a condition thought to be directly attributable to excessive alcohol consumption. The indicator is expressed as a directly age standardised rate per 100,000 resident population. Population denominators were mid-year estimates from the Office for National Statistics.

Alcohol-specific admissions are a subset of all alcohol-attributable admissions, and cover those conditions such as acute alcohol intoxication and alcoholic liver disease, where excessive alcohol consumption is a contributory factor in all cases (Appendix 1).

Rate of alcohol-attributable hospital admission per 100,000 population

An estimate of the number of people admitted to hospital during a specified time period with a condition thought to be directly or indirectly attributable to excessive alcohol consumption. The indicator is expressed as a directly age standardised rate per 100,000 resident population. Population denominators were mid-year estimates from the Office for National Statistics.

The estimation process takes into account the fact that for many conditions excessive alcohol consumption is known to be a contributory factor to some, but not all, cases.

Alcohol-specific and -attributable admissions were derived from Hospital Episode Statistics. Finished consultant episodes (FCEs) were extracted where any one of the 14 diagnosis fields contained an ICD-10 code for an alcohol-attributable condition (Appendix 1). Where a FCE contained more than one alcohol-attributable diagnosis (either within the same episode, or in different episodes), or an individual was associated with more than one FCE with an alcohol-attributable code, that individual was assigned the ICD-10 code associated with the highest attributable fraction. Area of residence was taken from the earliest episode in which the alcohol-attributable code was recorded. Persons identified in this manner were assigned an attributable count using the attributable fractions shown in Appendix 1. Attributable counts were summed as required (for example, by sex, area of residence, or by subgroups of alcohol-attributable conditions) to provide an estimate of the number of persons admitted to hospital as a direct or indirect result of alcohol consumption.

5. Treatment and Care Delivery

Indicator

- Prevalence-service utilisation ratio.

Rationale and Evidence

There are an estimated 1.1 million dependent drinkers, defined as individuals in England drinking above the recommended sensible levels who are experiencing harm and dependence symptoms. However, only an estimated 5.6% (approximately 63,000 individuals) of those who are thought to be alcohol dependent are accessing alcohol treatment each year²⁴. Due to the effectiveness of treatment, it has been estimated that if this rose to 10% of the alcohol dependent population receiving alcohol treatment, public sector costs would be reduced by between £109 million and £156 million annually²⁵.

The National Drug Treatment Monitoring System (NDTMS) measures the extent and nature of structured drug treatment. As such, there is no formal requirement for agencies to include individuals presenting for treatment with alcohol stated as their primary substance. The exception to this rule applies to young people (the National Treatment Agency for Substance Use [NTA] consider a young person to be under 18 at triage). Alcohol as a primary drug of use is included in the NTA young person's statistics. However, there is no requirement to include alcohol. Therefore, the inclusion of such clients will vary from agency to agency and no alcohol-only treatment services report to NDTMS. In addition, the Alcohol Needs Assessment Research Project (ANARP) attempted to measure the gap between the demand for and provision of specialist alcohol treatment services.

Within primary care, there are a number of alcohol screening tools available, one of which is the Single Alcohol Screening Question (SASQ)²⁶. This asks 'when was the last time you had more than six drinks (women) / eight drinks (men) in one day?' as a measure of hazardous drinking. The Quality and Outcomes Framework (QOF) became part of general practice contracts on 1 April 2004 and 2005/06 represents the second year for which QOF information is available. However, as yet, there is no mandatory screening for hazardous or harmful alcohol use within the GP / QOF system, even at the SASQ level²⁷.

²⁴ Department of Health (2005). Alcohol Needs Assessment Research Project (ANARP): the 2004 national alcohol needs assessment for England. London: Department of Health.

²⁵ National Treatment Agency for Substance Misuse (2006). Review of the effectiveness of treatment for alcohol problems. London: NTA.

²⁶ Details of other alcohol screening tools are summarised in the Primary Care Alcohol Information Service (PCAIS) factsheet, available at: www.alcoholconcern.org.uk/files/20030910_143338_Screening%20factsheet%20final%20for%20web%202.pdf

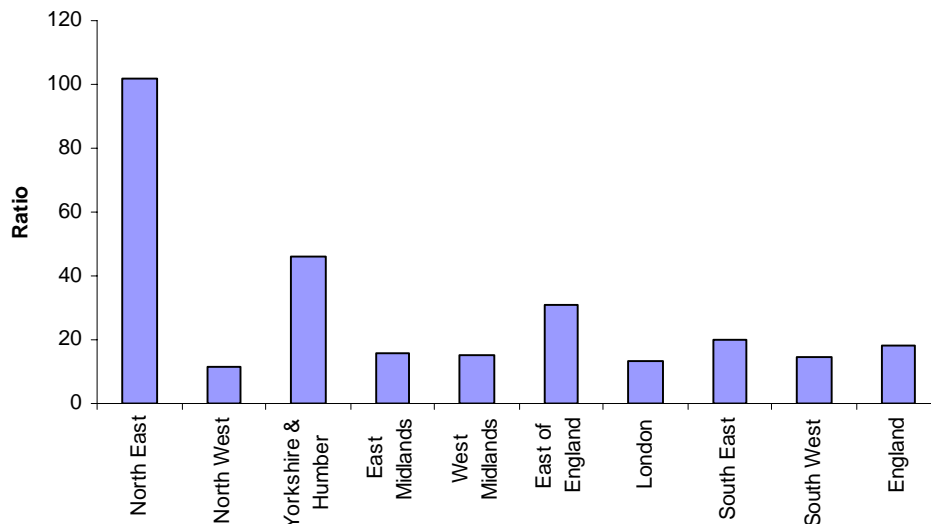
²⁷ The Information Centre (2007). The Quality and Outcomes Framework (QOF). Available from www.ic.nhs.uk/statistics-and-data-collections/audits-and-performance/qof

Regional Commentary

Prevalence-service utilisation ratio

The prevalence-service utilisation ratio (PSUR) is the number in need of interventions divided by the number of people accessing specialist alcohol interventions, which identifies the relative under-provision of access to services. The survey of alcohol treatment agencies in England in 2004 (ANARP) showed that there was considerable regional variation in the PSUR from 102 in the lowest access region (North East) to 12 in the highest (North West).

Figure 20: Prevalence-service utilisation ratio, 2004.



Source: Alcohol Needs Assessment Research Project (ANARP)

Table 20: Prevalence-service utilisation ratio, 2004.

	NE	NW	YH	EM	WM	EE	L	SE	SW	Eng
2004	101.9	11.8	46.0	15.7	15.3	31.2	13.2	20.2	14.3	18.0

Source: Alcohol Needs Assessment Research Project (ANARP)

Data Issues

Currently NDTMS does not formally collect alcohol treatment episodes. However, alcohol is reported by some agencies to NDTMS as one of the problem drugs individuals attending drug and alcohol services present with. Such reports accounted for 244,658 people in 2005. However, NTA estimate that there are a further 300 agencies providing alcohol treatment as yet not reporting at all to NDTMS. Therefore, no realistic estimate of numbers in treatment for alcohol can be made from this system. However, in 2007, NDTMS will be required to collect alcohol problem and treatment attendances from all specialist alcohol specific and drug and alcohol agencies across England.

Data collection from primary alcohol treatment services is now being developed, with a potential national roll out of the system in April 2008. These developments will enable more meaningful regional analyses to be undertaken in future years. Developments within the NDTMS will also provide essential information at local level, to enable the monitoring of levels and effectiveness of interventions at treatment provider, primary care trust, local authority and Drug and Alcohol Action Team levels.

Indicator Definition

Prevalence-service utilisation ratio

The prevalence-service utilisation ratio (PSUR) is the number in need of interventions divided by the number of people accessing specialist alcohol interventions. To identify the PSUR for each geographical area, the ANARP project needed to determine the nature and extent of demand for and access to service provision for Alcohol Use Disorders (AUDs) in England. This was carried out in two main phases: a mapping stage and a survey stage. Statutory and non-statutory services providing modalities of care for AUDs were identified through a comprehensive mapping process. A survey tool, designed to determine the nature of such provision, was sent out to all publicly funded service providing specialist treatment for AUDs.

6. Social and Behavioural Outcomes

As well as placing an increasing burden on health services, alcohol consumption can contribute to a range of social and behavioural problems that affect society more widely. These include crime and anti-social behaviour, teenage pregnancies and sexually transmitted infections, the use of tobacco and illegal drugs, road traffic accidents, problems with schoolwork and pupil absenteeism and decreased workplace productivity, employee absenteeism and incapacity. This chapter presents a selection of these outcomes where data are available for regional comparison. However, there are many gaps where data are currently unavailable for analysis.

6.1 Crime and violence

Indicators

- Rate of alcohol-related recorded crime per 1,000 population (all crimes);
- Rate of alcohol-related recorded crime per 1,000 population (violent crimes);
- Rate of alcohol-related recorded crime per 1,000 population (sexual offences);
- Percentage of adults who felt that alcohol was *a major* cause of crime in Britain today;
- Percentage of adults who felt that alcohol was *the main* cause of crime in Britain today.

Rationale and Evidence

There are clear links between alcohol consumption and crime, particularly for alcohol-related violence. According to the British Crime Survey 2005/06, victims believed the offender to be under the influence of alcohol in nearly half of all violent incidents (44%)²⁸. In England and Wales, young males who binge drink regularly are more than twice as likely to have committed a violent crime during the past 12 months than regular (non-binge) drinkers²⁹. Alcohol-related crime has negative impacts on the health of victims and offenders and places huge burdens on wider society and public services. The costs of alcohol-related violence to public services, the economy and individuals are high, with, for example, the national costs of alcohol-related crime and disorder estimated at £7.8 billion a year³⁰.

Background

In 2006/07, 512,863 recorded crimes in England were attributable to alcohol, a rate of 10.2 per 1,000 population. This was a decrease on the rate seen in 2005/06 (10.5) and 2004/05 (11.4). A similar decreasing trend was seen for recorded violent crime attributable to alcohol, where rates decreased slightly from 7.8 per 100,000 in 2004/05, to 7.3 in 2005/06 and to 7.2 in 2006/07. However, a slightly different trend was seen for sexual offences, where rates remained at a similar level in 2004/05 and 2005/06 (at 0.15 per 100,000) and decreased slightly in 2006/07 (to 0.14 per 100,000). Among members of the public, the percentage perceiving alcohol to be *a major* cause of crime in Britain is increasing, rising from 36.0% in 2002/03-2003/04 to 47.9% in 2004/05-2005/06. Similarly, the percentage of people stating that alcohol is *the main* cause of crime in Britain today has increased from around 2.7% to 5.7% over the same time period.

²⁸ Walker, A, Kershaw, C and Nicholas, S (2006). Crime in England and Wales 2005/2006. London: Home Office.

²⁹ Mathews, S and Richardson, A (2005). Findings from the 2003 offending, crime and justice survey: alcohol-related crime and disorder. Home Office Findings 261. London: Home Office.

³⁰ Strategy Unit (2003). Strategy Unit Alcohol Harm Reduction project interim analytical report. London: Strategy Unit.

Regional Commentary

Rate of alcohol-related recorded crime per 1,000 population (all crimes)

In 2006/07 the prevalence of recorded crimes attributable to alcohol varied across the regions³¹, with the North West, Yorkshire and The Humber, and London all significantly higher than England overall, and the North East, East Midlands, East of England, South East and South West significantly lower (Figure 21).

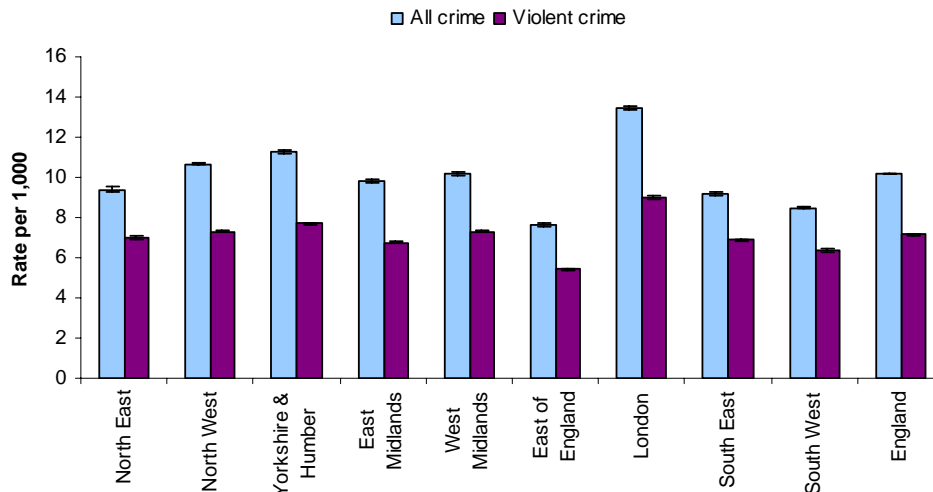
Rate of alcohol-related recorded crime per 1,000 population (violent crimes)

Seven in ten of all recorded crimes attributable to alcohol in 2006/07 were violent crimes. As with all crimes, the North West, Yorkshire and The Humber and London all had significantly higher rates than England overall, as did the West Midlands. Again, the North East, East Midlands, East of England, South East and South West were all significantly lower (Figure 21).

Rate of alcohol-related recorded crime per 1,000 population (sexual offences)

In 2006/07, London had the highest rate of sexual offences attributable to alcohol, the only region significantly higher than England overall (Table 21, Appendix 4). The East of England had the lowest rate and was the only region significantly lower than the England average (Table 21, Appendix 4).

Figure 21: Rate of alcohol-related recorded crimes per 1,000 population, 2006/07.



Source: NWPPO from UK Home Office (recorded crimes) and Office for National Statistics (mid-year population estimates)

Table 21: Rates of alcohol-related recorded crimes per 1,000 population, 2006/07.

	NE	NW	YH	EM	WM	EE	L	SE	SW	Eng
All crimes	9.4	10.7	11.2	9.8	10.2	7.6	13.5	9.2	8.5	10.2
Violent crimes	7.0	7.3	7.7	6.8	7.3	5.4	9.0	6.9	6.4	7.2
Sexual offences	0.13	0.13	0.14	0.15	0.14	0.11	0.16	0.14	0.13	0.14

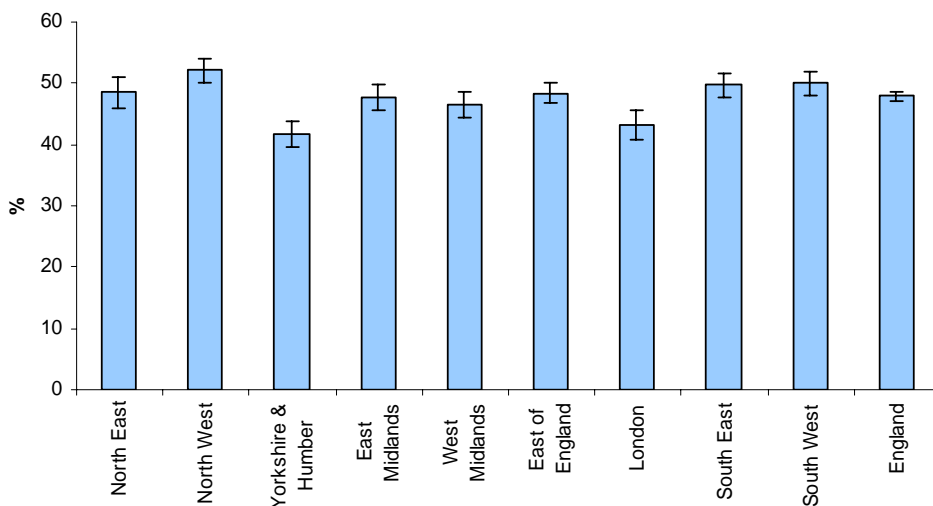
Source: NWPPO from UK Home Office (recorded crimes) and Office for National Statistics (mid-year population estimates)

³¹ Figures refer to the place where the incident took place, not the residence of the victim or perpetrator.

Percentage of adults who felt alcohol was a major cause of crime in Britain today

For 2004/05-2005/06, the percentage of people who felt that alcohol was a *major* cause of crime in Britain today was highest in the North West, the only region significantly higher than the England average (Figure 22). The lowest percentages were found in Yorkshire and The Humber and London, both significantly lower than England overall. Trend data for this indicator show an increase in the percentage of individuals perceiving alcohol as a *major* cause of crime between 2002/03-2003/04 and 2004/05-2005/06, both nationally (by 12 percentage points) and regionally (Table 22).

Figure 22: Percentage of adults stating that alcohol was **a major** cause of crime in Britain, 2004/05-2005/06.



Source: NWPHO from British Crime Survey (unweighted)

Table 22: Percentage of adults stating that alcohol was **a major** cause of crime in Britain, 2002/03-2003/04 and 2004/05-2005/06.

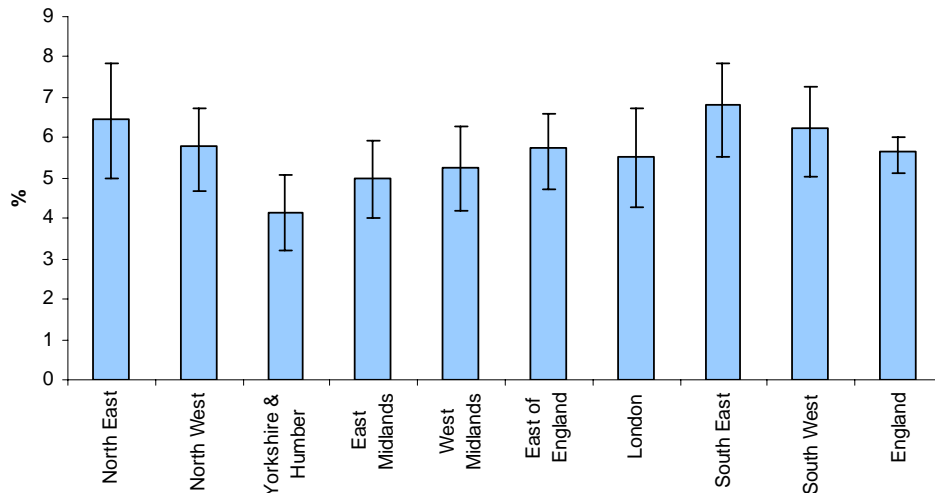
	NE	NW	YH	EM	WM	EE	L	SE	SW	Eng
2002/03-2003/04	37.9	37.8	31.2	35.8	35.3	41.1	29.9	36.5	36.7	36.0
2004/05-2005/06	48.5	52.1	41.6	47.7	46.4	48.4	43.3	49.7	50.1	47.9

Source: NWPHO from British Crime Survey (unweighted)

Percentage of adults who felt alcohol was the main cause of crime in Britain today

There was very little variation in the percentage of adults feeling that alcohol was *the main* cause of crime in Britain today. Yorkshire and The Humber was the only region to vary significantly from England overall, showing a lower percentage (Figure 23). Between 2002/03-2003/04 and 2004/05-2005/06, percentages increased in England overall from 2.7% to 5.7%, a trend that was apparent in all regions (Table 23).

Figure 23: Percentage of adults stating that alcohol was **the main** cause of crime in Britain, 2004/05-2005/06.



Source: NPHO from British Crime Survey (unweighted)

Table 23: Percentage of adults stating that alcohol was **the main** cause of crime in Britain, 2002/03-2003/04 and 2004/05-2005/06.

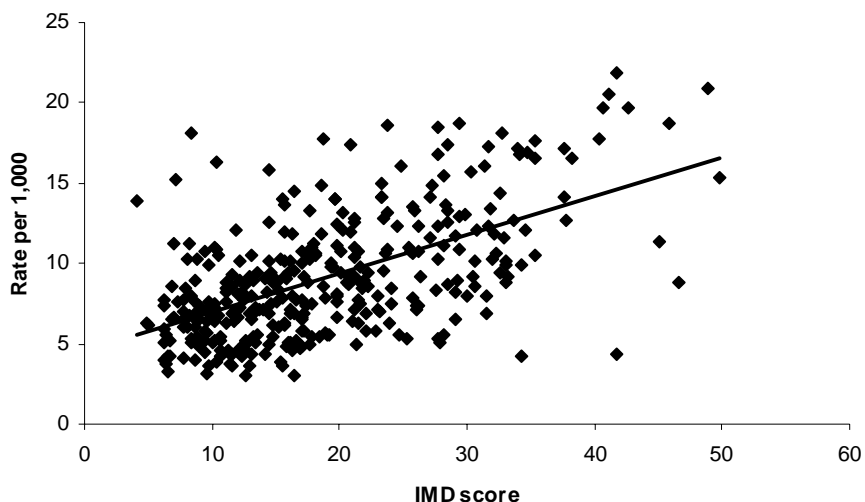
	NE	NW	YH	EM	WM	EE	L	SE	SW	Eng
2002/03-2003/04	3.0	2.3	2.6	2.3	2.8	2.5	2.5	3.5	2.5	2.7
2004/05-2005/06	6.5	5.8	4.1	5.0	5.3	5.7	5.5	6.8	6.2	5.7

Source: NPHO from British Crime Survey (unweighted)

Sub-regional Inequalities

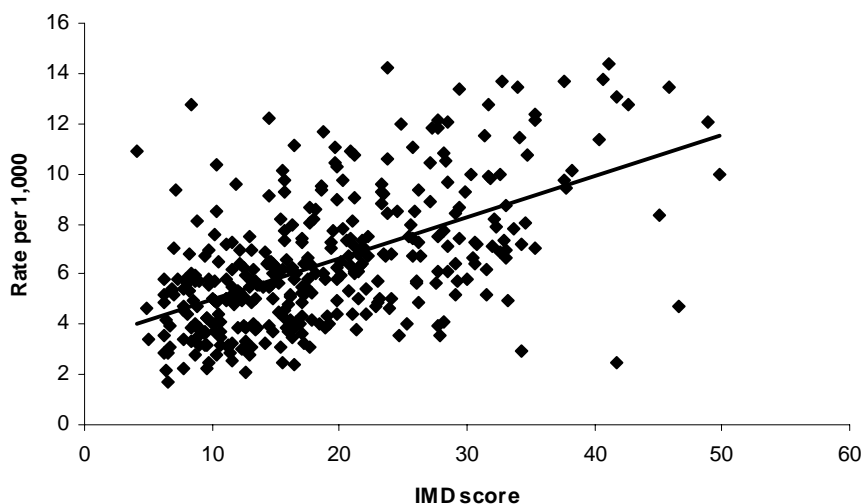
Analyses of local authority level data showed a positive association between the rate of recorded crimes attributable to alcohol and deprivation (using the Index of Multiple Deprivation 2004) for all crimes (Scatterplot 2), violent crime (Scatterplot 3) and sexual offences (Scatterplot 4)³².

Scatterplot 2: Rate of all alcohol-related recorded crimes per 1,000 population and the Index of Multiple Deprivation 2004. England local authorities, 2006/07.



Sources: NWPHO from UK Home Office (recorded crimes), Office for National Statistics (mid-year population estimates) and Communities and Local Government (Index of Multiple Deprivation 2004)

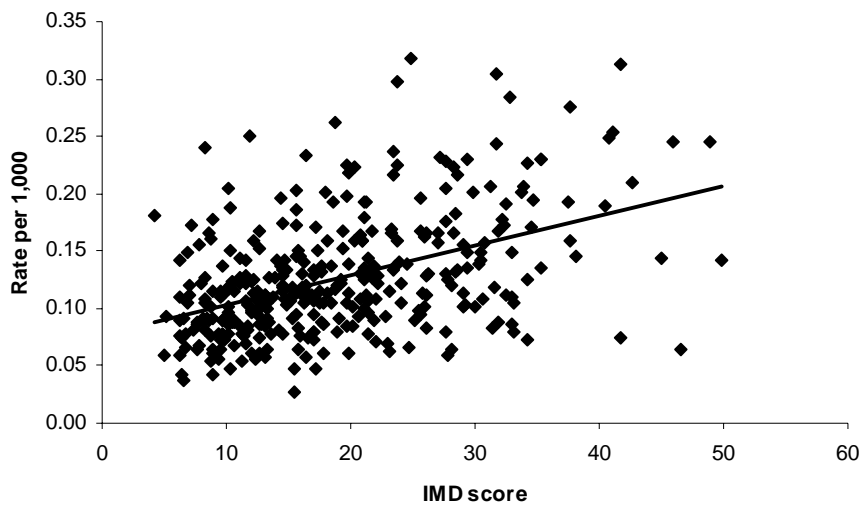
Scatterplot 3: Rate of alcohol-related recorded violent crimes per 1,000 population and the Index of Multiple Deprivation 2004. England local authorities, 2006/07.



Sources: NWPHO from UK Home Office (recorded crimes), Office for National Statistics (mid-year population estimates) and Communities and Local Government (Index of Multiple Deprivation 2004)

³² Scatterplots exclude the City of London as this is an extreme outlier.

Scatterplot 4: Rate of alcohol-related recorded sexual offences per 1,000 population and the Index of Multiple Deprivation 2004. England local authorities, 2006/07.



Source: NWPFO from UK Home Office (recorded crimes), Office for National Statistics (population estimates) and Communities and Local Government (Index of Multiple Deprivation 2004)

Data Issues

Changes in how crimes are recorded make it difficult to measure trends in crimes attributable to alcohol. The National Crime Recording Standard (NCRS) introduced in 2002 aimed to promote greater consistency between police forces in the recording of crime and to take a more victim based approach³³. The NCRS required police to record all known incidents of crime, regardless of whether those involved intended to press charges. The impact of these changes led to an estimated 10% increase in total recorded crime in 2002/03 compared to 2001/02, with violent crime most affected³⁴. In addition, increased police activity to detect crime and punish offenders can lead to an increase in arrests or reporting of incidents of crime, which subsequently impacts on the rate of offences recorded. All crime data refer to the place where the incident took place, not the residence of the victim or perpetrator. However, to calculate rates, the estimated resident population has been used as the denominator. This is likely to result in higher rates in city centres, where there are high numbers of non-resident visitors.

Indicator Definitions

Rate of alcohol-related recorded crime per 1,000 population (all crimes, violent crime, sexual offences)

Recorded crime attributable to alcohol is calculated using the Strategy Unit attributable fractions applied to recorded crime data from the Home Office. These fractions were taken from the NEW-ADAM arrestee survey and are based on urine tests of arrestees³⁵. The proportion of arrestees testing positive for alcohol is used to determine the attributable fractions. Population denominators were mid-2005 estimates from the Office for National Statistics.

Box 1 provides details of the attributable fractions for recorded crime in England. Data on crimes attributable to alcohol are available by local authority area for England on the Local Alcohol Profiles for England website³⁶.

³³ Home Office (2006). Home Office counting rules for recorded crime. Annex A (Online). London: Home Office. Available at: www.homeoffice.gov.uk/rds/pdfs06/countrecstan06.pdf Accessed 5 February 2007.

³⁴ Simmons, J, Legg, C and Hosking, R (2003). National Crime Recording Standard (NCRS): An analysis of the impact on recorded crime. Companion Volume to Crime in England and Wales 2002/2003. Part One: The national picture. Home Office Online Report 31/03. London: Home Office.

³⁵ Strategy Unit (2003). Alcohol misuse: How much does it cost? (Online). London: Cabinet Office. Available at: www.number10.gov.uk/files/pdf/econ.pdf Accessed 5 February 2007.

³⁶ www.nwph.net/alcohol/lape

Percentage of adults who felt that alcohol was a major/the main cause of crime in Britain today
 The British Crime Survey (BCS)³⁷ is conducted for the Home Office to gather information on levels of crime and public attitude to crime and other Home Office issues across England and Wales. Commencing in 1982, the survey has been conducted annually since 2001/02 with around 50,000 interviews of individuals aged 16 years and over taking place each year. The BCS is an important source of information relating to crimes not reported to the police.

Box 1: Alcohol-attributable fractions for recorded crime in England, by category.

Crime category	Attributable fraction
Criminal damage	0.47
Violence against the person	0.37
Other	0.26
Drug offences	0.19
Burglary	0.17
Fraud and forgery	0.16
Sexual offences	0.13
Theft and handling stolen goods	0.13
Robbery	0.12

Source: Strategy Unit (2003b)

British Crime Survey data for the following questions were extracted:
 In your view, which are the major causes of crime in Britain today? You can choose from the factors on this card. CODE ALL THAT APPLY
 PROBE: What others?
 1. A. Too lenient sentencing
 2. B. Poverty
 3. C. Lack of discipline from school
 4. D. Lack of discipline from parents
 5. E. Drugs
 6. F. Alcohol
 7. G. Unemployment
 8. H. Breakdown of family
 9. I. Too few police
 10. DO NOT PROMPT: None of these

Which ONE of the causes you mentioned do you think is the MAIN cause of crime in Britain today? CODE ONE ONLY
 1. A. Too lenient sentencing
 2. B. Poverty
 3. C. Lack of discipline from school
 4. D. Lack of discipline from parents
 5. E. Drugs
 6. F. Alcohol
 7. G. Unemployment
 8. H. Breakdown of family
 9. I. Too few police
 10. SPONTANEOUS: Do not think there is one main cause

The 2002/03 and 2003/04 datasets were combined, as well as the 2004/05 and 2005/06 datasets. All responses with alcohol selected as a *major* or *the main* cause of crime were then analysed by region. Some caution must be taken when interpreting these results as data for these indicators are based on perceptions which may differ from reality.

³⁷ www.homeoffice.gov.uk/rds/bcs1.html

6.2 Anti-social behaviour orders

Indicator

- Rate of anti-social behaviour orders (ASBOs) issued by courts per 100,000 population.

Rationale and Evidence

Public perceptions of levels of problematic drunken and rowdy behaviour in the street form one of the key components used to measure anti-social behaviour. The BCS highlights that 24% of people perceive drunken and rowdy behaviour to be a very big or fairly big problem in their area³⁸. Almost a fifth of those who had felt insulted, pestered or intimidated in the last year had thought that the perpetrator was under the influence of alcohol³⁹. Furthermore, there are well documented links between drunken and rowdy behaviour and violence. A very general indication of alcohol-related anti-social behaviour can be gained from observing the rate of anti-social behaviour orders (ASBOs) issued each year. While ASBOs are used for a wider range of behaviour than insulting, pestering or intimidating behaviour, in the absence of any direct measures of anti-social behaviour, this is currently the most suitable source of data available.

Background

Between January 2001 and December 2005, a total of 9,190 ASBOs were issued by courts in England. There was a considerable rise in the numbers issued over this period, from 344 in 2001 (0.7 per 100,000 population) to 3,840 in 2005 (7.7 per 100,000 population).

³⁸ Walker A, Kershaw C & Nicholas S (2006). Crime in England and Wales 2005/06. London: Home Office.

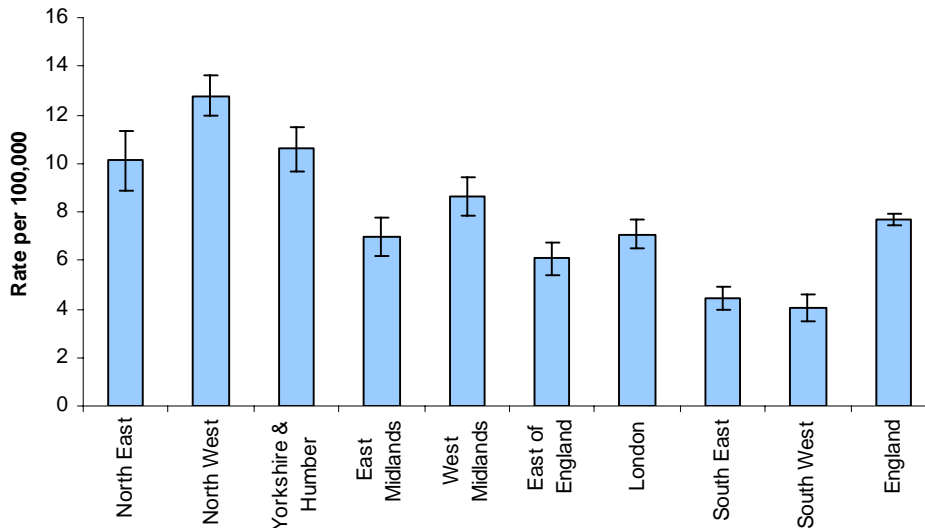
³⁹ Budd, T and Sims, L (2001). Anti-social behaviour and disorder: findings from the 2000 British Crime Survey. Findings 145. London: Home Office.

