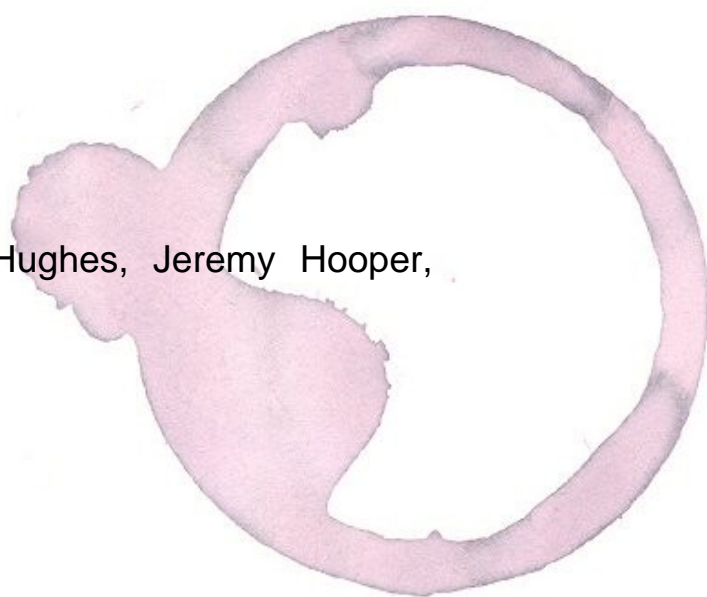


# Regional Alcohol Indicators for the North West of England 2006

Volume 1 (Part 1)

Main report

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# Regional Alcohol Indicators for the North West of England 2006

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# Executive Summary

The development of alcohol-related entertainment can offer economic and employment opportunities that are clear to both private investors and local authorities. However, what have often been more difficult to quantify are the negative effects on individual and community well being that result from alcohol use, and the subsequent pressures that fall on health, judicial and other public services. A wide range of research is beginning to identify ill health and crime costs associated with alcohol equivalent to billions of pounds each year. However, these studies often provide no ongoing measures of the negative consequences of alcohol use in particular areas or of any year-on-year progress in tackling them. In order to meet these needs the North West Regional Alcohol Harm Reduction Strategic Group tasked the Centre for Public Health to develop a set of indicators of alcohol-related harm that could be measured separately in each Local Authority and repeated annually in order to assess progress in tackling alcohol-related problems.

This, the first set of Regional Alcohol Indicators, provides:

- The latest data on crime and health related to alcohol for each individual Local Authority in the region and, for comparison, the North West average;
- Details on the direction of the indicator's trend (in terms of whether the impact of alcohol is growing or lessening) for each Local Authority and the North West as a whole;
- A summary of the key points for each indicator (e.g. areas in the North West most affected);
- Information on how the indicator relates to deprivation; and
- Details of methodologies and definitions used.

The indicators are a tool that we hope will aid health and judicial services as well as Local Authorities with planning interventions to reduce the negative consequences of alcohol. This initial indicators report serves to highlight the scale such consequences have already reached across the North West. Findings include:

- Alcohol-related health problems are reducing every individual's life expectancy (across the North West) on average by over ten and a half months for males and over six months for females;
- The average number of months of life lost attributable to alcohol increased by nearly 25 per cent among both males and females between 1995 and 2004 (increasing by 2.51 and 1.50 months respectively);
- The burden of ill-health attributable to alcohol, as measured by hospitalised admission and life expectancy, falls disproportionately on males and on the poorest areas in the region;
- Since 2002/03, recorded crime attributable to alcohol in the North West increased by eight per cent (to 0.87 offences per 1,000 of the population), whilst violent crime attributable to alcohol increased by nearly 40 per cent (to 2.14 per 1,000) (although changes to recording systems have contributed to these increases);
- Twenty-three per cent of the population in the North West are now estimated to be binge drinkers; and
- Across most alcohol indicators measured in this report, more urbanised areas such as Blackpool, Liverpool and Manchester suffer the greatest levels of alcohol-related harms. For example the rate of alcohol-related hospitalised admission among males in the most affected area (15.22 per 1,000 population in Liverpool) is two and a half times higher than that in the least affected area (6.09 per 1,000 in Fylde).

The *Regional Alcohol Indicators* is an ongoing project and we are keen to receive suggestions both on how existing indicators could be improved and of additional indicators that may be of use to those planning, commissioning or delivering services to reduce alcohol-related harms.

# Introduction

The North West of England is disproportionately affected by alcohol and its related harms (Drummond et al. 2005, Hughes et al. 2004). The region suffers from higher estimates of alcohol consumption and higher rates of alcohol-related mortality than other parts of England. However, even within the North West the impact of alcohol varies considerably. Local Authority areas differ in terms of alcohol consumption levels, the types and extent of alcohol-related harms experienced (such as crime and health problems), the direction in which trends in alcohol measures are moving and how fast such changes are occurring. Understanding the impact of alcohol within local areas is essential in identifying the burden imposed by alcohol and which types of interventions are required to reduce alcohol-related harms.

This report and its associated online tools (available through [www.nwpho.net/alcohol](http://www.nwpho.net/alcohol)) aim to provide information on the impact of alcohol at a local level to inform policy and practice throughout the North West. Wherever possible, the information is provided at a Local Authority level, with the aim of creating a profile of the alcohol situation in each Local Authority and enabling comparison between areas and the North West average.

## The structure of the report

In order to provide an accurate representation of the situation in each Local Authority, a variety of different alcohol-related indicators have been developed covering consumption, health, crime and licensing. The indicators used include:

1. Synthetic estimates of binge drinking;
2. The prevalence of hospitalised admission for alcohol specific causes;
3. The prevalence of hospitalised admission for all causes attributable to alcohol;
4. Reduced life expectancy attributable to alcohol;
5. All recorded crime attributable to alcohol;
6. All violent offences attributable to alcohol;
7. Sexual offences attributable to alcohol;
8. Drink driving; and
9. Premises licensed to sell alcohol.

For consistency, each indicator in the report follows a standard format, providing:

- The latest estimate for each indicator for each individual Local Authority in the region and the North West average;
- Information on how far each Local Authority's estimate varies from the North West average;
- Details on the direction of the indicator's trend (in terms of whether the impact of alcohol is growing or lessening) for each Local Authority and the North West as a whole;
- A summary of the key points for the indicator;
- Information on how the indicator relates to deprivation; and
- Details of the methodology and definitions used.

Health profiles specific to each individual Local Authority are available on request and through the above website. These present the indicator data specific to a particular Local Authority, summarising key points and illustrating how that locality compares both to other local authorities in the North West and to the North West as a whole.

## What next?

It is anticipated that the data in this report will be updated and published annually, to enable monitoring of the alcohol situation within Local Authorities and the region over time. It is also intended to expand the indicators used in the report in order to provide a broader picture of alcohol's impacts across the North West and locally. Based on Alcohol Concern's Alcohol Strategy Toolkit<sup>1</sup> and its suggested baseline indicators, possible future indicators include:

- The number of Anti-Social Behaviour Orders issued;
- The number of teenage pregnancies; and
- The rate of truancy.

Comments or recommendations on the potential direction of this project report will be welcomed.

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<sup>1</sup> Please see <http://www.localalcoholstrategies.org.uk> for more details

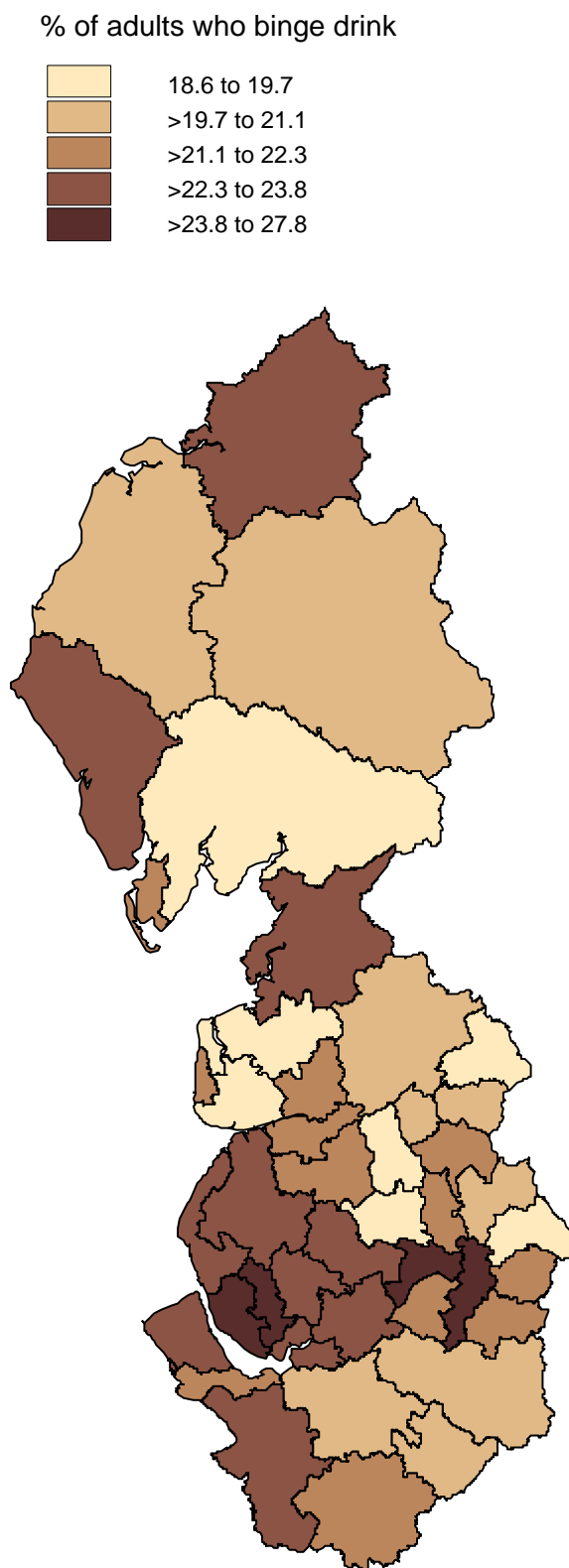
# Indicator 1: Synthetic estimates of binge drinking

**Table 1.1: Synthetic estimates: prevalence of binge drinking among the adult population between 2000 and 2002\***

Local Authority	Synthetic estimates of binge drinking (%)	Variation from North West total
Allerdale	21.1	-1.9
Barrow-in-Furness	21.8	-1.2
Blackburn with Darwen	18.6	-4.4
Blackpool	22.0	-1.0
Bolton	19.7	-3.3
Burnley	20.8	-2.2
Bury	21.4	-1.6
Carlisle	23.2	+0.2
Chester	22.9	-0.1
Chorley	22.3	-0.7
Congleton	21.0	-2.0
Copeland	23.3	+0.3
Crewe & Nantwich	21.5	-1.5
Eden	20.7	-2.3
Ellesmere Port & Neston	21.9	-1.1
Fylde	19.5	-3.5
Halton	23.8	+0.8
Hyndburn	20.6	-2.4
Knowsley	25.0	+2.0
Lancaster	23.1	+0.1
Liverpool	27.8	+4.8
Macclesfield	20.8	-2.2
Manchester	24.8	+1.8
Oldham	19.5	-3.5
Pendle	19.2	-3.8
Preston	22.0	-1.0
Ribble Valley	20.8	-2.2
Rochdale	20.1	-2.9
Rossendale	21.5	-1.5
Salford	24.7	+1.7
Sefton	23.4	+0.4
South Lakeland	19.6	-3.4
South Ribble	22.1	-0.9
St. Helens	22.7	-0.3
Stockport	21.9	-1.1
Tameside	22.2	-0.8
Trafford	22.3	-0.7
Vale Royal	21.0	-2.0
Warrington	22.9	-0.1
West Lancashire	22.7	-0.3
Wigan	22.7	-0.3
Wirral	22.6	-0.4
Wyre	18.7	-4.3
<b>North West</b>	<b>23.0</b>	<b>N/A</b>

\*Figures in this table may not add up exactly due to rounding.

**Map 1.1: Synthetic estimates: prevalence of binge drinking among the adult population (%) between 2000 and 2002**



## Indicator 1: Synthetic estimates of binge drinking

Few data are available at a Local Authority level on population alcohol consumption levels. Thus, for the purposes of this report synthetic estimates have been calculated using data from the Health Survey for England (2000, 2001 and 2002) and other demographic data sources (Box 1.1).

Between 2000 and 2002, 23 per cent of North West adults were estimated to be binge drinkers. This percentage varied across the region. Liverpool (27.8%), Knowsley (24.9%) and Manchester (24.8%) were estimated to have the highest levels of binge drinking, whilst Blackburn with Darwen (18.6%), Wyre (18.7%) and Pendle (19.2%) had the lowest.

Because of the nature of synthetic estimates (Box 1.1), it has not been possible to measure trends.

### **Box 1.1: Indicator description**

The Health Survey for England surveyed (in 2000, 2001 and 2002) over 30,400 adults (that is household residents aged 16 years and over) regarding their levels of alcohol consumption (Scholes et al. 2005). Participants provided details on the quantity of alcohol consumed on the day that they had drunk the largest quantity of alcohol in the previous week.

Binge drinking in the Health Survey for England was defined as (Pickering et al 2005; Scholes et al. 2005):

- For men, the percentage drinking eight units or more of alcohol on at least one day in the previous week; and
- For women, the percentage drinking six units or more of alcohol on at least one day in the previous week.

The Health Survey for England provided regional figures on alcohol consumption, but the sample sizes were too small to produce estimates by local authority areas (the lowest level at which the data can provide estimates for is by Strategic Health Authorities) (Pickering et al. 2005). As such, to provide estimates for Local Authorities, synthetic estimates have been calculated.

Synthetic estimates provide information on the expected prevalence of a specific behaviour such as binge drinking (Pickering et al. 2005). A statistical model is used describing the relationships between specific types of respondents (such as binge drinkers) and the characteristics of the area (such as demographic details). This model is used to ascertain prevalence estimates for specific cases, which can then be used to formulate estimates for specific areas based on their demographic characteristics.

For this report, data from three years of the Health Survey for England (2000, 2001 and 2002) were combined to produce a single dataset.

These estimates and the rankings provided for binge drinking in the individual Local Authority health profiles need to be viewed with caution. The data do not account for additional factors (such as local campaigns on healthy behaviour). In addition, it is not advised that they are used to measure trends (Pickering et al. 2005; Scholes et al. 2005).

## Indicator 2: Hospitalised admission for alcohol specific conditions

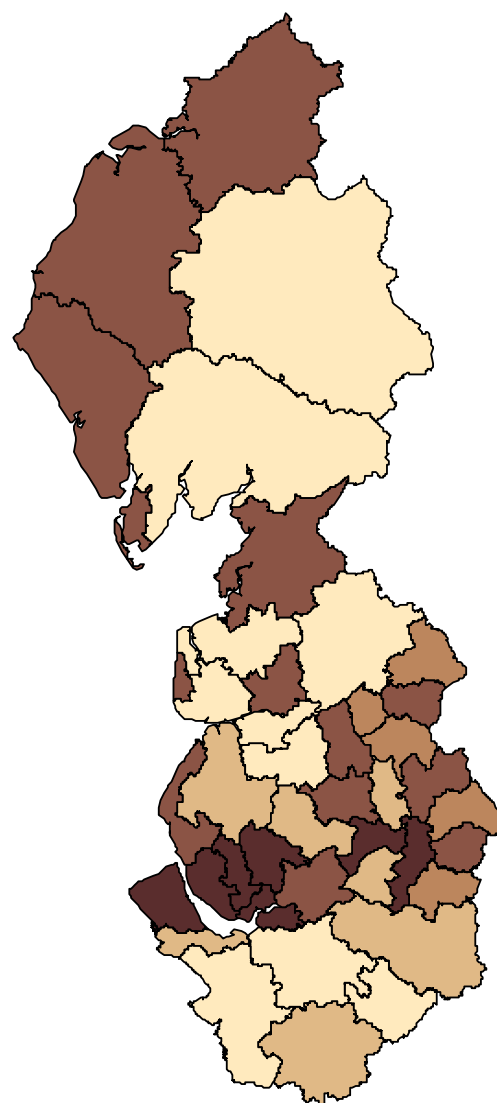
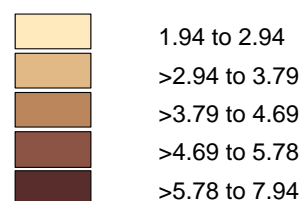
### a) Males

Table 2.1: Prevalence of hospitalised admission for alcohol specific conditions amongst males in 2004/05\*

Local Authority	Admission per 1,000 males in 2004/05	Variation from North West total	Change from 2003/04
Allerdale	5.08	+0.22	+0.89
Barrow-in-Furness	5.22	+0.35	+1.40
Blackburn with Darwen	4.95	+0.09	+1.19
Blackpool	5.20	+0.34	+0.35
Bolton	5.37	+0.50	+1.28
Burnley	5.77	+0.90	+0.28
Bury	3.79	-1.08	-0.31
Carlisle	5.05	+0.19	+0.13
Chester	2.75	-2.11	-0.14
Chorley	2.75	-2.11	-0.53
Congleton	1.98	-2.89	+0.01
Copeland	5.78	+0.91	+0.12
Crewe & Nantwich	3.09	-1.77	-0.13
Eden	2.41	-2.45	+0.29
Ellesmere Port & Neston	3.57	-1.30	+0.11
Fylde	2.13	-2.74	+0.21
Halton	6.14	+1.27	-0.17
Hyndburn	4.69	-0.17	+1.21
Knowsley	6.58	+1.71	+0.09
Lancaster	4.99	+0.12	-0.14
Liverpool	7.94	+3.08	+0.41
Macclesfield	3.10	-1.77	+0.90
Manchester	7.44	+2.58	+1.56
Oldham	4.41	-0.45	-0.39
Pendle	4.24	-0.62	-0.13
Preston	5.48	+0.62	+0.38
Ribble Valley	1.94	-2.93	+0.24
Rochdale	5.36	+0.50	+0.47
Rossendale	4.37	-0.49	+0.53
Salford	6.15	+1.28	+1.36
Sefton	5.14	+0.28	+0.56
South Lakeland	2.94	-1.93	+0.30
South Ribble	2.79	-2.07	+0.15
St. Helens	6.42	+1.56	+0.70
Stockport	4.28	-0.59	+0.54
Tameside	4.96	+0.10	+0.59
Trafford	3.33	-1.54	+0.59
Vale Royal	2.71	-2.15	-0.05
Warrington	4.90	+0.04	+0.21
West Lancashire	3.58	-1.29	-0.37
Wigan	3.70	-1.16	+0.46
Wirral	6.92	+2.06	+0.42
Wyre	2.54	-2.33	+0.46
<b>North West</b>	<b>4.86</b>	<b>N/A</b>	<b>+0.46</b>

Map 2.1: Prevalence of hospitalised admission for alcohol specific conditions amongst males in 2004/05

Male hospitalised admission per 1,000 population



\*Figures in this table may not add up exactly due to rounding.