Regional Commentary

Rate of anti-social behaviour orders (ASBOs) issued by courts per 100,000 population

In 2005, the North West, Yorkshire and The Humber and the North East had significantly higher numbers of ASBOs per 100,000 population issued than England overall, while the South East, South West and East of England had significantly lower numbers (Figure 24). All regions experienced a rise in the numbers of orders issued between 2003 and 2005 (Table 24).

Figure 24: Rate of anti-social behaviour orders issued by courts per 100,000 population, 2005.



Source: NWPHO from Home Office (ASBOs issued at all courts) and Office for National Statistics (mid-year population estimates)

Table 24: Rate of anti-social behaviour orders issued by courts per 100,000 population, 2003 to 2005.

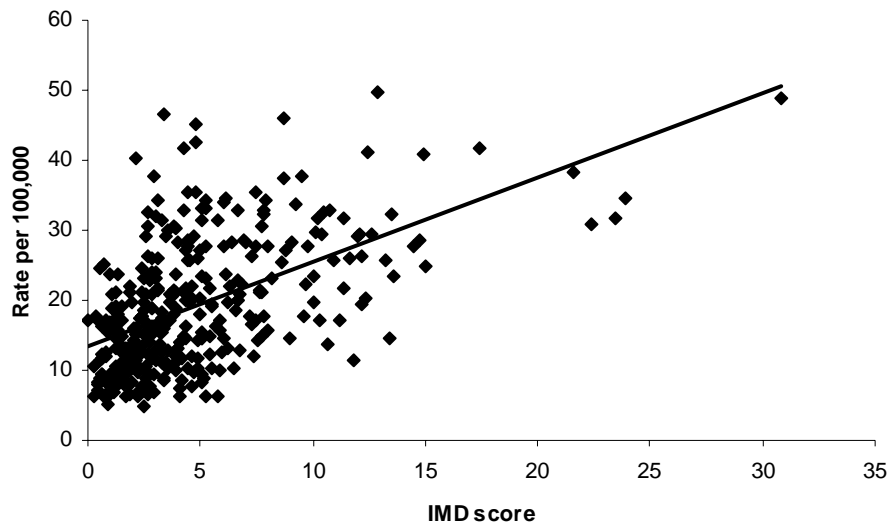
	NE	NW	YH	EM	WM	EE	L	SE	SW	Eng
2003	2.2	5.7	3.0	1.4	3.5	1.8	1.9	1.5	1.5	2.6
2004	5.2	10.9	9.9	5.5	7.2	4.9	5.9	4.7	5.1	6.7
2005	10.1	12.8	10.6	6.9	8.6	6.1	7.1	4.4	4.1	7.7

Source: NWPHO from Home Office (ASBOs issued at all courts) and Office for National Statistics (population estimates)

Sub-regional Inequalities

At a local authority level, England as a whole (and all regions separately) showed a positive association between the number of ASBOs per 100,000 population and deprivation (Scatterplot 5).

Scatterplot 5: Rate of anti-social behaviour orders per 100,000 population and the Index of Multiple Deprivation 2004. England local authorities 2003-05.



Source: NWPHO from Home Office (ASBOs issued at all courts), Office for National Statistics (mid-year population estimates) and Communities and Local Government (Index of Multiple Deprivation 2004)

Data Issues

The Home Office has collated data from the Court Service on the number of ASBOs issued at all courts since April 1999. Data are collected for all criminal justice system areas (cjsa) in England and, where possible, data are aggregated to the local authority areas in which the restrictions placed through the ASBO apply. ASBO data reflects the use of ASBOs by local areas to tackle anti-social behaviour and does not necessarily indicate levels of anti-social behaviour within specific areas. In addition, ASBO data is drawn from large administrative datasets and consequently quality should be treated with caution. Data provided in the local authority area table differs from the cjsa table because an issuing court can be outside the area in which the restrictions have been imposed. For example, an issuing court may be in Hampshire cjsa but the restrictions apply only to a local authority area within Dorset. Despite efforts to aggregate data to local authority area, in some circumstances the local authority areas defined do not match up to formally listed areas. Furthermore, a number of ASBOs place restrictions on individuals that are in force for the whole of England and not just for one local authority area, and therefore do not come under one particular local authority. Between 2003 and 2005, six ASBOs were of this nature and were therefore not included in the analyses presented above.

Indicator Definitions

Rate of anti-social behaviour orders issued by courts per 100,000 population

An ASBO is a court order designed to stop unwanted public behaviour. Regional and local authority data on the number of ASBOs issued in England are available on the crime reduction website⁴⁰ and are provided for the period April 1999 to December 2005. Yearly total figures are provided for all areas from 2001. Data are also provided for this period by cjsa and include data broken down into age categories (aged 10-17 years and aged 18 plus). Population denominators were mid-year estimates from the Office for National Statistics.

⁴⁰ www.crimereduction.gov.uk/asbos/asbos2.htm

6.3 Incapacity

Indicators

- Rate of claimants of Incapacity Benefit or Severe Disablement Allowance whose main medical reason is alcoholism per 100,000 working age population;
- Percentage of total claimants of Incapacity Benefit or Severe Disablement Allowance who have a main medical reason of alcoholism.

Rationale and Evidence

Alcoholism may affect an individual's ability to participate in the labour market, whether it be through intermittent, regular or long-term absences, the loss of work, or negative effects on the capacity to secure work. When a working age individual is incapacitated by alcoholism to a level at which it is felt unreasonable to require them to seek work, they may be able to claim benefits on incapacity grounds if they are eligible. Incapacity Benefit (IB) and Severe Disablement Allowance (SDA) are two specific benefits that can be paid to working age individuals who are unable to work because of ill health or disability, including alcoholism. The rate of individuals claiming such benefits provides a better understanding of the extent to which alcohol dependency affects the ability to participate in the labour market.

Background

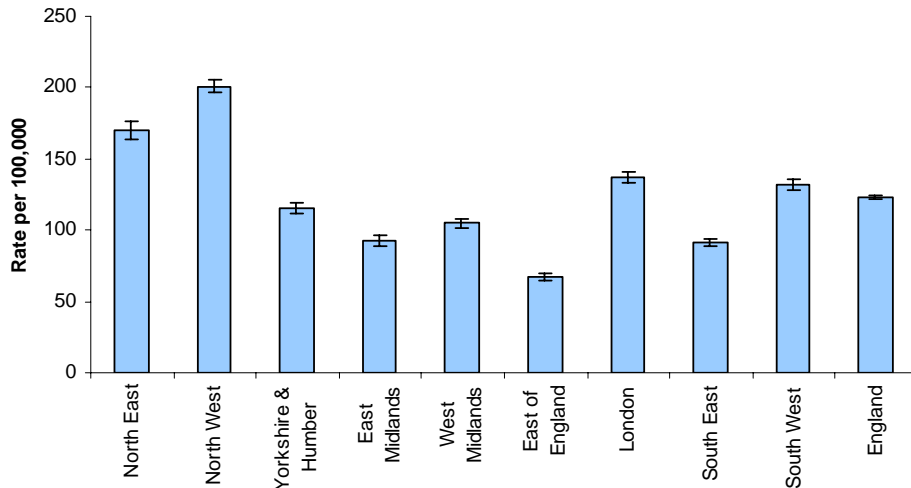
Incapacity Benefit (IB) is a benefit paid at a weekly rate for people under 65 who have paid adequate National Insurance contributions and are not (or no longer) entitled to statutory sick pay. Severe Disablement Allowance (SDA) is a benefit for those aged 16 or over and under 65 who are not entitled to receive IB. Since April 2001, it has not been possible to make a new claim for SDA, but those people who initiated a claim before this date continue to receive regular payments. Over 38,000 people in England were claiming IB or SDA for the primary diagnosis of alcoholism in August 2006, a rate of 122.7 per 100,000 working age population, and 1.75% of the total number of claimants.

Regional Commentary

Rate of claimants of Incapacity Benefit or Severe Disablement Allowance whose main medical reason is alcoholism per 100,000 working age population

The rate of claimants with alcoholism as a primary diagnosis (per 100,000 working population) varied considerably between regions, with the North East, North West, London and South West having significantly higher rates than England overall, and all other regions having significantly lower rates. Furthermore, the rate per 100,000 for the highest region (North West) was almost three times higher than the lowest (East of England) (Figure 25).

Figure 25: Rate of claimants of Incapacity Benefit or Severe Disablement Allowance whose main medical reason is alcoholism per 100,000 working age population, August 2006.



Source: NWPFO from Work and Pensions Longitudinal Study, Department for Work and Pensions Information Directorate (claimants) and Office for National Statistics (mid-year population estimates)

Table 25: Rate of claimants of Incapacity Benefit or Severe Disablement Allowance whose main medical reason is alcoholism per 100,000 working population, August 2006.

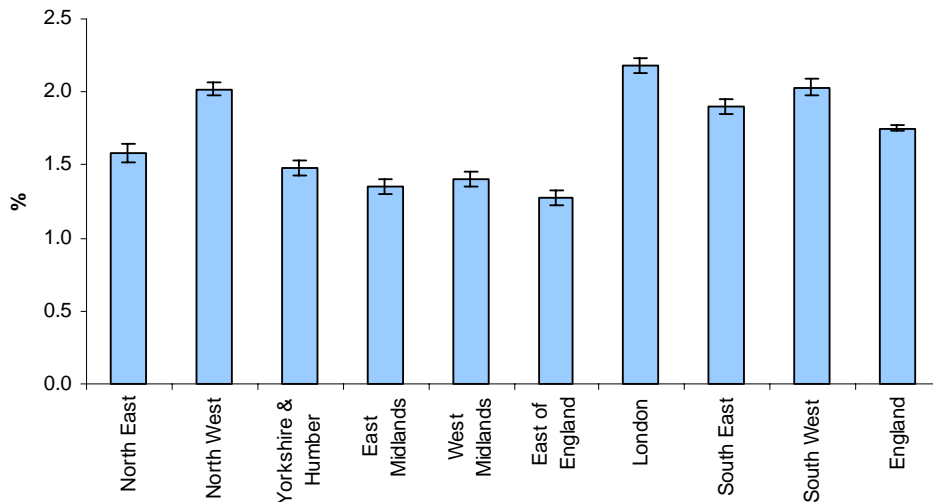
	NE	NW	YH	EM	WM	EE	L	SE	SW	Eng
Aug 2006	169.7	201.0	115.2	92.4	104.9	67.5	137.0	91.6	132.1	122.7

Source: NWPFO from Work and Pensions Longitudinal Study, Department for Work and Pensions Information Directorate (claimants) and Office for National Statistics (mid-year population estimates)

Percentage of total claimants of Incapacity Benefit or Severe Disablement Allowance who have a main medical reason of alcoholism

The percentage of IB and SDA claims made where the primary diagnosis was alcoholism was low for all regions, ranging from 2.2% in London to 1.2% in the East of England (Figure 26). Significantly higher percentages (than England overall) were found for the North West, London, South East and South West, with significantly lower percentages found for all other regions.

Figure 26: Percentage of total claimants of Incapacity Benefit or Severe Disablement Allowance who have a main medical reason of alcoholism, August 2006.



Source: Work and Pensions Longitudinal Study, Department for Work and Pensions Information Directorate

Table 26: Percentage of total claimants of Incapacity Benefit or Severe Disablement Allowance who have a main medical reason of alcoholism, August 2006.

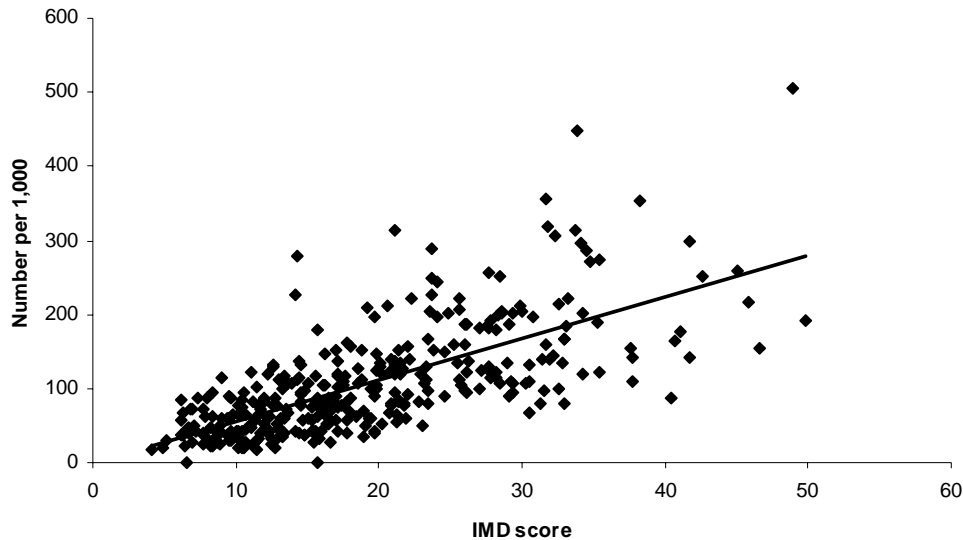
	NE	NW	YH	EM	WM	EE	L	SE	SW	Eng
Aug 2006	1.6	2.0	1.5	1.4	1.4	1.3	2.2	1.9	2.0	1.8

Source: Work and Pensions Longitudinal Study, Department for Work and Pensions Information Directorate

Sub-regional Inequalities

At a local authority level, all regions showed a positive association between the rate of claimants per 100,000 working age population and deprivation, with those in the more deprived areas generally having a higher rate of claimants (Scatterplot 6).

Scatterplot 6: Rate of claimants of Incapacity Benefit or Severe Disablement Allowance whose main medical reason is alcoholism per 100,000 working age population and the Index of Multiple Deprivation 2004. England local authorities, August 2006.



Source: Work and Pensions Longitudinal Study, Department for Work and Pensions Information Directorate (claimants), Communities and Local Government (Index of Multiple Deprivation 2004) and Office for National Statistics (mid-year population estimates)

Data Issues

These data do not reflect the whole impact of alcoholism on the labour market, which is likely to be higher. Not all individuals suffering from alcoholism will seek Incapacity Benefit. Others may be claiming IB/SDA for other primary reasons, with alcoholism as a secondary cause, and would not be included in this data.

Indicator Definitions

Rate of claimants of Incapacity Benefit or Severe Disablement Allowance whose main medical reason is alcoholism per 100,000 working age population;

Percentage of total claimants of Incapacity Benefit or Severe Disablement Allowance who have a main medical reason of alcoholism.

Data on claimants of IB and SDA are derived from the Work and Pensions Longitudinal Study, Department for Work and Pensions Information Directorate. Claimants include people receiving benefits, as well as those who are not entitled but who continue to submit medical evidence or those who have had their benefit extinguished. Causes of incapacity are based on the International Classification of Diseases, 10th Revision, published by the World Health Organization. For the rate of claimants, the denominator used is the working age population (men aged 16 to 64 and women aged 16 to 59), from mid-2005 estimates from the Office for National Statistics.

6.4 Road traffic accidents

Indicators

- Percentage of drivers in injury road accidents who are given a breath test;
- Percentage of drivers in injury road accidents who failed a breath test;
- Rate of casualties from road accidents involving illegal alcohol levels per 100,000 population;
- Rate of alcohol-attributable mortality due to land transport accidents per 100,000 population.

Rationale and Evidence

Alcohol use affects physical and cognitive function and consequently can impair driving ability through, for example, reduced reaction times, vision and ability to judge speed and distance. Alcohol can also increase feelings of confidence and lead to increased risk taking when driving⁴¹. In pedestrians, these same effects can increase vulnerability to road traffic accidents⁴². Research shows that alcohol consumption by drivers increases their risk of involvement in a road traffic accident, and that this risk increases with blood alcohol concentration (BAC)⁴³.

Background

The legal BAC limit for driving in the UK is 80mg of alcohol/100ml of blood. In 2004, among all road traffic fatalities⁴⁴ aged 16 and over for whom BAC levels were recorded, 37% had consumed alcohol and 25% had BAC levels above the legal limit. During weekend drinking hours (Friday and Saturday 10pm-4am), 63% of fatalities had BAC levels above the legal limit⁴⁵. Among adult pedestrian fatalities only, of those with a known BAC, 52% had consumed alcohol, and 42% had a BAC level above 80mg/100ml. During weekend drinking hours 79% had a BAC level above 80mg/100ml.

*Tomorrow's roads: safer for everyone*⁴⁶, published in 2000, set targets for reducing road casualties, including to have reduced the number of people killed or seriously injured in road accidents by 40% by 2010 compared to the 1994-1998 average (also a 2004 Spending Review PSA target for local government). In 2005, a 33% reduction had been achieved towards this target. However, over this period the numbers of both casualties and deaths from drink driving, despite having declined rapidly throughout the 1980s and early 1990s, have fluctuated. In 2005 an estimated 560 people were killed through drink driving in Britain (480 in England), 17.5% of all road traffic fatalities, compared to a low of 460 in 1998. The total number of drink drive casualties in 2005 is estimated at 15,400 in Britain (of which 13,630 were in England), compared to a low of 14,980 in 1993. However, both casualties and fatalities from drink driving are estimated to be lower in 2005 than they were in 2004.

⁴¹ IAS Institute for Alcohol Studies (2007). Alcohol – drinking and driving. Available from: www.ias.org.uk/resources/factsheets/drink_driving.pdf Accessed 8 June 2007.

⁴² Department for Transport (2001). Alcohol and pedestrians. Available from: www.dft.gov.uk/pgr/roadsafety/research/rsrr/theme3/alcoholandpedestriansno20 Accessed 8 June 2007.

⁴³ Peden M, Scurfield R, Sleet D et al (2004). World report on road traffic injury prevention. Geneva: World Health Organization.

⁴⁴ Including motor vehicle drivers, motorcycle riders, vehicle passengers, pedestrians and pedal cyclists.

⁴⁵ TRL Limited (2006). Blood alcohol levels in road accidents fatalities for 2004 in Great Britain. LF2098. Wokingham: TRL Limited

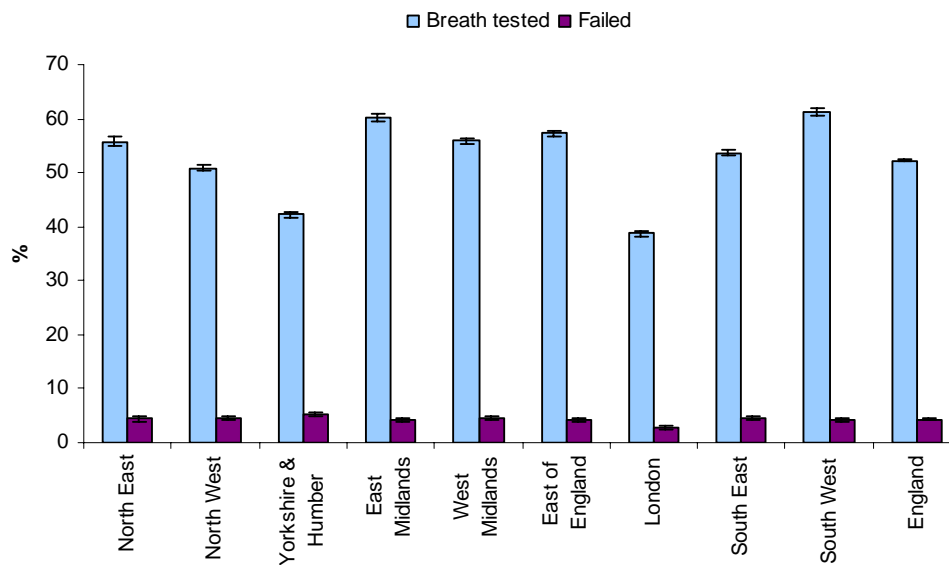
⁴⁶ Department for Transport (2000). Tomorrow's roads: safer for everyone. Available from: www.dft.gov.uk/pgr/roadsafety/strategytargetperformance/tomorrowsroadssaferforeveryone Accessed 8 June 2007.

Regional Commentary

Percentage of drivers in injury road accidents who are given a breath test and the percentage who failed a breath test

Regional data on breath tests and failures are shown in Figure 27. Across England, half (52%) of drivers involved in a personal injury road traffic accident were breath tested. Percentages were significantly higher than England in North East, East Midlands, West Midlands, East of England, South East and South West and significantly lower in all other regions. Nationally, around 4% of drivers involved in an accident failed the breath test, and there was little variation in this percentage between regions. Only two regions differed significantly from the England average, which were Yorkshire and The Humber (higher) and London (lower).

Figure 27: Percentage of drivers in injury road accidents who are given a breath test and the percentage of drivers who failed a breath test, 2005.



Source: NWPFO from Department for Transport

Table 27: Percentage of drivers in injury road accidents who are given a breath test and the percentage of drivers who failed a breath test, 2005.

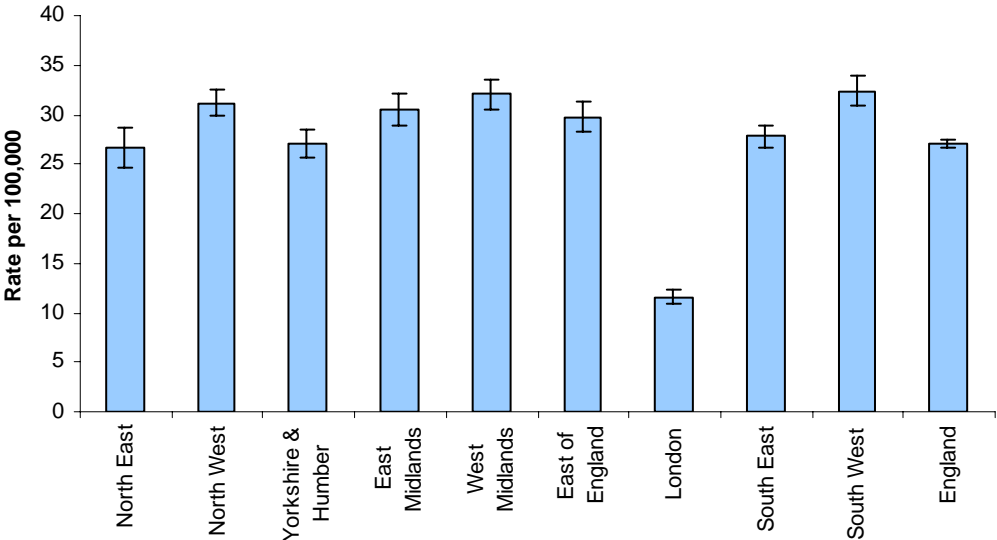
	NE	NW	YH	EM	WM	EE	L	SE	SW	Eng
Breath tested	55.8	50.8	42.2	60.2	55.9	57.3	38.8	53.6	61.3	52.2
Failed	4.4	4.5	5.2	4.2	4.6	4.3	2.7	4.5	4.3	4.3

Source: Department for Transport

Rate of casualties from road accidents involving illegal alcohol levels per 100,000 population

Figure 28 shows the rate of casualties from road accidents involving illegal alcohol levels. Rates are significantly higher than England in the South West, West Midlands, North West, East Midlands and East of England and significantly lower in London.

Figure 28: Rate of casualties from road accidents involving illegal alcohol levels per 100,000 population, 2005.



Note: Adjusted for under-reporting
 Source: NWPHO from Department for Transport

Table 28: Rate of casualties from road accidents involving illegal alcohol levels per 100,000 population, 2005.

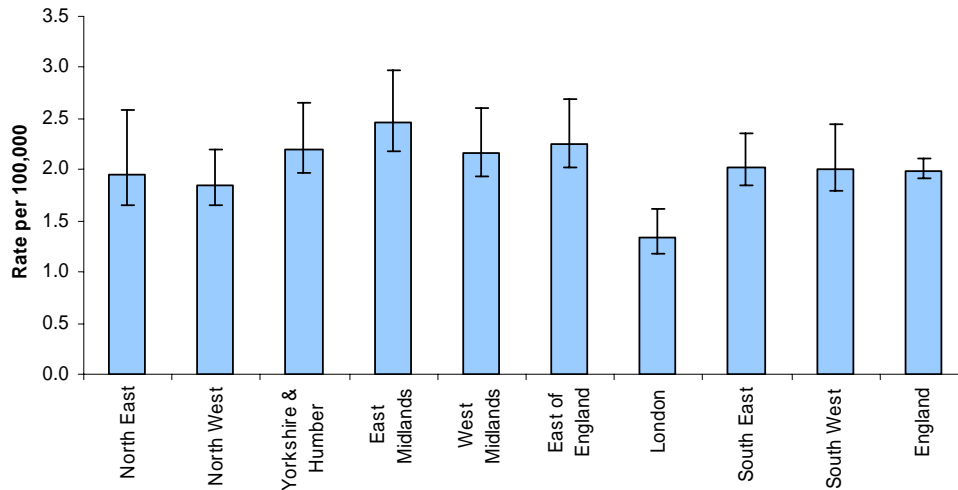
	NE	NW	YH	EM	WM	EE	L	SE	SW	Eng
2005	26.6	31.1	27.1	30.4	32.1	29.8	11.6	27.8	32.4	27.0

Note: Adjusted for under-reporting
 Source: NWPHO from Department for Transport

Rate of alcohol-attributable mortality due to land transport accidents per 100,000 population

In 2004, rates of mortality per 100,000 population for alcohol-attributable land transport accidents were highest in the East Midlands (the only region significantly higher than England) and lowest in London (the only region significantly lower than England) (Figure 29).

Figure 29: Rate of alcohol-attributable mortality due to land transport accidents per 100,000 population, 2004.



Source: NPHO from Office for National Statistics

Table 29: Rate of alcohol-attributable mortality due to land transport accidents, 2004.

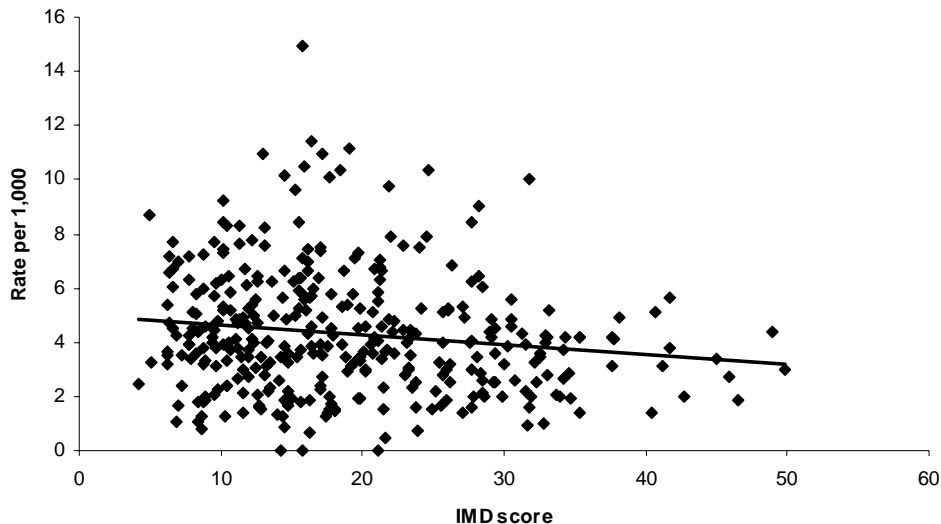
	NE	NW	YH	EM	WM	EE	L	SE	SW	Eng
2004	2.0	1.8	2.2	2.5	2.2	2.3	1.3	2.0	2.0	2.0

Source: NPHO from Office for National Statistics

Sub-regional Inequalities

Only mortality data are available at a low enough level for sub-regional analysis. At a national level, there was little association between mortality per 100,000 population for alcohol-attributable land transport accidents and deprivation (Scatterplot 7).

Scatterplot 7: Rate of alcohol-attributable mortality due to land transport accidents per 100,000 population and the Index of Multiple Deprivation 2004. England local authorities, 2004.



Source: NWPHO from National Statistics (mortality due to land transport accidents), Communities and Local Government (Index of Multiple Deprivation)

Data Issues

Breath test statistics are available at local authority level on the Department for Transport website. However, the sample of points on minor roads in some local areas is very small, and thus sampling errors can be large. Consequently, although the data are made available they are not classified as National Statistics.

Data on drink drive statistics from the Department for Transport are incomplete, as BAC levels are not always recorded for either casualties or fatalities. STATS19 road casualty data from the Department for Transport is recognised to be an underestimation of the true number of casualties, for example through under-reporting/recording and misclassification. The Department for Transport is continuing research to identify reporting gaps and improve estimations.

The mortality estimates provided here utilise a single alcohol-attributable fraction (35.3%⁴⁷), applied to total mortality from land transport accidents. However, BAC recording of road accident fatalities in Great Britain shows varying prevalence of alcohol between different fatality types. For example, in 2004, 37% of all road accident fatalities for whom BAC levels were recorded had consumed alcohol, ranging from 23% of pedal cyclists to 52% of pedestrians.

⁴⁷ Hughes K, Tocque K, Humphrey G and Bellis MA (2004). Taking measures: A situational analysis of alcohol in the North West. Liverpool, Centre for Public Health, Liverpool John Moores University.

Indicator Definitions

Percentage of drivers in injury road accidents who are given/failed a breath test

For breath tests, police can take a screening breath test if they suspect a person has been driving or intends to drive while under the influence of alcohol, has committed a moving traffic offence, or if a driver has been involved in an accident.

Data on breath testing are available from the Department for Transport and are published annually⁴⁸.

Rate of casualties from road accidents involving illegal levels of alcohol per 100,000 population

In this case, casualties are defined as all road users killed or injured in a drink-drive accident. A drink-drive accident is an incident on a public road in which someone is killed or seriously injured and where one or more of the motor vehicle drivers or riders involved either refused to give a breath test specimen when requested to do so by the police (other when incapable of doing so for medical reasons), or one of the following:

- i) failed a roadside breath test by registering over 35 microgrammes of alcohol per 100 millilitres of breath
- ii) died and was subsequently found to have more than 80 milligrammes of alcohol per 100 millilitres of blood.

Two sources of data are used to assess the extent and characteristics of drink-drive accidents in Great Britain:

- i) Coroners' data: Information about the level of alcohol in the blood of road accident fatalities aged 16 or over who die within 12 hours of a road accident is provided by Coroners in England and Wales.
- ii) STATS 19 breath test data: The personal injury road accident reporting system (STATS19) provides data on injury accidents in which the driver or rider survived and was also breath tested at the roadside. If the driver or rider refused to provide a breath test specimen then they are considered to have failed the test unless they are deemed unable to take the test for medical reasons.

Once drink-drive accidents have been identified using Coroners' and STATS19 data then the resulting casualties in these accidents are identified from STATS19 data.

Population denominators were mid-year estimates from the Office for National Statistics.

Rate of alcohol attributable mortality due to land transport accidents per 100,000 population

Land transport accidents include those involving a car, motorcycle, pedal cycle, bus, light goods, heavy good vehicles (HGVs) and other vehicle occupants and pedestrians. Mortality from land transport accidents is available from the National Centre for Health Outcomes Development (NCHOD) (source of data: National Statistics) to a local authority level.

Alcohol-attributable mortality due to land transport accidents have been calculated using the Strategy Unit attributable fraction of 35.3%.

⁴⁸ www.dft.gov.uk/pgr/statistics/datatablespublications/accidents/

6.5 Teenage conceptions

Indicators

- Under 16 conceptions, rate per 1,000 females aged 13-15;
- Under 18 conceptions, rate per 1,000 females aged 15-17.

Rationale and Evidence

The use of alcohol can play a contributory role in risky sexual behaviour, and therefore conceptions, among teenagers. Among sexually active 13 and 14 year olds, 40% said they were drunk or stoned at first intercourse⁴⁹, while in a survey of 15-16 year olds, 8% reported having had unprotected sex following alcohol consumption⁵⁰. Since alcohol is widely known to reduce inhibitions, it can be used deliberately to increase confidence with potential sexual partners⁵¹. However, at the same time, the acute effects of alcohol can reduce the ability to assess risks, making young people more likely to engage in unprotected sex⁵². Additionally, often the places where potential sexual partners are met are in contexts where alcohol is both available and a major part of social interaction, such as pubs, bars and nightclubs.

Background

A total of 39,683 conceptions occurred among females under 18 years of age in England in 2005, with 7,462 conceptions occurring among the under 16s. Teenage conception rates have been decreasing in recent years. Since 1998, the baseline year for the Teenage Pregnancy Strategy⁵³, the under 18 conception rate has fallen by 11.8% to the lowest level for over 20 years, and the under 16 conception rate has fallen by 12.1%.