## Indicator 2: Hospitalised admission for alcohol specific conditions

### a) Males

In 2004/05 in the North West, the prevalence of hospitalised admission for alcohol specific conditions was 4.86 per 1,000 of the male population (for conditions such as alcoholic liver cirrhosis or alcohol overdose; Box 2.1). This rate was higher than that for females (2.49 admissions per 1,000 of the population; Indicator 2b). The total rate for both males and females combined was 3.65 per 1,000 of the population.

Prevalence levels of alcohol specific hospitalisation among males varied greatly across the region, ranging from 1.94 per 1,000 of the population in Ribble Valley to more than four times that in Liverpool at 7.94 per 1,000. Both of these local authorities have seen increases in the rate of admissions since 2003/04 (Ribble Valley by 0.24 per 1,000 and Liverpool by 0.41 per 1,000).

The prevalence of male hospitalised admission in the North West has increased from 4.40 per 1,000 of the population in 2003/04 to 4.86 per 1,000 of the population in 2004/05. In total, 33 Local Authorities saw an increase in the prevalence of alcohol specific hospitalised admission between 2003/04 and 2004/05, with the largest increases seen in Manchester and Barrow-in-Furness (increasing by 1.56 and 1.40 per 1,000 respectively). In comparison, ten local authorities experienced a decrease in rates, with Chorley experiencing the largest decrease by 0.53 per 1,000 of the population.

The rate of male hospitalised admission specific to alcohol showed a strong correlation with deprivation ( $R^2 = 0.79$ ; Figure 2.3), with the rate of hospitalised admission increasing with higher levels of deprivation.

#### **Box 2.1: Indicator description**

The codes from the World Health Organization's International Classification of Disease (ICD) were used to extract data on all those aged under 85 years who had been admitted to hospital for an alcohol specific cause or condition between the financial years 2003/04 and 2004/05 (Bellis et al. 2005; WHO 1992).

Alcohol specific conditions are those that are classified as being wholly related to alcohol (such as alcohol overdose or, through long-term alcohol misuse, conditions such as alcoholic liver cirrhosis). A full list of conditions included in this category is provided in Appendix 1. The numbers of cases in each code are then summed to produce the total number of alcohol specific hospitalised admission per 1,000 of the population.

This indicator also feeds into Indicator 3, which covers hospitalised admission for all causes that are attributable to alcohol.

## Indicator 2: Hospitalised admission for alcohol specific conditions

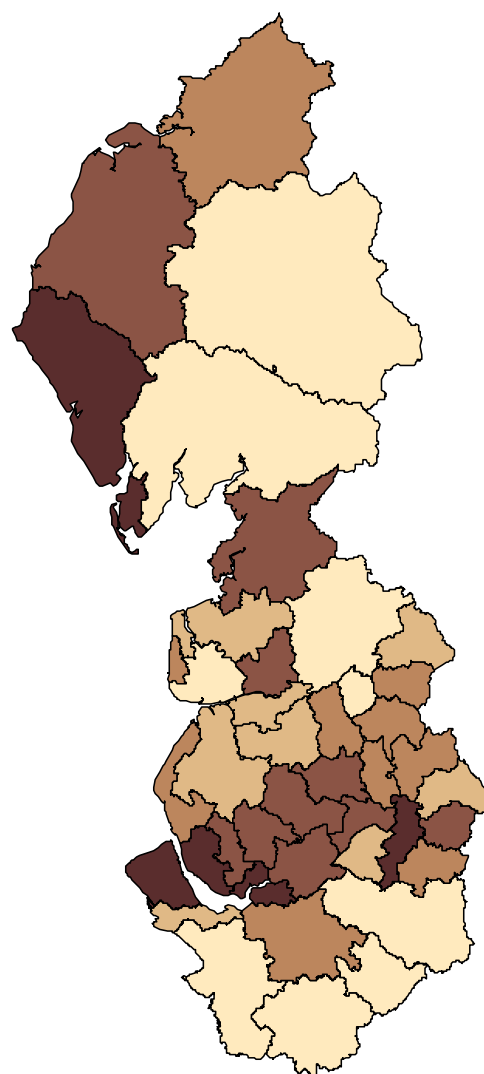
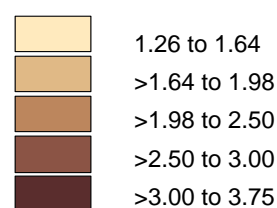
### b) Females

**Table 2.2: Prevalence of hospitalised admission for alcohol specific conditions amongst females in 2004/05\***

Local Authority	Admission per 1,000 females in 2004/05	Variation from North West total	Change from 2003/04
Allerdale	2.85	+0.36	-0.17
Barrow-in-Furness	3.17	+0.68	+0.41
Blackburn with Darwen	2.30	-0.20	+0.85
Blackpool	2.39	-0.10	+0.20
Bolton	2.68	+0.18	+0.68
Burnley	2.42	-0.07	-0.37
Bury	2.22	-0.27	+0.40
Carlisle	2.33	-0.16	+0.07
Chester	1.26	-1.23	-0.02
Chorley	1.78	-0.71	-0.37
Congleton	1.37	-1.13	-0.17
Copeland	3.69	+1.19	+0.31
Crewe & Nantwich	1.52	-0.98	-0.24
Eden	1.60	-0.89	+0.51
Ellesmere Port & Neston	1.86	-0.63	-0.27
Fylde	1.54	-0.95	+0.26
Halton	3.13	+0.64	-0.06
Hyndburn	1.62	-0.88	+0.33
Knowsley	3.00	+0.51	-0.10
Lancaster	2.83	+0.33	+0.40
Liverpool	3.75	+1.26	+0.09
Macclesfield	1.64	-0.85	+0.09
Manchester	3.36	+0.87	+0.63
Oldham	1.95	-0.55	-0.07
Pendle	1.98	-0.51	+0.24
Preston	2.59	+0.10	-0.35
Ribble Valley	1.43	-1.06	+0.56
Rochdale	2.25	-0.24	+0.08
Rossendale	2.30	-0.19	+0.56
Salford	2.82	+0.33	+0.77
Sefton	2.50	+0.01	-0.06
South Lakeland	1.64	-0.85	+0.18
South Ribble	1.75	-0.75	-0.21
St. Helens	2.97	+0.48	+0.06
Stockport	2.11	-0.39	+0.26
Tameside	2.63	+0.14	+0.19
Trafford	1.97	-0.52	+0.30
Vale Royal	2.22	-0.28	+0.60
Warrington	2.94	+0.44	+0.17
West Lancashire	1.77	-0.73	-0.46
Wigan	2.70	+0.21	+0.65
Wirral	3.26	+0.77	-0.04
Wyre	1.71	-0.79	+0.54
<b>North West</b>	<b>2.49</b>	<b>N/A</b>	<b>+0.21</b>

**Map 2.2: Prevalence of hospitalised admission for alcohol specific conditions amongst females in 2004/05**

Female hospitalised admission per 1,000 population



\*Figures in this table may not add up exactly due to rounding.

## Indicator 2: Hospitalised admission for alcohol specific conditions

### b) Females

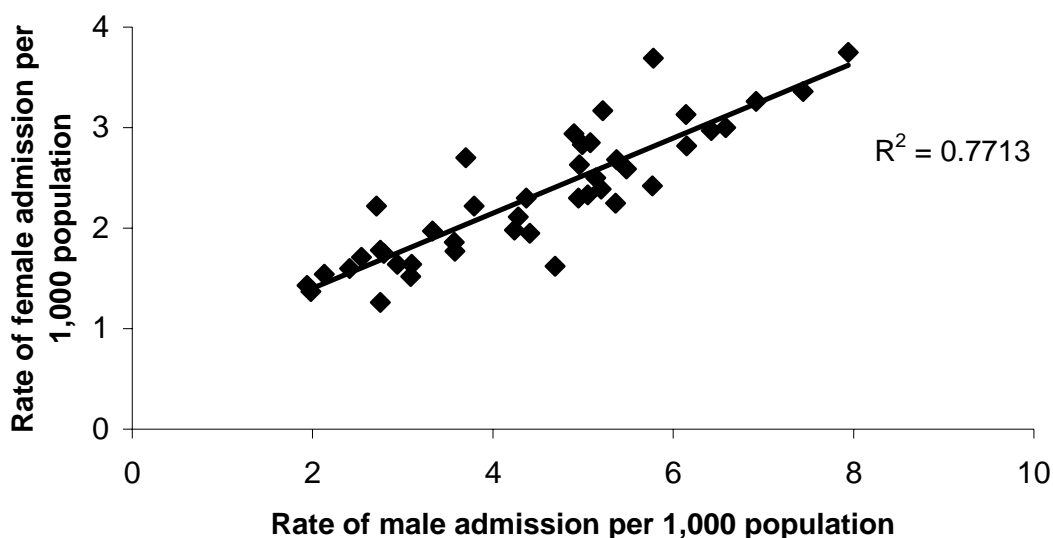
In 2004/05 in the North West, the prevalence of hospitalised admission for alcohol specific conditions was 2.49 individuals per 1,000 of the female population, increasing from 2.28 per 1,000 in 2003/04. Rates of admission varied greatly across the region, ranging from 1.26 per 1,000 in Chester to more than triple that in Liverpool at 3.75 per 1,000 of the female population.

In total, 28 local authorities saw an increase in the rate of alcohol specific hospitalised admission compared to 2003/04, with Blackburn with Darwen and Salford seeing the largest increases (by 0.85 and 0.77 per 1,000 population respectively). In comparison, 15 local authorities experienced a decrease, with West Lancashire, Burnley and Chorley experiencing the largest decreases (by 0.46, 0.37 and 0.37 per 1,000 respectively).

The rate of female hospitalised admission for alcohol specific conditions showed a moderate correlation with deprivation, with the rate of hospitalised admission increasing with higher levels of deprivation ( $R^2 = 0.56$ ; Figure 2.3). However, this correlation was not as strong as that for males.

Across the region, the rate of female hospitalised admission for alcohol specific conditions was lower than that for males (2.49 and 4.86 per 1,000 respectively in the North West overall). For example, in Oldham 4.41 per 1,000 males were admitted, compared to 1.95 per 1,000 females. The rate of female admission for alcohol specific conditions showed a strong correlation with the rate of male admission, with the former increasing with the latter ( $R^2 = 0.77$ ; Figure 2.1).

**Figure 2.1: Correlation between the male and female prevalence levels of hospitalised admission for alcohol specific conditions in 2004/05 by Local Authority in the North West**



## Indicator 2: Hospitalised admission for alcohol specific conditions

### c) Total population

Figure 2.2: Trends in prevalence of hospitalised admission for alcohol specific conditions per 1,000 of the population by gender in the North West, 2003/04 to 2004/05

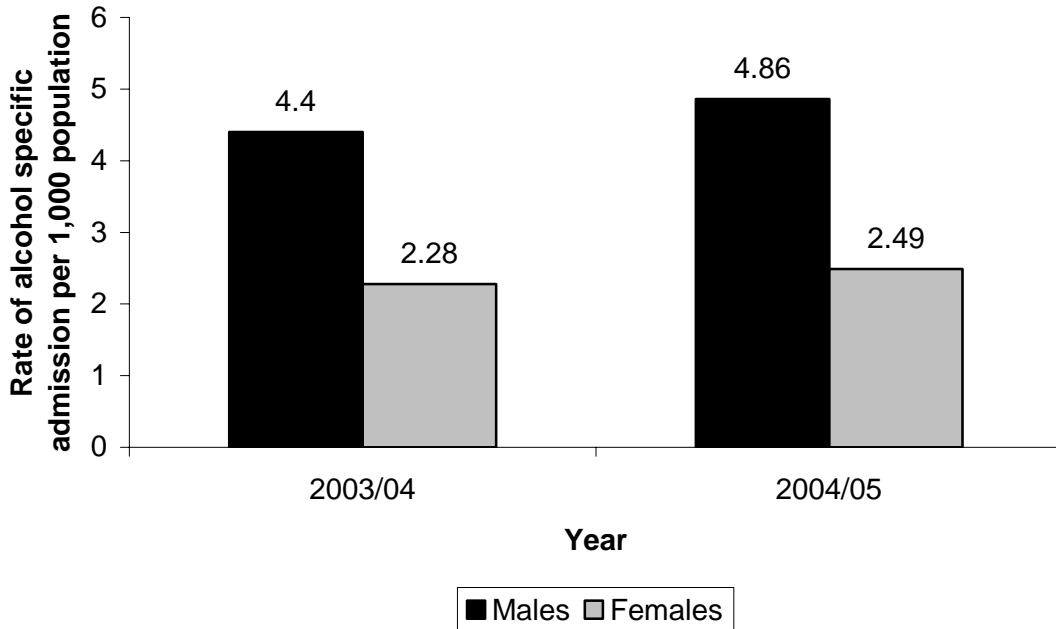
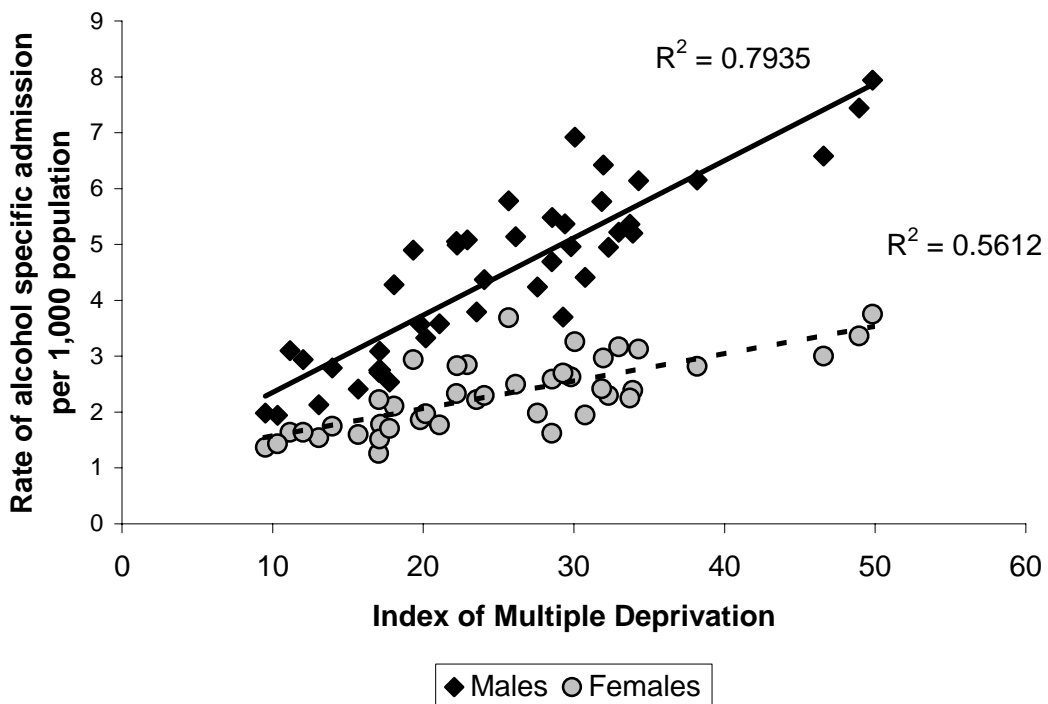


Figure 2.3: Correlation between the prevalence of hospitalised admission for alcohol specific conditions per 1,000 of the population in 2004/05 and the Index of Multiple Deprivation\* in 2004 by Local Authority and gender in the North West



\* A higher Index of Multiple Deprivation score represents a higher level of deprivation.

## Indicator 3: Hospitalised admission for all conditions attributable to alcohol

### a) Males

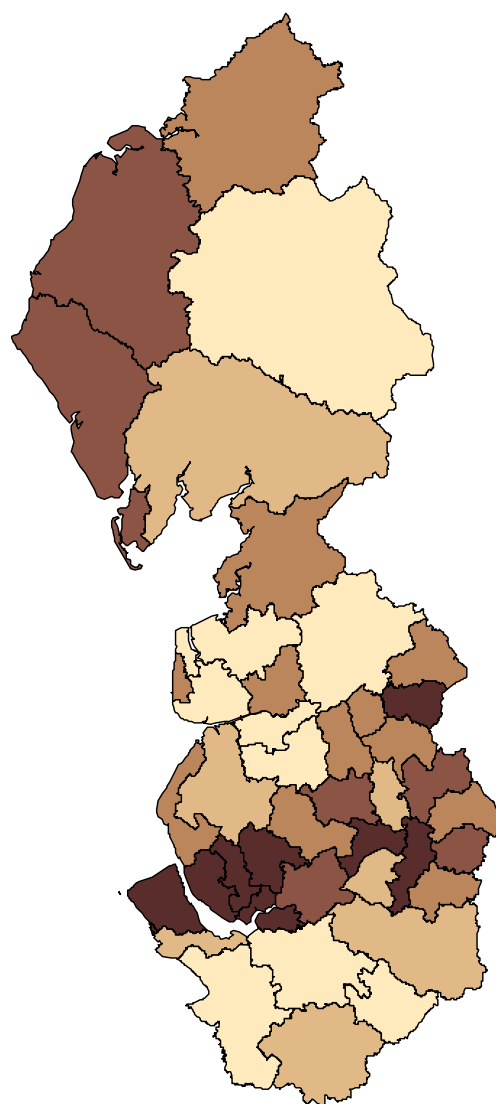
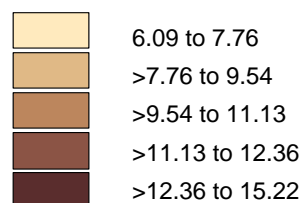
**Table 3.1: Prevalence of hospitalised admission for all conditions attributable to alcohol amongst males in 2004/05\***

Local Authority	Admission per 1,000 males in 2004/05	Variation from North West total	Change from 2003/04
Allerdale	11.32	+0.41	+1.02
Barrow-in-Furness	12.16	+1.25	+1.47
Blackburn with Darwen	10.92	+0.01	+1.74
Blackpool	10.46	-0.45	+0.20
Bolton	11.41	+0.50	+1.92
Burnley	13.00	+2.09	-0.03
Bury	9.54	-1.38	-0.19
Carlisle	10.96	+0.04	+0.20
Chester	7.62	-3.29	-0.01
Chorley	7.76	-3.15	-1.17
Congleton	6.61	-4.30	+0.45
Copeland	12.36	+1.45	-0.10
Crewe & Nantwich	8.13	-2.78	+0.34
Eden	7.10	-3.81	+0.52
Ellesmere Port & Neston	9.35	-1.56	+0.51
Fylde	6.09	-4.82	+0.15
Halton	13.68	+2.77	-0.32
Hyndburn	10.13	-0.78	+1.67
Knowsley	14.05	+3.14	+0.44
Lancaster	10.63	-0.28	+0.29
Liverpool	15.22	+4.31	+0.51
Macclesfield	8.20	-2.71	+0.69
Manchester	14.27	+3.36	+1.95
Oldham	10.87	-0.04	-0.37
Pendle	10.85	-0.06	+0.08
Preston	10.65	-0.26	-0.83
Ribble Valley	6.28	-4.63	+0.31
Rochdale	11.82	+0.91	+0.74
Rossendale	10.63	-0.28	+0.07
Salford	13.27	+2.36	+1.83
Sefton	11.13	+0.22	+0.43
South Lakeland	8.34	-2.57	+0.89
South Ribble	7.22	-3.69	-0.72
St. Helens	13.18	+2.27	+1.18
Stockport	10.40	-0.51	+0.83
Tameside	11.62	+0.71	+0.73
Trafford	8.36	-2.56	+0.62
Vale Royal	7.40	-3.52	-0.12
Warrington	11.56	+0.65	+0.75
West Lancashire	9.50	-1.41	-0.43
Wigan	10.14	-0.77	+0.69
Wirral	13.23	+2.32	+1.25
Wyre	6.93	-3.98	+0.59
<b>North West</b>	<b>10.91</b>	<b>N/A</b>	<b>+0.63</b>

\*Figures in this table may not add up exactly due to rounding.