However, compared to other European countries, females in the UK have one of the highest percentages of female 15-16 year olds who have engaged in unprotected sex as a result of alcohol use (11%⁵⁴), and a slightly higher than average (median) percentage for males (6%) (Appendix 3, Table 66). In 1998 (the latest available comparative data), the UK also had the highest rate of births among women aged 15-19 years (30.8 per 1,000 women) compared to other rich countries (Appendix 3, Table 67).

⁴⁹ Wight D, Henderson M, Raab G et al (2000). Extent of sexual intercourse among young teenagers in Scotland: A cross sectional survey. *British Medical Journal*, 7244: 1243-1244.

⁵⁰ Hibbell B, Andersson B, Bjarnason T et al (2004). The ESPAD Report 2003: Alcohol and other drug use among students in 35 European countries. Stockholm: CAN.

⁵¹ Taylor J, Fulop N, Green J (1999). Drink, illicit drugs and unsafe sex in women. *Addiction*, 94(8): 1209-1218.

⁵² Alcohol Concern (2002). Alcohol and teenage pregnancy. London: Alcohol Concern. Available from: www.alcoholconcern.org.uk/files/20030818_160907_Teen%20Pregnancy%20Briefing.pdf Accessed 24 April 2006.

⁵³ Social Exclusion Unit (1999). Teenage pregnancy. London: The Stationery Office.

⁵⁴ This percentage has been applied to the total under 18 conceptions to estimate the number attributable to alcohol presented in Figure i (Executive Summary).

Regional Commentary

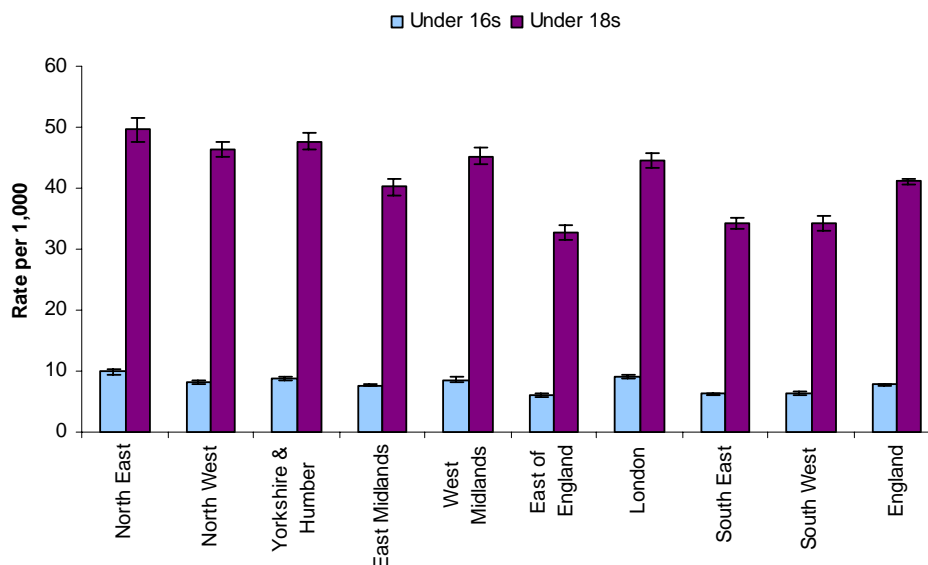
Under 16 conceptions, rate per 1,000 females aged 13-15

Under 18 conceptions, rate per 1,000 females aged 15-17

During 2003-05 (for the under 16s) and in 2005 (for the under 18s), rates of conception varied between regions (Figure 30). Rates were significantly higher than the England average in the North East, North West, Yorkshire and The Humber, West Midlands, and London for both age groups. Rates were significantly lower for the East of England, South East and South West for both age groups.

Between 1998 and 2005, the rate of under 18 conceptions decreased in all regions. Larger than average decreases were seen in the East Midlands, East of England, South West, London, West Midlands and the North East (Table 30). Between 2001-03 and 2003-05, there was also a decrease in the rate of under 16 conceptions in most regions. However, the North East, North West and South West experienced slight increases in rates.

Figure 30: Crude rate of conception per 1,000 females, 2003-05 (under 16s) and 2005 (under 18s).



Note: The under 16 rate is per 1,000 females aged 13-15 and the under 18 rate is per 1,000 females aged 15-17.

Source: Office for National Statistics and Teenage Pregnancy Unit

Table 30: Crude rate of conception per 1,000 females, 2001-03 to 2003-05 (under 16s) and 1998-2005 (under 18s).

		NE	NW	YH	EM	WM	EE	L	SE	SW	Eng
Under 16s	2001-03	9.6	8.1	9.0	7.5	8.7	6.3	9.9	6.5	6.4	7.9
	2002-04	9.8	8.1	9.0	7.4	8.6	6.1	9.5	6.2	6.3	7.8
	2003-05	9.9	8.3	8.9	7.4	8.6	6.0	9.1	6.2	6.5	7.7
Under 18s	1998	56.5	50.3	53.1	48.8	51.7	37.9	51.1	37.8	39.4	46.6
	1999	55.3	48.8	51.0	43.5	49.3	36.4	50.5	35.9	37.5	44.8
	2000	50.8	47.5	47.9	42.8	49.0	35.1	50.4	36.0	36.3	43.6
	2001	48.3	45.1	47.1	40.2	47.2	34.2	50.3	35.0	37.1	42.5
	2002	51.0	45.2	47.0	40.4	46.8	34.6	52.0	34.4	35.4	42.6
	2003	52.1	45.0	46.8	41.1	47.2	33.3	50.8	33.1	34.1	42.1
	2004	50.6	45.6	47.3	41.0	45.0	32.8	48.3	33.5	34.5	41.5
	2005	49.6	46.4	47.7	40.2	45.3	32.7	44.6	34.2	34.2	41.1

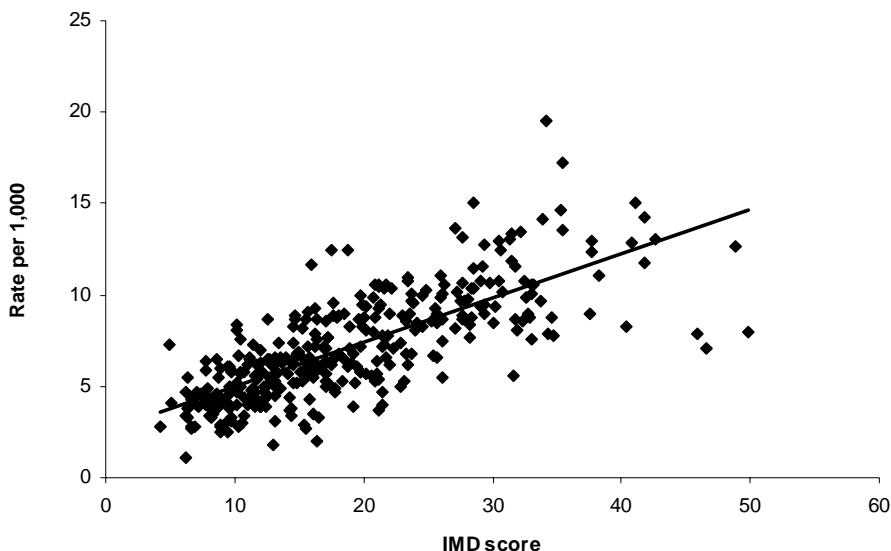
Note: The under 16 rate is per 1,000 females aged 13-15 and the under 18 rate is per 1,000 females aged 15-17.

Source: Office for National Statistics and Teenage Pregnancy Unit

Sub-regional Inequalities

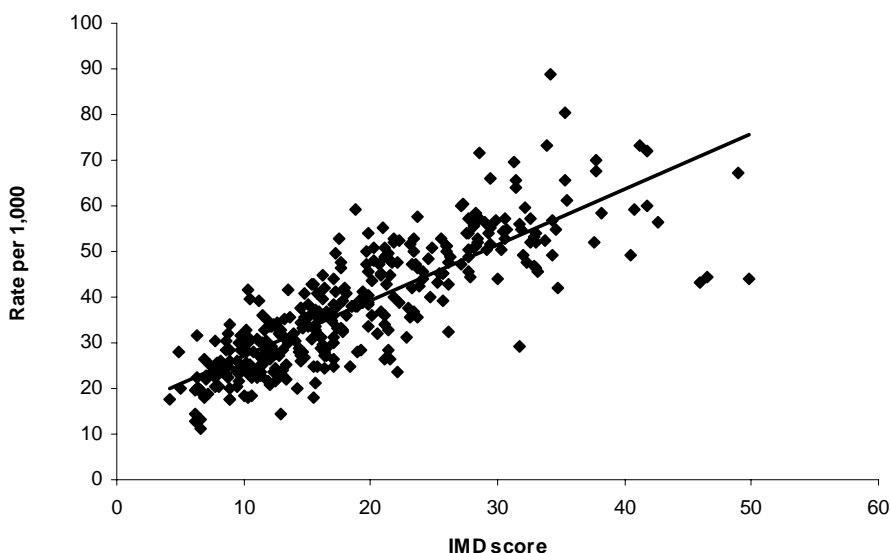
At a local authority level, a positive association was found between the rate of conceptions and deprivation (using the Index of Multiple Deprivation 2004) for both 13-15 year olds (Scatterplot 8) and 15-17 year olds (Scatterplot 9). Positive associations were found for all regions.

Scatterplot 8: Under 16 conceptions, rate per 1,000 females aged 13-15 and the Index of Multiple Deprivation 2004. England local authorities, 2003-05.



Source: Office for National Statistics and Teenage Pregnancy Unit (conceptions) and Communities and Local Government (Index of Multiple Deprivation)

Scatterplot 9: Under 18 conceptions, rate per 1,000 females aged 15-17 and the Index of Multiple Deprivation 2004. England local authorities, 2003-05.



Source: Office for National Statistics and Teenage Pregnancy Unit (conceptions) and Communities and Local Government (Index of Multiple Deprivation)

Data Issues

These data refer to all teenage conceptions, not those conceptions that are related to alcohol consumption.

Indicator Definitions

Under 16 conceptions, rate per 1,000 females aged 13-15;

Under 18 conceptions, rate per 1,000 females aged 15-17.

Annual data on teenage conceptions (as well as teenage abortions) are produced by the Office for National Statistics and published annually in *Health Statistics Quarterly*⁵⁵. Data are available at the following geographies: country, region, strategic health authority, county, local authority and primary care trust. Conception data include pregnancies that result in either one or more live or still births, or a legal abortion. They do not include miscarriages or illegal abortions.

Under 18 data includes conceptions to all females aged under 18, including the under 16s. However, as only about 5% of under 18 conceptions are to females aged under 15, a three-year age group (15-17) is used as the denominator because including younger age groups in the base population to calculate the rate would be misleading. For under 16 rates, females aged 13-15 are used as the denominator.

Data for 2005 are presented for under 18 conceptions for England and the regions to allow comparisons with 1998 figures, the baseline year for the Teenage Pregnancy Strategy. Data for the period 2003-05 are presented for under 16 conceptions for England, the regions and local authorities and for under 18 conceptions for local authorities because, on an annual basis, the number of conceptions in some areas can be small. Using a three-year rolling period helps to smooth out significant random fluctuations that can occur in these circumstances.

⁵⁵ www.statistics.gov.uk/statbase/Product.asp?vlnk=6725&More=N

6.6 School absence and exclusions

Indicators

- Percentage of half days missed due to unauthorised absence in maintained secondary schools;
- Rate of fixed period drug or alcohol-related exclusions from school per 100,000 pupils;
- Rate of permanent drug or alcohol-related exclusions from school per 100,000 pupils.

Rationale and Evidence

Evidence suggests there is a positive association between adolescent alcohol use and levels of school absence. In a survey of secondary school children aged 11-15 in England, pupils who had tranted in the last year were much more likely to have drunk alcohol in the last week (55%) compared to those who tranted more than a year ago (36%) or those who had never tranted (11%)⁵⁶. Furthermore, those who had been excluded from school within the last 12 months were more likely to have had an alcoholic drink in the last week (45%) than those who had never been excluded (21%). The acute or direct effects of heavy alcohol use such as hangover or lack of sleep may encourage students to trant, but alcohol use is often also an indirect cause (through alcohol-related anti-social behaviour) of student exclusions from school. In England and Wales, 13-15% of suspensions from school were for drinking alcohol on site⁵⁷. Additionally, some studies have found that the association between alcohol use and truancy is largely accounted for by other related variables such as having a sociable/delinquent lifestyle, lack of hobbies, and tobacco or cannabis use⁵⁸. Reducing school absence by 8% by 2008 (compared to 2003) is a 2004 Spending Review Public Service Agreement (PSA) target for local government.

Background

In 2004/05 over 11 million half days were missed due to unauthorised absence in secondary schools in England, just over 1.2% of all possible pupil half days. This is a very slight increase on the percentage in 2002/03 (1.0%). In 2004/05, a total of 11,100 fixed period exclusions were made in England for drug or alcohol-related causes (145 per 100,000 pupils), with a further 470 permanent exclusions (6 per 100,000). This is a 9% decrease on the number of fixed period exclusions recorded in 2003/04 (12,250) and a 23% decrease for permanent exclusions (610). In 2003, around 3% of males and 4% of females aged 15-16 in the UK had performed poorly at school as a result of alcohol use. Compared to other European countries, this was around the average (median) percentage for males, but slightly higher than the average for females (2%) (Appendix 3, Table 68).

⁵⁶ Fuller E (2005). Smoking, drinking and drug use among young people in England in 2004. London: Department of Health.

⁵⁷ Youth Justice Board (2002). Youth Survey 2002. Research study conducted for the Youth Justice Board, January – March 2002. MORI Social Research, London. Available from: www.youth-justice-board.gov.uk/Publications/Scripts/prodView.asp?idProduct=67&eP Accessed 24 April 2006.

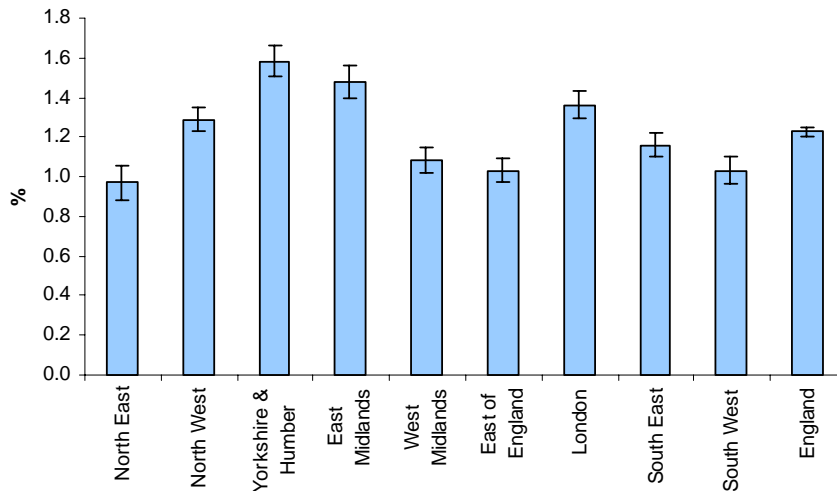
⁵⁸ Miller P, Plant M (1999). Truancy and perceived school performance: an alcohol and drug study of UK teenagers. *Alcohol and Alcoholism*, 34(6): 886-893.

Regional Commentary

Percentage of half days missed due to unauthorised absence in maintained secondary schools

In 2004/05, the percentage of half days missed due to unauthorised absence varied slightly between regions, with the lowest percentages experienced by the North East, East of England and the South West. The highest percentage was found in Yorkshire and The Humber. However, between 2002/03 and 2004/05, all regions showed a slight increase in unauthorised absence percentages, with the greatest increases found in the North East and South West and the least found in Yorkshire and The Humber and London (Table 31).

Figure 31: Percentage of half days missed due to unauthorised absence in maintained secondary schools, 2004/05.



Source: Department for Education and Skills

Table 31: Percentage of half days missed due to unauthorised absence in maintained secondary schools, 2002/03 to 2004/05.

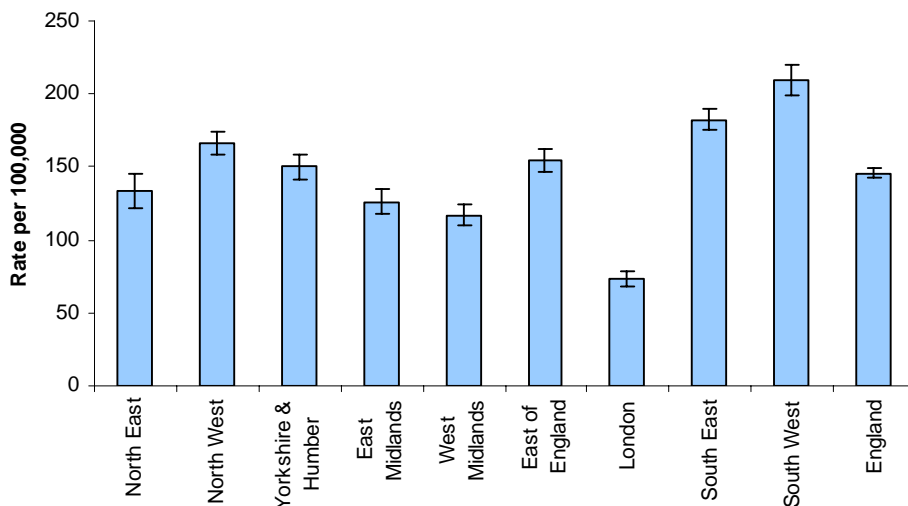
	NE	NW	YH	EM	WM	EE	L	SE	SW	Eng
2002/03	0.84	1.07	1.47	1.27	0.98	0.87	1.34	0.93	0.81	1.07
2003/04	0.98	1.16	1.49	1.39	1.00	0.95	1.32	0.99	0.94	1.14
2004/05	0.97	1.29	1.58	1.48	1.08	1.03	1.36	1.16	1.03	1.23

Source: Department for Education and Skills

Rate of fixed period drug or alcohol-related exclusions from school per 100,000 pupils

There was some variation between regions in the rate of fixed period drug or alcohol-related exclusions per 100,000 pupils in 2004/05 (Figure 32). Three regions had a significantly higher rate than the England average (the North West, South East, South West) and three regions a significantly lower rate (the East Midlands, West Midlands, London).

Figure 32: Rate of fixed period drug or alcohol-related exclusions from school per 100,000 pupils, 2004/05.



Note: Drug and alcohol-related exclusions are included together in the same category; see *Data Issues* for more information.

Source: Department for Education and Skills

Table 32: Rate of fixed period drug or alcohol-related exclusions from school per 100,000 pupils, 2004/05.

	NE	NW	YH	EM	WM	EE	L	SE	SW	Eng
2004/05	132.9	166.6	150.0	125.8	116.8	154.3	73.6	182.5	209.0	145.9

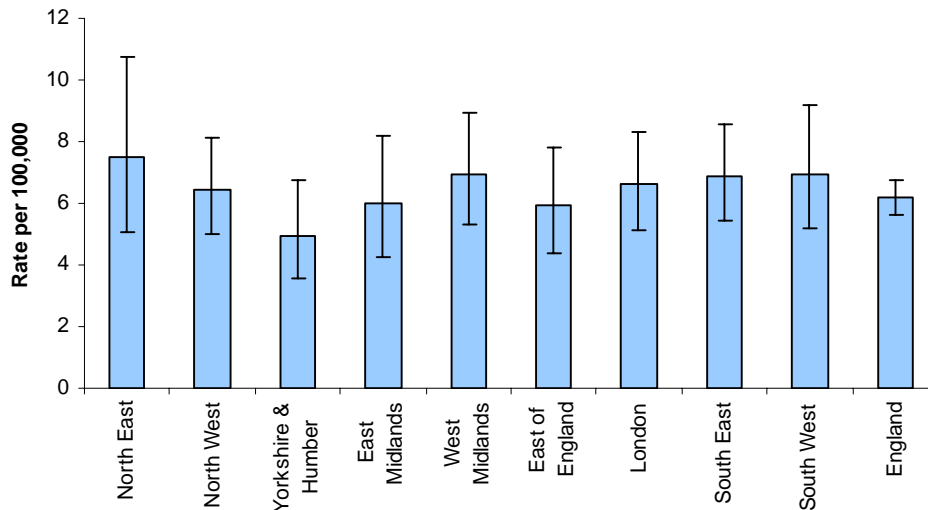
Note: Drug and alcohol-related exclusions are included together in the same category; see *Data Issues* for more information.

Source: Department for Education and Skills

Rate of permanent drug or alcohol-related exclusions from school per 100,000 pupils

While some variation was found between regions for permanent drug or alcohol-related exclusions during 2004/05 (Figure 33), no region was significantly different from the England average.

Figure 33: Rate of permanent drug or alcohol-related exclusions from school per 100,000 pupils, 2004/05.



Note: Drug and alcohol-related exclusions are included together in the same category; see *Data Issues* for more information.

Source: Department for Education and Skills

Table 33: Rate of permanent drug or alcohol-related exclusions from school per 100,000 pupils, 2004/05.

	NE	NW	YH	EM	WM	EE	L	SE	SW	Eng
2004/05	7.5	6.4	5.0	6.0	6.9	5.9	6.6	6.9	7.0	6.2

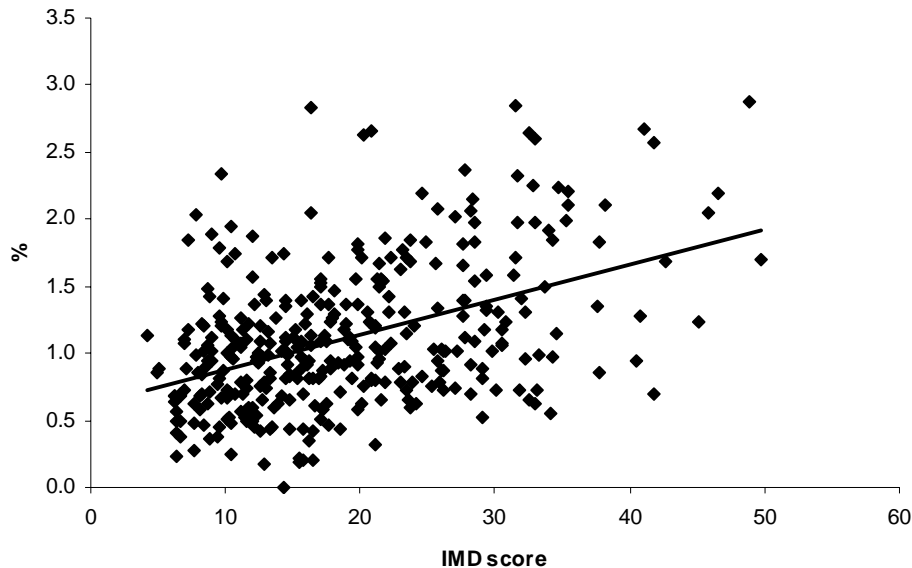
Note: Drug and alcohol-related exclusions are included together in the same category; see *Data Issues* for more information.

Source: Department for Education and Skills

Sub-regional Inequalities

Only the percentage of half days missed due to unauthorised absence is available at a level low enough for sub-regional analyses. Here, a positive association was found with deprivation for England as a whole (Scatterplot 10).

Scatterplot 10: Percentage of half days missed due to unauthorised absence in maintained secondary schools and the Index of Multiple Deprivation 2004. England local authorities, 2005/06.



Sources: Department for Education and Skills (unauthorised absence) and Communities and Local Government (Index of Multiple Deprivation)

Data Issues

While data are available for unauthorised absences, the reason for these absences is not specified; therefore actual levels of truancy (as opposed to lateness or unauthorised holidays for example – see *Indicator Definition*) cannot be calculated. Similarly, these data do not give any indication of the levels of unauthorised absence due to alcohol consumption. Data on truancy is also available by Government Office region from the truancy sweeps. However, this is a less reliable source of data to use for comparison purposes, since the frequency of sweeps varies considerably between local authorities and regions. For exclusion data, there is no distinction made between exclusions that are drug-related and those that are alcohol-related, although those children that consume drugs are more likely to use alcohol and vice versa⁵⁹. It is not therefore possible to determine whether the actual rate of alcohol-related exclusions varies from region to region.

Indicator Definitions

Percentage of half days missed due to unauthorised absence in maintained secondary schools
Schools are required to register attendance of pupils twice a day, once in the morning and once in the afternoon. Unauthorised absence is defined as absence without permission from a teacher or other authorised representative of the school. It includes absences such as truancy, lateness, unauthorised holidays, and non-established reasons. Regional and local authority level data are available from the Department for Children, Schools and Families.

Rate of fixed period / permanent alcohol-related exclusions from school

There are two types of exclusions. Fixed term exclusions are those where the pupil is given a fixed period to remain out of school. A pupil can be issued a fixed term exclusion more than

⁵⁹ Fuller E (2005). Smoking, drinking and drug use among young people in England, 2004. London: Health and Social Care Information Centre.

once during the year, provided no more than 45 days are taken throughout that academic year. Permanent exclusions are those where the pupils is not allowed to return to school. Exclusion data includes that from primary, secondary (including middle schools) and local authority maintained special schools. The denominator data used to calculate rates for exclusions are the number of pupils in primary, secondary (including middle schools) and local authority maintained special schools in January 2005. Both sets of data are available from the Department for Children, Schools and Families.

6.7 Nightlife behaviours

Indicators

- Percentage of adults who made nine or more visits to a pub or bar in the evening in the last month;
- Percentage of adults who made four or more visits to a nightclub or disco in the last month.

Rationale and Evidence

Alcohol consumption forms the basis of a night out for many young people. Binge drinking is a common feature, fuelled by cheap drinks promotions and the marketing of alcohol to young people⁶⁰. Research in Liverpool found that just over three-quarters (77%) of young people (aged 18 to 35) always drank alcohol when going out, with only 2% stating they never drank on a night out. Furthermore, including alcohol drunk both before and during a night out, the average amount consumed over the course of the night was 20.5 units for males and 16.0 units for females⁶¹. The number of visits to a pub or bar and nightclub or disco provides information on the frequency of nights out, and potentially heavy drinking, among the general population.

Background

In England, around 7% of people taking part in the latest British Crime Surveys (2004/05-2005/06) had visited a pub or bar in the evening on nine or more occasions in the last month, and around 6% had been to a nightclub or disco on four or more occasions in the last month. Compared to previous surveys conducted in 2002/03-2003/04, the proportion of people visiting venues at these frequencies had decreased slightly, by 0.6 percentage points for visits to a pub or bar and by 0.4 percentage points for visits to a nightclub or disco.

⁶⁰ World Health Organization (2002). Declaration on the technical consultation to the World Health Organization on the marketing and promotion of alcohol to young people. Cited by Institute of Alcohol Studies (2002). Alcohol and Advertising. St Ives: Institute of Alcohol Studies.

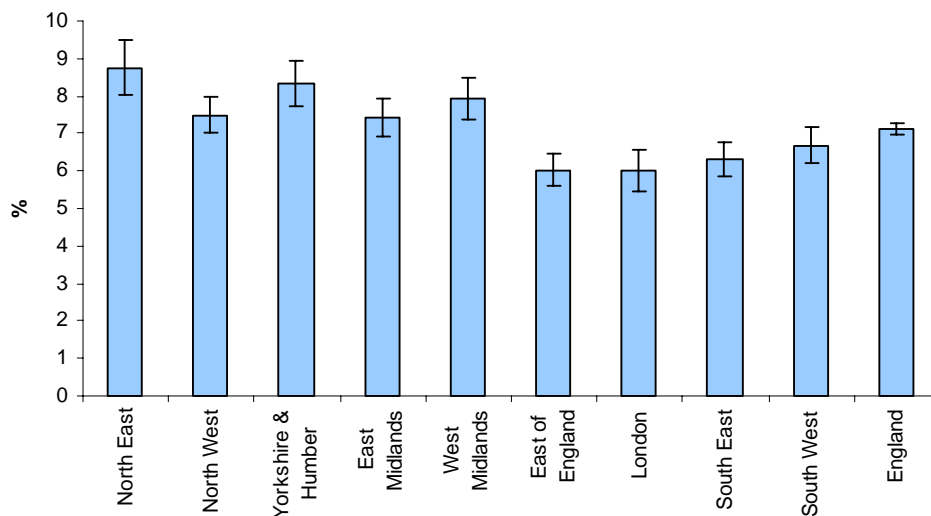
⁶¹ Anderson Z, Hughes K, Bellis MA (2007). Exploration of young people's experience and perceptions of violence in Liverpool's nightlife. Liverpool: Centre for Public Health, Liverpool John Moores University.

Regional Commentary

Percentage of adults who made nine or more visits to a pub or bar in the evening in the last month

The percentage of people visiting a pub or bar on nine or more occasions appears to show a north-south divide, with the majority of the northern regions having a figure higher than the England average, significantly so for the North East, Yorkshire and The Humber and the West Midlands (Figure 34). Southern regions have a lower figure than the England average, with three regions being significantly lower (East of England, London and the South East). Most regions experienced a decrease in the proportion of adults who visited a pub or bar at these frequencies between 2002/03-2003/04 and 2004/05-2005/06. The largest decrease in these proportions was seen in the North East, while a slight increase was reported in Yorkshire and The Humber (Table 34).

Figure 34: Percentage of adults who made nine or more visits to a pub or bar in the evening in the last month, 2004/05-2005/06.



Source: NPHO from British Crime Survey (unweighted)

Table 34: Percentage of adults who made nine or more visits to a pub or bar in the evening in the last month, 2002/03-2003/04 and 2004/05-2005/06.

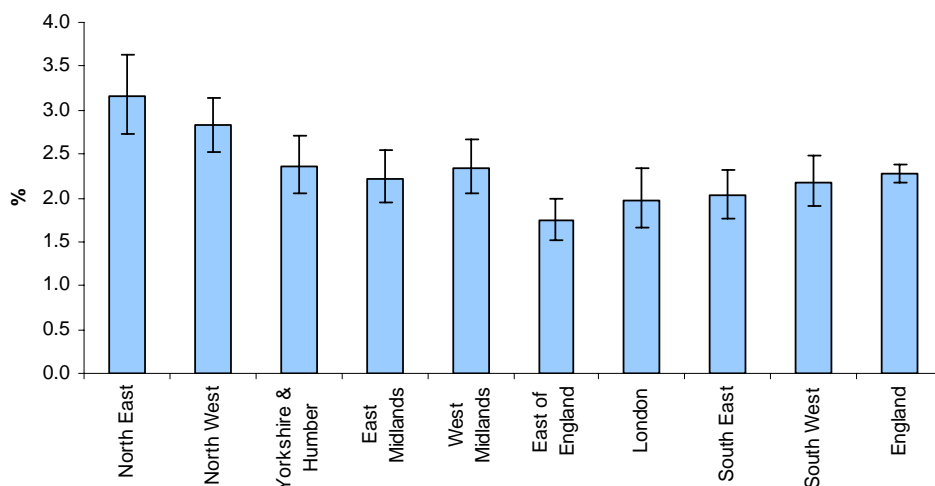
	NE	NW	YH	EM	WM	EE	L	SE	SW	Eng
2002/03-2003/04	10.8	8.3	8.2	7.7	8.6	6.3	6.7	7.1	7.0	7.7
2004/05-2005/06	8.8	7.5	8.3	7.4	7.9	6.0	6.0	6.3	6.7	7.1

Source: NPHO from British Crime Survey (unweighted)

Percentage of adults who made four or more visits to a nightclub or disco in the last month

The percentage of adults making four or more visits to a nightclub or disco in the last month showed some variation between regions, with the North East and North West having a significantly higher proportion and the East of England having a significantly lower proportion than the England average (Figure 35). A slight decrease in the percentage of adults making visits to a nightclub or disco at these frequencies, as seen for England overall, was found for all regions between 2002/03-2003/04 and 2004/05-2005/06 (Table 35).

Figure 35: Percentage of adults who made four or more visits to a nightclub or disco in the last month, 2004/05-2005/06.



Source: NPHO from British Crime Survey (unweighted)

Table 35: Percentage of adults who made four or more visits to a nightclub or disco in the last month, 2002/03-2003/04 and 2004/05-2005/06.