**Map 3.1: Prevalence of hospitalised admission for all conditions attributable to alcohol amongst males in 2004/05**

Male hospitalised admission per 1,000 population



## Indicator 3: Hospitalised admission for all conditions attributable to alcohol

### a) Males

In 2004/05 in the North West, the prevalence of hospitalised admission for alcohol attributable conditions was 8.37 individuals per 1,000 of the total population (including both those conditions specific to alcohol – see Indicator 2 – and those for which alcohol is a known contributor; Box 3.1). This rate has increased from 7.88 per 1,000 in 2003/04. Amongst males, this rate was higher at 10.91 per 1,000 of the population (for females the rate was 6.00 per 1,000; Indicator 2b), and this has increased from 10.28 per 1,000 in 2003/04. Rates of male admission varied greatly across the region, ranging from 6.09 per 1,000 in Fylde to nearly triple that in Liverpool at 15.22 per 1,000. Both of these local authorities have seen increases in the rate of admission since 2003/04 (Liverpool by 0.51 per 1,000 and Fylde by 0.15 per 1,000).

In total in 2004/05, 32 local authorities saw an increase in the rate of hospitalised admission for alcohol attributable conditions amongst males compared to 2003/04 with Manchester seeing the highest increase (from 12.33 to 14.27 per 1,000 population). In comparison, 11 Local Authorities experienced a decrease, with Chorley seeing the largest decrease (from 8.93 to 7.76 per 1,000 population).

The rate of male hospitalised admission attributable to alcohol showed a strong correlation with deprivation ( $R^2 = 0.79$ ; Figure 3.3), with the rate of hospitalised admission increasing with higher levels of deprivation.

#### Box 3.1: Indicator description

The codes from the World Health Organization's International Classification of Disease (ICD) were used to extract data on all those aged under 85 years who had been admitted to hospital for an alcohol attributable cause or condition between the financial years 2003/04 and 2004/05 (Bellis et al. 2005; WHO 1992). The conditions can be categorised into two distinct areas:

- Conditions that are classified as being wholly related to alcohol (such as alcohol overdose or, through long-term alcohol misuse, conditions such as alcoholic liver cirrhosis) – see Appendix 1 for the full list of conditions included; and
- Conditions for which alcohol is a contributory factor in some cases (such conditions include liver cancer, stomach cancer, stroke or unintentional injury and assault) – see Appendix 2 for the full list of conditions included.

This indicator encompasses both categories (the former is also discussed independently in this report - Indicator 2). In order to calculate the incidence of the latter, the Strategy Unit (2003) has determined alcohol attributable fractions (AAFs), which indicate the estimated proportion of individual conditions for which alcohol is a contributory factor. For example, stomach cancer has an AAF of 0.20 or 20 per cent as 20 per cent of cases are thought to occur as a result of alcohol misuse. As such, to calculate the number of hospital episodes attributable to alcohol, the total number of deaths in each classification is multiplied by the appropriate AAF.

Some conditions have more than one attributable fraction that can be used to determine the rate of incidence. In such cases, the fractions are averaged using the mean to produce the final estimate. The number in each code is then summed to produce the total number of alcohol-attributable hospital admissions per 1,000 of the population.

# Indicator 3: Hospitalised admission for all conditions attributable to alcohol

## b) Females

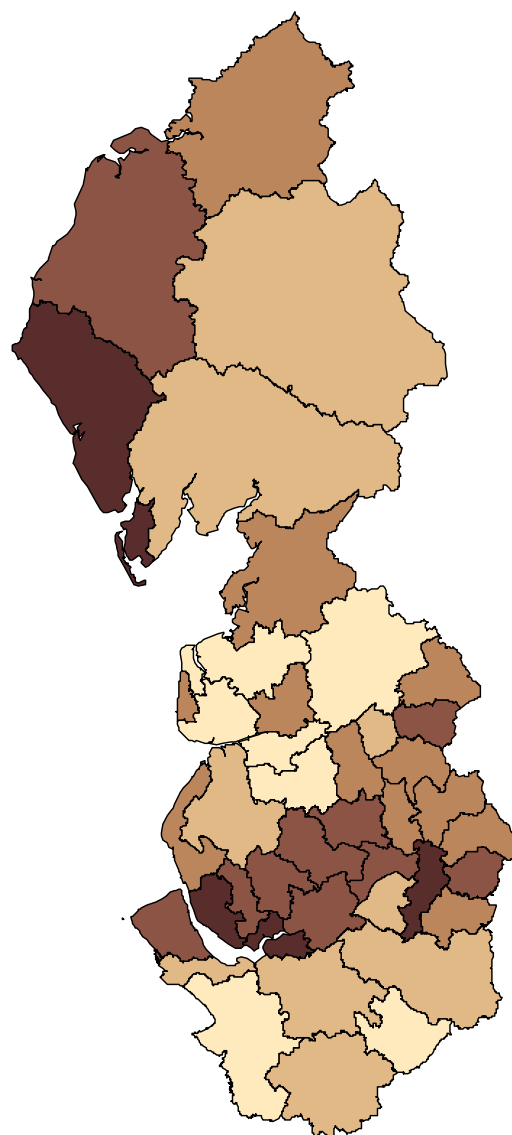
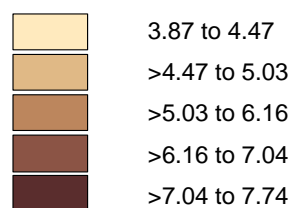
**Table 3.2: Prevalence of hospitalised admission for all conditions attributable to alcohol amongst females in 2004/05\***

Local Authority	Admission per 1,000 females in 2004/05	Variation from North West total	Change from 2003/04
Allerdale	6.54	+0.54	+0.11
Barrow-in-Furness	7.45	+1.45	+0.77
Blackburn with Darwen	5.82	-0.18	+1.23
Blackpool	5.71	-0.29	-0.26
Bolton	6.25	+0.25	+1.09
Burnley	6.34	+0.34	-0.61
Bury	5.77	-0.23	+0.64
Carlisle	5.83	-0.17	+0.29
Chester	3.87	-2.13	+0.16
Chorley	4.47	-1.53	-0.75
Congleton	4.19	-1.81	+0.06
Copeland	7.72	+1.72	-0.10
Crewe & Nantwich	4.64	-1.36	+0.15
Eden	4.59	-1.41	+0.74
Ellesmere Port & Neston	5.01	-0.99	-0.01
Fylde	4.08	-1.92	+0.03
Halton	7.56	+1.56	+0.20
Hyndburn	5.03	-0.97	+0.47
Knowsley	6.88	+0.88	+0.10
Lancaster	6.16	+0.16	+0.61
Liverpool	7.74	+1.74	+0.05
Macclesfield	4.78	-1.22	+0.23
Manchester	7.22	+1.22	+0.91
Oldham	5.74	-0.26	+0.08
Pendle	5.58	-0.42	+0.08
Preston	5.81	-0.19	-0.77
Ribble Valley	4.13	-1.87	+0.79
Rochdale	5.80	-0.20	+0.07
Rossendale	5.86	-0.14	+0.69
Salford	6.99	+0.99	+1.01
Sefton	5.59	-0.41	+0.06
South Lakeland	4.72	-1.28	+0.47
South Ribble	4.35	-1.65	-0.72
St. Helens	6.68	+0.68	+0.32
Stockport	5.98	-0.02	+0.64
Tameside	6.55	+0.55	+0.30
Trafford	4.86	-1.14	+0.34
Vale Royal	5.03	-0.97	+0.70
Warrington	6.88	+0.88	+0.57
West Lancashire	4.85	-1.15	-0.67
Wigan	6.48	+0.48	+0.91
Wirral	7.04	+1.04	+0.36
Wyre	4.24	-1.76	+0.20
<b>North West</b>	<b>6.00</b>	<b>N/A</b>	<b>+0.34</b>

\*Figures in this table may not add up exactly due to rounding.

**Map 3.2: Prevalence of hospitalised admission for all conditions attributable to alcohol for females in 2004/05**

Female hospitalised admission per 1,000 population



# Indicator 3: Hospitalised admission for all conditions attributable to alcohol

## b) Females

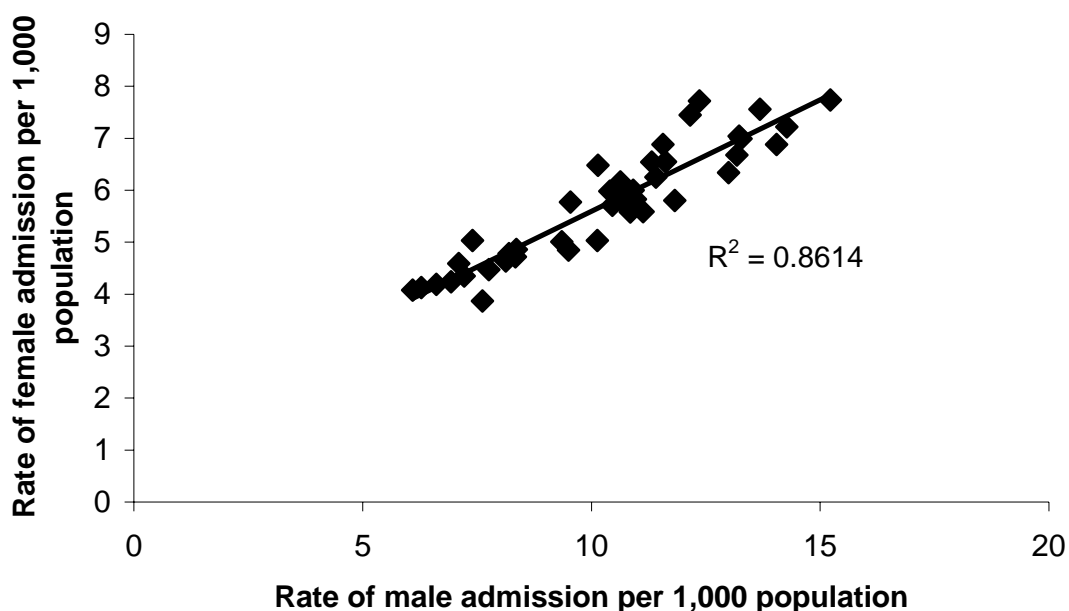
In 2004/05 in the North West, the prevalence of hospitalised admission attributable to alcohol was 6.00 individuals per 1,000 of the female population (compared to 10.91 per 1,000 for males) (Box 3.1 for methodology), a rate that has increased from 5.65 per 1,000 in 2003/04. The rate of admission varied greatly across the region, ranging from 3.87 per 1,000 in Chester to more than double that in Liverpool at 7.74 per 1,000 of the population.

In total in 2004/05, 35 local authorities saw an increase in the rate of female hospitalised admission for all conditions attributable to alcohol compared to 2003/04 with Blackburn with Darwen seeing the highest increase (from 4.59 to 5.82 per 1,000 of the population). In comparison, 11 Local Authorities experienced a decrease in rates with Preston seeing the largest decrease (from 6.58 to 5.81 per 1,000 of the population).

The rate of female hospitalised admission for all conditions attributable to alcohol showed a moderate correlation with deprivation ( $R^2 = 0.60$ ; Figure 3.3), with the rate of hospitalised admission increasing with deprivation. However, this correlation was not as strong as that for males.

Across all local authorities in the region, the rate of female alcohol attributable hospitalised admission was lower than that for males. For example in Stockport, 10.40 per 1,000 males were admitted, whereas 5.98 per 1,000 females were admitted in 2004/05. The rate of female hospitalised admission attributable to alcohol showed a strong correlation with the rate of male admission ( $R^2 = 0.86$ ; Figure 3.1), with the rate of female admission increasing with the rate of male admission.

**Figure 3.1: Correlation between the male and female prevalence levels of hospitalised admission for all conditions attributable to alcohol in 2004/05, by Local Authority in the North West**



# Indicator 3: Hospital admission for all conditions attributable to alcohol

## c) Total population

Figure 3.2: Trends in the prevalence of hospitalised admission for all conditions attributable to alcohol per 1,000 of the population by gender in the North West, 2003/04 to 2004/05

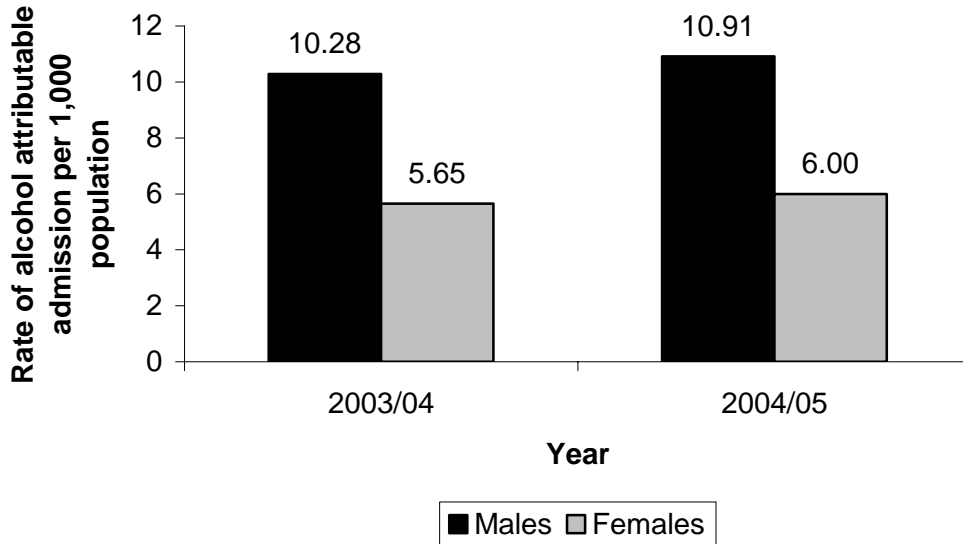
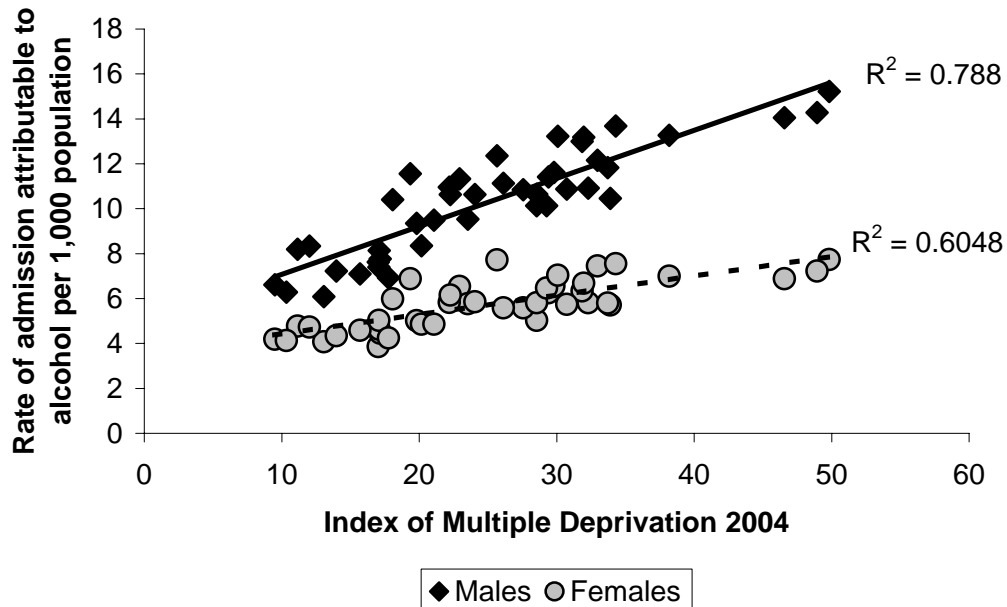


Figure 3.3: Correlation between the prevalence of hospitalised admissions for all conditions attributable to alcohol per 1,000 of the population in 2004/05 and the Index of Multiple Deprivation\* in 2004 by gender and Local Authority in the North West



\* A higher Index of Multiple Deprivation score represents a higher level of deprivation.