	NE	NW	YH	EM	WM	EE	L	SE	SW	Eng
2002/03-2003/04	4.0	3.0	2.7	2.6	3.0	2.2	2.6	2.5	2.7	2.7
2004/05-2005/06	3.2	2.8	2.4	2.2	2.3	1.7	2.0	2.0	2.2	2.3

Source: NPHO from British Crime Survey (unweighted)

Data Issues

Although these indicators, taken from the British Crime Survey, provide useful information on the frequency of visits to licensed premises during evenings, there is no information on whether or not alcohol is consumed and if so, in what quantity. Visiting a pub or nightclub frequently over the course of a month does not necessarily infer that higher quantities of alcohol are being consumed than for those making fewer visits. Therefore, care needs to be taken with the interpretation and implications of these measures and regional data are presented as higher or lower than the England average, rather than better or worse, in Appendix 5.

Indicator Definitions

Both indicators are derived from the alcohol disorder module of the British Crime Survey (BCS)⁶². The BCS is conducted for the Home Office to gather information on levels of crime and public attitude to crime and other Home Office issues across England and Wales. Commencing in 1982, the survey has been conducted annually since 2001/02 with around 50,000 interviews of individuals aged 16 years and over taking place each year.

Percentage of adults who made nine or more visits to a pub or bar in the evening in the last month

The proportion (as a percentage) of adults aged 16 or over reporting the frequency of visits to a pub or bar in the evening in the past month. Adults were asked "How often have you visited a pub or bar in the last month?".

Percentage of adults who made four or more visits to a nightclub or disco in the last month

The proportion (as a percentage) of adults aged 16 or over reporting the frequency of visits to a nightclub or disco in the past month. Adults were asked "How often have you visited a nightclub or disco in the last month?".

Responses from both questions were categorised into:

- None
- Between 1 and 3 times (less than once a week)
- Between 4 and 8 times (once to twice a week)
- Between 9 and 12 times (about three times a week)
- More than 12 times (almost every day).

The last two categories were combined to give the percentage of adults making nine or more visits to a pub or bar, and the last three categories were combined to give the percentage of adults making four or more visits to a nightclub or disco. Data from years 2004/05 and 2005/06 were merged and presented as one percentage for the main indicator. Responses from 2002/03 and 2003/04 were merged and presented as one percentage as a comparison for the trend data.

⁶² www.homeoffice.gov.uk/rds/bcs1.html

7. Alcohol Consumption

7.1 Drinking by adults (aged 16+)

Indicators

- Percentage of adults consuming alcohol on five or more days a week;
- Percentage of adults binge drinking (over 8 units [males] and 6 units [females] on the heaviest drinking day in the last week) (Health Survey for England [HSE]);
- Percentage of adults binge drinking (over 8 units [males] and 6 units [females] on the heaviest drinking day in the last week) (General Household Survey [GHS]);
- Percentage of adults consuming hazardous and harmful levels of alcohol (22 or more units [males] or 15 or more units [females] per week), (HSE);
- Percentage of adults consuming harmful levels of alcohol (over 50 units [males] or over 35 units [females] per week), (HSE);
- Percentage of adults consuming hazardous and harmful levels of alcohol (22 or more units [males] or 15 or more units [females] per week), (GHS);
- Percentage of adults consuming harmful levels of alcohol (over 50 units [males] or over 35 units [females] per week), (GHS);
- Percentage of adults consuming hazardous and harmful levels of alcohol, (Psychiatric Morbidity Survey [PMS]);
- Percentage of adults consuming harmful levels of alcohol, (PMS);
- Percentage of adults with dependent levels of alcohol consumption;
- Mean weekly units consumed by self-reported moderate drinkers;
- Mean units consumed on the heaviest day in last seven days by self-reported moderate drinkers.

Rationale and Evidence

Levels of alcohol consumption have increased over the last decade and nowadays over 90% of adults in Britain drink alcohol⁶³. Both the frequency and the level of alcohol consumed among the general population provide a measure of the potential level of harm being applied on different sections of the population. Measures of the variation and patterns of alcohol consumption are essential in understanding levels of related harms across communities and in identifying those groups and areas that are most affected by alcohol-related problems. Measures of alcohol consumption vary but concentrating on hazardous, harmful and dependent drinking, as well as the extent of binge drinking (see Box 2 for definitions) enables the populations at greatest risk of harms to be identified, thus allowing recognition of geographical areas or population groups where service provision and intervention to encourage sensible drinking patterns is most needed.

Background

Currently, there are several national lifestyle surveys that potentially provide measures of alcohol consumption across the whole of England and by regions. However, there is only partial consistency between these separate surveys and many changes to the questions over time do not allow for reporting of accurate trends (see Box 3 in *Data Issues*). The main national surveys available to measure adult alcohol consumption are the Health Survey for England (2000-05) and the General Household Survey (2000-05), with the addition of the Psychiatric Morbidity Survey (2000) which enables other measures of consumption.

In England, around a third of people drink alcohol once or twice a week (Health Survey for England⁶⁴). A further third drink more often than this, while around one in ten have not drunk any alcohol in the last 12 months. Between 2000 and 2004, the proportion of people drinking on most days of the week remained relatively stable (at around 14%). However, the percentage

⁶³ General Household Survey 2005: www.statistics.gov.uk/StatBase/Product.asp?vlnk=5756

⁶⁴ Department of Health: www.dh.gov.uk/en/Publicationsandstatistics/PublishedSurvey/HealthSurveyForEngland/index.htm

of people drinking once or twice a week fell slightly (from 30% to 26%), while those drinking less frequently increased slightly (for example, the percentage drinking once or twice a year increased from 7% to 9%). Around half of the population appear to drink, less than four units on their heaviest day in the last week. The majority of the remainder (around 30% of drinkers) drink more than six units on their heaviest day. In general, drinking levels remained fairly similar between 2000 and 2004. A slight change was seen in 2002, with an increase in the proportion of people drinking more than six units on their heaviest day, and a decrease in the percentage of people drinking less than five units. However, by 2004 levels had largely reverted back to those seen in 2000.

Compared to other countries in the EU, the UK had slightly higher than average (median) percentages of males and females who had drunk alcohol in the last 12 months between 1996 and 2003 (Appendix 3, Table 69). Furthermore, in 2000, the United Kingdom had one of the highest percentages of males and females who drank at least once a week (compared to a selected number of European countries, Appendix 3, Table 70).

Box 2: Hazardous, harmful, dependent and binge drinking

The Alcohol Needs Assessment Research Project (ANARP; Department of Health, 2005) identifies three categories of problematic alcohol consumption used to assess the level of need in the population. These are defined as:

- *Hazardous drinking* - Drinking above recognised sensible levels, but not yet experiencing harm (measured by consumption of between 22 and 50 units per week for males and between 15 and 35 units per week for females);
- *Harmful drinking* - Drinking above recognised sensible levels and experiencing harm, such as an alcohol-related accident, acute alcohol poisoning, hypertension, cirrhosis (measured by consumption of over 50 units per week for males and over 35 units per week for females);
- *Alcohol dependence*⁶⁵ - Drinking above recognised sensible levels and experiencing harm and symptoms of dependence (measured by an Alcohol Use Disorder Identification Test (AUDIT) score greater than 10 and a Severity of Alcohol Dependence Questionnaire (SAD-Q) score greater than 3).

Sensible drinking

The Government advises 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 of alcohol a day.

Binge drinking is defined as drinking over double the daily recognised sensible levels in any one day (over eight units a day for men and over six units a day for women).

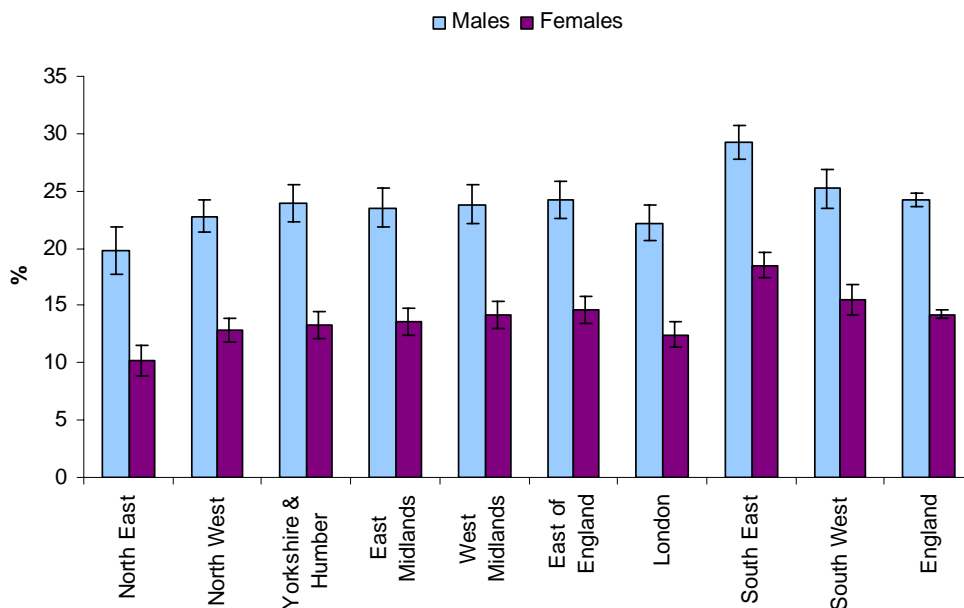
⁶⁵ From the Psychiatric Morbidity Survey, where hazardous drinking is measured by an Alcohol Use Disorder Identification Test (AUDIT) score greater than 8 and harmful drinking is measured by an AUDIT score greater than 16.

Regional Commentary

Percentage of adults consuming alcohol on five or more days a week

There are some differences in the reported frequency of alcohol consumption between regions for both males and females (Figure 36). The most regular drinkers are in the South East, where 29% of males and 19% of females consume alcohol on five or more days a week. This is the only region with percentages significantly higher than England overall. Conversely, the lowest proportions of daily drinkers are found in the North East for males and females (both significantly lower than England) and London for females (also significantly lower). The South East has a much smaller difference in percentages between males and females than any other region. For all regions, the most common frequency of alcohol consumption (for 2000-04) was once or twice a week for both males and females (Table 36). London had the highest proportion of males (16%) and females (22%) that had not drunk in the last 12 months.

Figure 36: Percentage of adults consuming alcohol on five or more days a week, 2000-04.



Source: NPHO from Health Survey for England (unweighted)

Table 36: Frequency (%) of alcohol consumption in the last 12 months, 2000-04.

		NE	NW	YH	EM	WM	EE	L	SE	SW	Eng
Males	Almost every day	13.8	17.5	18.0	18.0	17.7	17.9	15.8	22.9	19.6	18.3
	Five or six days a week	6.0	5.3	5.9	5.6	6.1	6.3	6.4	6.3	5.6	5.9
	Three or four days a week	23.1	19.3	19.4	18.8	20.6	19.0	16.4	18.8	17.1	18.9
	Once or twice a week	32.0	33.6	30.3	30.9	28.7	30.0	26.3	27.1	32.5	30.0
	Once or twice a month	9.1	9.4	9.5	10.2	10.0	11.0	10.5	10.1	10.6	10.1
	Every couple of months	5.6	3.5	4.1	4.7	4.1	4.3	4.3	3.9	4.1	4.2
	Once or twice a year	4.1	3.9	4.6	4.2	4.5	5.1	4.8	3.7	4.1	4.3
	Not in last 12 months	6.4	7.5	8.2	7.8	8.2	6.3	15.6	7.1	6.2	8.2
Females	Almost every day	7.6	9.2	9.9	10.5	10.6	10.9	8.6	14.4	11.6	10.6
	Five or six days a week	2.5	3.6	3.4	3.0	3.5	3.7	3.8	4.1	3.8	3.6
	Three or four days a week	13.6	12.7	12.3	12.9	12.2	12.0	11.1	13.6	12.0	12.5
	Once or twice a week	32.9	32.5	30.1	29.6	26.5	28.7	22.9	26.4	28.7	28.4
	Once or twice a month	13.9	14.4	13.9	13.7	14.0	15.1	14.2	14.2	14.0	14.2
	Every couple of months	7.3	7.5	7.9	7.8	7.6	8.2	8.0	7.4	7.7	7.7
	Once or twice a year	9.9	8.1	9.1	9.7	10.5	9.7	9.3	9.2	9.9	9.4
	Not in last 12 months	12.4	11.9	13.5	12.7	15.0	11.6	22.0	10.6	12.2	13.6

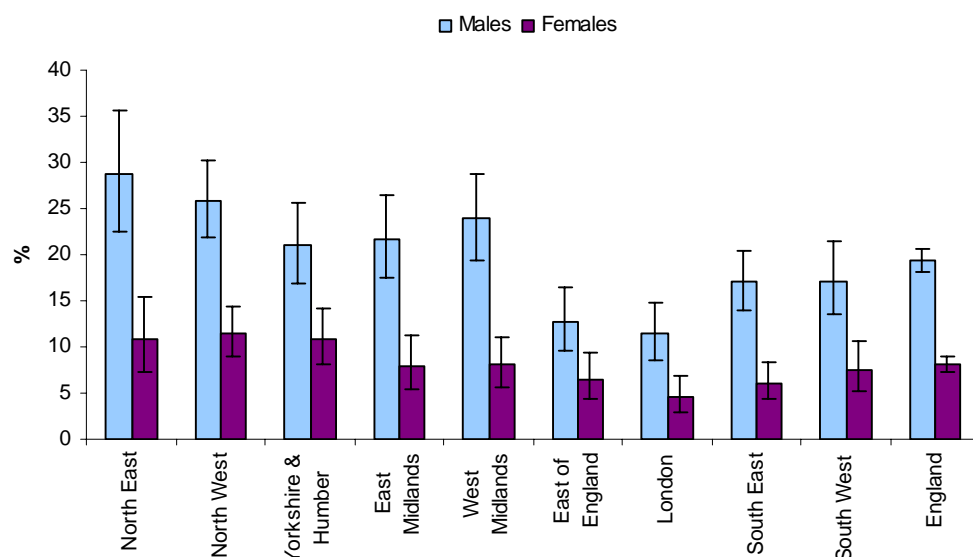
Source: NPHO from Health Survey for England (unweighted)

Percentage of adult males binge drinking (over 8 units on the heaviest drinking day in the last week), (HSE and GHS);

Percentage of adult females binge drinking (over 6 units on the heaviest drinking day in the last week), (HSE and GHS).

There are clear regional differences in the levels of binge drinking reported in the last week for both males and females (HSE - Figure 37; GHS - Figure 38), with a visible north-south pattern. However, measures of the proportions of the population binge drinking differ between the two national surveys. The HSE consistently reports higher percentages of both men and women binge drinking. The trends within each region are also variable between the surveys and between sexes (Table 37; Table 38). For the HSE, percentages for both males and females were significantly higher in the North West and Yorkshire and The Humber and significantly lower in London. For males, percentages were also significantly lower in the South East. For the GHS, percentages for males were significantly higher in the North East and North West and significantly lower in the East of England and London, while for females, percentages were significantly lower in London only.

Figure 37: Percentage of adults binge drinking (HSE), 2005.



Note: Binge drinking is defined as consuming over eight units on the heaviest drinking day in the last week for males and over six units on the heaviest drinking day in the last week for females.

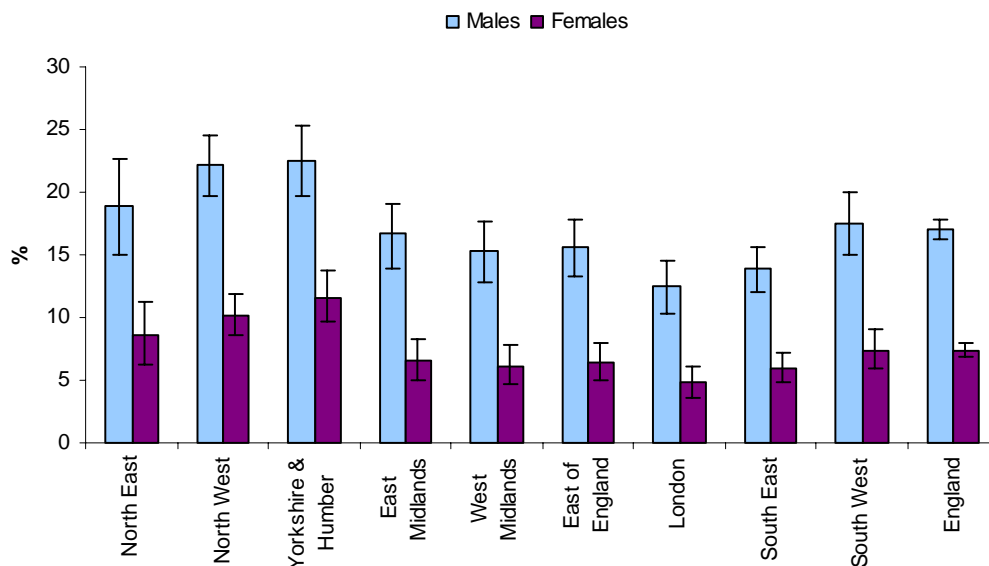
Source: NPHO from Health Survey for England (unweighted)

Table 37: Percentage of adults binge drinking (HSE), 2000-05.

		NE	NW	YH	EM	WM	EE	L	SE	SW	Eng
Males	2000	23.4	26.3	25.2	18.0	21.3	17.0	13.9	14.4	18.9	19.6
	2001	26.9	25.1	21.5	15.6	18.5	18.1	18.3	16.5	15.4	19.3
	2002	27.2	26.2	25.2	23.1	18.0	19.5	17.3	17.0	18.1	21.0
	2003	28.8	25.7	26.5	19.1	22.2	18.7	16.8	19.0	15.4	20.9
	2004	27.9	20.1	22.6	18.9	18.7	18.3	13.4	18.5	16.2	18.9
	2005	28.8	25.9	21.1	21.7	23.9	12.8	11.4	17.1	17.2	19.3
Females	2000	12.6	9.5	8.0	6.1	6.1	6.5	6.0	5.3	5.2	7.0
	2001	15.2	9.4	9.7	6.5	7.2	9.6	5.8	7.5	5.8	8.2
	2002	13.8	12.9	13.5	8.1	8.8	6.2	7.9	8.0	7.0	9.4
	2003	14.1	11.7	9.9	7.7	7.1	7.8	6.2	6.6	6.5	8.3
	2004	11.0	9.6	9.7	8.5	8.9	4.6	4.9	8.3	7.1	7.9
	2005	10.9	11.4	10.9	8.0	8.1	6.6	4.6	6.1	7.5	8.1

Source: NPHO from Health Survey for England (unweighted)

Figure 38: Percentage of adults binge drinking (GHS), 2005.



Note: Binge drinking is defined as consuming over eight units on the heaviest drinking day in the last week for males and over six units on the heaviest drinking day in the last week for females.
 Source: NWPHO from General Household Survey (unweighted)

Table 38: Percentage of adults binge drinking (GHS), 2000-05.

		NE	NW	YH	EM	WM	EE	L	SE	SW	Eng
Males	2000	24.8	22.6	21.4	20.6	15.8	16.5	16.3	20.8	18.2	19.4
	2001	26.9	25.3	25.1	19.7	16.5	18.0	18.0	16.2	17.5	19.9
	2002	27.6	23.4	25.6	20.2	17.3	14.1	18.4	16.0	20.1	19.6
	2003	24.3	26.6	27.1	25.5	21.5	18.7	17.4	17.3	20.9	21.8
	2004	27.7	27.2	28.7	22.4	21.9	16.6	17.0	19.0	19.7	21.8
	2005	19.0	22.2	22.6	16.7	15.3	15.7	12.5	13.9	17.6	17.0
Females	2000	12.4	12.3	10.2	6.8	6.9	7.8	7.3	9.3	8.9	9.1
	2001	14.6	11.8	11.5	12.0	6.7	7.6	7.4	7.1	8.1	9.2
	2002	16.0	10.6	13.9	7.1	7.8	6.0	7.5	8.0	8.3	9.1
	2003	9.0	12.0	12.7	8.6	9.2	6.0	4.8	8.8	8.1	8.9
	2004	11.3	12.9	14.5	10.8	7.6	5.4	5.6	8.8	8.3	9.3
	2005	8.6	10.2	11.6	6.5	6.1	6.4	4.8	6.0	7.3	7.4

Source: NWPHO from General Household Survey (unweighted)

*Percentage of adults consuming hazardous and harmful levels of alcohol**Percentage of adults consuming harmful levels of alcohol*

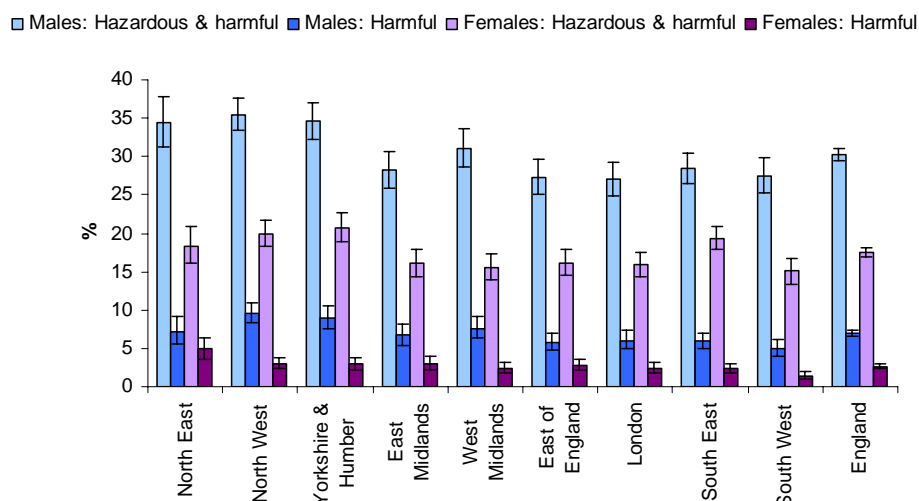
The Health Survey for England (HSE), the General Household Survey (GHS) and the Psychiatric Morbidity Survey (PMS) all contain measures indicating harmful and hazardous drinking in adults, although the definition within the PMS is not dependent on actual levels of consumption but on responses to questionnaires (Box 3). In England for 2000-02, the national lifestyle surveys are in relatively good agreement with regards to the proportion of the adult population who are hazardous & harmful or harmful drinkers (Figure 39 and Figure 40). For males, 30% (HSE) and 27% (GHS) are hazardous & harmful drinkers and 7% (HSE) and 6% (GHS) are harmful drinkers; and for females 18% (HSE) and 17% (GHS) are hazardous & harmful drinkers and 3% (HSE) and 3% (GHS) are harmful drinkers.

Regional patterns of hazardous & harmful and harmful drinkers are also similar between the HSE and GHS analysis for 2002-02 (Figure 39 and Figure 40), with in general, percentages higher in the North than the South of England for both indicators. For hazardous & harmful drinking among males, regions that are significantly higher than England are the North East (HSE and GHS), North West (HSE and GHS) and Yorkshire and The Humber (HSE and GHS), while those significantly lower are London (HSE and GHS) and the East of England (GHS only). For females, slightly different patterns are found between surveys. For the HSE, the North West and Yorkshire and The Humber are significantly higher and the South West significantly lower. For the GHS, the North West is significantly higher and the West Midlands and London significantly lower. For harmful drinking, significances are different between surveys. For males, the North West and Yorkshire and The Humber are significantly higher for the HSE only, and North East higher for the GHS only, while the South West is significantly lower for the HSE only. For females, the North East is significantly higher for the HSE only, while the South West is lower for the HSE only and London lower for the GHS only.

Levels of hazardous & harmful and harmful drinking are also available from 2005 from the GHS only. These show a slightly different pattern to that found for 2000-02, with a noticeable reduction in the percentages for both males and females in most regions (Figure 41). The only exceptions were for the East of England (hazardous & harmful, males only; harmful, males only), Yorkshire and The Humber (harmful, males only), West Midlands (harmful, females only) and London (harmful, females only), which either remained at a similar level or increased slightly. A decrease was most evident for males in the East of England for both hazardous & harmful and harmful drinking. For hazardous & harmful drinking, only females showed any significant regional differences from the England average: higher in the North West and Yorkshire and The Humber and lower in London. For harmful drinking, the only significant variation was for males in Yorkshire and The Humber, which were higher than England overall.

The Psychiatric Morbidity Survey (PMS) uses a different definition of hazardous & harmful and harmful drinking based on responses to AUDIT questions (Box 3) and as such figures are not directly comparable to the national survey measures. Regional patterns of hazardous & harmful and harmful drinkers as defined by the PMS are very similar to the patterns from the national surveys, with the exception of West Midlands which reported higher levels of hazardous & harmful and harmful drinking for males (Figure 42). Significant differences from England overall were only found for hazardous & harmful drinking, where for males the North East and North West were higher and the East of England lower, and for females the North West was higher and South East lower.

Figure 39: Percentage of adults consuming hazardous & harmful and harmful levels of alcohol (HSE), 2000-02.



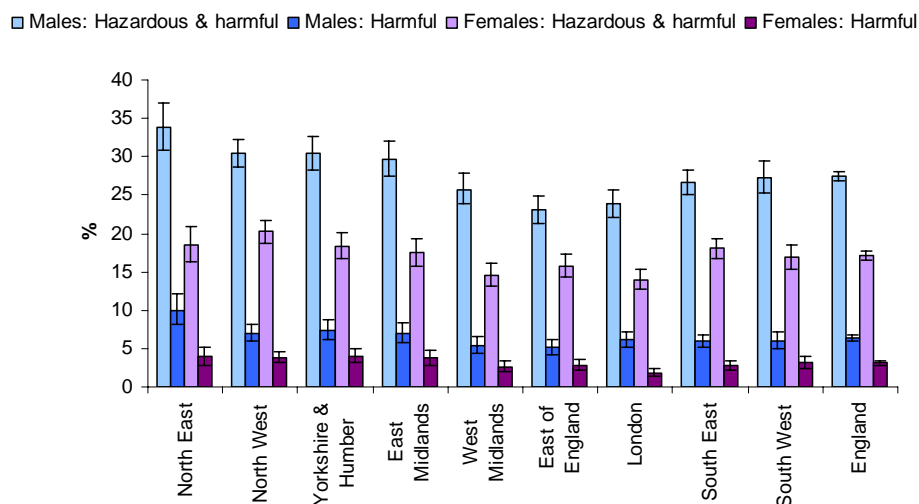
Source: NPHO from Health Survey for England (unweighted)

Table 39: Percentage of adults consuming hazardous & harmful and harmful levels of alcohol (HSE), 2000-02.

		NE	NW	YH	EM	WM	EE	L	SE	SW	Eng
Males	Hazardous & harmful	34.4	35.5	34.6	28.3	31.1	27.3	27.1	28.4	27.5	30.3
	Harmful	7.1	9.6	9.0	6.7	7.6	5.8	6.0	5.9	5.0	7.0
Females	Hazardous & harmful	18.4	19.9	20.7	16.1	15.5	15.9	19.3	15.0	17.6	17.6
	Harmful	4.9	3.0	2.9	3.0	2.4	2.8	2.3	2.3	1.4	2.7

Source: NPHO from Health Survey for England (unweighted)

Figure 40: Percentage of adults consuming hazardous & harmful and harmful levels of alcohol (GHS), 2000-02.



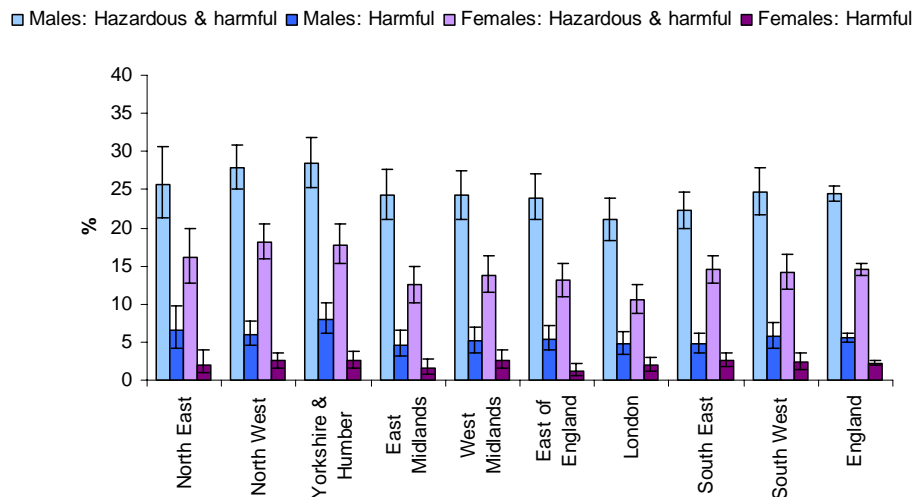
Source: NPHO from General Household Survey (unweighted)

Table 40: Percentage of adults consuming hazardous & harmful and harmful levels of alcohol (GHS), 2000-02.

		NE	NW	YH	EM	WM	EE	L	SE	SW	Eng
Males	Hazardous & harmful	33.8	30.5	30.5	29.7	25.8	23.1	23.8	26.7	27.4	27.4
	Harmful	10.0	7.0	7.4	6.9	5.4	5.2	6.1	5.9	6.0	6.4
Females	Hazardous & harmful	18.5	20.2	18.4	17.4	14.5	15.8	14.0	18.0	17.0	17.1
	Harmful	3.9	3.8	4.0	3.7	2.7	2.9	1.8	2.8	3.1	3.1

Source: NPHO from General Household Survey (unweighted)

Figure 41: Percentage of adults consuming hazardous & harmful and harmful levels of alcohol (GHS), 2005.



Source: NPHO from General Household Survey (unweighted)

Table 41: Percentage of adults consuming hazardous & harmful and harmful levels of alcohol (GHS), 2005.

		NE	NW	YH	EM	WM	EE	L	SE	SW	Eng
Males	Hazardous & harmful	25.7	27.9	28.4	24.3	24.2	23.9	21.1	22.2	24.7	24.5
	Harmful	6.6	6.0	8.0	4.7	5.1	5.3	4.8	4.8	5.8	5.6
Females	Hazardous & harmful	16.1	18.1	17.8	12.5	13.7	13.1	10.5	14.5	14.1	14.5
	Harmful	2.1	2.5	2.5	1.6	2.7	1.3	2.0	2.6	2.3	2.2

Source: NPHO from General Household Survey (unweighted)

Figure 42: Percentage of adults consuming hazardous & harmful and harmful levels of alcohol (PMS), 2000.

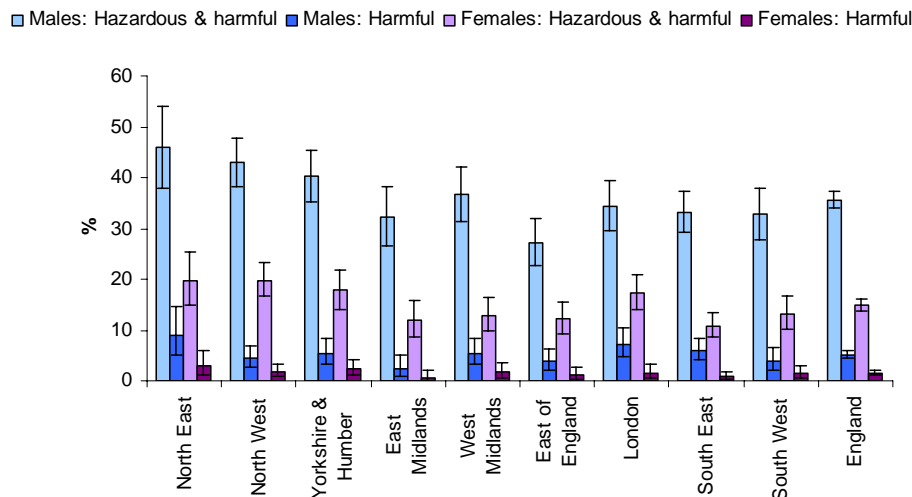


Table 42: Percentage of adults consuming hazardous & harmful and harmful levels of alcohol (PMS), 2000.