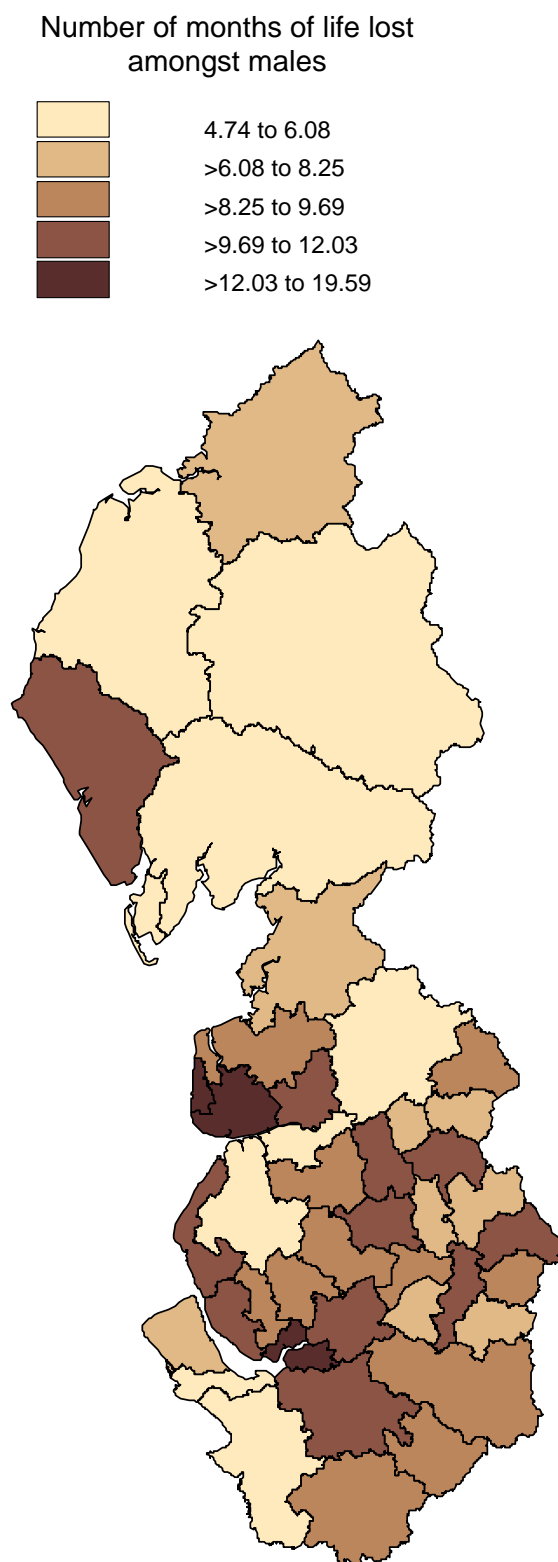
## Indicator 4: Reduced life expectancy for all causes attributable to alcohol

### a) Males

**Table 4.1: Average projected estimates of months of life lost for all causes attributable to alcohol amongst males in 2004\***

Local Authority	Number of male months of life lost	Variation from North West total	Change from 1995
Allerdale	9.29	-1.30	+2.11
Barrow-in-Furness	19.59	+8.99	+8.22
Blackburn with Darwen	11.53	+0.93	+5.92
Blackpool	13.46	+2.87	+0.53
Bolton	11.04	+0.45	+3.51
Burnley	11.01	+0.42	+4.96
Bury	10.67	+0.07	+3.21
Carlisle	10.49	-0.11	+0.40
Chester	7.47	-3.12	+2.48
Chorley	9.36	-1.24	+1.06
Congleton	9.51	-1.09	+1.32
Copeland	4.74	-5.85	-3.60
Crewe & Nantwich	9.69	-0.90	+0.81
Eden	7.62	-2.98	+2.53
Ellesmere Port & Neston	9.64	-0.96	+4.13
Fylde	9.43	-1.17	+4.13
Halton	13.46	+2.86	+6.61
Hyndburn	12.60	+2.00	+4.73
Knowsley	10.48	-0.12	+2.28
Lancaster	8.71	-1.89	-0.30
Liverpool	13.08	+2.49	+3.08
Macclesfield	7.90	-2.69	+2.83
Manchester	13.57	+2.98	-0.25
Oldham	11.32	+0.72	+4.19
Pendle	7.39	-3.20	-0.45
Preston	8.55	-2.04	-2.07
Ribble Valley	10.99	+0.39	+6.18
Rochdale	9.22	-1.38	+2.30
Rossendale	13.31	+2.71	+5.27
Salford	13.61	+3.02	+4.75
Sefton	12.54	+1.95	+4.86
South Lakeland	6.08	-4.51	+1.33
South Ribble	12.03	+1.43	+5.79
St. Helens	8.82	-1.77	+1.74
Stockport	8.93	-1.66	+1.08
Tameside	12.75	+2.16	+5.33
Trafford	8.14	-2.46	+1.37
Vale Royal	7.77	-2.82	+3.79
Warrington	8.25	-2.34	+0.14
West Lancashire	11.03	+0.44	+5.52
Wigan	9.26	-1.33	+3.59
Wirral	10.88	+0.29	-0.26
Wyre	10.85	+0.26	+1.50
<b>North West</b>	<b>10.59</b>	<b>N/A</b>	<b>+2.52</b>

**Map 4.1: Average projected estimate of months of life lost for all causes attributable to alcohol amongst males in 2004**



\*Figures in this table may not add up exactly due to rounding.

## Indicator 4: Reduced life expectancy for all causes attributable to alcohol

### a) Males

Across the North West, male life expectancy was reduced by an average of 10.59 months due to excessive alcohol consumption in 2004. This has increased from 8.07 months lost in 1995, although the North West has seen a decrease compared to 2003 (10.76 months lost).

The contribution of alcohol to life expectancy varied widely throughout the region during this period. Males in Barrow-in-Furness suffered by far the greatest burden in 2004, with over one and a half years of life lost through alcohol. This was nine months above the regional average and almost six months greater than the second highest area of Salford (which suffered nearly 14 months of life lost). Barrow-in-Furness has also seen the greatest increase in months of life lost through alcohol over the last decade, with the number of months lost increasing by more than eight months.

In comparison, alcohol has had the least impact on life expectancy among males in Copeland, although it was still responsible for almost five months of life lost in 2004. The Local Authority also saw a decrease in the number of months of life lost attributable to alcohol over the last decade, with the number decreasing by three and a half months.

In total in the North West, 37 local authorities saw an increase in alcohol attributable reduced life expectancy compared to 1995, whilst only six witnessed a decrease (including Copeland, Pendle and Preston).

Reduced life expectancy (attributable to alcohol) amongst males showed a weak correlation with deprivation ( $R^2 = 0.24$ ; Figure 4.3), with reduced life expectancy not necessarily increasing with higher levels of deprivation.

#### **Box 4.1: Indicator description**

The codes from the World Health Organization's International Classification of Disease (ICD) were used to extract data on all those aged under 75 years who had died from an alcohol attributable cause or condition between 1995 and 2004 (Bellis et al. 2005; WHO 1992). The conditions can be categorised into two distinct areas:

- Conditions that are classified as being wholly related to alcohol (such as alcohol overdose or, through long-term alcohol misuse, conditions such as alcoholic liver cirrhosis) – see Appendix 1 for the full list of conditions included; and
- Conditions for which alcohol is a contributory factor in some cases (such conditions include liver cancer, stomach cancer, stroke or unintentional injury and assault) – see Appendix 2 for the full list of conditions included.

This indicator encompasses both categories (see Appendix 3 for the full list of conditions included).

In order to calculate the incidence of the latter, the Strategy Unit (2003) has determined an alcohol attributable fraction (AAF), which can be applied to the number of conditions where alcohol was a contributory factor. For example, stomach cancer has an AAF of 0.20 or 20 per cent as 20 per cent of cases are thought to be as a result of alcohol misuse. As such, to calculate the number of deaths attributable to alcohol, the total number of deaths in each classification is multiplied by the appropriate AAF.

The calculations used to estimate the number of months of life lost attributable to alcohol are described by Bellis et al. (2005).

# Indicator 4: Reduced life expectancy for all causes attributable to alcohol

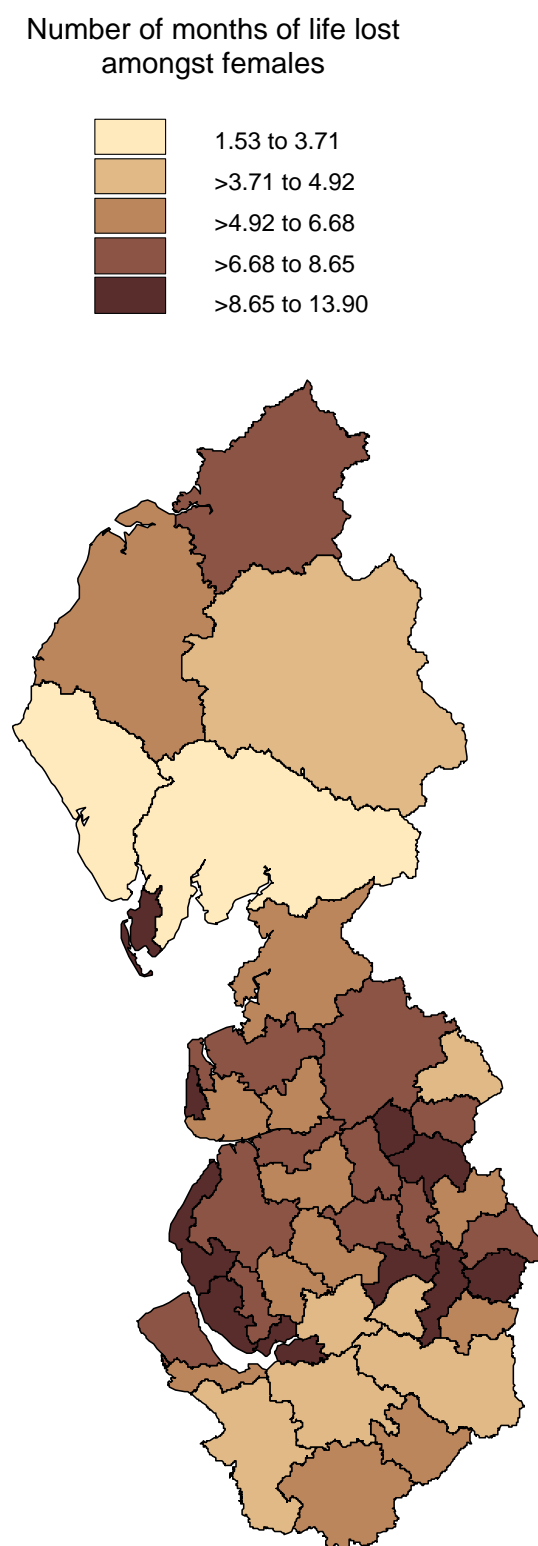
## b) Females

**Table 4.2: Average projected estimates of months of life lost for all causes attributable to alcohol amongst females in 2004\***

Local Authority	Number of female months of life lost	Variation from North West total	Change from 1995
Allerdale	3.35	-2.74	-2.40
Barrow-in-Furness	3.71	-2.39	-0.44
Blackburn with Darwen	7.24	+1.15	+3.07
Blackpool	13.90	+7.81	+7.61
Bolton	6.76	+0.66	+0.81
Burnley	4.09	-2.00	-1.69
Bury	4.92	-1.18	+1.17
Carlisle	4.88	-1.21	+1.43
Chester	3.21	-2.89	+0.92
Chorley	6.68	+0.58	+3.01
Congleton	6.28	+0.18	+2.96
Copeland	7.08	+0.98	+3.37
Crewe & Nantwich	6.10	0.00	+2.29
Eden	2.65	-3.45	-3.11
Ellesmere Port & Neston	3.32	-2.78	-0.47
Fylde	9.58	+3.49	+3.37
Halton	10.43	+4.33	+6.69
Hyndburn	4.36	-1.74	+1.13
Knowsley	5.73	-0.37	-0.82
Lancaster	4.81	-1.28	+1.10
Liverpool	8.65	+2.56	+2.16
Macclesfield	6.05	-0.04	+2.72
Manchester	7.24	+1.14	+1.11
Oldham	7.71	+1.61	+4.03
Pendle	5.48	-0.62	+3.05
Preston	6.80	+0.70	+0.97
Ribble Valley	1.53	-4.56	-2.30
Rochdale	4.75	-1.35	-0.19
Rossendale	7.95	+1.85	+3.46
Salford	6.40	+0.31	-0.03
Sefton	7.05	+0.95	+3.06
South Lakeland	3.19	-2.90	+0.71
South Ribble	2.64	-3.46	-2.60
St. Helens	6.28	+0.19	+1.07
Stockport	4.45	-1.65	+0.51
Tameside	6.48	+0.38	+2.12
Trafford	4.43	-1.66	+0.20
Vale Royal	6.98	+0.88	+2.25
Warrington	7.50	+1.41	+3.13
West Lancashire	3.68	-2.42	-1.75
Wigan	5.39	-0.70	+1.60
Wirral	4.69	-1.40	+0.08
Wyre	6.13	+0.03	+1.04
<b>North West</b>	<b>6.10</b>	<b>N/A</b>	<b>+1.43</b>

\*Figures in this table may not add up exactly due to rounding.

**Map 4.2: Average projected estimate of months of life lost for all causes attributable to alcohol amongst females in 2004**



## Indicator 4: Reduced life expectancy for all causes attributable to alcohol

### b) Females

Female life expectancy in the North West was reduced by an average of 6.10 months due to excessive alcohol consumption in 2004 (Box 4.1 for methodology), its highest point in the last decade (in 1995, 4.66 months were lost). The contribution of alcohol to life expectancy varied widely across the region. Females in Blackpool experienced the largest number of months of life lost, with nearly 14 months lost (more than double the regional average). In comparison, alcohol had the least impact on life expectancy in Ribble Valley where 1.53 months were lost.

In total, 32 local authorities saw an increase in alcohol attributable reduced life expectancy compared to 1995 (with Blackpool seeing the highest increase from 6.29 to 13.90 months), whilst 11 Local Authorities experienced a decrease (Eden saw the largest decrease from 5.75 to 2.65 months).

In general in the North West in 2004, males experienced a higher number of months lost through excessive alcohol consumption. For example, in Eden male expectancy was reduced by an average of 7.62 months, whilst for females it was reduced by 2.65 months. However, in Blackpool, Copeland and Fylde, the situation was reversed and females experienced a higher number of months lost (Table 4.3).

**Table 4.3: Average projected estimate of months of life lost for all causes attributable to alcohol in 2004 in Blackpool, Copeland and Fylde, by gender**

Local Authority	Males	Females
Blackpool	13.46	13.90
Copeland	4.74	7.08
Fylde	9.43	9.58

Although there was some correlation between male and female alcohol-attributable months of life lost ( $R^2 = 0.05$ ; Figure 4.1), this was very limited. So the rate of female months of life lost did not necessarily increase with that of males'. There was also negligible correlation evident between months of life lost for females with levels of deprivation ( $R^2 = 0.14$ ; Figure 4.3), with reduced life expectancy not necessarily increasing with higher levels of deprivation.

**Figure 4.1: Correlation between male and female months of life lost for all causes attributable to alcohol in 2004, by Local Authority in the North West**



# Indicator 4: Reduced life expectancy for all causes attributable to alcohol

## c) Total population

Figure 4.2: Trends in estimates for months of life lost for all causes attributable to alcohol in the North West by gender, 1995 to 2004

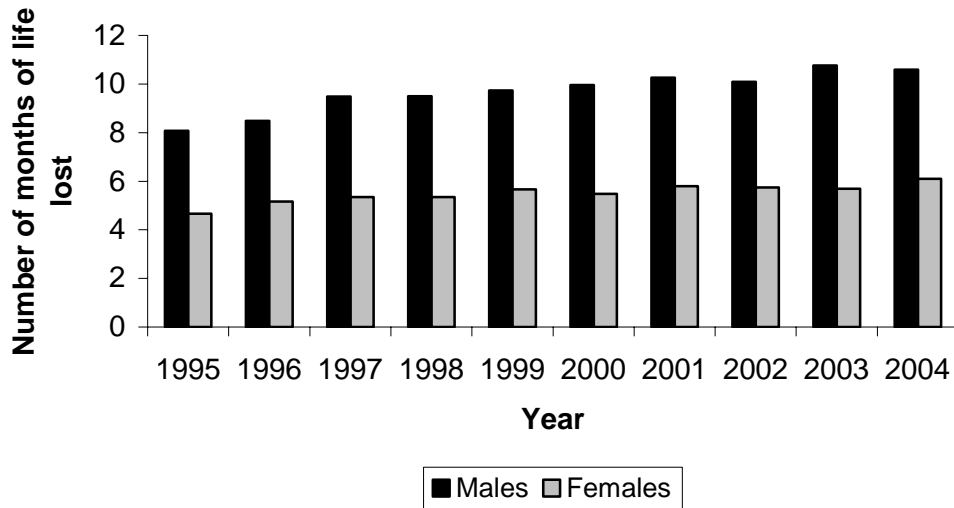
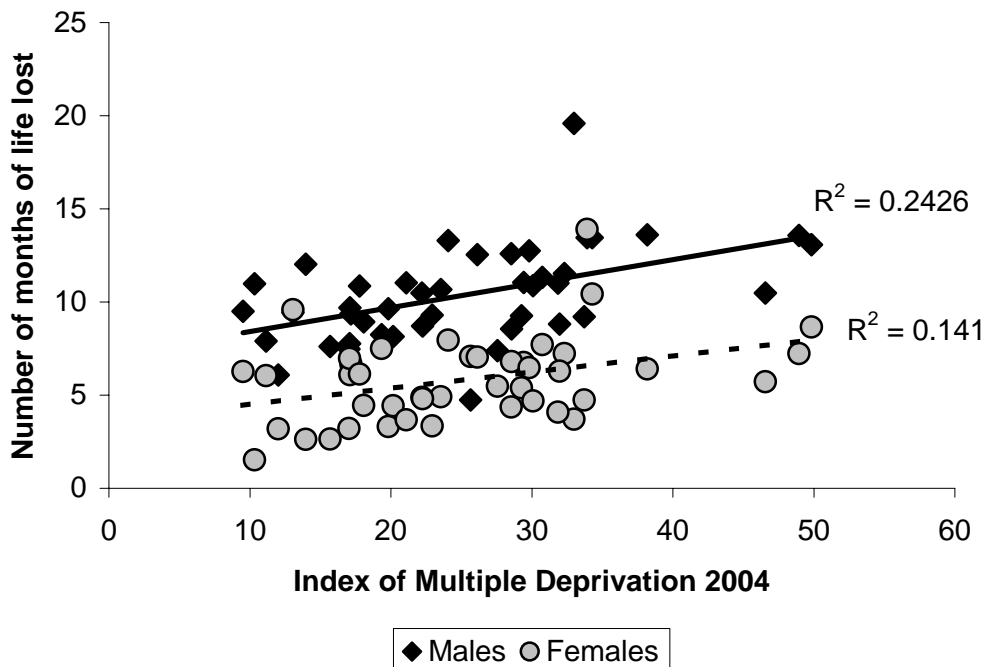


Figure 4.3: Correlation between estimates for months of life lost for all causes attributable to alcohol and the Index of Multiple Deprivation\* in 2004 by Local Authority and gender in the North West



\* A higher Index of Multiple Deprivation score represents a higher level of deprivation.

## Indicator 5: All recorded crime attributable to alcohol

In 2004/05, police in the North West recorded 780,105 crimes (Nicholas et al. 2005), of which 208,958 were estimated to have been attributable to alcohol (Box 5.1), providing a regional rate of 11.42 alcohol attributable crimes per 1,000 of the population. Rates of alcohol-related crime varied widely across the region. The highest levels were seen in the largest cities, with rates of 20.23 per 1,000 in Manchester (nearly twice the regional average) and 19.41 in Liverpool, while the lowest rates were in Ribble Valley (3.84 per 1,000) and Congleton (4.94 per 1,000). Alcohol-related crime in the North West correlated strongly with deprivation, with alcohol-related crime increasing with higher levels of deprivation ( $R^2 = 0.74$ ; Figure 5.2)

Trends in alcohol attributable crime are difficult to measure as the crime recording system is continually changing with major changes seen in the recording of both violent and sexual crimes in recent years (Box 5.1 and Box 7.1). Without accounting for such changes, the North West as a whole has seen an increase of 0.87 alcohol-related crimes per 1,000 population since 2002/03 and most local authority areas have recorded an increase over this period, with the highest increase noted in Blackpool (by 8.92 alcohol attributable crimes per 1,000 population) and Burnley (by 4.23 per 1,000). However, rates in 11 local authorities have decreased since 2002/03, with the greatest decreases seen in Oldham (by 3.51 per 1,000) and Trafford (by 2.97 per 1,000).