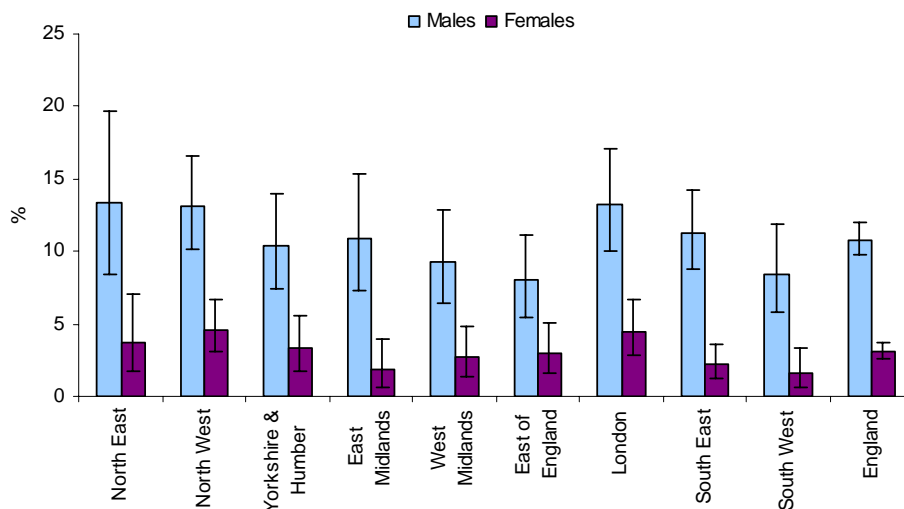
		NE	NW	YH	EM	WM	EE	L	SE	SW	Eng
Males	Hazardous & harmful	45.9	42.9	40.2	32.2	36.6	27.1	34.3	33.3	32.8	35.6
	Harmful	8.9	4.5	5.5	2.3	5.4	3.9	7.3	6.1	4.0	5.2
Females	Hazardous & harmful	19.7	19.7	17.8	11.9	12.8	12.2	17.3	10.9	13.3	14.8
	Harmful	2.9	1.9	2.3	0.6	1.7	1.1	1.6	0.9	1.4	1.5

Source: NPHO from Psychiatric Morbidity Survey (unweighted)

Percentage of adults with dependent levels of alcohol consumption

The PMS survey also examines whether drinkers are dependent or non-dependent by assessment using the Severity of Alcohol Dependence questionnaire (SAD-Q). Regional patterns across England show that the highest levels of male alcohol dependence are in the North East and for females, the North West. The lowest levels for males are in the East of England and for females, the South West (Figure 43). However, no regions are significantly better or worse than the England average.

Figure 43: Percentage of adults with dependent levels of alcohol consumption, 2000.



Source: NPHO from Psychiatric Morbidity Survey (unweighted)

Table 43: Percentage of adults with dependent levels of alcohol consumption, 2000.

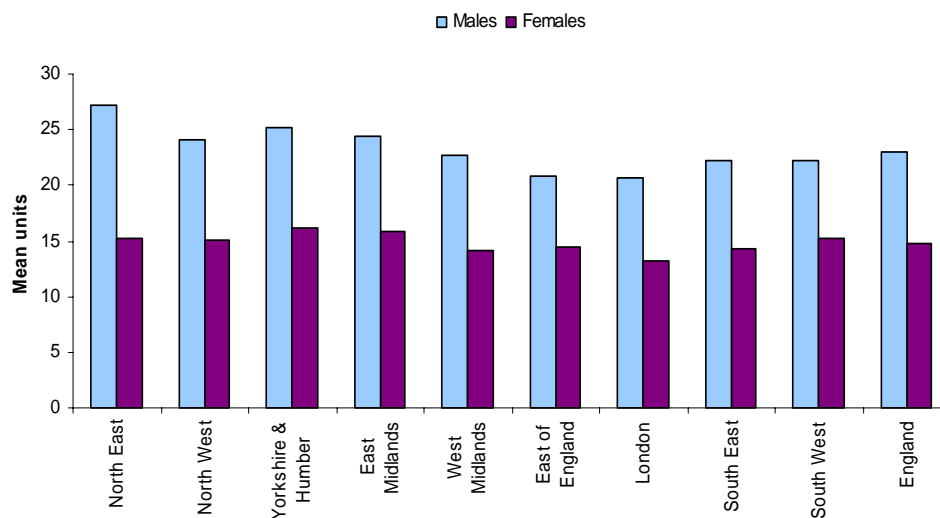
	NE	NW	YH	EM	WM	EE	L	SE	SW	Eng
Males	13.4	13.1	10.4	10.9	9.3	8.0	13.3	11.3	8.5	10.8
Females	3.8	4.6	3.3	1.8	2.7	3.0	4.5	2.2	1.6	3.1

Source: NPHO from Psychiatric Morbidity Survey (unweighted)

*Mean weekly units consumed by self-reported moderate drinkers**Mean units consumed on heaviest day in last seven days by self-reported moderate drinkers*

There are some regional differences in the mean weekly units consumed and the mean units consumed on the heaviest day by self-reported moderate drinkers (Figure 44 and Figure 45). Levels of consumption are generally higher in the north than the south. For mean weekly units, levels were highest in the North East (for males) and Yorkshire and Humber (for females), and lowest in London (for both males and females). For mean units consumed on the heaviest day, levels were highest in the Yorkshire and The Humber (for both males and females) and lowest in the South East (for males) and the East of England (for females). The figures reveal that there may be a 'normalisation' to expected drinking levels and that people classifying themselves as moderate drinkers will actually be drinking more where population levels of drinking are highest.

Figure 44: Mean weekly units consumed by self-reported moderate drinkers, 2000-02.



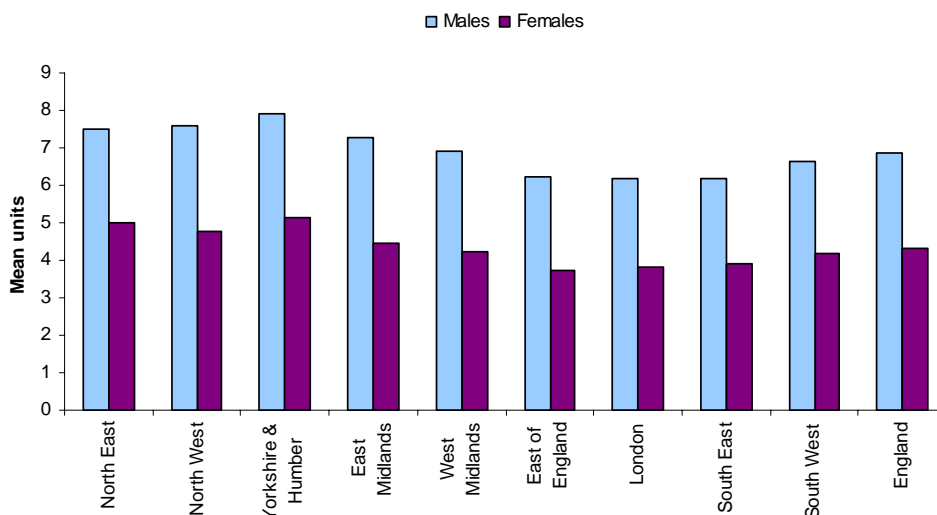
Source: NWPHO from General Household Survey (unweighted)

Table 44: Mean weekly units consumed by self-reported moderate drinkers, 2000-02.

	NE	NW	YH	EM	WM	EE	L	SE	SW	Eng
Males	27.2	24.1	25.1	24.4	22.7	20.9	20.7	22.3	22.2	23.0
Females	15.2	15.1	16.2	15.9	14.2	14.4	13.1	14.3	15.2	14.8

Source: NWPHO from General Household Survey (unweighted)

Figure 45: Mean units consumed on heaviest day in last seven days by self-reported moderate drinkers, 2000-05.



Source: NWPHO from General Household Survey (unweighted)

Table 45: Mean units consumed on heaviest day in last seven days by self-reported moderate drinkers, 2000-05.

	NE	NW	YH	EM	WM	EE	L	SE	SW	Eng
Males	7.5	7.6	7.9	7.3	6.9	6.2	6.2	6.2	6.6	6.9
Females	5.0	4.8	5.1	4.5	4.2	3.7	3.8	3.9	4.2	4.3

Source: NWPHO from General Household Survey (unweighted)

Sub-regional Inequalities

Direct measures of alcoholic consumption by local authority are not currently available (see *Data Issues*). Synthetic estimates have been generated for sub-regional indicators of alcohol consumption (and are currently being updated) but it is not possible to investigate inequalities using these estimates due to the use of deprivation and demographics in the modelling process. However, direct estimates of alcohol consumption have been derived from national survey data at a sub-regional level; 2002 Strategic Health Authority (SHA) boundaries⁶⁶. This sub-regional analysis shows clear inequalities across England. By mapping consumption levels on the same scale across time, the stark changes that have occurred in the last eight years are graphically illustrated.

Males

Patterns of harmful or hazardous drinking in males (more than 21 units per week) reveals that between 1994-96 and 2000-02 levels have increased across many areas of England (see Figure 46a-c). Two-thirds of SHAs (mostly in the north of England) saw increases in the proportion of males drinking to harmful or hazardous levels. The greatest increases were seen in Leicestershire, Northamptonshire and Rutland (25%), North and East Yorkshire and Northern Lincolnshire (19%) and South West Peninsula (19%). While northern areas saw increases, many areas in the south saw reductions in the proportion of males drinking to harmful or hazardous levels. The areas that saw the largest decreases were North East London (by 14%), South East London (by 13%) and Bedfordshire and Hertfordshire (by 8%). This is a clear example of the widening health gap between the north and south.

Patterns of binge drinking among males (consuming eight or more units on the heaviest drinking day last week) vary across the region, with some areas showing significant changes over the period 1998-2000 to 2003-05 (Figure 47a-c). Over half of the SHAs saw increased proportions of male binge drinking, with the largest being in Hampshire and Isle of Wight and Shropshire and Staffordshire (35.4% and 33.6% respectively) (Table 47). Of the SHAs that saw decreases, the largest were in Essex (by 16.6%), Avon, Gloucestershire and Wiltshire (by 15.5%) and North and East Yorkshire and Northern Lincolnshire (by 15.4%).

Females

The pattern of change over time is even more worrying than that seen in males. Like males, sub-regional analysis reveals that between 1994-96 and 2000-02 levels of harmful or hazardous drinking among females (more than 14 units per week) have increased dramatically across many areas of England (Figure 48a-c). The north-south divide is evident, though not as clear-cut as for males, and levels of harmful or hazardous drinking are lower but increasing dramatically. Overall, from 1994-96 to 2000-02, the largest increases were seen in Leicestershire, Northamptonshire and Rutland (100%), Essex (64%) and North West London (55%). Despite these increases, a handful of areas (mainly in the south) saw improvements, with declining proportions of females drinking to harmful or hazardous levels, for example North East London (by 27%) South East London (by 22%) and Avon, Gloucestershire and Wiltshire (by 7%).

Sub-regional analysis reveals that levels of binge drinking among females (drinking six or more units on the heaviest drinking day last week) have increased in more areas of England between 1998-2000 and 2003-05 than seen for males (Figure 49a-c). A north-south divide is more evident for females than for males. The majority of increases have occurred in northern areas such as Birmingham and the Black Country (54.6%) and South Yorkshire (52.1%) whilst the largest decreases have been concentrated in the south of the country; for example, South West London and South East London saw declines of 33.7% and 30.6% respectively (Table 49).

⁶⁶ www.nwpho.org.uk/lifestyles

Figure 46: Age standardised proportion (%) of men drinking more than 21 units per week (harmful or hazardous), 1994-96 to 2000-02.

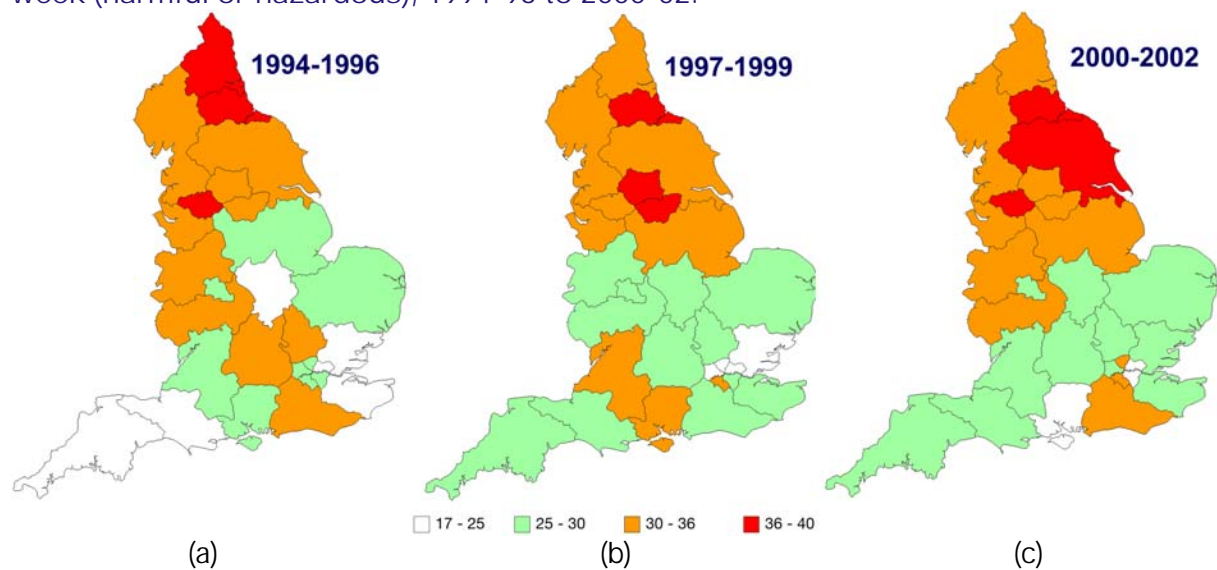


Table 46: Age standardised proportion (%) of men drinking more than 21 units per week (harmful or hazardous). England Strategic Health Authorities, 1994-96 to 2000-02.

Strategic Health Authority (2002 boundaries)	1994-96	1997-99	2000-02	% change 1994-06 to 2000-02
Avon, Gloucestershire and Wiltshire	27.63	31.14	27.06	-2.1%
Bedfordshire and Hertfordshire	30.79	28.65	28.35	-7.9%
Birmingham and the Black Country	29.41	28.9	29.68	0.9%
Cheshire and Merseyside	33.02	33.97	35.33	7.0%
County Durham and Tees Valley	37.33	39.28	36.42	-2.4%
Cumbria and Lancashire	30.18	32.68	34.77	15.2%
Dorset and Somerset	24.65	29.64	28.95	17.4%
Essex	23.51	22.9	27.32	16.2%
Greater Manchester	36.48	35.75	38.29	5.0%
Hampshire and Isle of Wight	26.09	31.83	24.03	-7.9%
Kent and Medway	24.03	28.15	27.52	14.5%
Leicestershire, Northamptonshire and Rutland	23.69	27.39	29.63	25.1%
Norfolk, Suffolk and Cambridgeshire	26.00	26.07	26.28	1.1%
North and East Yorkshire and Northern Lincolnshire	30.23	33.79	36.09	19.4%
North Central London	25.61	21.62	30.04	17.3%
North East London	21.59	17.98	18.6	-13.9%
North West London	25.23	22.37	26.35	4.4%
Northumberland, Tyne and Wear	37.34	33.90	35.56	-4.8%
Shropshire and Staffordshire	30.82	29.83	30.73	-0.3%
South East London	27.49	26.60	23.99	-12.7%
South West London	29.51	30.36	30.54	3.5%
South West Peninsula	23.22	28.25	27.67	19.2%
South Yorkshire	33.14	36.99	31.78	-4.1%
Surrey and Sussex	31.83	29.15	33.41	5.0%
Thames Valley	30.40	29.47	28.87	-5.0%
Trent	27.71	30.06	32.73	18.1%
West Midlands South	31.43	25.80	32.54	3.5%
West Yorkshire	33.83	39.11	35.38	4.6%

Source: Health Survey for England (Department of Health, © Crown Copyright. February 2004)

Figure 47: Age standardised proportion (%) of men drinking eight or more units on the heaviest drinking day last week (binge drinking), 1998-00 to 2003-05.

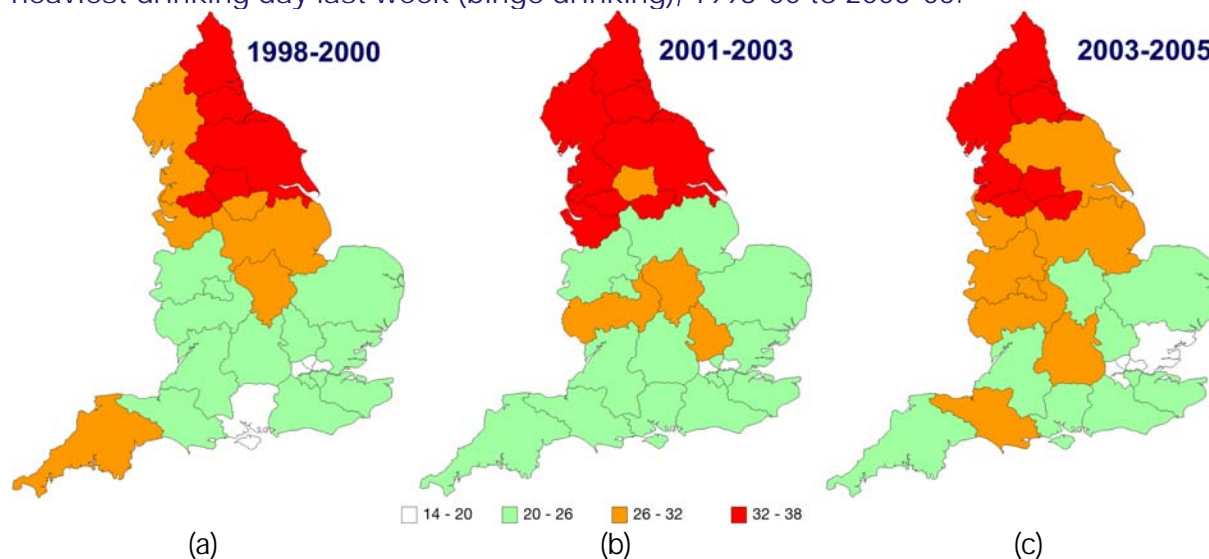


Table 47: Age standardised proportion (%) of men drinking eight or more units on the heaviest drinking day last week (binge drinking). England Strategic Health Authorities, 1998-2000 to 2003-05.

Strategic Health Authority (2002 boundaries)	1998-2000	2001-03	2003-05	% change 1998-2000 to 2003-05
Avon, Gloucestershire and Wiltshire	24.79	24.32	20.95	-15.5%
Bedfordshire and Hertfordshire	25.28	27.58	25.78	2.0%
Birmingham and the Black Country	24.68	25.75	29.59	19.9%
Cheshire and Merseyside	30.87	35.42	29.62	-4.0%
County Durham and Tees Valley	34.80	37.61	34.37	-1.2%
Cumbria and Lancashire	30.76	32.80	36.10	17.4%
Dorset and Somerset	22.81	23.84	28.17	23.5%
Essex	23.27	22.92	19.41	-16.6%
Greater Manchester	34.24	32.25	31.96	-6.7%
Hampshire and Isle of Wight	18.68	23.97	25.29	35.4%
Kent and Medway	22.11	22.81	22.00	-0.5%
Leicestershire, Northamptonshire and Rutland	27.61	28.30	24.74	-10.4%
Norfolk, Suffolk and Cambridgeshire	21.61	24.80	22.81	5.6%
North and East Yorkshire and Northern Lincolnshire	35.12	33.56	29.72	-15.4%
North Central London	16.26	22.38	13.89	-14.6%
North East London	14.49	18.55	17.47	20.6%
North West London	14.95	18.82	15.88	6.2%
Northumberland, Tyne and Wear	35.79	32.26	37.73	5.4%
Shropshire and Staffordshire	19.90	25.12	26.57	33.6%
South East London	19.76	21.14	23.65	19.7%
South West London	19.83	25.44	17.54	-11.6%
South West Peninsula	26.76	21.35	23.74	-11.3%
South Yorkshire	31.09	35.97	31.60	1.7%
Surrey and Sussex	21.06	22.71	25.72	22.1%
Thames Valley	24.95	25.37	26.28	5.3%
Trent	26.93	25.11	27.33	1.5%
West Midlands South	23.90	29.98	30.21	26.4%
West Yorkshire	32.73	27.33	31.87	-2.6%

Source: Health Survey for England (The Information Centre for health and social care. © Crown Copyright. 2007)

Figure 48: Age standardised proportion (%) of women drinking more than 14 units per week (harmful or hazardous), 1994-96 to 2000-02.

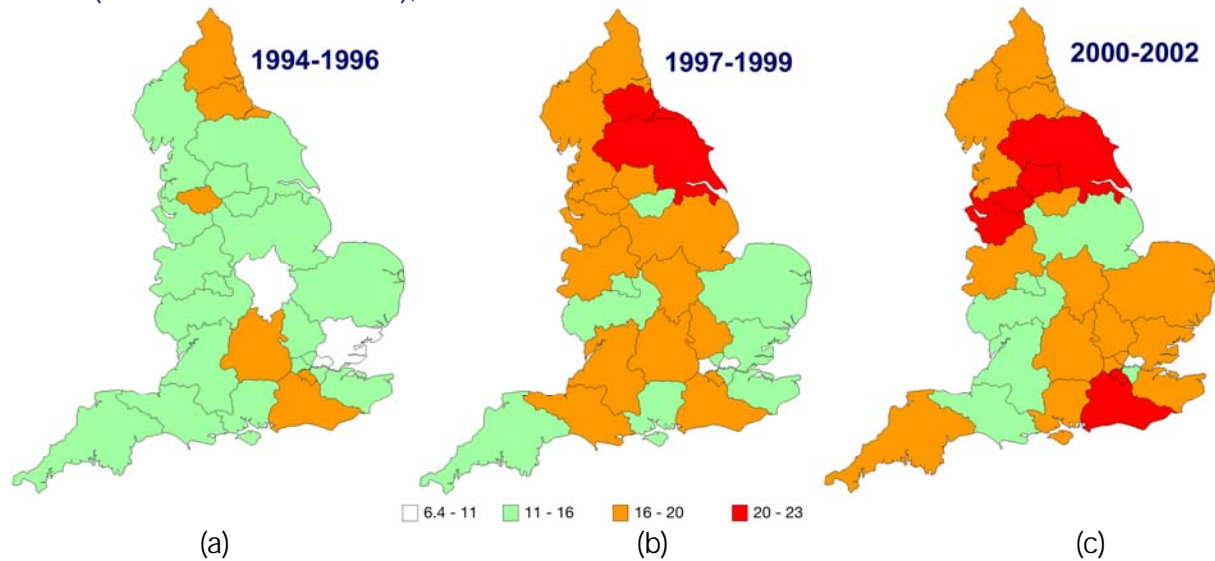


Table 48: Age standardised proportion (%) of women drinking more than 14 units per week (harmful or hazardous). England Strategic Health Authorities, 1994-96 to 2000-02.

Strategic Health Authority (2002 boundaries)	1994-96	1997-99	2000-02	% change 1994-96 to 2000-02
Avon, Gloucestershire and Wiltshire	14.46	17.52	13.44	-7.1%
Bedfordshire and Hertfordshire	13.00	16.50	18.82	44.8%
Birmingham and the Black Country	12.17	14.75	13.56	11.4%
Cheshire and Merseyside	15.44	18.13	22.05	42.8%
County Durham and Tees Valley	16.41	20.93	18.33	11.7%
Cumbria and Lancashire	15.57	17.29	16.42	5.5%
Dorset and Somerset	13.44	18.75	13.48	0.3%
Essex	10.88	11.62	17.82	63.8%
Greater Manchester	17.88	19.73	22.18	24.1%
Hampshire and Isle of Wight	13.05	13.08	16.08	23.2%
Kent and Medway	15.38	15.48	17.79	15.7%
Leicestershire, Northamptonshire and Rutland	8.22	17.07	16.44	100.0%
Norfolk, Suffolk and Cambridgeshire	12.05	15.37	16.83	39.7%
North and East Yorkshire and Northern Lincolnshire	13.97	20.49	21.37	53.0%
North Central London	13.94	12.58	16.84	20.8%
North East London	8.83	10.56	6.44	-27.1%
North West London	12.80	10.53	19.84	55.0%
Northumberland, Tyne and Wear	16.93	16.74	17.97	6.1%
Shropshire and Staffordshire	12.57	16.35	17.79	41.5%
South East London	15.54	14.45	12.06	-22.4%
South West London	17.36	16.47	21.67	24.8%
South West Peninsula	13.24	15.68	19.56	47.7%
South Yorkshire	15.24	15.90	16.52	8.4%
Surrey and Sussex	19.40	20.00	22.85	17.8%
Thames Valley	17.74	18.77	17.13	-3.4%
Trent	13.95	16.81	15.50	11.1%
West Midlands South	13.33	13.69	15.79	18.5%
West Yorkshire	16.00	18.54	20.80	30.0%

Source: Health Survey for England (Department of Health, © Crown Copyright. February 2004)

Figure 49: Age standardised proportion (%) of women drinking six or more units on the heaviest drinking day last week (binge drinking), 1998-00 to 2003-05.

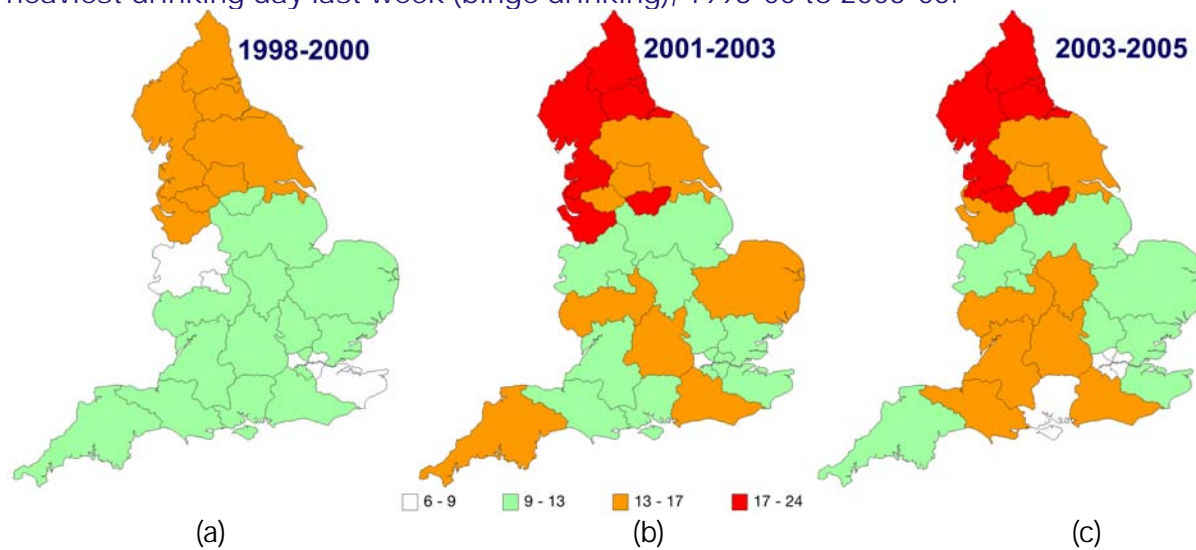


Table 49: Age standardised proportion (%) of women drinking six or more units on the heaviest drinking day last week (binge drinking). England Strategic Health Authorities, 1998-2000 to 2003-05.

Strategic Health Authority (2002 boundaries)	1998-2000	2001-03	2003-05	% change 1998-2000 to 2003-05
Avon, Gloucestershire and Wiltshire	10.79	11.61	13.31	23.4%
Bedfordshire and Hertfordshire	12.62	10.86	12.22	-3.1%
Birmingham and the Black Country	7.30	11.47	11.28	54.6%
Cheshire and Merseyside	13.72	18.08	16.34	19.1%
County Durham and Tees Valley	15.03	20.12	19.47	29.6%
Cumbria and Lancashire	15.81	17.48	17.98	13.7%
Dorset and Somerset	11.45	11.12	15.31	33.8%
Essex	12.23	12.12	9.72	-20.5%
Greater Manchester	16.66	16.90	18.86	13.2%
Hampshire and Isle of Wight	9.86	10.27	9.29	-5.8%
Kent and Medway	8.57	10.03	11.35	32.5%
Leicestershire, Northamptonshire and Rutland	12.48	12.52	13.69	9.8%
Norfolk, Suffolk and Cambridgeshire	11.35	13.26	11.58	2.1%
North and East Yorkshire and Northern Lincolnshire	14.79	15.85	16.46	11.2%
North Central London	9.69	10.18	8.73	-9.9%
North East London	7.35	10.56	8.10	10.3%
North West London	8.16	8.74	8.73	7.0%
Northumberland, Tyne and Wear	16.93	22.94	23.64	39.6%
Shropshire and Staffordshire	8.31	11.13	11.32	36.2%
South East London	8.38	10.84	5.81	-30.6%
South West London	11.45	11.66	7.59	-33.7%
South West Peninsula	9.66	13.89	11.83	22.5%
South Yorkshire	12.68	18.84	19.28	52.1%
Surrey and Sussex	11.64	14.07	12.88	10.7%
Thames Valley	10.30	13.72	15.51	50.5%
Trent	11.96	12.69	11.56	-3.4%
West Midlands South	9.31	12.91	13.64	46.5%
West Yorkshire	14.58	14.73	16.18	10.9%

Source: Health Survey for England (The Information Centre for health and social care. © Crown Copyright. 2007)

Data Issues

Obtaining reliable information about drinking behaviour is difficult, and social surveys consistently under-report alcohol consumption. Data on alcohol sales in England have been used to assess the levels of under-reporting and it has been estimated that surveys pick up approximately 55% to 60% of alcohol consumed in the UK⁶⁷. This is partly because people may consciously or unconsciously underestimate how much alcohol they consume. Drinking at home is particularly likely to be underestimated because the quantities consumed are not measured and are likely to be larger than those dispensed in licensed premises. However, despite these problems, survey estimates still provide the best comparisons of different population subgroups and trends over time.

There are some issues with national surveys regarding the comparison of data over time. While the methodology tends to remain the same, some of the questions have changed over time and this prevents the most recent levels being presented for some measures. For example, earlier surveys included questions around drinking in the last year, which are required to analyse harmful and hazardous drinking. These questions are not included within the HSE from 2003 onwards. The GHS also discontinued the question in 2003, although it was reintroduced in 2005. Thus these measures are not consistently available over time.

Currently, only national surveys provide a consistent picture across the whole of England. Sample sizes are not sufficiently large enough to allow for annual analysis of the data below Government Office region and even combining years does not allow local authority measures to be derived except through the use of synthetic estimates. Although many local areas conduct local lifestyle surveys it is currently difficult to aggregate the data from such surveys since the questions asked and the methods of collection can be sufficiently different to not allow consistent data definitions.

⁶⁷ Goddard E (2001). Obtaining information about drinking through surveys of the general population, National Statistics Methodology Series NSM 24, Office for National Statistics: London.

Box 3: Sources of lifestyle surveys containing alcohol consumption measures

Data Source	Main alcohol measures available	Geography / Access	Issues / Comments
Health Survey for England (Department of Health)	Binge, harmful, hazardous drinking from 'units consumed' Frequency of drinking	Available at GOR from UK Data Archive ⁶⁸ LA level data is accessible for specific projects	Hazardous/harmful drinking measures not available after 2002 Access to lower level data is possible through negotiation
General Household Survey (Office for National Statistics)	Binge, harmful, hazardous drinking from 'units consumed' Self-reported drinking status	Available at GOR from UK Data Archive	Hazardous/harmful drinking measures not available for 2003 and 2004 Obtaining access to lower level data involves much negotiation and justification
Omnibus Survey (Office for National Statistics)	Units consumed Frequency of drinking Some information about understanding around number of units that is considered sensible	Available at GOR from UK Data Archive for some months	Sample size is relatively small each month Survey only undertaken in a couple of months and intermittent years
British Crime Survey (Home Office)	Number of time visit pubs, bars, clubs (Alcohol Disorder Module) Frequency of drinking, how often felt drunk and in some years truancy from school because of alcohol (Drinking Behaviour Module)	Available at GOR from UK Data Archive MSOA level data is accessible for specific projects	Alcohol Disorder Module not directly linked with Alcohol Drinking Behaviour Module Questions not consistent over years Alcohol Drinking Behaviour Module sample size exceedingly small (approx 10% of main survey)
Health-Related Behaviour Questionnaire (Schools Health Education Unit)	Units consumed Frequency of drinking Source of alcohol	Available at GOR from SHEU Local authority potentially possible from school (with caveats)	Sampling is not necessarily representative since commissioning of surveys is not random
Alcohol, Drugs and Smoking in Young People (Department of Health)	Units consumed Frequency of drinking Source of alcohol Age first drank alcohol	Available without any geography from UK Data Archive	The sampling framework is not stratified using region, therefore no geographical identifiers are provided
Psychiatric Morbidity Survey (Office for National Statistics)	Harmful, hazardous and dependent drinking from responses to the Alcohol Use Disorder Identification Test (AUDIT) and Severity of Alcohol Dependence Questionnaires (SAD-Q)	Available at GOR from UK Data Archive Lower geography may be possible	One-off survey undertaken in 2000

⁶⁸ www.data-archive.ac.uk

Indicator Definitions

Percentage of adults consuming alcohol on five or more days a week - Health Survey for England

The proportion (as a percentage) of respondents aged 16 and over reporting having drunk alcohol on five or more days in the last week each year 2000 to 2005.

Percentage of adults binge drinking - Health Survey for England and General Household Survey

The proportion (as a percentage) of men who drank over 8 units and women who drank over 6 units on the heaviest drinking day in the last week. Derived from the largest amount of alcohol (in standard units) consumed in a single day during the past seven days, as reported by respondents aged 16 or over in each year 2000 to 2005. The total number of units was estimated from the responses to a series of questions about the type of alcoholic beverages and the amount consumed of each on the day that they had most to drink. Essentially the questions are the same in both surveys.

- *Health Survey for England - number of units drunk on the heaviest day of drinking in the last seven days*
- *General Household Survey - maximum daily amount drunk in the last week*

Percentage of adults consuming hazardous & harmful and harmful levels of alcohol - Health Survey for England and General Household Survey

The proportion (as a percentage) of respondents aged 16 and over whose self-reported alcohol intake was considered to be 'hazardous' (defined as 22-50 units/week for males, and 15-35 units/week for females), or 'harmful' (defined as over 50 units/week for males, and over 35 units/week for females). Respondents were aged 16 or over and took part in the Health Survey for England each year 2000 to 2002 and in the General Household Survey each year 2000 to 2002 and 2005. The total number of units normally consumed in a week was estimated from responses to a series of questions about the type of alcoholic beverages consumed, the frequency of consumption over the past 12 months, and the amount typically consumed. Essentially the questions are the same in the Health Survey for England and the General Household Survey.

Percentage of adults consuming hazardous & harmful and harmful levels of alcohol - Psychiatric Morbidity Survey

The proportion of respondents whose score on the Alcohol Use Disorders Identification Test (AUDIT) was 8-16 ('Hazardous'), or over 16 ('Harmful'). Respondents were aged 18 or over, and took part in the Psychiatric Morbidity Survey 2000.

Percentage of adults with dependent levels of alcohol consumption - Psychiatric Morbidity Survey

The proportion (as a percentage) of respondents with a score of 11 or more on the Alcohol Use Disorders Identification Test (AUDIT) AND a score of 4 or more on Severity of Alcohol Dependence questionnaire (SAD-Q). Respondents were aged 18 or over, and took part in the Psychiatric Morbidity Survey 2000.

Mean weekly units consumed and mean units consumed on heaviest day in last seven days by self-reported moderate drinkers - General Household Survey

The mean total weekly units consumed and number of units consumed on the heaviest drinking day in the last week by current drinkers aged 16 or over taking part in the General Household Survey each year between 2000 and 2005 who rated their current drinking habits as 'moderate'. Moderate drinkers are those who chose 'drink a moderate amount' as a best fit description to describe the amount they drank. ('Light drinkers' are those who 'hardly drink at all' or 'drink a little' and 'heavy drinkers' 'drink quite a lot' or 'drink heavily').

7.2 Drinking by children

Indicators

- The percentage of Year 8 and Year 10 pupils who consumed seven or more units of alcohol in the last seven days (School Health Education Unit [SHEU]);
- The percentage of 13-15 year olds who consumed seven or more units of alcohol in the last seven days (Health Survey for England [HSE]).

Rationale and Evidence

Although laws in the United Kingdom restrict alcohol consumption and purchasing for those aged under 18 years old, both practices are evident and ongoing. Not only can such consumption be risky in itself, but alcohol consumption patterns formed during youth can help to establish patterns in later life⁶⁹. Both the frequency and level of alcohol consumed among school children in the UK are important indicators, and provide a greater understanding of how early drinking patterns develop.

Background

Around 60% of pupils aged 11 to 15 years old in England report lifetime use of alcohol⁷⁰, a level that remained relatively stable between 2003 and 2005. Male pupils drink slightly more units per week than females (in 2005, 11.5 units for males, 9.5 units for females). Alcohol consumption also varies with age; 46% of 15 year olds had drunk alcohol in the last week in 2005, compared to 3% of 11 year olds. Alongside this, frequency of consumption and amount consumed also increase with age. Compared to their European counterparts, 15 and 16 year olds in the UK are more likely to drink alcohol, and to do so more frequently (Appendix 3, Table 71). In addition, higher levels of negative consequences of alcohol use are experienced in the UK than in other European countries, particularly among females (Appendix 3, Table 72).

Unfortunately, the *Smoking, drinking and drug use among young people* survey only provides national estimates of the proportion of young people who drink: the dataset contains no geographical identifiers as the sampling is not stratified by Government Office region⁷¹.

⁶⁹ Oesterle S, Hill KG, Hawkins JD, Guo J, Catalano RF and Abbott RD (2004). Adolescent heavy episodic drinking trajectories and health in young adulthood. *Journal of Studies on Alcohol*. 65: 204-12.

⁷⁰ NatCen (National Centre for Social Research) and NFER (National Foundation for Educational Research) (2006). *Smoking, drinking and drug use among young people in England in 2004*. London: Office for National Statistics.

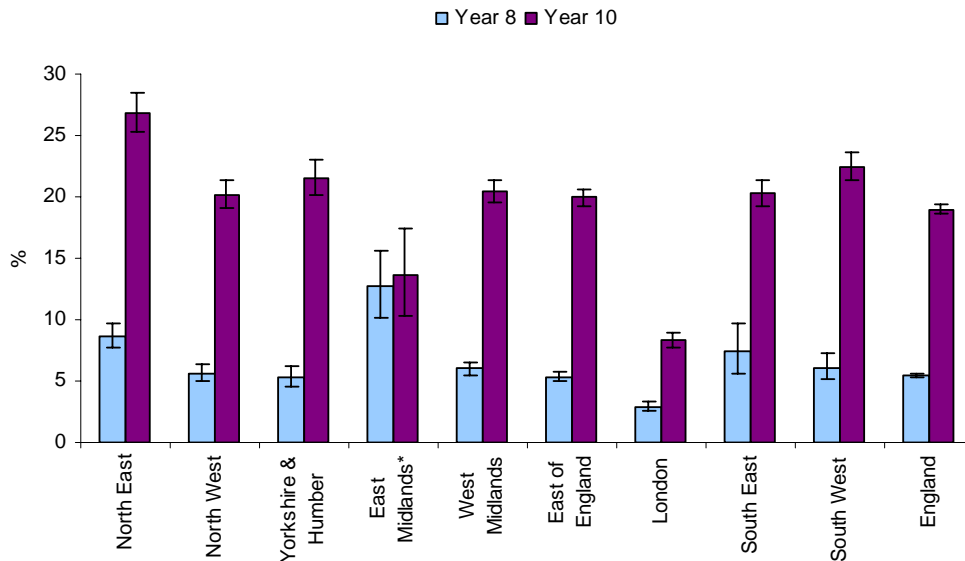
⁷¹ The Information Centre (personal communication).

Regional Commentary

Percentage of Year 8 and Year 10 pupils who consumed seven or more units of alcohol in the last seven days (School Health Education Unit [SHEU])

Across all regions, around 5% and 19% of Year 8 and Year 10 pupils respectively stated they had drunk seven or more units of alcohol in the last seven days (Figure 50). Significantly higher percentages (than England overall) were found for the North East (both Year 8 and Year 10), East Midlands (Year 8 only), Yorkshire and The Humber (Year 10 only) and the West Midlands (Year 10 only). Significantly lower percentages were found for London (both Year 8 and Year 10) and the East Midlands (Year 10 only).

Figure 50: Percentage of Year 8 and Year 10 pupils who consumed seven or more units of alcohol in the last seven days, 2003-06 (Year 8) and 2002-06 (Year 10).



*The number of schools in each local authority and therefore region who took part in the survey varied widely. East Midlands is based on schools from one local authority only, and therefore has a much smaller sample size than other regions. This is unlikely to be representative of the region as a whole. Source: NWPPO from Health Related Behaviour Questionnaire, School Health Education Unit

Table 50: Percentage of Year 8 and Year 10 pupils who consumed seven or more units of alcohol in the last seven days, 2003-06 (Year 8) and 2002-06 (Year 10).

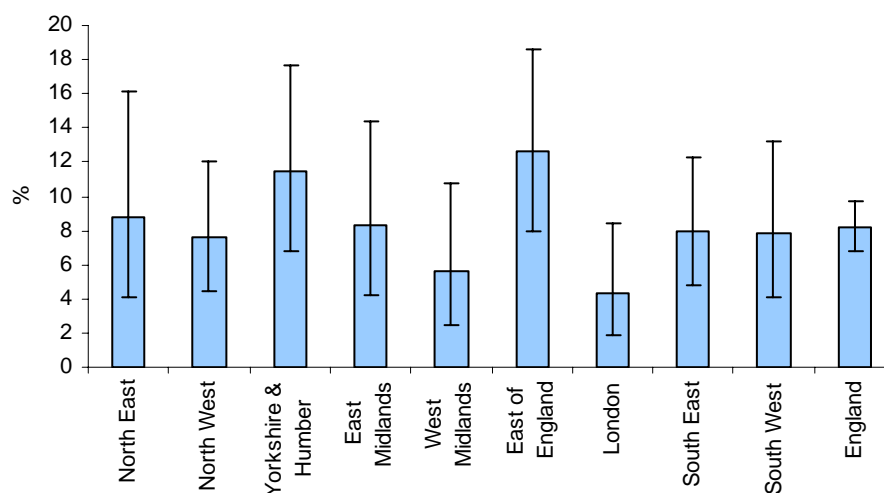
	NE	NW	YH	EM*	WM	EE	L	SE	SW	Eng
Year 8	8.7	5.7	5.3	12.7	6.0	5.3	2.9	7.5	6.1	5.5
Year 10	26.8	20.2	21.6	13.6	20.4	19.9	8.4	20.3	22.5	19.0

*The number of schools in each local authority and therefore region who took part in the survey varied widely. East Midlands is based on schools from one local authority only, and therefore has a much smaller sample size than other regions. This is unlikely to be representative of the region as a whole. Source: NWPPO from Health Related Behaviour Questionnaire, School Health Education Unit

Percentage of 13-15 year olds who consumed seven or more units of alcohol in the last seven days (HSE)

Nationally, just over 8% of teenagers aged 13-15 drank seven or more units in the last seven days. This varied regionally, from 13% in the East of England to 4% in London. However, no region differed significantly from the England average. This data compares reasonably well with that collected by SHEU, with percentages for most regions falling within the Year 8 and Year 10 values (with the exception of West Midlands). However patterns between regions are slightly different. While the East of England experienced the highest percentages for HSE, they have one of the lowest percentages for SHEU data (particularly for Year 8). Additionally, the North East and North West, two of the highest regions within SHEU data, do not show the same high level for HSE data.

Figure 51: Percentage of 13-15 year olds who consumed seven or more units of alcohol in the last seven days, 2002.



Source: Health Survey for England

Table 51: Percentage of 13-15 year olds who consumed seven or more units of alcohol in the last seven days, 2002.

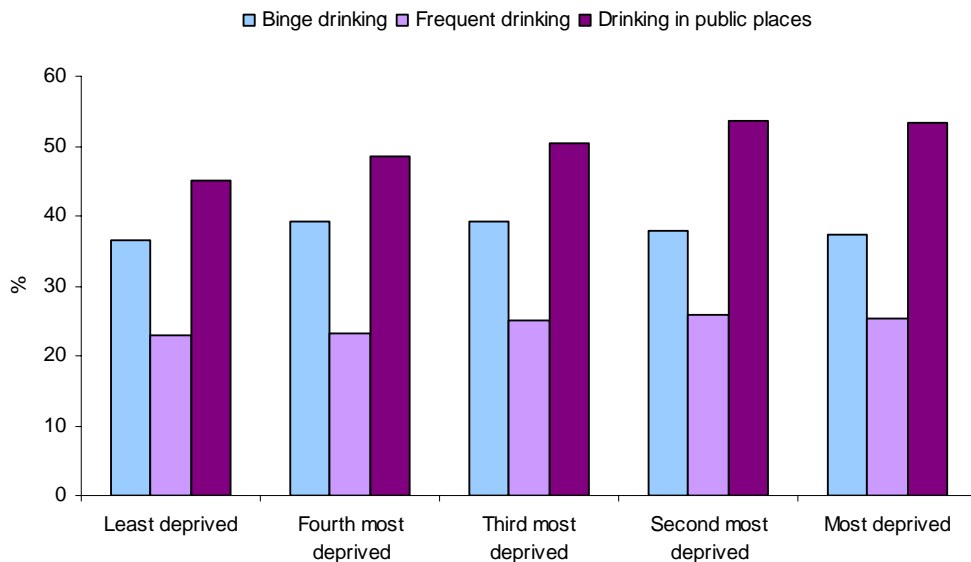
	NE	NW	YH	EM	WM	EE	L	SE	SW	Eng
%	8.8	7.6	11.4	8.3	5.6	12.6	4.4	8.0	7.8	8.2

Source: Health Survey for England

Sub-regional Inequalities

There is little data available for sub-regional analysis. Although the Health Related Behaviour Questionnaire can provide local authority level information, the commissioning of the survey is patchy across the country and there is no information available for many areas. In a previous study in one region, it was found that young people from schools located in the most deprived areas were significantly more likely to participate in risky drinking behaviour; particularly drinking in public places⁷².

Figure 52: The relationship between the level of deprivation in area of the school attended and risky drinking behaviours among 15 and 16 year olds. North West of England, 2005.



Source: Bellis et al. (2006)

Table 52: The relationship between the level of deprivation in area of the school attended and risky drinking behaviours among 15 and 16 year olds. North West of England, 2005.

	Least deprived	Fourth most deprived	Third most deprived	Second most deprived	Most deprived
Binge drinking	36.6	39.2	39.1	38.0	37.3
Frequent drinking	23.0	23.3	25.1	26.0	25.3
Drinking in public places	45.1	48.6	50.4	53.6	53.4

Source: Bellis et al. (2006)

⁷² Bellis MA, Hughes K, Morleo M, Tocque K, Hughes S, Allen T and Harrison D (2006). Patterns of risky alcohol consumption in North West teenagers and their implications for preventing alcohol-related harm. Liverpool: Centre for Public Health, Liverpool John Moores University.

Data Issues

It would be possible for the national *Smoking, drinking and drug use among young people* survey to provide annual estimates of the proportion of young people who drink by region if the sampling framework was suitably stratified. Since it is not, measures from the only other possible data source, the School Health Education Unit survey, are presented here.

Percentage of Year 8 and Year 10 pupils who consumed seven or more units of alcohol in the last seven days (SHEU)

For SHEU data, these are collected using opportunistic rather than randomised sampling, as the Schools Health and Education Unit (SHEU) "...exercises little or no control over which schools and which parts of the country become involved"⁷³. The samples taken from each school aim to reflect the academic profile of the year group, recognising the relationship between educational attainment (that is, it should be a mixed ability sample of approximately 100 pupils from each year group being studied).

Some issues that have been previously highlighted relating to data collected by SHEU that may affect the data shown here include:

- Alcohol consumption and non-inclusion of low alcohol drinks and canned shandy: by not including canned shandy or low alcoholic drinks the percentage of children saying they had not had an alcoholic drink in the last seven days may increase⁷⁴.
- Quantity drunk: there may be biasing of estimates on the low side of the overall consumption levels. It is, however, considered more likely than not to portray a normal week's drinking behaviour.
- Possible underestimates of number of alcohol units consumed⁷⁵, particularly in the instances where, for example, drinks are poured at home or at a friend's house and probably won't meet the usual measures observed in pub/clubs.
- Reliability/validity of data and comparing the data with national alcohol data: samples are 'accidental' and not 'deliberate' and therefore do not provide a 'national sample' in a research sense.

Percentage of 13-15 year olds who consumed seven or more units in the last seven days (HSE)

The HSE undertook a boost sample of children and young mothers in 2002. They were asked additional questions depending on their age range. The total sample is designed to be representative of the country but the overall sample size is small in each particular age range. For this indicator, the age range was 13-15 with a total of around 1,500 respondents across the country.

Indicator Definitions

Percentage of Year 8 and Year 10 pupils who consumed seven or more units of alcohol in the last seven days

Respondents were schoolchildren completing the Health Related Behaviour Questionnaire (HRBQ) conducted by the School Health Education Unit between 2003 and 2006 (Year 8) and 2002 and 2006 (Year 10).

Percentage of 13-15 year olds who consumed seven or more units in the last seven days (HSE)

Respondents were children aged 13-15 completing the 13-15 year old self completion questionnaire for the Health Survey for England boost sample in 2002 conducted by the National Centre for Social Research.

⁷³ Balding J (2006). *Young People into 2006*. The Health Related Behaviour Questionnaire results for 37,932 young people between the ages of 10 and 15. Devon: SHEU.

⁷⁴ Balding J, Regis D, Wise A, Nish D and Muirden, J (1997). *Young People and Alcohol. Its Use and Abuse*. Devon: SHEU.

⁷⁵ SHEU (2003). *Trends. Young People and Alcohol. Attitudes to drinking 1983-2001*. Data from the Health Related Behaviour Questionnaire from a sample of 299,543 young people between the ages of 12-13 and 14-15. Devon: SHEU.

Box 4 provides some basic methodological details for the other surveys discussed in this chapter.

Box 4: Methodological details of the datasets on alcohol consumption by children.

Study and source	Geography	Number of respondents	Age	Setting	Topics covered
ESPAD (Hibell et al. 2004)	United Kingdom	2,068	15 to 16	School	Alcohol, drugs and tobacco
Trading Standards North West (Bellis et al. 2006)	North West of England	10,271	15 to 16	School	Alcohol
Schools Survey (NatCen and NFER 2006)	England	9,202	11 to 15	School	Alcohol, drugs and tobacco

Source: Bellis et al. (2006), Hibell et al. (2004), NatCen and NFER (2006).

Box 5 describes the terms used in the analysis of the Trading Standards North West survey, which relate to risky drinking.

Box 5: Definitions of risky drinking used in the Trading Standards North West data analysis.

Term	Definition
Binge drinking	Drinking five or more alcoholic drinks in one session
Frequent drinking	Drinking alcohol on at least two days a week
Drinking in public places	Drinking alcohol on the streets, in parks, in pubs or clubs

Source: Bellis et al. (2006)

8. The Alcohol Economy

Indicators

- Consumer on licence expenditure (£ per person) on alcohol;
- Volume (litres per person) of alcohol sold in on licensed venues;
- Rate of on and off licensed premises per 10,000 population;
- Household purchases of alcoholic drinks (ml per person per week);
- Eating out purchases of alcoholic drinks (ml per person per week);
- Household purchases of alcoholic drinks (pence per person per week);
- Eating out purchases of alcoholic drinks (pence per person per week);
- Proportion of total household expenditure on food and drink spent on alcoholic drinks;
- Proportion of total eating out expenditure on food and drink spent on alcoholic drinks;
- Percentage of total employees employed in bars.

Rationale and Evidence

Information on alcohol sales can help to illustrate the nature of the alcohol situation in England and Wales. Such information can complement the data on alcohol consumption to provide a better understanding of the levels of expenditure, quantities and types of alcohol purchased as well as places where alcohol is likely to be consumed. The rate of on and off licensed premises per 10,000 population can also provide a measure of the accessibility of alcohol in the UK⁷⁶.

Background

The sale and consumption of alcohol play an important role in today's society. On an individual level, millions of people in the UK enjoy drinking alcohol to socialise and relax. From a wider perspective, the alcohol market generates income through taxes and excise duty, creates employment, and contributes to the regeneration of towns and cities. However, the burden of acute and long-term problems associated with alcohol use such as mortality, hospital admission and crime and violence can have devastating effects on individuals, place increasing strain on public services, and burden both the workplace and the wider economy.

In 2003, the Strategy Unit published the report *Alcohol misuse: how much does it cost?*⁷⁷ which estimated the total external⁷⁸ costs that alcohol places on society in England (Box 6). These included costs to health services for hospital visits and treatment; costs to the workplace for lost output through alcohol-related absenteeism and reduced employment; and costs to criminal justice services through, for example, alcohol-related offences, drink driving casualties and the emotional impact of crime on victims. Total external costs were estimated to be between £18.5 billion and £20 billion per year, around 2% of Gross Domestic Product (GDP).

However, the costs to society also need to be balanced against the benefits created by alcohol consumption. For instance, in 2004 sales of alcohol in both on and off licensed premises in England and Wales totalled over £27.6 billion⁷⁹ and in the Budget 2007, the Government estimated that £7.9 billion would be collected from alcohol duty for 2006/07: £3.3 billion from beer and cider, £2.4 billion from wine and £2.2 billion from spirits⁸⁰. In addition, it is estimated that around one million jobs are created by the alcohol industry, from farming through to sales in on and off licences.

⁷⁶ Under the Licensing Act 2003, there is no longer a separate alcohol licence for on and off licensed premises. This makes it difficult to obtain current data on the separate numbers of on and off licensed premises. The DCMS have requested that local authorities submit this information to them as part of their new statistics collection exercise. However, local authorities may not hold information in this format and such information will not be available until late 2007.

⁷⁷ Strategy Unit (2003b). *Alcohol misuse: How much does it cost?* (Online). London: Cabinet Office. Available at: www.number10.gov.uk/files/pdf/econ.pdf Accessed 5 February 2007.

⁷⁸ External costs are defined as those falling on third parties (such as services) rather than those falling on individuals themselves.

⁷⁹ ACNielsen (2004). *The drink pocket book: 2005 edition*. WARC, Oxfordshire.

⁸⁰ HM Treasury Budget 2007. *Building Britain's long-term future: Prosperity and fairness for families*. London: The Stationery Office.

Box 6: Estimated costs per annum of alcohol misuse (based on 2000/02 data).

	£ million	
	First estimate	Second estimate
Health care costs		
Hospital inpatient (and day) visits		
Directly attributable to alcohol misuse	126.2	126.2
Partly attributable to alcohol misuse	344.2	399.8
Hospital outpatient visits	222.8	445.6
Accident and emergency visits	305.2	305.2
Ambulance services	205.0	205.0
Practice nurse consultants	19.1	19.3
NHS GP consultations	27.8	48.7
Laboratory tests	N/A	N/A
Dependency prescribed drugs	1.6	1.6
Other health care costs	35.3	35.3
Specialist treatment services	96.2	96.2
Workplace and wider economy costs		
Lost output due to absenteeism	1,213.6	1,785.9
Lost output due to reduced employment	1,726.1	2,153.7
Lost output due to reduced employment efficiency	N/A	N/A
Lost output due to premature death	2,254.3	2,481.8
Costs of alcohol-related and alcohol-specific crime		
Criminal Justice System costs		
Alcohol-specific offences	29.9	29.9
Alcohol-related offences	1,720.4	1,720.4
Property/health and victim services	2,521.2	2,521.2
Costs in anticipation of crime (alarms etc)	1,494.6	1,494.6
Lost productive output of victims	969.8	969.8
Emotional impact costs for victims of crime	4,678.6	4,678.6
Drink driving		
Criminal Justice System costs	77.3	77.3
Cost of drink driving casualties		
Lost output		
Serious casualties	33.8	33.8
Slight casualties	25.9	25.9
Medical and ambulance		
Serious casualties	20.5	20.5
Slight casualties	11.0	11.0
Human costs		
Serious casualties	232.8	232.8
Slight casualties	123.8	123.8
Total Costs	18,517.1	20,044.0

Source: Cabinet Office Strategy Unit

In 2004, consumers spent £40,837 million on alcohol in the UK, an increase of 3% since 2002⁸¹. Patterns of alcohol sales vary between off licensed and on licensed premises and between different types of alcohol. For example, more alcohol is purchased through on licensed premises, where the most money is spent on beer (in comparison to off licensed premises where more is spent on wine). Trend data also show different patterns according to the licence and alcohol type. For instance, the value of wine purchases from off licences increased by 13% between 2002 and 2004 in England and Wales (to £4,424.6 million), whereas sales in on licences saw a decrease of 9% (to £2,264.2 million^{81, 82}). However, cider has experienced an 8% increase in sales in on licences in England and Wales between 2002 and 2004 (to £621.2 million). This increase in popularity and sales has been linked to cider's rebranding under Magners' marketing strategy, with Bulmer's reporting a 40% increase in sales in the last two

⁸¹ ACNielsen (2005). The drink pocket book: 2006 edition. WARC, Oxfordshire.

⁸² ACNielsen (2003). The drink pocket book: 2004 edition. WARC, Oxfordshire.

years⁸³. In contrast, flavoured alcoholic drinks seem to be becoming less popular, and show a decrease of 21% in hectolitres sold in on licences between 2002 and 2004 in England and Wales⁸⁴. The number of licensed premises in England has also been increasing in recent years (by 2.8% for on licensed and by 4.2% for off licensed premises between 2001 and 2004), so providing more locations for both alcohol purchasing and alcohol consumption. This meant that in 2004, there were a total of 113,370 on licensed and 46,582 off licensed premises in England and Wales.

⁸³ Duffy J (2006). I am, now, a cider drinker. BBC online article. 18 August 2006. (<http://news.bbc.co.uk/1/hi/magazine/5263394.stm> Accessed 21 January 2007).

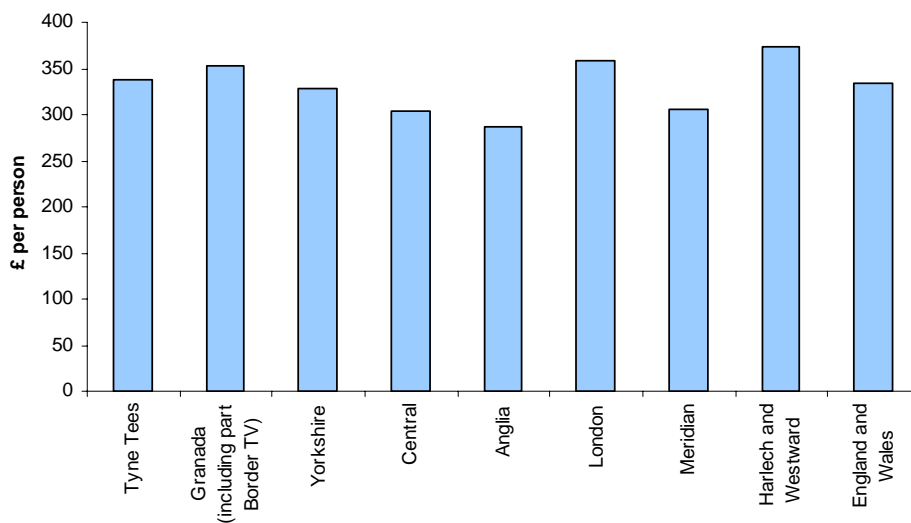
⁸⁴ ACNielsen (2003). The drink pocket book: 2004 edition. WARC, Oxfordshire.; ACNielsen (2004). The drink pocket book: 2005 edition. WARC, Oxfordshire.; ACNielsen (2005). The drink pocket book: 2006 edition. WARC, Oxfordshire.

Regional Commentary

Consumer on licence expenditure (£ per person) on alcohol

The amount of money spent per person on alcohol in on licensed premises was highest in Harlech and Westward and lowest in Anglia (Figure 53; for Government Office region equivalents see Box 7). Although the majority of money was spent on beer for all regions, there were some slight differences in the proportions of money spent on the various alcohol types. For instance, compared to other regions, London and Meridian had the highest percentage of money spent on wine and the lowest spent on beer (Box 8). Regional data per population on off licence expenditure are not available⁸⁵. However, the proportions of money spent on various alcohol types within off licence premises are shown in Box 9. A far greater proportion of expenditure was spent on wine for all regions in off licensed premises than on licensed.

Figure 53: Consumer on licence expenditure (£ per person) on alcohol, 2004.



Source: ACNielsen

Table 53: Consumer on licence expenditure (£ per person) on alcohol, 2004.

	Tyne Tees	Granada (including part Border TV)	Yorkshire	Central	Anglia	London	Meridian	Harlech and Westward	England and Wales
£	337.1	353.2	327.8	303.9	287.1	358.1	306.3	373.1	334.1

Source: ACNielsen

⁸⁵ The areas presented in this analysis differ from both Government Office region and ACNielsen on licence regions.

Box 7: ACNielsen regions and approximate Government Office region equivalents.

ACNielsen region	GO region	Notes
Tyne Tees	North East	Includes some areas of North West (parts of Cumbria).
Granada (including part Border TV)	North West	Includes some areas of Wales (Flintshire, Conwy, Isle of Anglesey, parts of Denbighshire and parts of Gwynedd). Excludes parts of Cumbria.
Yorkshire	Yorkshire and The Humber	Includes some areas of East Midlands (Lincolnshire, parts of Derbyshire, parts of Nottinghamshire) and East of England (parts of Norfolk).
Central	West Midlands and East Midlands	Includes some areas of Wales (parts of Powys), South West (parts of Gloucestershire) and South East (Oxfordshire). Excludes parts of Northamptonshire.
Anglia	East of England	Excludes Bedfordshire, Hertfordshire, parts of Essex, parts of Norfolk.
London	London	Includes areas of East of England (Bedfordshire, Hertfordshire, parts of Essex) and South East (Buckinghamshire, Hampshire, parts of Kent, parts of Surrey, parts of West Sussex).
Meridian	South East	Includes areas of South West (parts of Wiltshire and Dorset). Excludes Buckinghamshire, Hampshire, parts of Kent, parts of Surrey, parts of West Sussex.
Harlech and Westward	South West	Includes the majority of Wales. Excludes Dorset, parts of Wiltshire, parts of Gloucestershire.

Box 8: Percentage of consumer on licence expenditure on alcohol spent on beer, cider, spirits and wine, 2004.

	Tyne Tees	Granada (including part Border TV)	Yorkshire	Central	Anglia	London	Meridian	Harlech and Westward	England and Wales
Beer	74.5	70.1	76.4	71.0	67.6	60.8	62.4	66.7	67.7
Cider	3.7	2.8	3.5	4.0	3.2	2.6	2.9	5.8	3.5
Spirits	14.1	17.1	11.2	15.6	15.1	18.4	16.8	15.6	16.0
Wine	7.7	10.0	8.9	9.3	14.1	18.2	17.9	11.9	12.8

Source: ACNielsen

Box 9: Percentage of consumer off licence expenditure on alcohol spent on beer, cider, spirits and wine, 2004.

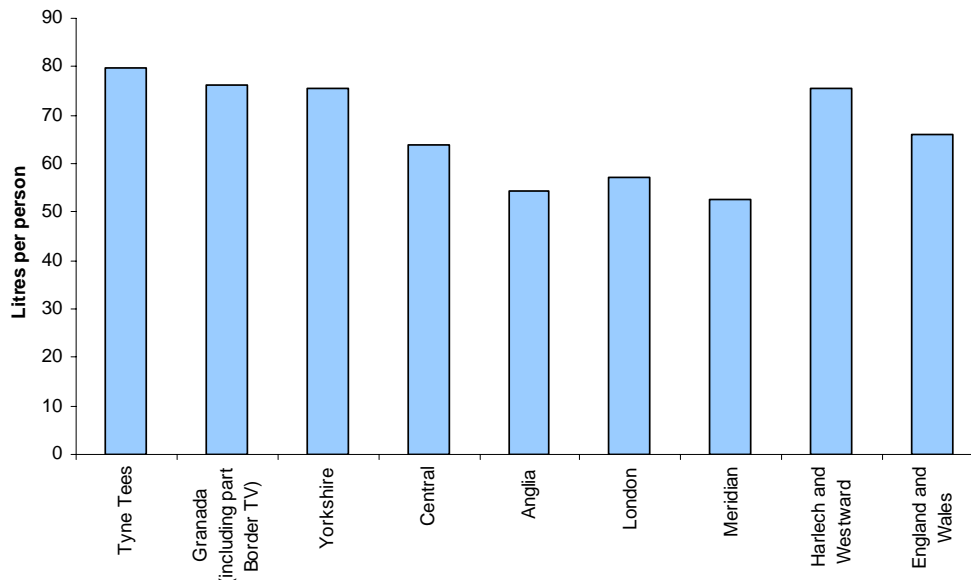
	Tyne Tees	Granada (including part Border TV)	Yorkshire	Central	Anglia	London	Meridian	Harlech and Westward	England and Wales
Beer	31.4	30.1	35.3	28.6	29.9	24.6	27.6	24.8	28.9
Cider	3.2	2.3	3.1	3.8	2.7	1.8	2.4	3.6	4.7
Spirits	25.7	25.7	23.6	25.0	24.4	21.2	24.0	25.1	23.9
Wine	39.7	41.9	38.0	42.6	43.0	52.3	46.0	46.5	42.6

Source: ACNielsen

Volume (litres per person) of alcohol sold in on licensed venues

For on licensed venues, the number of litres sold per person in 2004 was highest in Tyne Tees and lowest in Meridian (Figure 54). However, variations are likely to be partly related to the percentage of litres sold for each type of alcohol, with Meridian and London selling a higher percentage of wine (6.4 and 7.4% respectively) than other regions (ranging from 2.3 to 4.8%⁸⁶).