### Box 5.1: Indicator description

Recorded crime attributable to alcohol is the total number of recorded crimes attributable to alcohol, calculated using the Strategy Unit attributable fractions. These fractions were taken from the NEW-ADAM arrestee survey and are based on urine tests of arrestees (Strategy Unit 2003). The proportion of arrestees testing positive for alcohol (and thus the attributable fractions) are shown in Table 5.1.

**Table 5.1: Alcohol attributable fractions for recorded crime in England, by category**

Crime category	Attributable fraction (%)	
Criminal damage	0.47	(47%)
Violence against the person	0.37	(37%)
Other	0.26	(26%)
Drug offences	0.19	(19%)
Burglary	0.17	(17%)
Fraud and forgery	0.16	(16%)
Sexual offences	0.13	(13%)
Theft and handling stolen goods	0.13	(13%)
Robbery	0.12	(12%)

Source: Strategy Unit (2003).

The number in each crime category is then summed to produce the total number of crimes attributable to alcohol per 1,000 of the population.

Changes in how crime is reported in England and Wales mean trends are difficult to measure. Specifically, the National Crime Recording Standard (NCRS; introduced in 2002) required police to record all known incidents of crimes, regardless of whether those involved intended to press charges. The impact of these changes led to an estimated 10 per cent increase in total recorded crime in 2002/03 compared to 2001/02, with violent crime most affected (Box 6.1; Simmons et al. 2003). Given these changes, for the purposes of this report changes in crime have been measured from 2002/03. In addition, other changes to recorded crime have occurred since the introduction of the NCRS including those introduced through the Sexual Offences Act 2003 (Box 7.1). Thus trends reported here should be treated with caution.

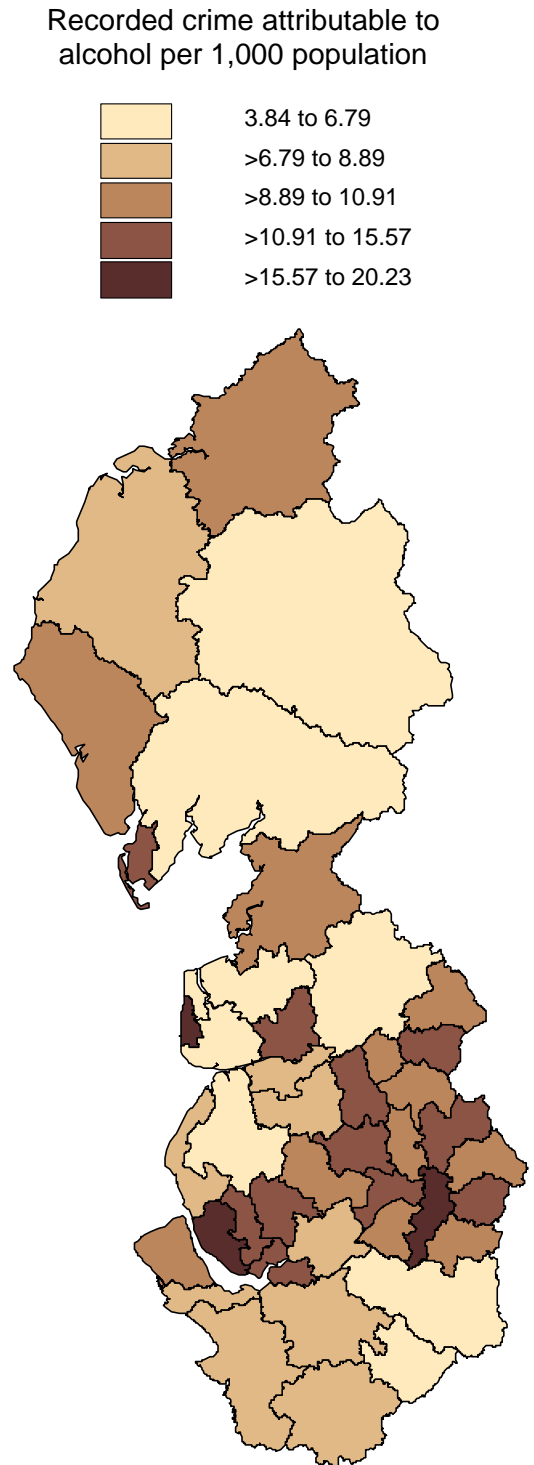
# Indicator 5: All recorded crime attributable to alcohol

**Table 5.2: All recorded crime attributable to alcohol, rate per 1,000 of the population in 2004/05\***

Local Authority	Crime per 1,000 in 2004/05	Variation from North West total	Change since 2002/03
Allerdale	8.32	-3.10	+0.49
Barrow-in-Furness	11.73	+0.31	+3.88
Blackburn with Darwen	13.03	+1.61	+3.35
Blackpool	18.29	+6.87	+8.92
Bolton	12.29	+0.87	-1.79
Burnley	14.04	+2.62	+4.23
Bury	9.51	-1.91	-2.32
Carlisle	10.74	-0.68	+2.41
Chester	8.79	-2.63	+0.04
Chorley	8.85	-2.57	+3.47
Congleton	4.94	-6.48	+0.29
Copeland	9.32	-2.10	+2.72
Crewe & Nantwich	7.95	-3.47	+1.35
Eden	5.19	-6.23	+1.26
Ellesmere Port & Neston	8.77	-2.65	+2.01
Fylde	5.71	-5.71	+2.28
Halton	11.88	+0.46	+2.87
Hyndburn	9.53	-1.89	+2.18
Knowsley	11.49	+0.07	+1.15
Lancaster	10.27	-1.15	+3.09
Liverpool	19.41	+7.99	+3.43
Macclesfield	6.74	-4.68	-0.03
Manchester	20.23	+8.81	-2.84
Oldham	10.91	-0.51	-3.51
Pendle	9.91	-1.51	+2.46
Preston	15.57	+4.15	+3.64
Ribble Valley	3.84	-7.58	+0.12
Rochdale	13.40	+1.98	-0.77
Rossendale	9.42	-2.00	+2.86
Salford	13.10	+1.68	-1.97
Sefton	8.65	-2.77	+1.50
South Lakeland	5.88	-5.54	+2.31
South Ribble	7.90	-3.52	+3.04
St. Helens	11.60	+0.18	+2.15
Stockport	10.10	-1.32	-0.39
Tameside	12.73	+1.31	-0.28
Trafford	9.71	-1.71	-2.97
Vale Royal	7.62	-3.80	+0.41
Warrington	8.89	-2.53	+2.12
West Lancashire	6.79	-4.63	+2.16
Wigan	9.32	-2.10	-0.60
Wirral	10.16	-1.26	+1.26
Wyre	6.14	-5.28	+1.66
<b>North West</b>	<b>11.42</b>	<b>N/A</b>	<b>+0.87</b>

\*Figures in this table may not add up exactly due to rounding.

**Map 5.1: All recorded crime attributable to alcohol, rate per 1,000 of the population in 2004/05**



# Indicator 5: All recorded crime attributable to alcohol

Figure 5.1: Trends in all recorded crime attributable to alcohol, rate per 1,000 of the population in the North West, 2002/03 and 2004/05

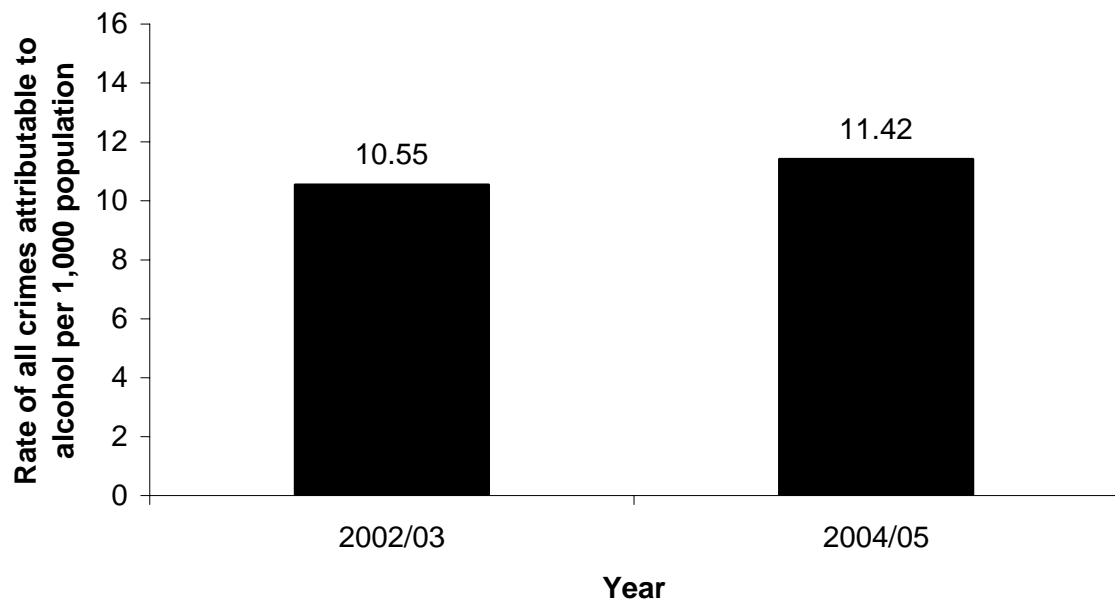
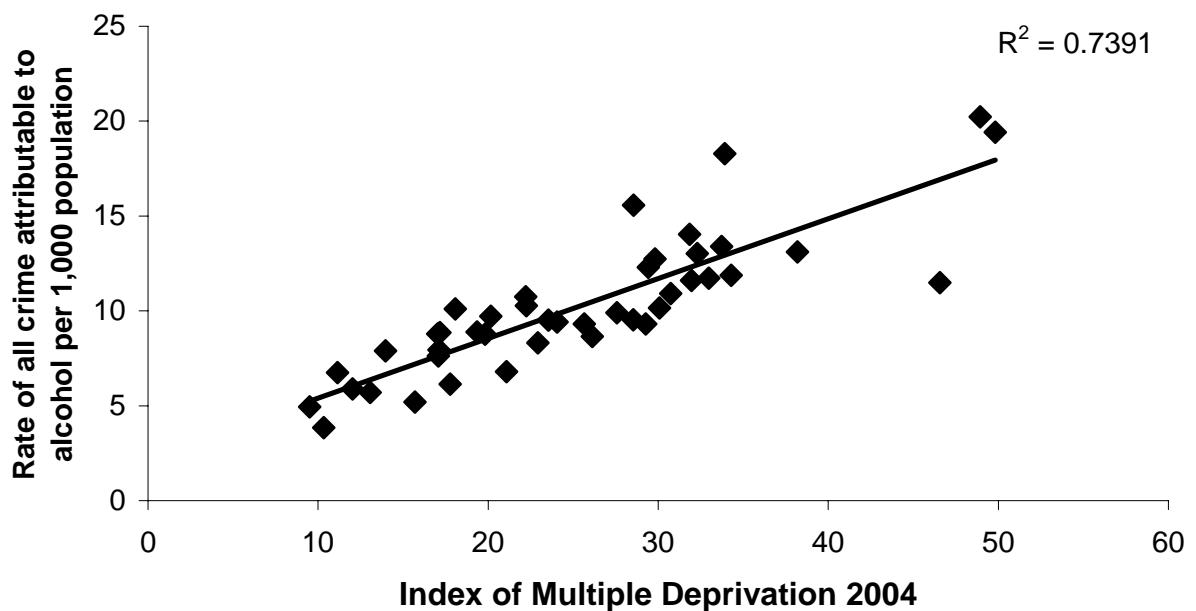


Figure 5.2: Correlation between the rate of all recorded crime attributable to alcohol per 1,000 of the population in 2004/05 and Index of Multiple Deprivation\* in 2004 by Local Authority in the North West



\* A higher Index of Multiple Deprivation score represents a higher level of deprivation.

## Indicator 6: All violent offences attributable to alcohol

In 2004/05, police in the North West recorded a total of 143,773 offences for violence against the person, of which an estimated 53,196 (37%; Box 5.1) were attributable to alcohol, equating to 7.79 alcohol attributable violent offences per 1,000 individuals. At a local authority level, Blackpool had the highest rate of alcohol attributable violent offences, at 15.01 per 1,000 of the population; almost 50 per cent higher than the North West average. This was followed by Liverpool (13.56 per 1,000) and Manchester (11.83 per 1,000). The lowest rates were found in Ribble Valley (2.77 per 1,000) and Congleton (3.46 per 1,000). Alcohol attributable violent crime in the region correlated moderately with deprivation, with offences increasing with higher levels of deprivation ( $R^2 = 0.59$ ; Figure 6.2).

To provide further details, data for sub-categories of violence have been provided. These include more serious violence, wounding and less serious violence (Box 6.1). Correlations of these with deprivation showed a variety of correlation levels with less serious violent offences attributable to alcohol showing a negligible correlation ( $R^2 = 0.02$ ; Figure 6.8), and wounding attributable to alcohol showing a moderate correlation ( $R^2 = 0.64$ ; Figure 6.6).

Changes to crime recording in 2002 strongly impacted on recorded violent crime (Box 5.1) and thus trends in actual incidence are difficult to measure. These changes will explain much of the increase in recorded violence in the North West. Across the region, the rate of alcohol attributable violence increased by 2.14 offences per 1,000 individuals between 2002/03 and 2004/05. The increase was highest in Blackpool, Liverpool and Burnley. However, despite the changes, three Local Authorities saw a decrease (Bury, Oldham and Trafford).

### Box 6.1: Indicator description

The indicator *All violent offences attributable to alcohol* has been calculated by applying the Strategy Unit attributable fraction for violence against the person (0.37) to the total number of violent crimes (Box 5.1). These figures are then calculated into rates per 1,000 of the population. The sub-categories of *Wounding*, *More serious violence* and *Less serious violence* (see Appendix 4) include the counting codes shown in Table 6.1.

Table 6.1: Counting codes used to inform the sub-categories of violent crime

More serious violence	Wounding	Less serious violence
1	5	104
2	6	105A
3	7	105B
37.1	8A	11
4.1	8B	12
4.2	8C	13
4.3	8D	14
4.4/6	8E	15

Assault on a police officer is included in this report as a separate indicator, although these figures are also included in the *Less serious violence* category (code 104).

Violent crime was the most affected category of crime when the National Crime Recording Standard was introduced in 2002 (Box 5.1) – estimated to have increased by 23% between 2002/02 and 2002/03 following changes in recording methods (Simmons et al. 2003). Thus, trends in alcohol attributable violence reported here will reflect these changes and are largely not indicative of the direction of the actual incidence of violent crime. Rates of violent offences can also reflect police practice; for example, increased police activity to detect violence and punish offenders can lead to increased recorded rates of violence. Thus increased levels of recorded violence may reflect improved detection.

## Indicator 6: All violent offences attributable to alcohol

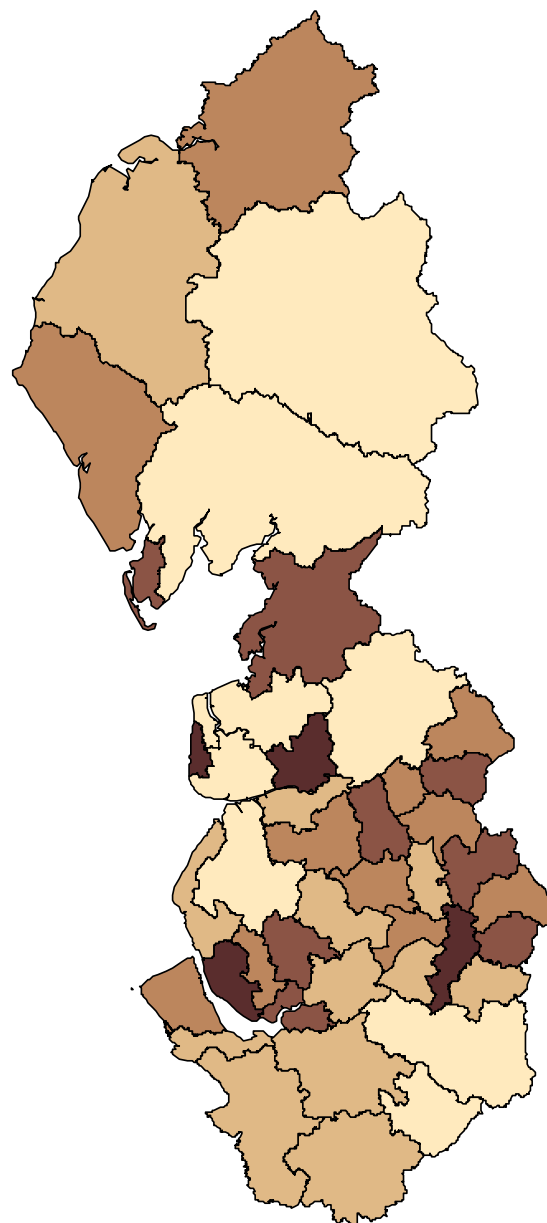
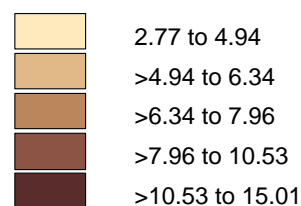
**Table 6.2: All violent offences attributable to alcohol, rate per 1,000 of the population in 2004/05\***

Local Authority	Violent offences related to alcohol per 1,000	Variation from North West total	Change from 2002/03
Allerdale	6.34	-1.45	+1.70
Barrow-in-Furness	10.06	+2.27	+4.14
Blackburn with Darwen	9.77	+1.98	+4.49
Blackpool	15.01	+7.22	+9.28
Bolton	7.32	-0.47	+0.65
Burnley	10.53	+2.74	+4.96
Bury	5.65	-2.14	-0.40
Carlisle	7.96	+0.17	+2.59
Chester	6.31	-1.47	+1.14
Chorley	6.85	-0.94	+4.08
Congleton	3.46	-4.33	+0.98
Copeland	7.70	-0.09	+3.02
Crewe & Nantwich	5.88	-1.91	+1.62
Eden	4.00	-3.79	+1.20
Ellesmere Port & Neston	5.87	-1.92	+2.04
Fylde	4.24	-3.55	+2.42
Halton	8.63	+0.84	+3.32
Hyndburn	7.08	-0.71	+2.66
Knowsley	7.34	-0.45	+1.29
Lancaster	8.46	+0.67	+4.10
Liverpool	13.56	+5.77	+5.01
Macclesfield	4.44	-3.35	+1.03
Manchester	11.83	+4.04	+0.83
Oldham	6.95	-0.84	-0.40
Pendle	7.02	-0.77	+2.79
Preston	11.76	+3.97	+4.93
Ribble Valley	2.77	-5.02	+0.73
Rochdale	9.10	+1.31	+1.63
Rossendale	6.66	-1.13	+3.31
Salford	7.52	-0.27	+0.76
Sefton	6.02	-1.77	+2.06
South Lakeland	4.94	-2.85	+2.47
South Ribble	6.20	-1.59	+3.23
St. Helens	8.43	+0.64	+3.38
Stockport	5.81	-1.98	+0.83
Tameside	8.84	+1.05	+2.04
Trafford	5.71	-2.08	-0.54
Vale Royal	5.51	-2.28	+1.33
Warrington	6.12	-1.67	+2.56
West Lancashire	4.92	-2.87	+2.70
Wigan	5.82	-1.96	+0.36
Wirral	7.47	-0.32	+2.06
Wyre	4.81	-2.98	+2.18
<b>North West</b>	<b>7.79</b>	<b>N/A</b>	<b>+2.14</b>

\*Figures in this table may not add up exactly due to rounding.