Figure 54: Volume (litres per person) of alcohol sold in on licensed venues, 2004.



Note: Total litres sold from beer, cider, spirits and wine, not pure alcohol.

Source: ACNielsen

Table 54: Volume (litres per person*) of alcohol sold in on licensed venues, 2004.

	Tyne Tees	Granada (including part Border TV)	Yorkshire	Central	Anglia	London	Meridian	Harlech and Westward	England and Wales
Litres	80	76	75	64	54	57	52	76	66

Note: Total litres sold from beer, cider, spirits and wine, not pure alcohol.

Source: ACNielsen

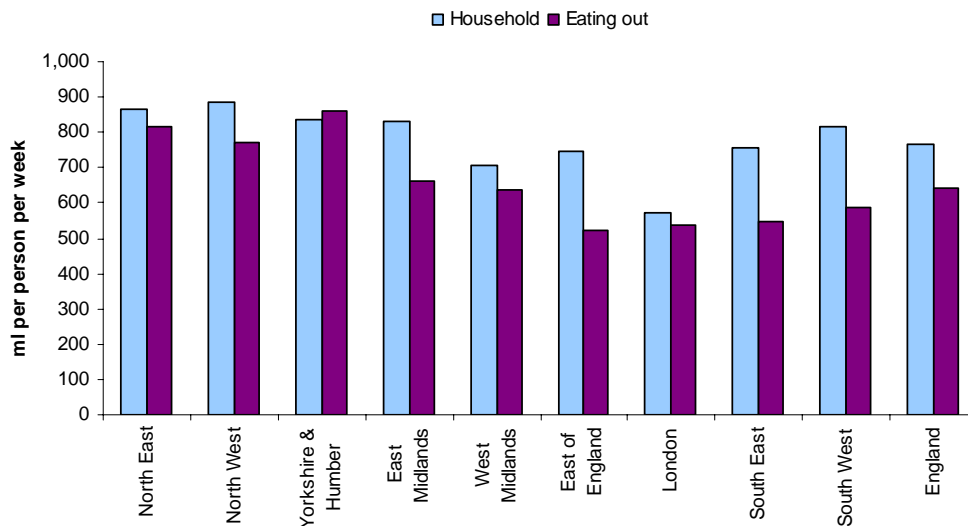
⁸⁶ ACNielsen (2004). The drink pocket book: 2005 edition. WARC, Oxfordshire.

Household purchases of alcoholic drinks (ml per person per week)

Eating out purchases of alcoholic drinks (ml per person per week)

The amount (ml) of alcohol purchased per person per week varies considerably between regions (Figure 55). In general, the northern regions purchase greater amounts per week than the southern regions. A similar pattern is noticeable when data are analysed by household and eating out (non-household) expenditure. Here, purchases range from 570ml (London) to 886 ml (North West) for household expenditure and from 524ml (East of England) to 860ml (Yorkshire and The Humber) for eating out expenditure.

Figure 55: Purchases of alcoholic drinks (ml per person per week), 2003-06.



Source: Expenditure and Food Survey, National Statistics

Table 55: Purchases of alcoholic drinks (ml per person per week), 2003-06.

	NE	NW	YH	EM	WM	EE	L	SE	SW	Eng
Household	868	886	838	829	705	747	570	758	815	766
Eating out	815	770	860	662	637	524	535	545	585	641

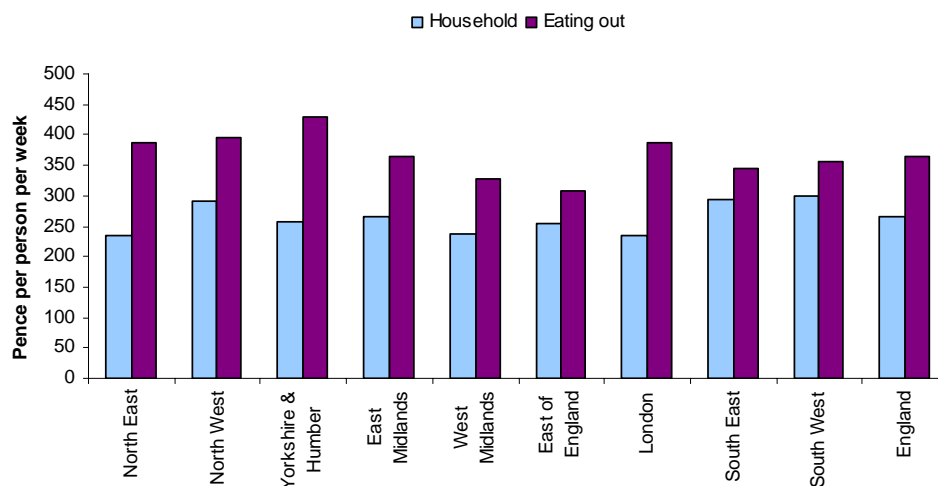
Source: Expenditure and Food Survey, National Statistics

Household purchases of alcoholic drinks (pence per person per week)

Eating out purchases of alcoholic drinks (pence per person per week)

The amount of money spent on alcohol per person per week also reveals some variation between regions (Figure 56). However, in contrast to the amount (ml) of alcohol purchased, there is less evidence of a north-south divide. Total expenditure ranges from 563 pence per week in the East of England to 687 pence in the North West. Between regions, patterns differ according to whether data is household or eating out expenditure. The most noticeable differences are for London and the North East, which both have the lowest levels of household expenditure but one of the high levels of eating out expenditure.

Figure 56: Purchases of alcoholic drinks (pence per person per week), 2003-06.



Source: Expenditure and Food Survey, National Statistics

Table 56: Purchases of alcoholic drinks (pence) per person per week, 2003-06.

	NE	NW	YH	EM	WM	EE	L	SE	SW	Eng
Household	234	291	256	265	237	255	234	295	299	266
Eating out	388	396	429	364	328	308	386	344	355	365

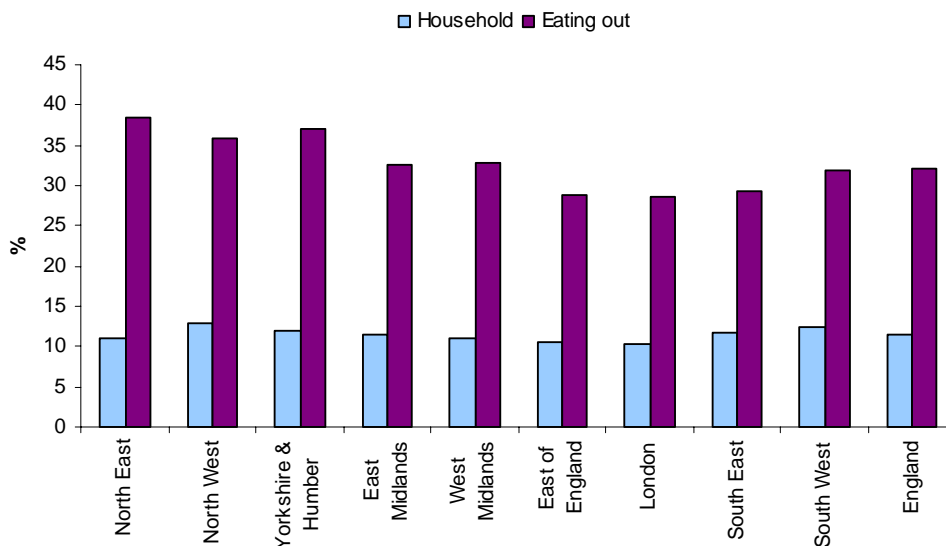
Source: Expenditure and Food Survey, National Statistics

Proportion of total household expenditure on food and drink spent on alcoholic drinks

Proportion of total eating out expenditure on food and drink spent on alcoholic drinks

The proportion of total household food and drink expenditure spent on alcohol is fairly consistent between regions, ranging from 10.4% in London to 12.8% in the North West. However, greater variation is found for eating out expenditure, where the proportion is higher in the northern regions, ranging from 28.5% (London) to 38.5% (North East) (Figure 57).

Figure 57: Proportion of total expenditure on food and drink spent on alcoholic drinks, 2003-06.



Note: Percentage was derived from expenditure in pence per person per week
 Source: Expenditure and Food Survey, National Statistics

Table 57: Proportion of total expenditure on food and drink spent on alcoholic drinks, 2003-06.

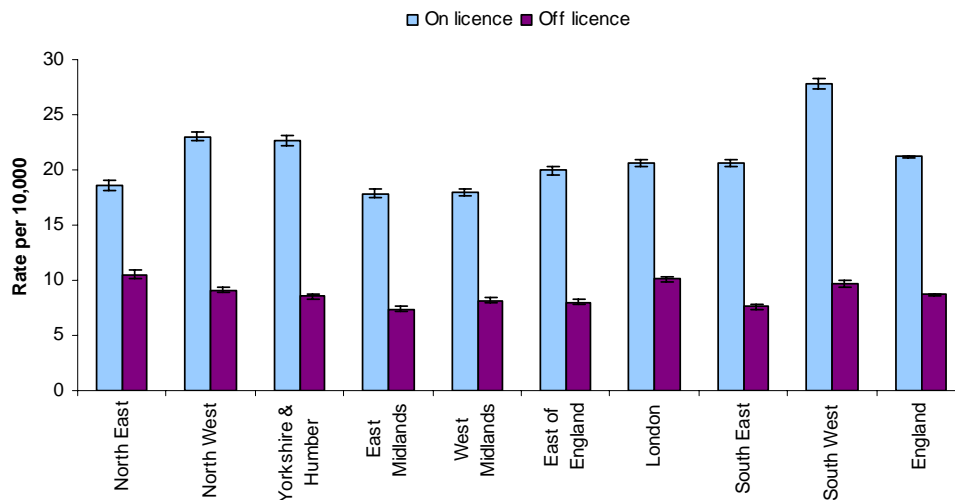
	NE	NW	YH	EM	WM	EE	L	SE	SW	Eng
Household	11.0	12.8	11.8	11.5	11.0	10.5	10.4	11.8	12.4	11.5
Eating out	38.5	35.9	37.1	32.5	32.8	28.8	28.5	29.4	31.8	32.0

Note: Percentage was derived from expenditure in pence per person per week
 Source: Expenditure and Food Survey, National Statistics

Rate of on and off licensed premises per 10,000 population

The rate of off licensed premises per 10,000 population was considerably lower than that for on licensed for all regions (Figure 58). For on licensed premises, the North West, Yorkshire and The Humber and the South West had significantly higher rates, while all other regions had significantly lower rates than the England average. For off licensed premises, the North East, North West, London and the South West had significantly higher rates, while East Midlands, West Midlands, East of England and South East all had significantly lower.

Figure 58: Rate of on and off licensed premises per 10,000 population, 2004.



Data presented are for 30 June 2004.

Source: NWPFO from Department for Culture, Media and Sport

Table 58: Rate of on and off licensed premises per 10,000 population, 2004.

	NE	NW	YH	EM	WM	EE	L	SE	SW	Eng
On licence	18.6	23.0	22.6	17.8	18.0	20.0	20.6	20.7	27.8	21.2
Off licence	10.5	9.1	8.5	7.4	8.1	8.0	10.1	7.6	9.7	8.7

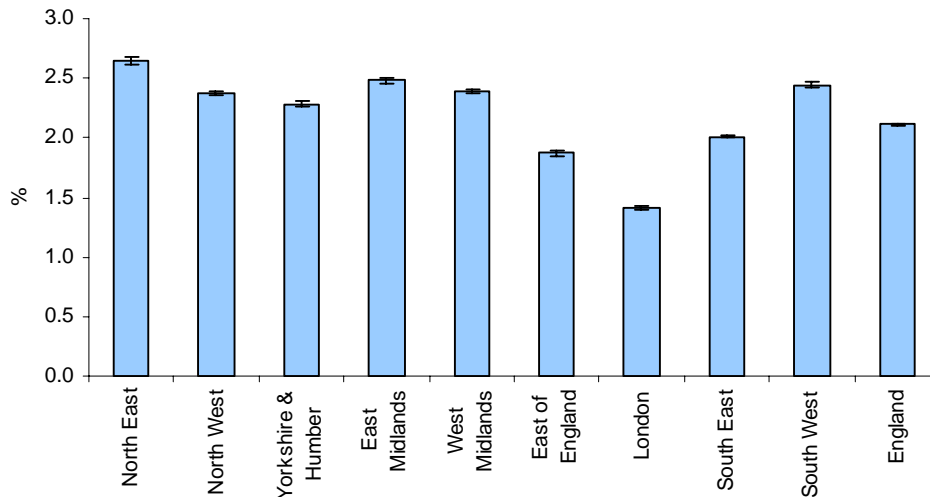
Data presented are for 30 June 2004.

Source: NWPFO from Department for Culture, Media and Sport

Percentage of total employees employed in bars

In England, there are around 484,400 employees employed in bars, representing 2.1% of all jobs (Figure 59). The proportion of all jobs in each region that bar jobs represent varies. Percentages are significantly higher than England overall in the North East, North West, Yorkshire and The Humber, East Midlands, West Midlands and the South West, while the percentage in London is significantly lower. Between 2003 and 2005, the number of bar jobs increased by 2.0% in England. However, the number of jobs increased by 10.6% in the West Midlands and 9.9% in the North East. Conversely, the number of jobs declined by 5.4% in the East of England and by 2.6% in the North West.

Figure 59: Percentage of total employees employed in bars, 2005.



Source: Annual Business Inquiry 2005, National Statistics (from Nomis website: www.nomisweb.co.uk)

Table 59: Percentage of total employees employed in bars, 2003 and 2005.

	NE	NW	YH	EM	WM	EE	L	SE	SW	Eng	
2003	Number of employees employed in bars	25,600	72,800	49,500	45,200	51,300	46,500	56,900	74,200	52,700	474,700
	Percentage of total employees employed in bars	2.5	2.4	2.3	2.5	2.2	2.0	1.4	2.0	2.5	2.1
2005	Number of employees employed in bars	28,100	70,900	51,700	46,100	56,700	44,000	57,200	75,700	54,000	484,400
	Percentage of total employees employed in bars	2.6	2.4	2.3	2.5	2.4	1.9	1.4	2.0	2.4	2.1

Source: Annual Business Inquiry 2005, National Statistics (from Nomis website: www.nomisweb.co.uk)

There are also some differences between the regions in the characteristics of employees who work in bars (Table 60). Across England, more women (56.8% of bar employees) than men (43.2%) are employees in bars, with the East Midlands (61.0% women, 39.0% men) having the most heavily female dominated bar workforce. However, in London slightly fewer women (49.5% of bar employees) than men (50.5%) are bar employees. More bar employees are employed on a part-time basis in England (58.5%) than full-time (41.5%), with the highest proportion of part-time workers seen in Yorkshire and The Humber (62.9%). In contrast, there are fewer part-time bar workers in London (45.8%) than full-time (54.2%).

Table 60: Employees in bars by gender and work status, 2005.

	NE	NW	YH	EM	WM	EE	L	SE	SW	Eng
Total employees	28,100	70,900	51,700	46,100	56,700	44,000	57,200	75,700	54,000	484,400
<i>% of all bar employees:</i>										
Male full-time	19.7	22.0	21.1	19.8	19.7	22.4	29.3	23.8	19.8	22.2
Male part-time	21.1	22.2	19.7	19.3	21.5	22.5	21.2	20.8	20.6	21.0
Male – all	40.8	44.2	40.8	39.0	41.2	44.9	50.5	44.6	40.4	43.2
Female full-time	17.6	18.0	16.1	17.9	18.1	19.5	24.8	20.5	19.8	19.3
Female part-time	41.6	37.8	43.2	43.1	40.7	35.6	24.7	35.0	39.7	37.5
Female – all	59.2	55.8	59.2	61.0	58.8	55.1	49.5	55.4	59.6	56.8
Full-time – all	37.3	40.0	37.1	37.7	37.8	41.9	54.2	44.2	39.7	41.5
Part-time – all	62.7	60.0	62.9	62.3	62.2	58.1	45.8	55.8	60.3	58.5
<i>% of all male employees:</i>										
Full-time	48.3	49.7	51.7	50.6	47.8	49.9	58.1	53.3	49.0	51.4
Part-time	51.7	50.3	48.3	49.4	52.2	50.1	41.9	46.7	51.0	48.6
<i>% of all female employees:</i>										
Full-time	29.7	32.2	27.1	29.4	30.8	35.4	50.2	36.9	33.3	34.0
Part-time	70.3	67.8	72.9	70.6	69.2	64.6	49.8	63.1	66.7	66.0
<i>% of all full-time employees:</i>										
Male	52.9	55.0	56.7	52.5	52.1	53.4	54.2	53.7	50.0	53.5
Female	33.7	37.0	31.3	30.9	34.6	38.7	46.2	37.3	34.1	36.0
<i>% of all part-time employees:</i>										
Male	33.7	37.0	31.3	30.9	34.6	38.7	46.2	37.3	34.1	36.0
Female	66.3	63.0	68.7	69.1	65.4	61.3	53.8	62.7	65.9	64.0

Source: Annual Business Inquiry 2005, National Statistics (from Nomis website: www.nomisweb.co.uk)

Sub-regional Inequalities

Different demographic groups show different alcohol purchasing patterns nationally. Lower socio-economic groups are more likely to buy larger quantities of beer and cider, whereas higher socio-economic groups are more likely to buy larger quantities of wine⁸⁷. From the indicators presented in this chapter, the only data source available by a lower geography than region is the rate of on licensed and off licensed premises. These data are available by Petty Session Division⁸⁸ and have been aggregated in Table 61 to larger geographical areas. Unsurprisingly, Central London has by far the highest rate of both on and off licensed premises per 10,000 population. Outside of Central London, the more rural and less populated areas of Cumbria and the Isle of Wight have the highest rate of on licences, while those areas with the highest off licensed premises are mixed (Cumbria, North West London, Dorset).

Table 61: Rate of licensed premises per 10,000 population by type of licence and area, 2003/04.

Area	On licences	Off licences	Area	On licences	Off licences
Avon and Somerset	29.7	10.7	Kent	21.6	8.0
Bedfordshire	17.2	8.5	Lancashire	27.9	9.2
Cambridgeshire	19.2	7.8	Leicestershire	21.0	9.5
Cheshire	19.3	7.4	Lincolnshire	25.8	8.7
Cleveland	17.8	10.6	Merseyside	19.7	8.9
Cumbria	45.1	11.9	Norfolk	26.3	9.8
Derbyshire	15.0	5.6	Northamptonshire	6.9	3.9
Devon and Cornwall	34.8	10.9	Northumberland	23.4	10.9
Dorset	28.9	11.0	North Yorkshire	36.0	9.7
Durham	19.4	10.4	Nottinghamshire	19.3	8.6
Essex	19.4	7.6	South Yorkshire	16.1	8.4
Gloucestershire	16.3	5.8	Staffordshire	21.2	8.1
Central London	125.3	19.2	Suffolk	21.8	8.1
North East London	11.8	8.5	Surrey	17.6	7.3
North West London	20.9	11.1	Sussex	25.2	8.4
South East London	13.7	9.3	Thames Valley	18.7	7.7
South West London	22.3	10.1	Tyne and Wear	17.2	10.4
Greater Manchester	19.2	9.4	Warwickshire	24.4	9.3
Hampshire	18.3	6.2	West Mercia	23.2	8.7
Hertfordshire	16.8	7.1	West Midlands	13.0	7.7
Humberside	19.5	8.4	West Yorkshire	23.1	8.2
Isle of Wight	44.2	9.8	Wiltshire	19.5	8.1

Data presented are for 30 June 2004.

Source: Department for Culture, Media and Sport⁸⁹

Data Issues

Only the rate of licensed premises per 10,000 population are available at a geography lower than region⁹⁰. As the Petty Session Divisions do not always tally with local authority, it has not been possible to analyse this data by deprivation.

In terms of the consumer expenditure data, it should be remembered that prices can differ considerably, with prices in London likely to be higher than elsewhere. This means that inevitably, consumer expenditure will be higher. So, people in London could be spending more money on less alcohol.

⁸⁷ ACNielsen (2005). The drink pocket book: 2006 edition. WARC, Oxfordshire.

⁸⁸ Petty Session Divisions are now known as Local Justice Areas and refer to areas in which magistrates are assigned to. They are broadly equivalent to local authorities.

⁸⁹ Department for Culture, Media and Sport (2004). Liquor licensing: England and Wales, July 2003-June 2004. DCMS Statistical Bulletin. London: DCMS.

⁹⁰ Under the Licensing Act 2003, there is no separate alcohol licence for on and off licensed premises. This makes it difficult to obtain data regarding the numbers of on and off license premises. The DCMS have requested that all local authorities collect this information. However, levels of response have yet to be determined.

It is difficult to make direct comparisons between the on licence and off licence data provided by ACNielsen⁹¹. This is for two reasons. First, the regional boundaries used are slightly different and second, the definitions used with regards to the alcohol categories (beer, cider, spirits and wine) are different between the two datasets.

While misreporting may be a problem for the Expenditure and Food Survey, it is thought to be lower in this survey than other dietary surveys due to its focus on expenditure rather than consumption, as well as the nature of data collection (the survey involves the completion of diaries over a two week period rather than completing a questionnaire retrospectively).

Indicator Definitions

Consumer on licence expenditure (£ per person) on alcohol;

Volume (litres per person) of alcohol sold in on licensed venues.

Data on consumer expenditure and volume of alcohol sold are derived from the ACNielsen⁹² reports *Drink Pocket Books*. Consumer expenditure is collected by off licensed and on licensed premises, where off licences are defined as premises that sell alcohol for consumption off the premises (such as a supermarket or corner shop), and on licences as those that sell alcohol for consumption on the premises (such as a pub or a restaurant). Box 10 shows the definitions used in the alcohol sales data regarding beer, cider, spirits and wine for off licensed and on licensed premises. Indicators on total consumer expenditure and volume of alcohol sold in on licensed premises have been calculated per person using ONS mid 2002 population estimates for the same geographical areas (latest available from ACNielsen).

Rate of on and off licensed premises per 10,000 population

The number of on and off licensed premises in England and Wales is collected by the Department for Culture, Media and Sport (DCMS). Rates have been calculated per 10,000 population using Office for National Statistics mid 2003 population estimates.

Household purchases of alcoholic drinks (ml and pence per person per week);

Eating out purchases of alcoholic drinks (ml and pence per person per week);

Proportion of total household expenditure on food and drink spent on alcoholic drinks;

Proportion of total eating out expenditure on food and drink spent on alcoholic drinks.

These data have been drawn from the Expenditure and Food Survey⁹³ which in 2005-06 involved the collection of 16,085 people within 6,785 households across the UK. Although survey data are available annually, this indicator uses data provided in the additional datasets aggregated over the most recent three year period for a more robust measurement.

Percentage of total employees employed in bars

This information has been extracted from the Annual Business Inquiry based on Standard Industrial Classification 2003 (SIC2003) 5540 (bars) and total employees. The Annual Business Inquiry is a sample survey of reporting units drawn from the Inter-Departmental Business Register. Approximately 78,000 reporting units, covering around half a million workplaces, are selected for each year's survey. All businesses at least 250 employees are surveyed, along with a sample of smaller businesses. Employment figures are rounded to the nearest 100 for publication.

⁹¹ ACNielsen (2003). The drink pocket book: 2004 edition. WARC, Oxfordshire.; ACNielsen (2004). The drink pocket book: 2005 edition. WARC, Oxfordshire.; ACNielsen (2005). The drink pocket book: 2006 edition. WARC, Oxfordshire.

⁹² ACNielsen are a worldwide marketing research company.

⁹³ Defra. Family food – datasets for 2005-06 publication. Countries and regions consumption (household and eating out). Available from: <http://statistics.defra.gov.uk/esg/publications/efs/datasets/default.asp> Accessed 3 August 2007.

Box 10: Definitions of alcohol used in the alcohol sales data.

Alcohol	Off licence definition used	On licence definition used
Beer	Packaged	Packaged and draught
Cider	Packaged	Packaged and draught
Spirits	Total major spirits	Aggregated data are used for scotch and malt whisky; gin; vodka; dark, golden and white rum; cognac; brandy; liqueurs and specialities; and flavoured alcoholic drinks
Wine	Aggregated data for still light wine, total fortified wine, vermouth and aperitifs	Aggregated data for still light wine, sparkling wine, champagne, Spanish-style fortified wine and fortified wine from other countries, port, vermouth and aperitifs

Source: ACNielsen

Appendix 1: Attributable fractions (AFs)

	Condition	ICD-10 codes	Male AF	Female AF
Alcohol-specific	Methanol poisoning	T511	1	1
	Mental and behavioural disorders due to use of alcohol	F10	1	1
	Ethanol poisoning	T510	1	1
	Degeneration of nervous system due to alcohol	G312	1	1
	Alcohol-induced pseudo-Cushing's syndrome	E244	1	1
	Alcoholic polyneuropathy	G621	1	1
	Alcoholic myopathy	G721	1	1
	Alcoholic liver disease	K70	1	1
	Alcoholic gastritis	K292	1	1
	Alcoholic cardiomyopathy	I426	1	1
	Accidental poisoning by and exposure to alcohol	X45	1	1
	Alcohol-attributable	Accidental exposure to excessive cold	X31	0.25
Acute pancreatitis		K85	0.24	0.24
Air/space transport accidents		V95-V97	0.2	0.2
Alcohol-induced chronic pancreatitis, other chronic pancreatitis		K860-K861	0.72	0.72
Assault		X93-X99, Y01-Y09	0.37	0.37
Chronic liver disease		K73-K74	0.485	0.52
Diabetes mellitus		E10-E14	0.05	0.05
Drowning		W65-W74	0.3195	0.2835
Epilepsy and Status epilepticus		G40-G41	0.15	0.15
Fall injuries		W00-W19	0.289	0.246
Fire injuries		X00-X09	0.4075	0.4075
Firearm injuries		W32-W34	0.25	0.25
Gastric ulcer		K25-K27	0.1	0.1
Gastro-oesophageal laceration-haemorrhage syndrome		K226	0.285	0.285
Heart failure		I50-I51	0.004	0.002
Hypertensive diseases		I10-I15	0.08	0.035
Inhalation and ingestion of food causing obstruction of respiratory tract		W79	0.625	0.625
Intentional self-harm/Event of undetermined intent		X60-X84, Y10-Y33	0.341	0.164
Ischaemic heart disease		I20-I25	0.005	0.005
Malignant neoplasm of breast		C50	0	0.035
Malignant neoplasm of larynx		C32	0.41	0.26
Malignant neoplasm of lip		C00	0.5	0.5
Malignant neoplasm of liver and intrahepatic bile ducts		C22	0.14	0.235
Malignant neoplasm of oesophagus		C15	0.285	0.285
Malignant neoplasm of oral cavity and pharynx		C01-C14	0.25	0.115
Malignant neoplasm of other digestive organs		C17-C21	0.2	0.2
Malignant neoplasm of stomach		C16	0.2	0.2
Oesophageal varices		I85	0.464	0.3235
Pneumonia and influenza		J12-J18	0.05	0.05
Psoriasis		L40 excluding L405	0.03	0.01
Road accidents		V01-V89	0.4	0.305
Spontaneous abortion		O03	0	0.12
Stroke		I60-I69	0.0815	0.0805
Supra ventricular cardiac arrhythmias, atrial fibrillation and flutter		I470-I471, I479, I48	0.17	0.09
Tuberculosis		A15-A19	0.25	0.25
Water transport accidents		V90-V94	0.2	0.2
Work/machine injuries		W24-W31	0.16	0.16

An additional attributable fraction of 0.11 (11%) was applied to teenage conceptions (under 18s) to estimate the numbers presented in Figure i – see section 6.5 Teenage conceptions.

Appendix 2: Brief description of lifestyle analyses and groups (P² People & Places) and deprivation analyses.

P² People and Places geodemographic classifications use Census information to cluster together local areas (using LSOA data) where resident populations have very similar characteristics. These groups offer an alternative geographical breakdown based on socio-economics and are related to the IMD deprivation analyses. There are 13 geodemographic classifications in total, based on a sliding scale running from least deprived to most deprived. A brief description is outlined below.

A. Mature Oaks

Comprised of wealthy, older working people living in large detached houses in rural areas.

B. Blossoming Families

Typified by well qualified, and well paid, young professional families with infants, buying their detached houses.

C. Country Orchards

Predominantly well educated, high income agricultural workers who are likely to be self-employed.

D. Rooted Households

Largely semi-skilled manual workers, with quite high incomes, buying their semi-detached houses.

E. Senior Neighbourhoods

Characterised by older people or pensioners who are quite affluent living in their owner occupied detached houses; quite likely to own a second home.

F. Qualified Metropolitans

Largely highly qualified professional commuters living in small single households concentrated in city centres.

G. Suburban Stability

Predominantly skilled manual, routine and semi-routine workers living in semi-detached and terraced housing.

H. New Starters

Primarily students and highly qualified but low income young adults living in single or cohabiting bedsits or flats.

I. Urban Producers

Mainly semi-skilled, unskilled, unemployed and unqualified single parent smokers with low incomes, living in terraced council housing.

J. Weathered Communities

Comprising unemployed, low income pensioners or lone parent families with routine or semi-routine occupations living in semi-detached housing or purpose built flats.

K. Multicultural Centres

Characterised by semi-skilled, unskilled and unemployed Jewish, Muslim, Black, Chinese, Indian, Pakistani and Bangladeshi low income families living in terraces.

L. Disadvantaged Households

Predominantly low income, poorly qualified young families or lone parents, who smoke and live in council or housing association homes.

M. Urban Challenge

Typified by unemployed, low income older smokers living in small council or housing association homes.

Measures of deprivation have been derived from the Index of Multiple Deprivation (IMD) 2004 for England and Wales. This provides a composite multiple deprivation score for Lower Super Output Areas (LSOAs) developed from seven distinct domains: health deprivations and disability, employment, income, education, skills and training, living environment, and barriers to housing and services. Where data are only available at a local authority level, these have been plotted against the average deprivation score for local authorities in England. Where data are available by LSOA, LSOA deprivation scores have been allocated to a deprivation quintile for England, running from the most deprived to the least deprived. Average rates/percentages have then been calculated for each deprivation quintile.

Appendix 3: European data

Table 62: Standardised death rate for chronic liver disease and cirrhosis, all ages per 100,000 population. European countries, 2001-2005.

	2001	2002	2003	2004	2005
Austria	19.1	17.6	18.3	17.5	16.7
Croatia	27.1	26.1	23.3	22.5	22.4
Czech Republic	16.9	16.1	16.7	15.8	16.5
Denmark	13.9	...	...	...	...
Estonia	22.1	21.7	20.0	20.6	21.7
Finland	12.2	13.2	12.4	16.0	17.6
France	13.3	12.9	12.6	...	...
Germany	17.0	17.0	16.7	15.5	...
Greece	5.0	4.7	4.8	4.7	...
Hungary	56.7	53.5	53.5	51.0	44.5
Iceland	1.4	0.7	1.4	2.1	...
Ireland	5.8	4.9	5.0	5.1	5.4
Italy	13.8	...	...	...	...
Latvia	15.0	14.4	14.0	14.2	15.3
Lithuania	19.1	18.5	21.0	21.1	26.0
Luxembourg	16.8	17.1	12.7	11.8	11.4
Malta	4.1	4.6	7.3	5.5	6.4
Netherlands	4.5	4.5	4.5	4.4	...
Norway	4.2	4.8	4.6	5.1	...
Poland	13.6	13.0	12.7	14.1	...
Portugal	16.5	14.1	13.3	13.3	...
Romania	49.4	50.6	46.5	44.5	...
Slovakia	25.3	26.6	24.9	22.7	24.8
Slovenia	34.1	29.5	31.3	27.2	21.9
Spain	10.5	10.2	9.9	9.5	...
Sweden	5.4	5.3	...	...	...
Switzerland	7.9	8.3	8.0	7.0	...
United Kingdom	10.2	10.4	11.1	10.9	...

Source: European Health for All (HfA) database <http://data.euro.who.int/hfad/>

Table 63: Standardised death rate for selected alcohol-related causes, all ages per 100,000 population. European countries, 2001-2005.

	2001	2002	2003	2004	2005
Austria	73.5	73.3	73.6	69.6	69.3
Belgium	...	...	...	...	...
Croatia	95.9	92.0	92.5	89.8	90.5
Cyprus	...	...	...	49.4	...
Czech Republic	84.3	84.0	89.7	84.8	81.0
Denmark	76.0	...	...	...	...
Estonia	197.0	174.3	165.9	162.1	158.3
Finland	90.9	88.5	87.6	95.1	93.3
France	82.2	80.4	79.4	...	...
Germany	62.0	62.1	61.5	58.2	...
Greece	44.4	40.4	41.0	41.4	...
Hungary	151.8	149.5	149.6	143.5	129.5
Iceland	51.6	45.2	40.1	43.0	...
Ireland	59.7	55.8	51.6	45.2	46.5
Italy	53.3	...	...	...	...
Latvia	182.4	173.8	160.2	153.5	157.2
Lithuania	185.5	175.9	177.0	173.1	190.8
Luxembourg	87.3	89.4	76.0	66.3	66.1
Malta	40.1	37.1	43.7	35.9	36.9
Netherlands	43.4	42.2	42.7	40.9	...
Norway	51.8	52.8	55.6	59.1	...
Poland	88.4	89.0	86.5	88.3	...
Portugal	68.9	74.4	71.0	...	...
Romania	122.3	127.0	121.2	114.9	...
Slovakia	92.4	92.8	91.1	87.9	90.6
Slovenia	117.5	109.2	111.4	104.0	93.8
Spain	54.0	52.4	52.9	51.4	...
Sweden	52.9	52.1	...	...	...
Switzerland	57.9	56.6	54.8	52.4	...
United Kingdom	51.9	51.5	52.3	52.1	...

Source: European Health for All (HfA) database <http://data.euro.who.int/hfad/>

Table 64: Standardised mortality ratio for men and women for liver cirrhosis at all ages per 100,000 population per year. European countries, 1997-2001.

	Males	Females
Austria	43.5	16.7
Denmark*	34.2	15.6
England and Wales	14.1	7.7
Finland	28.7	9.9
France	28.1	10.8
Germany	33.6	13.9
Ireland	11.1	6.5
Italy	26.5	12.2
Netherlands	9.7	5.9
Norway	12.1	6.7
Portugal	34.7	11.1
Scotland	34.4	16.1
Spain	25.1	8.2
Sweden	13.5	5.6

*1997-2000 only

Source: Leon and McCambridge (2006)⁹⁴.

⁹⁴ Leon DA and McCambridge J (2006). Liver cirrhosis mortality rates from Britain from 1950-2002, an analysis of routine data. The Lancet, 367: 52-56.

Table 65: Percentage of 15-16 year olds hospitalised or admitted to an emergency room due to alcohol use. European countries, 2003.

	Males	Females
Austria	2	1
Belgium	1	1
Bulgaria	3	1
Croatia	1	1
Cyprus	1	0
Czech Republic	1	1
Denmark	4	4
Estonia	3	1
Faroe Island	2	2
Finland	2	3
France	1	1
Germany	2	2
Greece	1	1
Greenland	3	2
Hungary	1	1
Iceland	2	2
Ireland	3	3
Isle of Man	2	4
Italy	2	1
Latvia	1	1
Lithuania	3	1
Netherlands	1	0
Norway	2	2
Poland	2	1
Portugal	1	1
Romania	2	0
Russia	2	1
Slovak Republic	1	1
Slovenia	1	1
Sweden	3	2
Switzerland	1	1
Turkey	3	1
Ukraine	2	1
United Kingdom	2	3

Source: Hibell et al (2004)⁹⁵.

⁹⁵ Hibell B, Anderson B, Bjarnason T, Ahlstrom S, Balakireia O, Kokkeri A and Morgan M (2004). The ESPAD report 2003. Alcohol and other drug use among students in 35 European countries. Stockholm, Sweden: Modintryckoffset AB.

Table 66: Percentage of 15-16 year olds who engaged in unprotected sex as a result of alcohol use. European countries, 2003.

	Males	Females
Austria	5	3
Belgium	3	1
Bulgaria	6	3
Croatia	3	1
Cyprus	2	0
Czech Republic	4	4
Denmark	6	7
Estonia	4	4
Faroe Island	3	9
Finland	4	8
France	1	1
Germany	3	3
Greece	2	0
Greenland	17	21
Hungary	3	2
Iceland	3	7
Isle of Man	8	14
Italy	3	1
Latvia	4	3
Lithuania	7	3
Malta	2	2
Netherlands	2	1
Norway	5	6
Poland	5	3
Portugal	2	1
Romania	5	1
Russia	5	4
Slovak Republic	3	3
Slovenia	3	2
Sweden	5	12
Switzerland	2	2
Turkey	3	1
Ukraine	6	4
United Kingdom	6	11

Source: Hibell et al (2004)⁹⁶.

⁹⁶ Hibell B, Anderson B, Bjarnason T, Ahlstrom S, Balakireia O, Kokkeri A and Morgan M (2004). The ESPAD report 2003. Alcohol and other drug use among students in 35 European countries. Stockholm, Sweden: Modintryckoffset AB.

Table 67: Rate per 1,000 of births in women aged 15-19. European countries, 1998.

	Rate per 1,000
Austria	14.0
Belgium	9.9
Czech Republic	16.4
Denmark	8.1
Finland	9.2
France	9.3
Germany	13.1
Greece	11.8
Hungary	26.5
Iceland	24.7
Ireland	18.7
Italy	6.6
Luxembourg	9.7
Netherlands	6.2
Norway	12.4
Poland	18.7
Portugal	21.2
Slovak Republic	26.9
Spain	7.9
Sweden	6.5
Switzerland	5.5
United Kingdom	30.8

Source: UNICEF (2001)⁹⁷

⁹⁷ UNICEF (2001). A league table of teenage births in rich nations. Florence, Italy: UNICEF.

Table 68: Percentage of 15-16 year olds who have performed poorly at school or work due to alcohol use. European countries, 2003.

	Males	Females
Austria	4	2
Belgium	1	1
Bulgaria	5	3
Croatia	2	1
Cyprus	1	0
Czech Republic	5	4
Denmark	6	6
Estonia	5	3
Faroe Island	5	4
Finland	3	4
France	1	1
Germany	2	2
Greece	1	0
Greenland	3	4
Hungary	3	2
Iceland	2	2
Ireland	5	5
Isle of Man	3	5
Italy	2	1
Latvia	4	4
Lithuania	12	8
Malta	1	1
Netherlands	2	1
Norway	2	2
Poland	4	2
Portugal	4	2
Romania	4	1
Russia	6	5
Slovak Republic	6	5
Slovenia	3	2
Sweden	2	3
Switzerland	2	1
Turkey	3	1
United Kingdom	3	4

Source: Hibell et al (2004)⁹⁸.

⁹⁸ Hibell B, Anderson B, Bjarnason T, Ahlstrom S, Balakireia O, Kokkeri A and Morgan M (2004). The ESPAD report 2003. Alcohol and other drug use among students in 35 European countries. Stockholm, Sweden: Modintryckoffset AB.

Table 69: Percentage of adults (15+) who drank alcohol in the last 12 months. European countries, 1996-2003.

	Males	Females
Austria	---	---
Belgium	88.5	74.3
Bulgaria	78.2	49.2
Croatia	---	---
Cyprus	77.0	42.4
Czech Republic	89.4	72.8
Denmark	---	---
Estonia	83.7	62.7
Finland	83.0	73.4
France	---	---
Germany	90.1	77.6
Greece	---	---
Hungary	71.5	37.7
Iceland	91.0	84.3
Ireland	86.6	82.6
Italy	89.1	66.5
Latvia	83.5	72.6
Lithuania	94.3	92.4
Luxembourg	---	---
Malta	78.3	56.2
Netherlands	91.0	78.3
Norway	89.7	81.4
Poland	81.6	59.5
Portugal	76.7	40.8
Romania	68.2	34.2
Slovak Republic	91.0	81.4
Slovenia	92.3	83.4
Spain	68.7	44.1
Sweden	90.6	83.8
Switzerland	85.4	69.0
United Kingdom	90.6	85.0

Source: European Commission/Eurostat (2005)⁹⁹

Table 70: Percentage of 18-64 year olds drinking at least once a week. Seven European countries, 2000.

	Males	Females
Finland	60	33
France	68	38
Germany	60	40
Ireland	69	51
Italy	76	52
Sweden	47	24
United Kingdom	74	51

Source: Leifman (2002)¹⁰⁰.

⁹⁹ European Commission/Eurostat (2005). Health in Europe 2005 edition. Luxembourg: European Communities.

¹⁰⁰ Leifman H (2002). A comparative analysis of drinking patterns in six EU countries in the year 2000. Contemporary Drug Problems, 29: 501-548.

Table 71: Frequency of use of any alcohol beverage during the last 12 months by school children aged 15-16. European countries, 2003.

	Boys %					Girls %				
	0	1- 9	10-19	20-39	40+	0	1-9	10-19	20-39	40+
Austria	8	31	15	14	32	6	38	21	19	17
Belgium	13	33	16	13	25	15	44	19	12	10
Bulgaria	13	46	15	10	16	14	59	13	7	7
Croatia	15	42	15	12	16	21	53	13	7	6
Cyprus	16	42	18	13	13	26	53	11	6	3
Czech Republic	5	38	16	14	28	5	46	20	14	14
Denmark	4	27	21	19	29	5	35	23	19	17
Estonia	14	46	16	11	13	11	54	16	10	9
Faroe Islands	24	30	18	15	11	24	34	16	16	10
Finland	22	52	14	7	6	19	50	18	8	5
France	18	50	15	9	8	22	57	13	5	3
Germany	7	40	17	16	19	7	48	22	13	10
Greece	7	42	20	14	19	10	50	17	16	7
Greenland	32	45	15	6	4	23	55	12	5	6
Hungary	16	52	12	10	10	16	62	12	6	4
Iceland	38	43	9	5	5	35	44	12	5	3
Ireland	14	37	17	14	17	10	33	18	16	23
Isle of Man	8	39	22	13	19	4	42	24	16	14
Italy	15	44	16	12	15	20	55	12	7	5
Latvia	14	55	13	9	10	12	59	15	10	5
Lithuania	6	47	19	15	14	6	57	20	11	6
Malta	9	36	16	16	23	11	46	18	13	13
Netherlands	14	26	15	13	34	15	37	20	16	12
Norway	26	49	13	6	7	21	53	14	8	4
Poland	12	47	17	10	14	17	57	13	7	6
Portugal	24	48	12	7	9	28	57	9	4	2
Romania	16	54	13	9	9	23	60	10	4	3
Russia	18	37	14	11	20	11	49	16	12	11
Slovak Republic	10	43	20	10	17	9	59	16	9	7
Slovenia	15	46	16	10	13	19	55	14	7	5
Sweden	23	53	14	6	5	23	55	13	5	4
Switzerland	12	44	15	13	16	13	55	17	10	6
Turkey	60	28	5	3	5	72	22	3	2	1
Ukraine	17	53	15	8	8	15	60	14	6	5
United Kingdom	10	35	17	15	23	8	42	19	16	15

 Source: Hibell et al (2004)¹⁰¹.

¹⁰¹ Hibell B, Anderson B, Bjarnason T, Ahlstrom S, Balakireia O, Kokkeri A and Morgan M (2004). The ESPAD report 2003. Alcohol and other drug use among students in 35 European countries. Stockholm, Sweden: Modintryckoffset AB.

Table 72: Negative consequences experienced following the use of alcohol. European countries, 2003.

	Boys %				Girls %			
	Engaged in unprotected sex	Trouble with police	Admitted to hospital/A&E	Performed poorly at school	Engaged in unprotected sex	Trouble with police	Admitted to hospital/A&E	Performed poorly at school
Austria	5	5	2	4	3	2	1	2
Belgium	3	4	1	1	1	1	1	1
Bulgaria	6	6	3	5	3	2	1	3
Croatia	3	4	1	2	1	2	1	1
Cyprus	2	2	1	1	0	0	0	0
Czech Republic	4	4	1	5	4	2	1	4
Denmark	6	9	4	6	7	3	4	6
Estonia	4	11	3	5	4	6	1	3
Faroe Islands	3	4	2	5	9	2	2	4
Finland	4	6	2	3	8	8	3	4
France	1	2	1	1	1	1	1	1
Germany	3	3	2	2	3	2	2	2
Greece	2	1	1	1	0	0	1	0
Greenland	17	4	3	3	21	2	2	4
Hungary	3	3	1	3	2	1	1	2
Iceland	3	7	2	2	7	5	2	2
Ireland	-	12	3	5	-	11	3	5
Isle of Man	8	13	2	3	14	15	4	5
Italy	3	2	2	2	1	1	1	1
Latvia	4	6	1	4	3	3	1	4
Lithuania	7	11	3	12	3	4	1	8
Malta	2	2	0	1	2	0	0	1
Netherlands	2	5	1	2	1	2	0	1
Norway	5	4	2	2	6	4	2	2
Poland	5	7	2	4	3	3	1	2
Portugal	2	2	1	4	1	0	1	2
Romania	5	5	2	4	1	1	0	1
Russia	5	11	2	6	4	4	1	5
Slovak Republic	3	4	1	6	3	2	1	5
Slovenia	3	5	1	3	2	2	1	2
Sweden	5	4	3	2	12	3	2	3
Switzerland	2	4	1	2	2	2	1	1
Turkey	3	3	3	3	1	1	1	1
Ukraine	6	6	2	5	4	2	1	3
United Kingdom	6	9	2	3	11	11	3	4

Source: Hibell et al (2004)¹⁰².¹⁰² Hibell B, Anderson B, Bjarnason T, Ahlstrom S, Balakireia O, Kokkeri A and Morgan M (2004). The ESPAD report 2003. Alcohol and other drug use among students in 35 European countries. Stockholm, Sweden: Modintryckoffset AB.

Appendix 4: 'Traffic light' indicators

KEY: Regional value against the England average based on 95% confidence intervals (CIs) unless otherwise stated.

Better than average

Consistent with average

Worse than average

*Confidence intervals unavailable

#Proportion attributable to alcohol unavailable

Indicator		England	North East	North West	Yorkshire and The Humber	East Midlands	West Midlands	East of England	London	South East	South West
LIFE LOST AND MORTALITY											
Months of life lost per person (under 75 years) due to alcohol (2003-05)*	Males	9.9	12.2	12.6	10.6	9.5	11.2	8.1	9.6	8.5	9.0
	Females	4.4	5.5	5.8	4.6	4.6	4.8	3.6	3.8	3.8	3.6
Years of life lost per person dying from alcohol-attributable conditions (2003-05)*	Males	20.2	20.9	21.2	20.6	20.1	20.4	19.3	21.7	19.2	18.5
	Females	15.1	16.3	16.4	15.4	15.6	15.3	14.3	15.7	14.1	13.2
Percentage of total deaths that are alcohol-specific (2005)	Males	1.39	1.62	1.77	1.49	1.21	1.60	0.92	1.35	1.22	1.33
	Females	0.59	0.70	0.87	0.49	0.57	0.73	0.47	0.51	0.51	0.44
Percentage of total deaths that are alcohol-attributable (2005)	Males	5.80	6.07	6.39	5.97	5.51	6.05	5.16	5.84	5.58	5.60
	Females	3.91	3.88	4.23	3.76	3.82	4.17	3.66	3.89	3.84	3.87
Rate of alcohol-specific mortality (under 75 years) per 100,000 population (2005)	Males	12.5	16.7	17.8	14.2	10.6	15.4	7.8	11.2	9.8	12.1
	Females	5.7	7.8	9.3	5.0	5.5	7.5	4.5	4.0	4.8	4.3
Rate of alcohol-specific mortality (all ages) per 100,000 population (2005)	Males	12.5	16.2	17.4	14.0	10.7	15.2	7.9	11.1	10.0	12.3
	Females	5.6	7.6	9.0	4.9	5.4	7.3	4.4	4.0	4.8	4.3
Rate of mortality from chronic liver disease including cirrhosis per 100,000 population (2005)	Males	13.4	16.7	18.7	14.1	12.6	15.1	8.1	14.8	10.8	11.8
	Females	6.8	8.4	10.3	6.4	7.1	8.1	5.1	6.0	5.6	5.3
Rate of alcohol-attributable mortality (under 75 years) per 100,000 population (2005)	Males	35.6	42.6	45.7	38.9	33.5	39.5	28.5	34.3	30.2	33.3
	Females	15.1	17.9	20.0	15.3	15.2	17.3	12.8	13.3	13.5	12.8

Indicator		England	North East	North West	Yorkshire and The Humber	East Midlands	West Midlands	East of England	London	South East	South West
Rate of alcohol-attributable mortality (all ages) per 100,000 population (2005)	Males	47.2	55.1	58.1	51.3	44.8	52.0	39.7	44.4	41.7	44.5
	Females	23.8	27.1	29.3	23.9	23.8	26.4	21.0	21.5	21.9	21.4
SECONDARY CARE - HOSPITAL ADMISSION											
Age standardised rate of hospital admission for alcohol-specific conditions (2005/06)	Males	339.7	532.1	536.3	335.0	287.9	323.3	221.5	348.1	259.1	338.6
	Females	164.1	263.5	270.1	159.4	142.1	147.8	114.4	121.4	139.2	176.3
Age standardised rate of hospital admission for alcohol-attributable conditions (2005/06)	Males	909.0	1,232.1	1,214.5	937.7	846.5	876.7	742.9	896.3	761.5	902.1
	Females	510.4	689.2	674.3	522.1	487.1	490.5	424.5	449.1	452.2	522.2
SOCIAL AND BEHAVIOURAL OUTCOMES											
Rate of alcohol-related crime per 1,000 population (2006/07)	All crimes	10.2	9.4	10.7	11.2	9.8	10.2	7.6	13.5	9.2	8.5
	Violent crime	7.2	7.0	7.3	7.7	6.8	7.3	5.4	9.0	6.9	6.4
	Sexual offences	0.14	0.13	0.13	0.14	0.15	0.14	0.11	0.16	0.14	0.13
Percentage of adults who stated that alcohol was a cause of crime in Britain today (2004/05-2005/06)	A major cause	47.9	48.5	52.1	41.6	47.7	46.4	48.4	43.3	49.7	50.1
	The main cause	5.7	6.5	5.8	4.1	5.0	5.3	5.7	5.5	6.8	6.2
Rate of anti-social behaviour orders (ASBOs) issued per 100,000 population [#] (2005)		7.7	10.1	12.8	10.6	6.9	8.6	6.1	7.1	4.4	4.1
Claimants of Incapacity Benefit (IB) or Severe Disablement Allowance (SDA) whose main medical reason is alcoholism (August 2006)	Rate per 100,000 working age population	122.7	169.7	201.0	115.2	92.4	104.9	67.5	137.0	91.6	132.1
Percentage of drivers in injury road accidents (2005) who:	fail a breath test	4.3	4.4	4.5	5.2	4.2	4.6	4.3	2.7	4.5	4.3
Rate of casualties from road accidents involving illegal alcohol levels per 100,000 population (2005)		27.0	26.6	31.1	27.1	30.4	32.1	29.8	11.6	27.8	32.4
Rate of alcohol-attributable mortality due to land transport accidents per 100,000 population (2003-05)		2.0	2.0	1.8	2.2	2.5	2.2	2.3	1.3	2.0	2.0
Rate of conception per 1,000 females [#]	Under 16 (2003-05)	7.7	9.9	8.3	8.9	7.4	8.6	6.0	9.1	6.2	6.5
	Under 18 (2005)	41.1	49.6	46.4	47.7	40.2	45.3	32.7	44.6	34.2	34.2

Indicator		England	North East	North West	Yorkshire and The Humber	East Midlands	West Midlands	East of England	London	South East	South West
Percentage of half days missed due to unauthorised absence in maintained secondary schools# (2004/05)		1.2	1.0	1.3	1.6	1.5	1.1	1.0	1.4	1.2	1.0
Rate of drug or alcohol-related exclusions from school per 100,000 pupils (2004/05)	Fixed period	145.9	132.9	166.6	150.0	125.8	116.8	154.3	73.6	182.5	209.0
	Permanent	6.2	7.5	6.4	5.0	6.0	6.9	5.9	6.6	6.9	7.0
ALCOHOL CONSUMPTION											
Percentage of adults consuming alcohol on five or more days a week (2000-04)	Males	24.2	19.7	22.8	23.9	23.5	23.8	24.2	22.2	29.2	25.2
	Females	14.2	10.1	12.8	13.3	13.6	14.1	14.6	12.4	18.5	15.5
Percentage of adults who drank over 8/6 units on the heaviest drinking day in the last week (binge drinking) - Health Survey for England (2005)	Males	19.3	28.8	25.9	21.1	21.7	23.9	12.8	11.4	17.1	17.2
	Females	8.1	10.9	11.4	10.9	8.0	8.1	6.6	4.6	6.1	7.5
Percentage of adults who drank over 8/6 units on the heaviest drinking day in the last week (binge drinking) - General Household Survey (2005)	Males	17.0	19.0	22.2	22.6	16.7	15.3	15.7	12.5	13.9	17.6
	Females	7.4	8.6	10.2	11.6	6.5	6.1	6.4	4.8	6.0	7.3
Percentage of adults consuming hazardous and harmful levels of alcohol - Health Survey for England (2000-02)	Males	30.3	34.4	35.5	34.6	28.3	31.1	27.3	27.1	28.4	27.5
	Females	17.6	18.4	19.9	20.7	16.1	15.5	16.2	15.9	19.3	15.0
Percentage of adults consuming harmful levels of alcohol - Health Survey for England (2000-02)	Males	7.0	7.1	9.6	9.0	6.7	7.6	5.8	6.0	5.9	5.0
	Females	2.7	4.9	3.0	2.9	3.0	2.4	2.8	2.3	2.3	1.4
Percentage of adults consuming hazardous and harmful levels of alcohol - General Household Survey (2000-02)	Males	27.4	33.8	30.5	30.5	29.7	25.8	23.1	23.8	26.7	27.4
	Females	17.1	18.5	20.2	18.4	17.4	14.5	15.8	14.0	18.0	17.0
Percentage of adults consuming harmful levels of alcohol - General Household Survey (2000-02)	Males	6.4	10.0	7.0	7.4	6.9	5.4	5.2	6.1	5.9	6.0
	Females	3.1	3.9	3.8	4.0	3.7	2.7	2.9	1.8	2.8	3.1
Percentage of adults consuming hazardous and harmful levels of alcohol - General Household Survey (2005)	Males	24.5	25.7	27.9	28.4	24.3	24.2	23.9	21.1	22.2	24.7
	Females	14.5	16.1	18.1	17.8	12.5	13.7	13.1	10.5	14.5	14.1

Indicator		England	North East	North West	Yorkshire and The Humber	East Midlands	West Midlands	East of England	London	South East	South West
Percentage of adults consuming harmful levels of alcohol - General Household Survey (2005)	Males	5.6	6.6	6.0	8.0	4.7	5.1	5.3	4.8	4.8	5.8
	Females	2.2	2.1	2.5	2.5	1.6	2.7	1.3	2.0	2.6	2.3
Percentage of adults consuming hazardous and harmful levels of alcohol - Psychiatric Morbidity Survey (2000)	Males	35.6	45.9	42.9	40.2	32.2	36.6	27.1	34.3	33.3	32.8
	Females	14.8	19.7	19.7	17.8	11.9	12.8	12.2	17.3	10.9	13.3
Percentage of adults consuming harmful levels of alcohol - Psychiatric Morbidity Survey (2000)	Males	5.2	8.9	4.5	5.5	2.3	5.4	3.9	7.3	6.1	4.0
	Females	1.5	2.9	1.9	2.3	0.6	1.7	1.1	1.6	0.9	1.4
Percentage of adults with dependent levels of alcohol consumption (2000)	Males	10.8	13.4	13.1	10.4	10.9	9.3	8.0	13.3	11.3	8.5
	Females	3.1	3.8	4.6	3.3	1.8	2.7	3.0	4.5	2.2	1.6
Percentage of pupils who consumed seven or more units in last seven days*	Year 8 (2003-06)	5.5	8.7	5.7	5.3	12.7	6.0	5.3	2.9	7.5	6.1
	Year 10 (2002-06)	19.0	26.8	20.2	21.6	13.6	20.4	19.9	8.4	20.3	22.5
Percentage of 13-15 year olds who consumed seven or more units in last seven days (2002)		8.2	8.8	7.6	11.4	8.3	5.6	12.6	4.4	8.0	7.8

Indicator		England and Wales	Tyne Tees	Granada (including part Border TV)	Yorkshire	Central	Anglia	London	Meridian	Harlech and Westward
THE ALCOHOL ECONOMY										
Volume of alcohol (litres per person) sold in on licensed venues* (2004)		66	80	76	75	64	54	57	52	76

Appendix 5: Remaining indicators

KEY: For selected indicators – regional value against the England average based on 95% confidence intervals (CIs):

Lower than average

Consistent with average

Higher than average

*Confidence intervals unavailable

Indicator		England	North East	North West	Yorkshire and The Humber	East Midlands	West Midlands	East of England	London	South East	South West
TREATMENT AND CARE DELIVERY											
Prevalence-service utilisation ratio* (2004)		18.0	101.9	11.8	46.0	15.7	15.3	31.2	13.2	20.2	14.3
SOCIAL AND BEHAVIOURAL OUTCOMES											
Claimants of Incapacity Benefit (IB) or Severe Disablement Allowance (SDA) whose main medical reason is alcoholism (August 2006)	Percentage of total claimants	1.8	1.6	2.0	1.5	1.4	1.4	1.3	2.2	1.9	2.0
Percentage of drivers in injury road accidents (2005) who:	are given a breath test	52.2	55.8	50.8	42.2	60.2	55.9	57.3	38.8	53.6	61.3
Percentage of adults who made nine or more visits to a pub or bar in the evening in the last month (2004/05-2005/06)		7.1	8.8	7.5	8.3	7.4	7.9	6.0	6.0	6.3	6.7
Percentage of adults who made four or more visits to a nightclub or disco in the last month (2004/05-2005/06)		2.3	3.2	2.8	2.4	2.2	2.3	1.7	2.0	2.0	2.2
ALCOHOL CONSUMPTION											
Mean weekly units consumed by self-reported moderate drinking adults - General Household Survey (2000-02)*	Males	23.0	27.2	24.1	25.1	24.4	22.7	20.9	20.7	22.3	22.2
	Females	14.8	15.2	15.1	16.2	15.9	14.2	14.4	13.1	14.3	15.2
Mean units consumed on the heaviest day in the last seven days by self-reported moderate drinking adults - General Household Survey (2000-05)*	Males	6.9	7.5	7.6	7.9	7.3	6.9	6.2	6.2	6.2	6.6
	Females	4.3	5.0	4.8	5.1	4.5	4.2	3.7	3.8	3.9	4.2
THE ALCOHOL ECONOMY											
Purchases of alcoholic drinks (ml per person per week) (2003-06)*	Household	766	868	886	838	829	705	747	570	758	815
	Eating out	641	815	770	860	662	637	524	535	545	585

Indicator		England	North East	North West	Yorkshire and The Humber	East Midlands	West Midlands	East of England	London	South East	South West
Purchases of alcoholic drinks (pence per person per week) (2003-06)*	Household	266	234	291	256	265	237	255	234	295	299
	Eating out	365	388	396	429	364	328	308	386	344	355
Proportion of total expenditure on food and drink spent on alcoholic drinks (2003-06)*	Household	11.5	11.0	12.8	11.8	11.5	11.0	10.5	10.4	11.8	12.4
	Eating out	32.0	38.5	35.9	37.1	32.5	32.8	28.8	28.5	29.4	31.8
Rate of licensed premises per 10,000 population (2004)	On licence	21.2	18.6	23.0	22.6	17.8	18.0	20.0	20.6	20.7	27.8
	Off licence	8.7	10.5	9.1	8.5	7.4	8.1	8.0	10.1	7.6	9.7
Percentage of total employees employed in bars (2005)		2.1	2.6	2.4	2.3	2.5	2.4	1.9	1.4	2.0	2.4

Indicator		England and Wales	Tyne Tees	Granada (including part Border TV)	Yorkshire	Central	Anglia	London	Meridian	Harlech and Westward
THE ALCOHOL ECONOMY										
Consumer on licence expenditure (£ per person) on alcohol (2004)*		334.1	337.1	353.2	327.8	303.9	287.1	358.1	306.3	373.1

Appendix 6: Glossary

AF	Attributable Fraction
ANARP	Alcohol Needs Assessment Research Project
APHO	Association of Public Health Observatories
ASBO	Anti-Social Behaviour Order
AUDIT	Alcohol Use Disorder Identification Test
BAC	Blood Alcohol Content
BCS	British Crime Survey
CJSA	Criminal Justice System Areas
CLD	Chronic Liver Disease
DCMS	Department for Culture, Media and Sport
DSR	Directly Standardised Rate
DWP	Department for Work and Pensions
EU	European Union
FCE	Finished Consultant Episode
GHS	General Household Survey
GOR	Government Office Region
GP	General Practice
HES	Hospital Episode Statistics
HRBQ	Health Related Behaviour Questionnaire
HSE	Health Survey for England
IB	Incapacity Benefit
ICD	International Classification of Diseases
IHD	Ischaemic Heart Disease
IMD	Index of Multiple Deprivation
LA	Local Authority
LSOA	Lower Super Output Area
MSOA	Middle Super Output Area
NatCen	National Centre for Social Research
NCHOD	National Centre for Health Outcomes Development
NDTMS	National Drug Treatment Monitoring System
NFER	National Foundation for Educational Research
NRCS	National Crime Recording Standard
NTA	National Treatment Agency
ONS	Office for National Statistics
PMS	Psychiatric Morbidity Survey
PSA	Public Service Agreements
PSUR	Prevalence Service Utilisation Ratio
PYLL	Potential Years of Life Lost
QOF	Quality and Outcomes Framework
SASQ	Single Alcohol Screening Question
SDA	Severe Disablement Allowance
SDR	Standardised Death Rate
SHA	Strategic Health Authority
SHEU	Schools Health Education Unit
SMR	Standardised Mortality Ratio



About the Association of Public Health Observatories (APHO)

The Association of Public Health Observatories (APHO) represents and coordinates a network of 12 public health observatories (PHOs) working across the five nations of England, Scotland, Wales, Northern Ireland and the Republic of Ireland.

APHO facilitates joint working across the PHOs to produce information, data and intelligence on people's health and health care for practitioners, policy makers and the public.

APHO is the:

- single point of contact for external partners
- learning network for members and participants
- advocate for users of public health information and intelligence.

Further information about APHO, the PHOs and their work can be obtained from www.apho.org.uk



About the North West Public Health Observatory (NWPHO) and Centre for Public Health

The North West Public Health Observatory (NWPHO) is an integrated part of public health intelligence in the Centre for Public Health at Liverpool John Moores University and the North West region. As a member of the Association of Public Health Observatories, NWPHO provides a lead role on alcohol, substance use, violence, dental health and work with the Health Protection Agency.

The Centre for Public Health is a vibrant research and teaching community working in partnership to deliver health at local, regional, national and international levels. Specialising in applied research and educational programmes, the Centre addresses health issues at all levels from policy development to service delivery. The Centre is firmly committed to a multi-disciplinary approach to public health and works not only with health services but also with local authorities, judicial bodies, environmental services and community groups.

NWPHO is one of six expert teams working together to produce comprehensive answers to public health issues and fulfils a regional public health information and intelligence function supporting the work of public health professionals, local authorities and providers of healthcare and other services relevant to health of the North West population.