**Map 6.1: All violent offences attributable to alcohol, rate per 1,000 of the population in 2004/05**

Violent offences attributable to alcohol per 1,000 population



## Indicator 6: All violent offences attributable to alcohol

Figure 6.1: Trends in all violent offences attributable to alcohol, rate per 1,000 of the population in the North West from 2002/03 to 2004/05

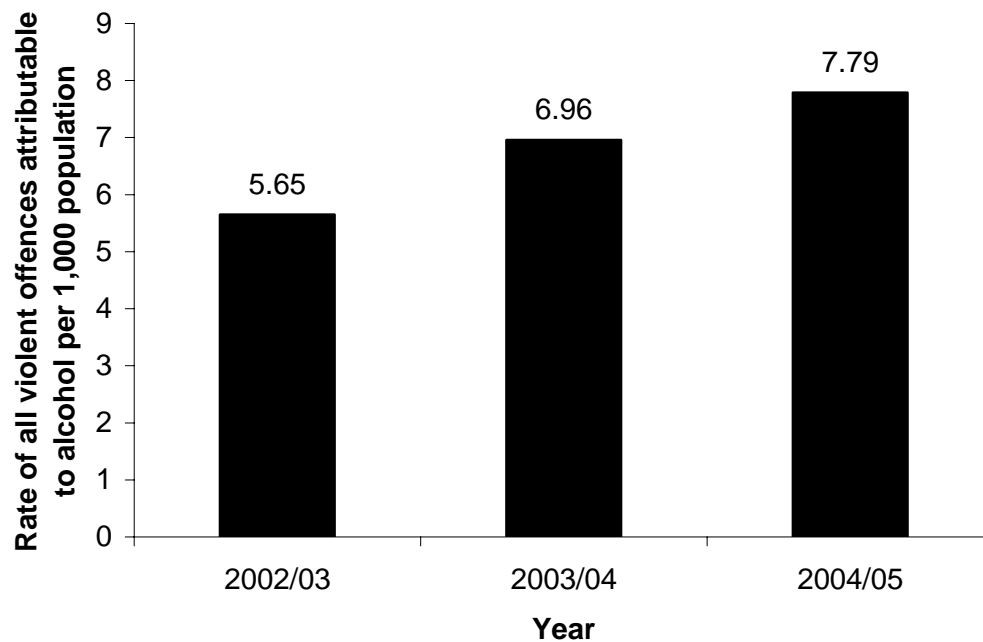
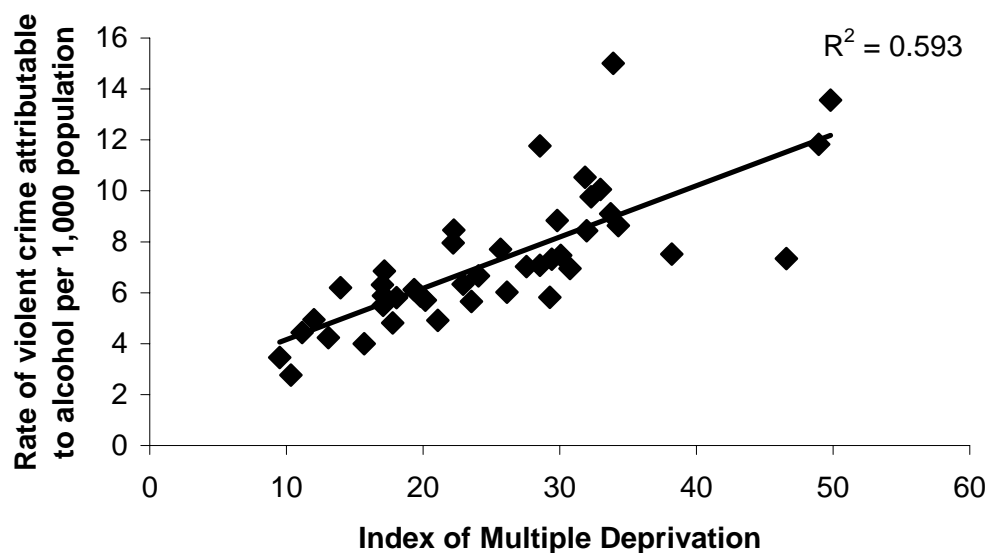


Figure 6.2: Correlation between the rate of all violent offences attributable to alcohol per 1,000 of the population in 2004/05 and the Index of Multiple Deprivation\* in 2004 by Local Authority in the North West



\* A higher Index of Multiple Deprivation score represents a higher level of deprivation.

# Indicator 6: All violent offences attributable to alcohol

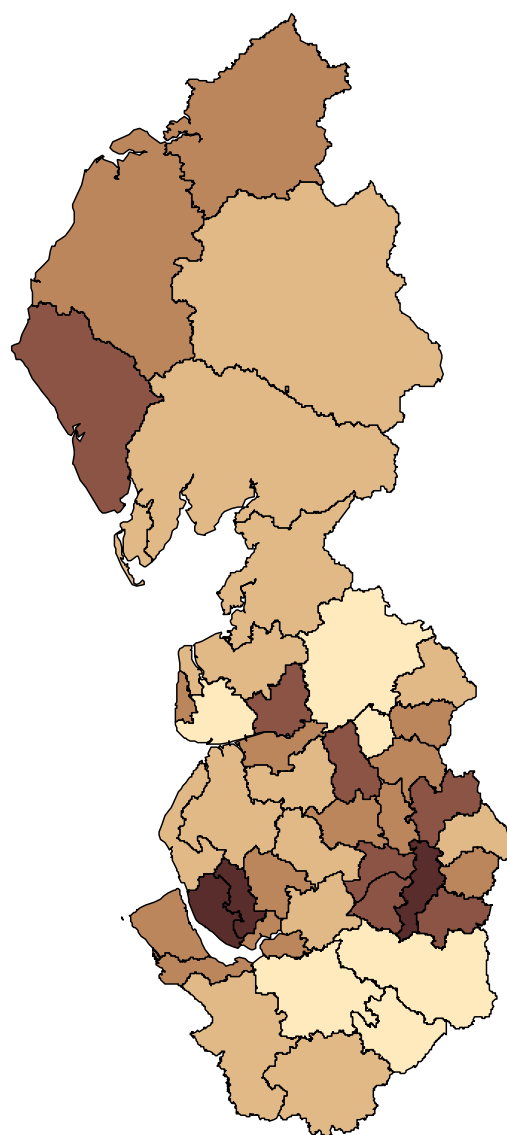
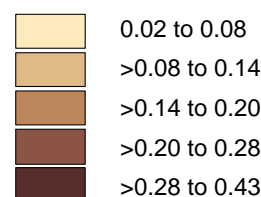
## a) More serious violence

**Table 6.3: More serious violent offences attributable to alcohol, rate per 1,000 of the population in 2004/05\***

Local Authority	More serious violence per 1,000 in 2004/05	Variation from North West total	Change from 2002/03
Allerdale	0.16	-0.03	+0.02
Barrow-in-Furness	0.09	-0.10	+0.04
Blackburn with Darwen	0.22	+0.03	+0.07
Blackpool	0.17	-0.02	+0.05
Bolton	0.15	-0.04	+0.03
Burnley	0.18	-0.01	+0.10
Bury	0.17	-0.02	-0.01
Carlisle	0.15	-0.04	+0.10
Chester	0.11	-0.08	+0.04
Chorley	0.13	-0.06	+0.07
Congleton	0.02	-0.17	-0.01
Copeland	0.20	+0.01	+0.12
Crewe & Nantwich	0.11	-0.08	+0.06
Eden	0.12	-0.07	+0.10
Ellesmere Port & Neston	0.17	-0.02	+0.11
Fylde	0.07	-0.12	+0.05
Halton	0.17	-0.02	+0.08
Hyndburn	0.08	-0.11	-0.05
Knowsley	0.34	+0.15	+0.01
Lancaster	0.10	-0.09	+0.02
Liverpool	0.43	+0.24	+0.03
Macclesfield	0.07	-0.12	+0.05
Manchester	0.43	+0.24	+0.03
Oldham	0.12	-0.07	-0.03
Pendle	0.10	-0.09	+0.05
Preston	0.26	+0.07	+0.16
Ribble Valley	0.05	-0.14	+0.03
Rochdale	0.22	+0.03	+0.10
Rossendale	0.16	-0.03	+0.09
Salford	0.28	+0.09	+0.11
Sefton	0.11	-0.08	+0.04
South Lakeland	0.14	-0.05	+0.09
South Ribble	0.15	-0.04	+0.10
St. Helens	0.19	0.00	+0.06
Stockport	0.22	+0.03	+0.08
Tameside	0.19	0.00	-0.25
Trafford	0.23	+0.04	0.00
Vale Royal	0.06	-0.13	0.00
Warrington	0.13	-0.06	+0.08
West Lancashire	0.12	-0.07	+0.06
Wigan	0.13	-0.06	+0.03
Wirral	0.14	-0.05	-0.02
Wyre	0.10	-0.09	+0.06
<b>North West</b>	<b>0.19</b>	<b>N/A</b>	<b>+0.04</b>

**Map 6.2: Mores serious violent offences attributable to alcohol, rate per 1,000 of the population in 2004/05**

More serious violent offences attributable to alcohol, per 1,000 population



\*Figures in this table may not add up exactly due to rounding.

# Indicator 6: All violent offences attributable to alcohol

## a) More serious violence

Figure 6.3: Trends in more serious violent offences attributable to alcohol, rate per 1,000 of the population in the North West, 2002/03 to 2004/05

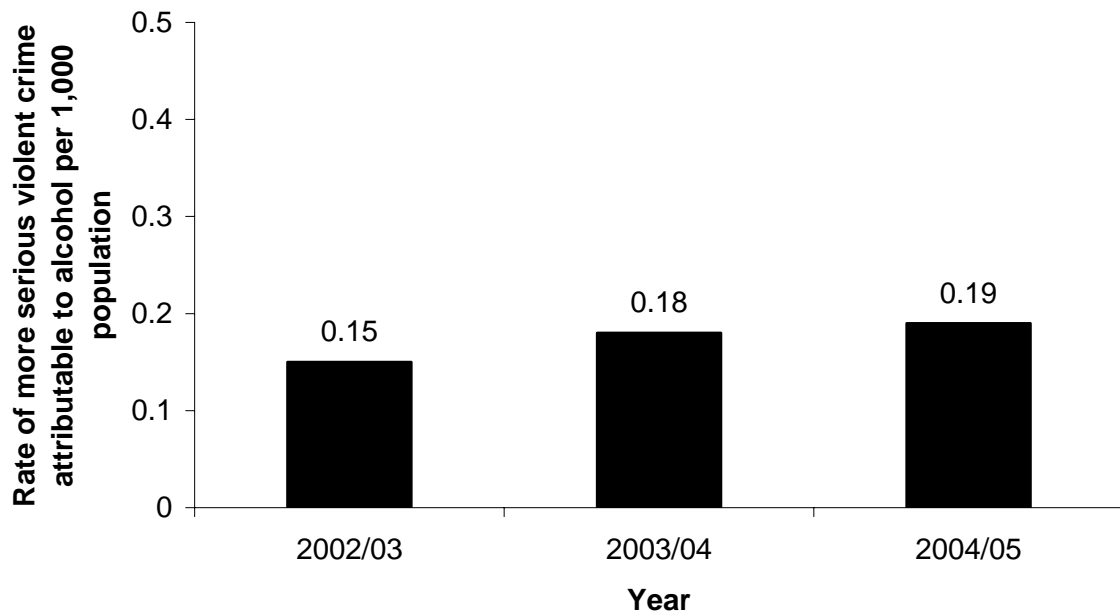
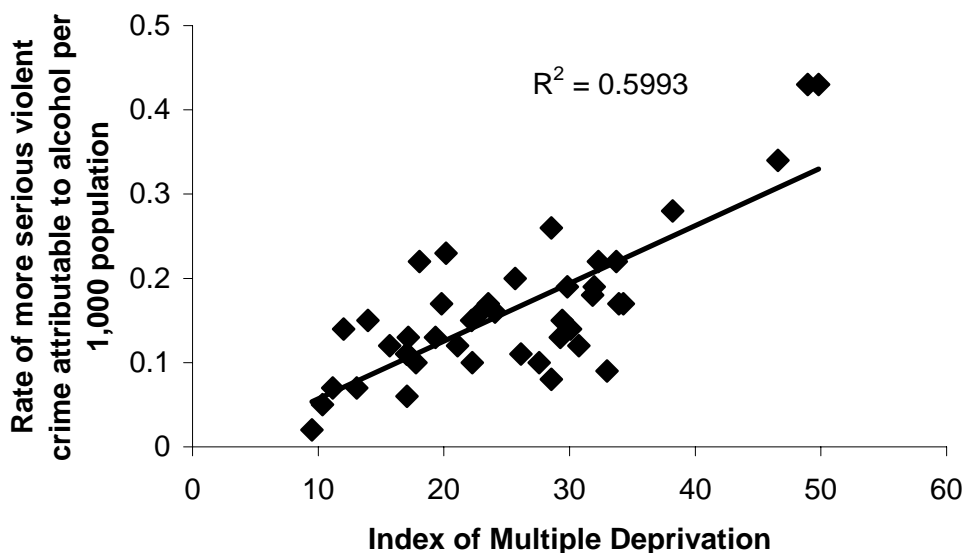


Figure 6.4: Correlation between the rate of more serious violent offences attributable to alcohol per 1,000 of the population in 2004/05 and the Index of Multiple Deprivation\* in 2004 by Local Authority in the North West



\* A higher Index of Multiple Deprivation score represents a higher level of deprivation.

# Indicator 6: All violent offences attributable to alcohol

## b) Wounding offences

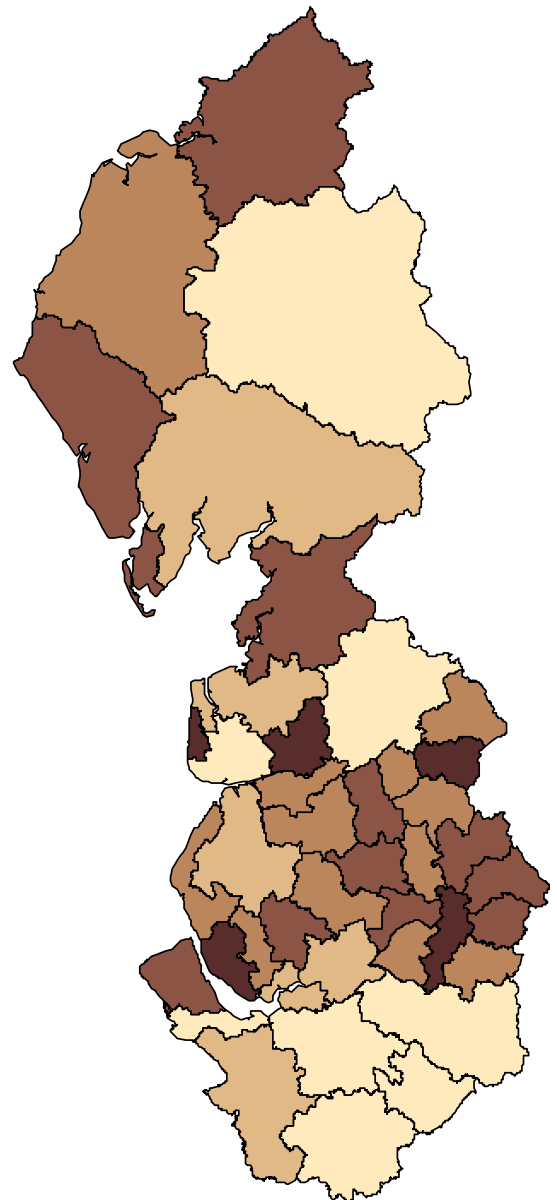
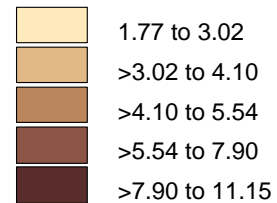
**Table 6.4: Wounding offences attributable to alcohol, rate per 1,000 of the population in 2004/05\***

Local Authority	Wounding per 1,000 in 2004/05	Variation from North West total	Change from 2002/03
Allerdale	4.85	-1.11	+1.40
Barrow-in-Furness	7.90	+1.94	+3.30
Blackburn with Darwen	6.78	+0.82	+3.04
Blackpool	11.04	+5.08	+6.65
Bolton	5.89	-0.07	+0.52
Burnley	8.45	+2.49	+4.27
Bury	4.77	-1.19	-0.03
Carlisle	6.03	+0.07	+2.58
Chester	3.58	-2.38	+1.11
Chorley	5.16	-0.80	+3.02
Congleton	1.77	-4.19	+0.38
Copeland	5.97	+0.01	+2.15
Crewe & Nantwich	2.97	-2.99	+0.85
Eden	3.00	-2.96	+1.06
Ellesmere Port & Neston	2.82	-3.14	+1.03
Fylde	3.02	-2.94	+1.65
Halton	4.10	-1.86	+0.97
Hyndburn	5.10	-0.86	+1.91
Knowsley	5.54	-0.42	+1.91
Lancaster	6.29	+0.33	+3.20
Liverpool	11.15	+5.19	+5.38
Macclesfield	2.46	-3.50	+0.51
Manchester	9.79	+3.83	+0.98
Oldham	5.98	+0.02	-0.24
Pendle	5.26	-0.70	+2.11
Preston	8.33	+2.37	+3.41
Ribble Valley	1.97	-3.99	+0.46
Rochdale	7.48	+1.52	+1.43
Rossendale	5.01	-0.95	+2.56
Salford	6.29	+0.33	+0.85
Sefton	4.71	-1.25	+2.08
South Lakeland	3.87	-2.09	+2.09
South Ribble	4.57	-1.39	+2.22
St. Helens	6.64	+0.68	+2.72
Stockport	4.68	-1.28	+0.76
Tameside	7.40	1.44	+2.04
Trafford	4.71	-1.25	-0.13
Vale Royal	2.52	-3.44	+0.22
Warrington	3.53	-2.43	+1.54
West Lancashire	3.63	-2.33	+1.95
Wigan	4.96	-1.00	+0.53
Wirral	5.89	-0.07	+1.88
Wyre	3.52	-2.44	+1.46
<b>North West</b>	<b>5.96</b>	<b>N/A</b>	<b>+1.79</b>

\*Figures in this table may not add up exactly due to rounding.

**Map 6.3: Wounding offences attributable to alcohol by Local Authority rate per 1,000 of the population in 2004/05**

Wounding offences attributable to alcohol, per 1,000 population



# Indicator 6: All violent offences attributable to alcohol

## b) Wounding offences

Figure 6.5: Trends in wounding offences attributable to alcohol, rate per 1,000 of the population in the North West, 2002/03 to 2004/05

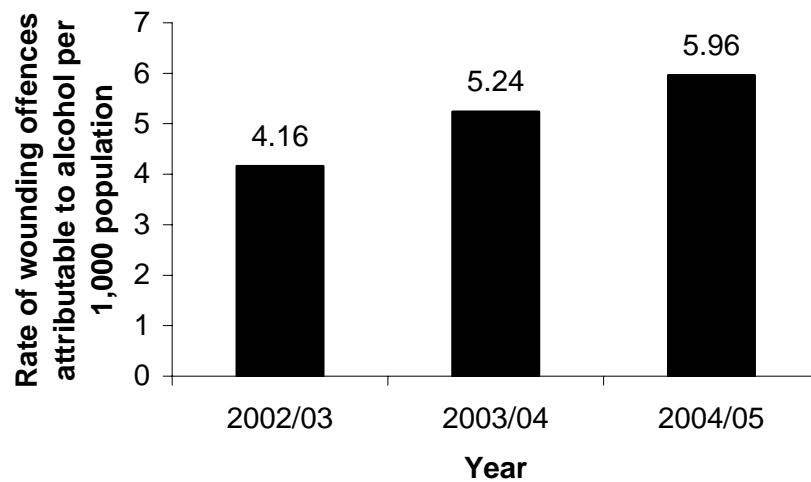
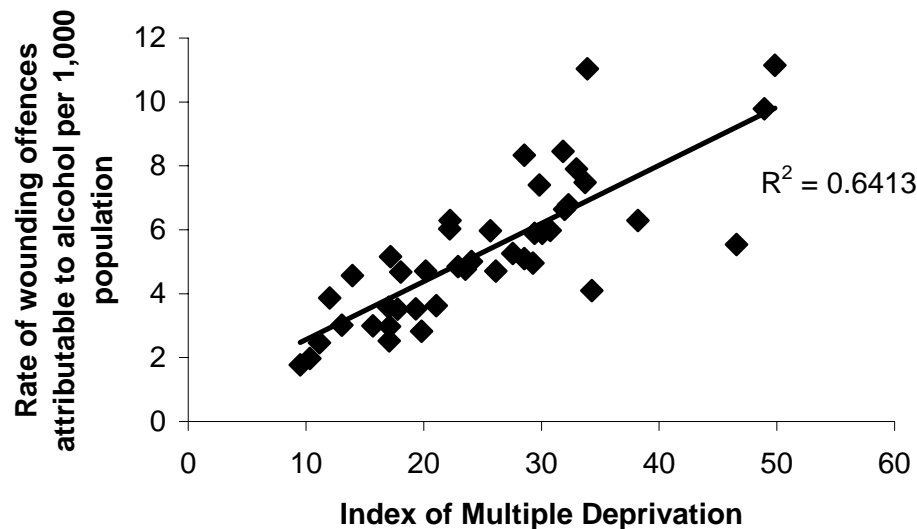


Figure 6.6: Correlation between the rate of wounding offences attributable to alcohol per 1,000 of the population in 2004/05 and the Index of Multiple Deprivation\* in 2004 by Local Authority in the North West



\* A higher Index of Multiple Deprivation score represents a higher level of deprivation.

# Indicator 6: All violent offences attributable to alcohol

## c) Less serious violence

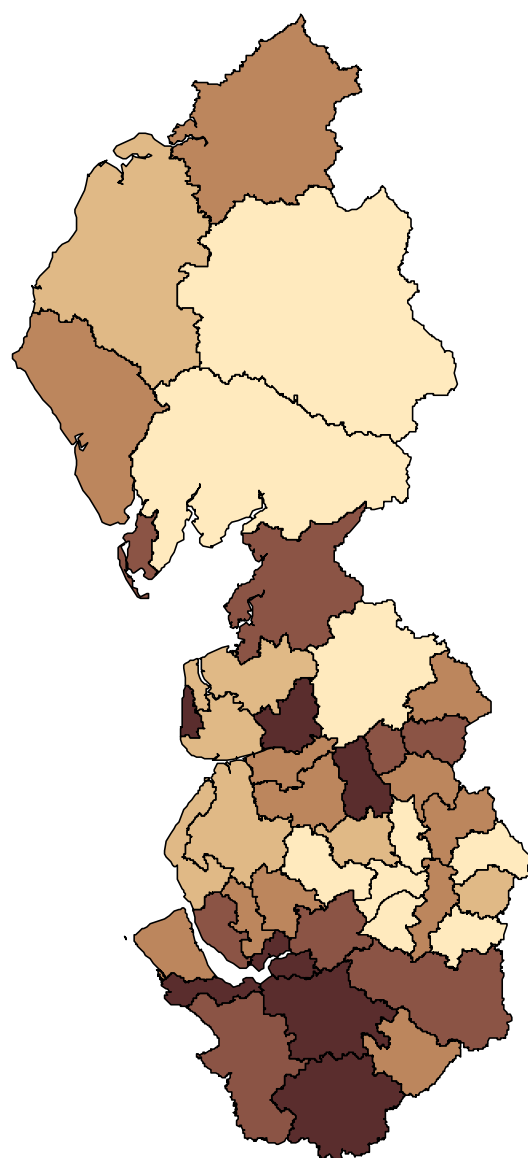
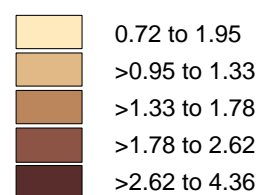
**Table 6.5: Less serious violent offences attributable to alcohol, rate per 1,000 of the population in 2004/05\***

Local Authority	Less serious violence per 1,000 in 2004/05	Variation from North West total	Change from 2002/03
Allerdale	1.33	-0.31	+0.28
Barrow-in-Furness	2.07	+0.43	+0.79
Blackburn with Darwen	2.77	+1.13	+1.38
Blackpool	3.80	+2.16	+2.58
Bolton	1.28	-0.36	+0.09
Burnley	1.90	+0.26	+0.58
Bury	0.72	-0.92	-0.36
Carlisle	1.78	+0.14	-0.08
Chester	2.62	+0.98	-0.01
Chorley	1.56	-0.08	+0.98
Congleton	1.66	+0.02	+0.61
Copeland	1.53	-0.11	+0.75
Crewe & Nantwich	2.81	+1.17	+0.70
Eden	0.88	-0.76	+0.05
Ellesmere Port & Neston	2.89	+1.25	+0.91
Fylde	1.15	-0.49	+0.73
Halton	4.36	+2.72	+2.26
Hyndburn	1.89	+0.25	+0.80
Knowsley	1.46	-0.18	-0.62
Lancaster	2.07	+0.43	+0.88
Liverpool	1.99	+0.35	-0.40
Macclesfield	1.90	+0.26	+0.48
Manchester	1.61	-0.03	-0.18
Oldham	0.86	-0.78	-0.13
Pendle	1.65	+0.01	+0.63
Preston	3.18	+1.54	+1.36
Ribble Valley	0.74	-0.90	+0.23
Rochdale	1.40	-0.24	+0.09
Rossendale	1.50	-0.14	+0.66
Salford	0.95	-0.69	-0.20
Sefton	1.20	-0.44	-0.06
South Lakeland	0.94	-0.70	+0.30
South Ribble	1.48	-0.16	+0.91
St. Helens	1.59	-0.05	+0.60
Stockport	0.91	-0.73	+0.01
Tameside	1.25	-0.39	+0.25
Trafford	0.78	-0.86	-0.40
Vale Royal	2.93	+1.29	+1.11
Warrington	2.46	+0.82	+0.93
West Lancashire	1.17	-0.47	+0.69
Wigan	0.73	-0.91	-0.19
Wirral	1.44	-0.20	+0.21
Wyre	1.20	-0.44	+0.67
<b>North West</b>	<b>1.64</b>	<b>N/A</b>	<b>+0.31</b>

\*Figures in this table may not add up exactly due to rounding.

**Map 6.4: Less serious violent offences attributable to alcohol, rate per 1,000 of the population in 2004/05**

Less serious violent offences attributable to alcohol, rate per 1,000 population



# Indicator 6: All violent offences attributable to alcohol

## c) Less serious violence

Figure 6.7: Trends in less serious violent offences attributable to alcohol, rate per 1,000 of the population in the North West, 2002/03 to 2004/05

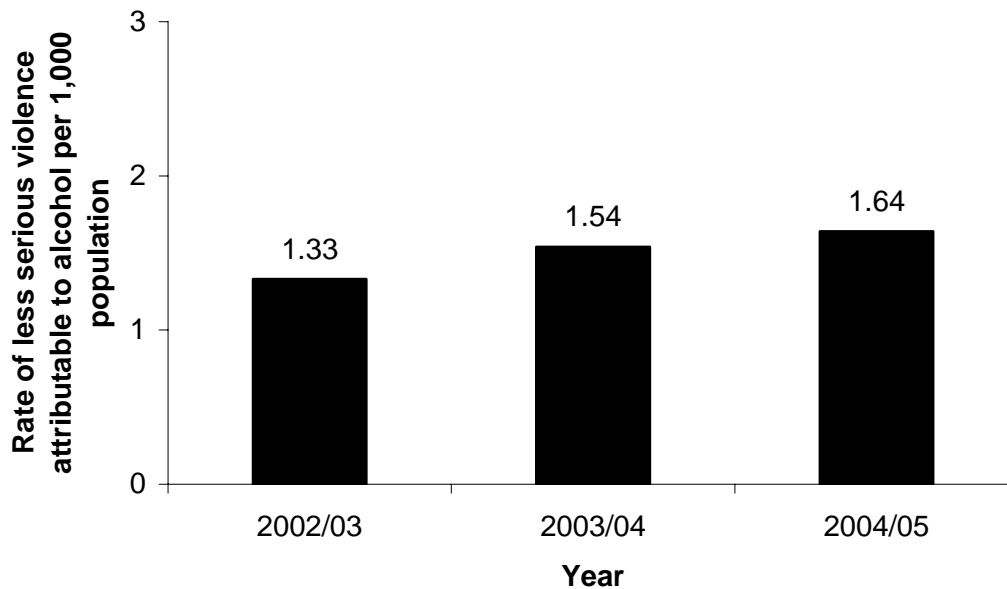
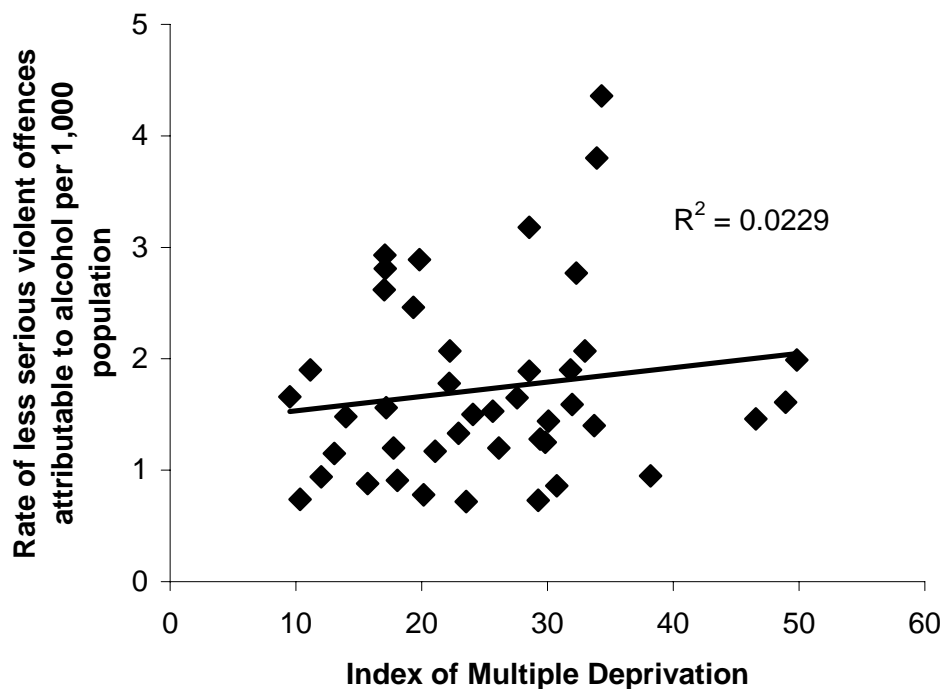


Figure 6.8: Correlation between the rate of less serious violent offences attributable to alcohol per 1,000 of the population in 2004/05 and the Index of Multiple Deprivation\* in 2004 by Local Authority in the North West



\*A higher Index of Multiple Deprivation score represents a higher level of deprivation.

# Indicator 6: All violent offences attributable to alcohol

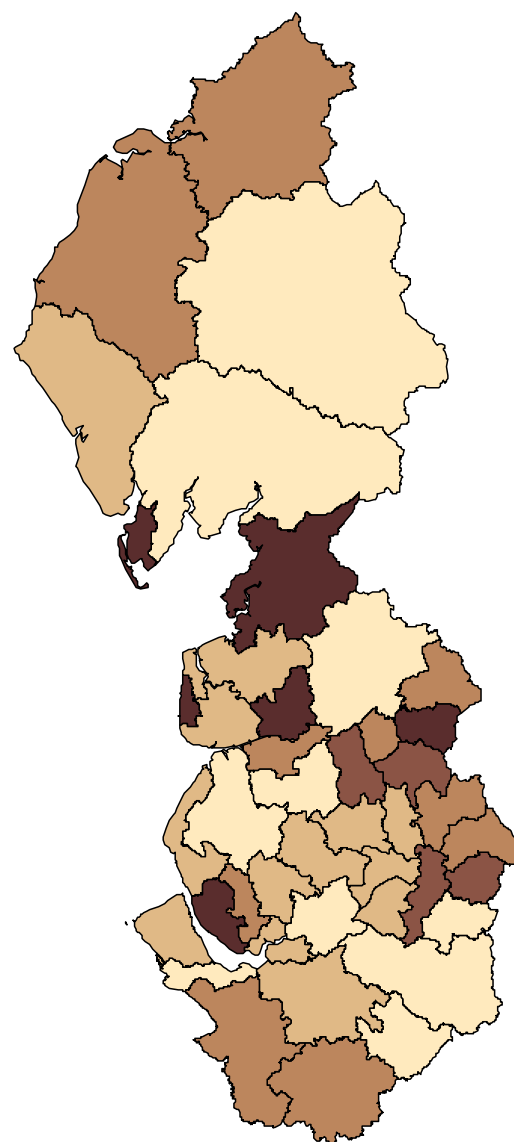
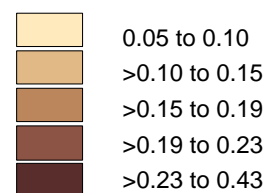
## (i) Assaults on a constable

**Table 6.6: Assaults on a constable attributable to alcohol, rate per 1,000 of the population in 2004/05\***

Local Authority	Assaults on a constable per 1,000 in 2004/05	Variation from North West total	Change from 2002/03
Allerdale	0.18	+0.01	+0.10
Barrow-in-Furness	0.30	+0.13	+0.06
Blackburn with Darwen	0.23	+0.06	-0.24
Blackpool	0.43	+0.26	-0.05
Bolton	0.13	-0.04	-0.11
Burnley	0.33	+0.16	-0.40
Bury	0.13	-0.04	-0.06
Carlisle	0.16	-0.01	-0.01
Chester	0.18	+0.01	-0.20
Chorley	0.10	-0.07	-0.17
Congleton	0.08	-0.09	-0.01
Copeland	0.14	-0.03	+0.01
Crewe & Nantwich	0.16	-0.01	-0.21
Eden	0.06	-0.11	-0.05
Ellesmere Port & Neston	0.10	-0.07	-0.06
Fylde	0.13	-0.04	-0.02
Halton	0.12	-0.05	-0.12
Hyndburn	0.18	+0.01	-0.27
Knowsley	0.19	+0.02	-0.14
Lancaster	0.31	+0.14	-0.20
Liverpool	0.34	+0.17	-0.39
Macclesfield	0.10	-0.07	-0.18
Manchester	0.21	+0.04	-0.44
Oldham	0.17	0.00	-0.13
Pendle	0.18	+0.01	-0.30
Preston	0.37	+0.20	-0.21
Ribble Valley	0.05	-0.12	-0.09
Rochdale	0.17	0.00	-0.09
Rossendale	0.21	+0.04	-0.21
Salford	0.15	-0.02	-0.06
Sefton	0.14	-0.03	-0.23
South Lakeland	0.10	-0.07	0.00
South Ribble	0.17	0.00	-0.11
St. Helens	0.13	-0.04	-0.14
Stockport	0.10	-0.07	-0.10
Tameside	0.20	+0.03	+0.04
Trafford	0.12	-0.05	-0.14
Vale Royal	0.12	-0.05	-0.06
Warrington	0.08	-0.09	-0.06
West Lancashire	0.08	-0.09	-0.13
Wigan	0.13	-0.04	-0.08
Wirral	0.14	-0.03	-0.14
Wyre	0.15	-0.02	-0.03
<b>North West</b>	<b>0.17</b>	<b>N/A</b>	<b>-0.15</b>

**Map 6.5: Assaults on a constable attributable to alcohol per 1,000 of the population in 2004/05**

Assaults on a constable attributable to alcohol, per 1,000 population



\*Figures in this table may not add up exactly due to rounding.

## Indicator 6: All violent offences attributable to alcohol

### (i) Assaults on a constable

Figure 6.9: Trends in assaults on a constable attributable to alcohol, rate per 1,000 of the population in the North West, 2002/03 to 2004/05

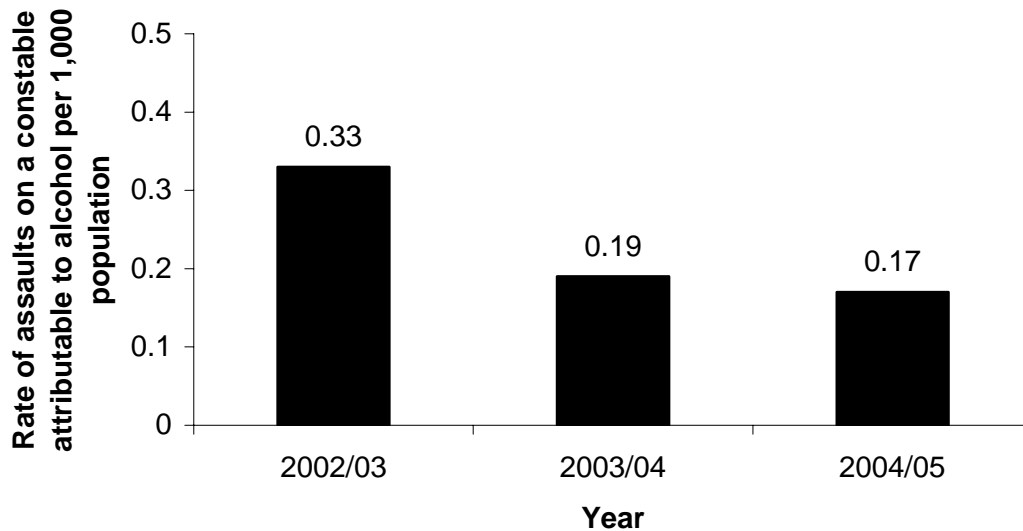
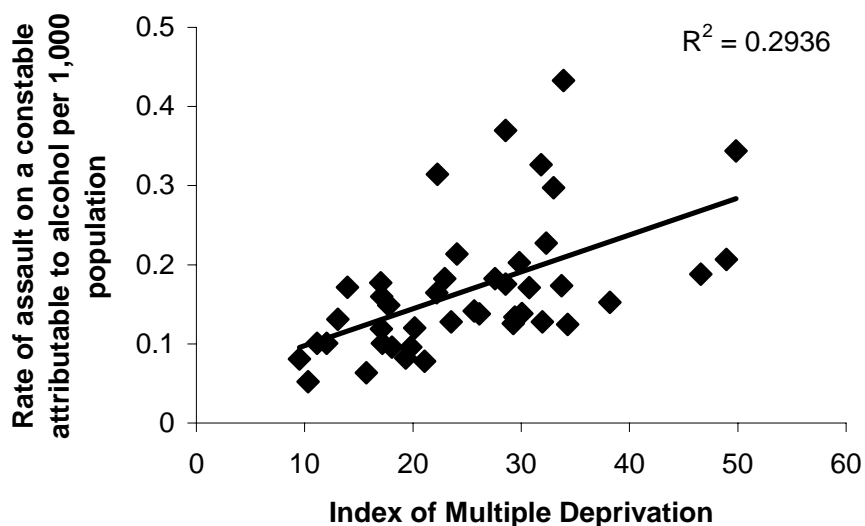


Figure 6.10: Correlation between the rate of assaults on a constable attributable to alcohol per 1,000 of the population in 2004/05 and the Index of Multiple Deprivation\* in 2004 by Local Authority in the North West



\*A higher Index of Multiple Deprivation score represents a higher level of deprivation.

## Indicator 7: Sexual offences attributable to alcohol

Police recorded 7,808 sexual offences in the North West in 2004/05, of which 1,015 (13% - Box 5.1) offences were estimated to be attributable to alcohol. Across the region as a whole there were 0.15 sexual offences attributable to alcohol per 1,000 of the population in 2004/05. As with other crimes, rates varied widely across the region. Manchester and Burnley had the highest rates of sexual offences at 0.31 per 1,000, followed by Blackpool (0.30) and Blackburn with Darwen (0.26). Rates were lowest in Eden (0.04), Congleton (0.05) and Allerdale (0.08).

Recent changes in both recorded crime standards (through the National Criminal Recording Standards; Box 5.1) and through the introduction of the Sexual Offences Act 2003 (Box 7.1) have considerably contributed to the large increase in the rate of sexual offences in recent years. Thus across the North West, the rate of sexual offences attributable to alcohol more than doubled between 2002/03 and 2004/05 (Figure 7.1). Because of the scale of these changes, Local Authority trend data for this indicator have not been calculated.

Sexual offences related to alcohol show a weak correlation with deprivation ( $R^2 = 0.40$ ; Figure 7.2), with the rate of sexual offences not necessarily increasing with higher levels of deprivation. Thus, this correlation is less pronounced than for other forms of violent crime (Figures 6.2, 6.4 and 6.6).

### Box 7.1: Indicator details

The indicator ***Sexual offences attributable to alcohol*** has been calculated by applying the Strategy Unit attributable fraction for sexual offences (13%) to the total number of sexual offences in each Local Authority (Box 5.1). These figures are then calculated into rates per 1,000 of the population.

Changes in legislation through the introduction of the National Crime Recording Standard (Box 5.1) and the Sexual Offences Act 2003 in May 2004 mean that trends are difficult to measure, and recorded crime figures for sexual offences showed a 17% increase nationally between 2003/04 and 2004/05 (Nicholas et al. 2005).

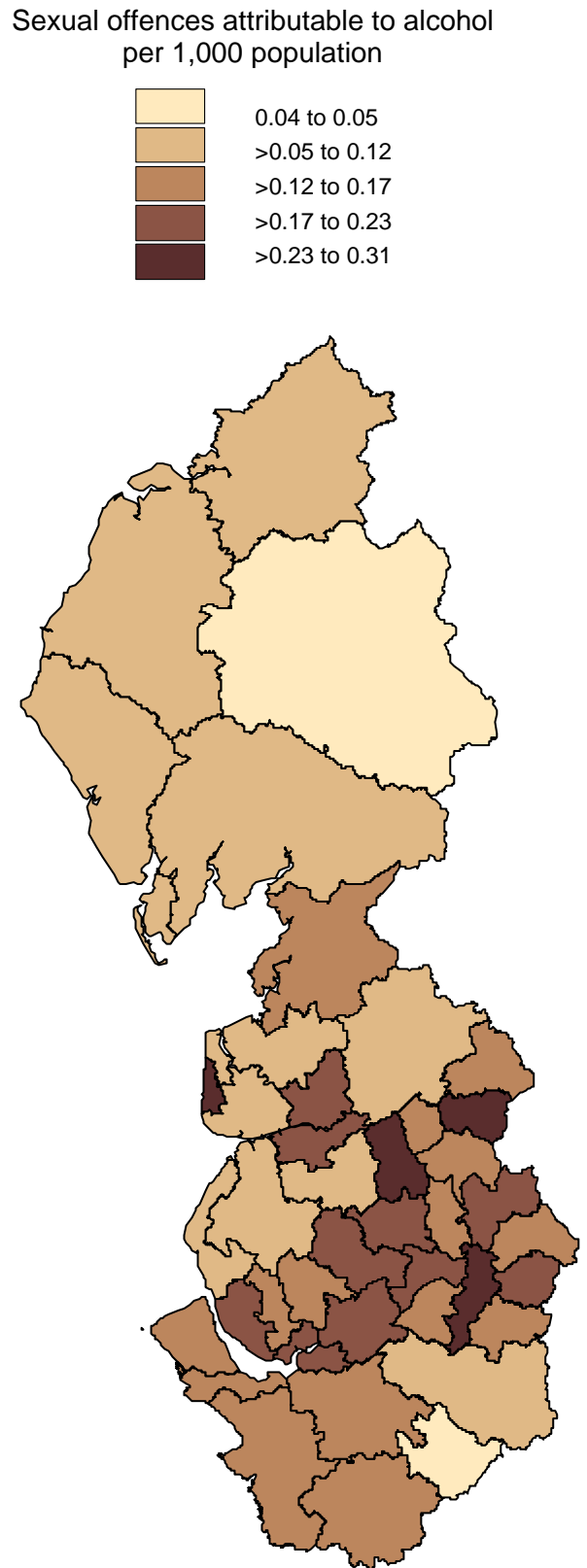
The Sexual Offences Act 2003 was introduced to try to tackle the under-reporting of sexual offences, and attempts to encourage more confidence in the justice system (Nicholas et al. 2005). In doing so, the Act has redefined many of the sexual offences covered. For example, exposure has been reclassified from indecent exposure under the 'other offences' category to exposure under the sexual offences groups (in a new category called 'miscellaneous sexual offences'; Nicholas et al. 2005).

# Indicator 7: Sexual offences attributable to alcohol

**Table 7.1: Sexual offences attributable to alcohol per 1,000 of the population by Local Authority in 2004/05\***

Local Authority	Sexual offences per 1,000 in 2004/05	Variation from North West total
Allerdale	0.08	-0.07
Barrow-in-Furness	0.11	-0.04
Blackburn with Darwen	0.26	+0.11
Blackpool	0.30	+0.15
Bolton	0.20	+0.05
Burnley	0.31	+0.16
Bury	0.15	0.00
Carlisle	0.10	-0.05
Chester	0.15	0.00
Chorley	0.10	-0.04
Congleton	0.05	-0.09
Copeland	0.12	-0.03
Crewe & Nantwich	0.13	-0.01
Eden	0.04	-0.11
Ellesmere Port & Neston	0.15	0.00
Fylde	0.09	-0.05
Halton	0.23	+0.08
Hyndburn	0.16	+0.02
Knowsley	0.15	0.00
Lancaster	0.16	+0.01
Liverpool	0.19	+0.04
Macclesfield	0.09	-0.06
Manchester	0.31	+0.16
Oldham	0.15	+0.01
Pendle	0.15	+0.01
Preston	0.23	+0.08
Ribble Valley	0.10	-0.05
Rochdale	0.23	+0.08
Rossendale	0.13	-0.02
Salford	0.19	+0.05
Sefton	0.10	-0.05
South Lakeland	0.08	-0.07
South Ribble	0.18	+0.03
St. Helens	0.15	0.00
Stockport	0.17	+0.02
Tameside	0.18	+0.04
Trafford	0.17	+0.02
Vale Royal	0.13	-0.02
Warrington	0.22	+0.07
West Lancashire	0.10	-0.05
Wigan	0.19	+0.05
Wirral	0.16	+0.01
Wyre	0.10	-0.05
<b>North West</b>	<b>0.15</b>	<b>N/A</b>

**Map 7.1: Sexual offences attributable to alcohol per 1,000 of the population in 2004/05**



\*Figures in this table may not add up exactly due to rounding.

# Indicator 7: Sexual offences attributable to alcohol

Figure 7.1: Trends in sexual offences attributable to alcohol, rate per 1,000 of the population in the North West, 2002/03 to 2004/05

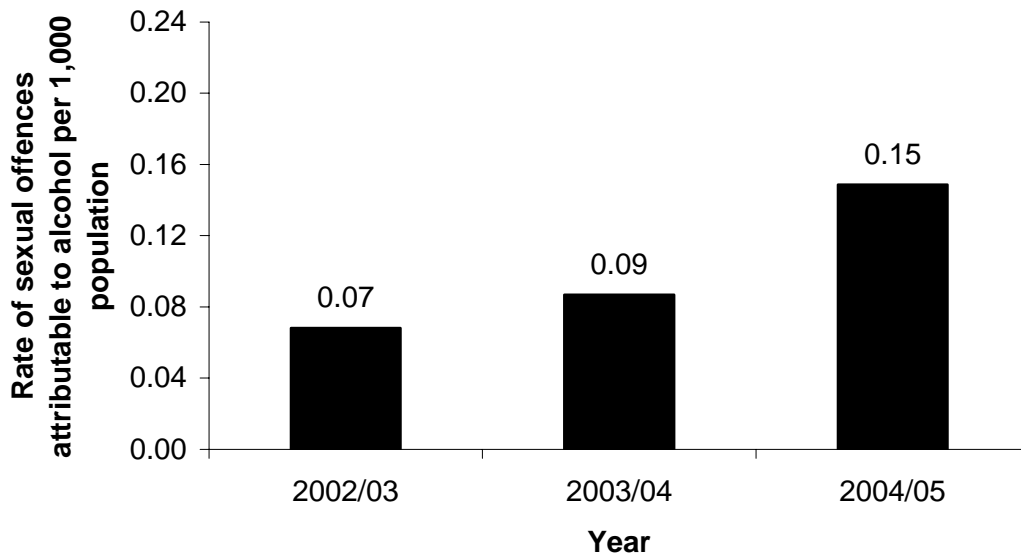
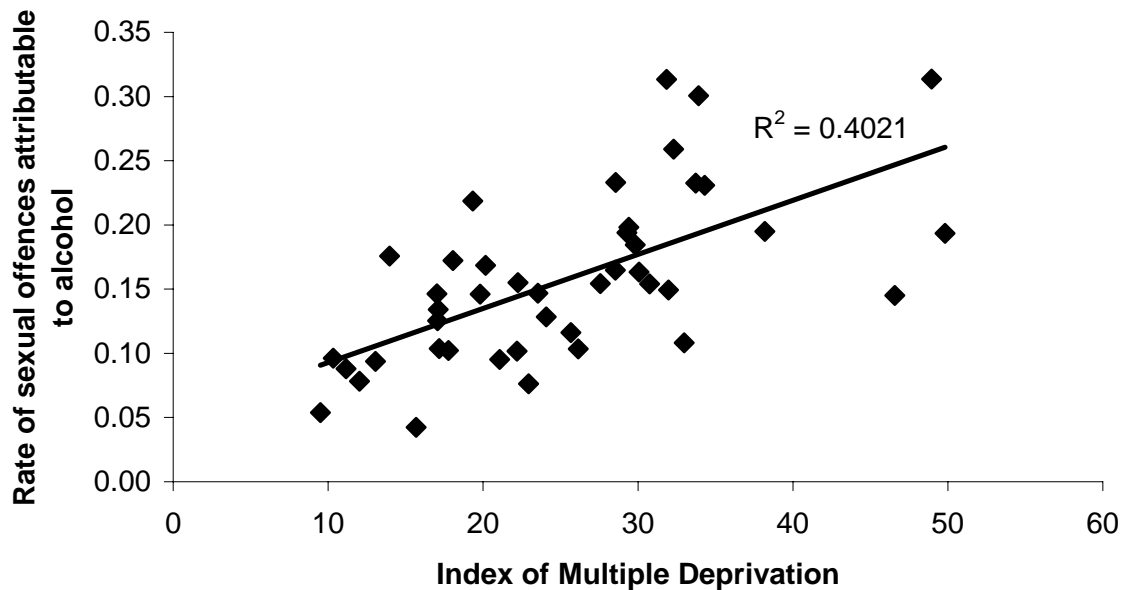


Figure 7.2: Correlation between rate of sexual offences attributable to alcohol per 1,000 of the population in 2004/05 and Index of Multiple Deprivation in 2004\* by Local Authority in the North West



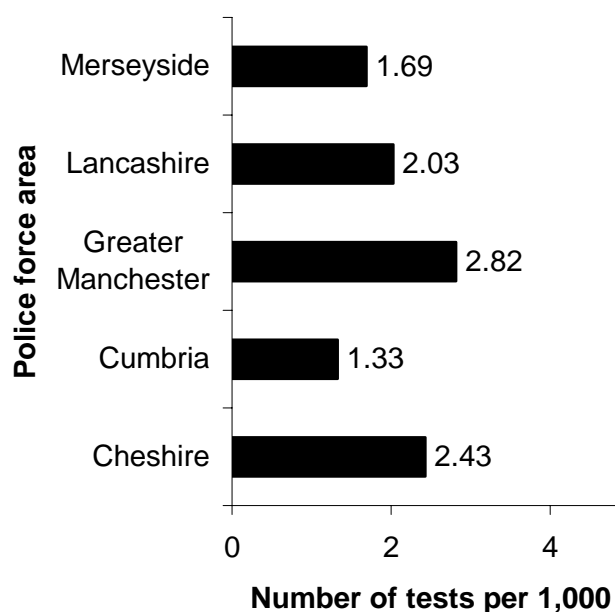
\* A higher Index of Multiple Deprivation score represents a higher level of deprivation.

## Indicator 8: Drink driving

**Table 8.1: Number of sentences passed in Magistrates' Courts for driving or attempting to drive with excess alcohol in 2004**

Petty Session Division	Total sentences passed
Blackburn, Darwen and Ribble Valley	250
Blackpool and Fylde	108
Bolton	332
Burnley, Pendle and Rossendale	281
Bury	196
Carlisle and District	184
Chester, Ellesmere Port and Neston	268
Chorley	173
Eden	79
Furness and District	125
Fylde Coast	366
Halton	130
Hyndburn	94
Knowsley	206
Lancaster	227
Liverpool	779
Macclesfield	266
Manchester	949
North Sefton	175
Oldham	290
Ormskirk	146
Preston	316
Rochdale, Middleton and Heywood	268
Salford, City of	339
South Cheshire	348
South Lakeland	119
South Ribble	115
South Sefton	225
St. Helens	232
Stockport	371
Tameside	295
Trafford	254
Vale Royal	179
Warrington	337
West Allerdale and Keswick	86
Whitehaven	82
Wigan and Leigh	370
Wirral	511
Wyre	48
<b>North West</b>	<b>10,119</b>

**Figure 8.1: Number of positive or refused breath tests per 1,000 of the population by police force area in 2003**



In 2004, 10,119 sentences were passed in North West Magistrates' Courts for driving or attempting to drive with excess alcohol. Manchester Magistrate's Court passed the highest number (949), whilst Wyre passed the lowest (48). However, these differences are likely to reflect differences in population sizes (see Box 8.1).

Greater Manchester Police force had the highest rate of positive or refused breath tests in 2003 (2.82 per 1,000), whilst Cumbria had the lowest (1.33 per 1,000).

### Box 8.1: Indicator description

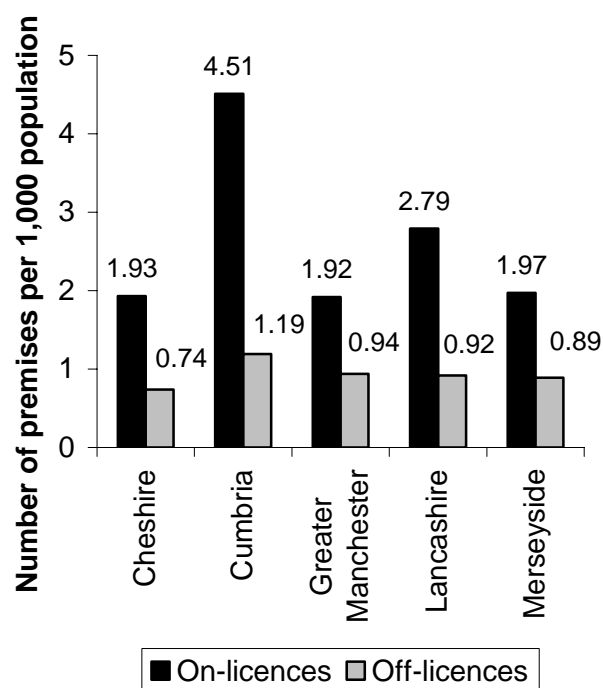
- See Box 9.1 for Petty Session Divisions.
- Information on population sizes for Petty Session Divisions is unavailable and so it has not been possible to calculate the number of sentences passed compared to population size.
- Sentences passed in Magistrates' Courts refer to those who are given a Community Sentence, fined, imprisoned, or given an absolute or conditional discharge.
- Magistrates' Courts handle those offences that are deemed less serious (such as motoring offences or minor injuries). More serious offences are handled by the Crown Courts.
- Drink drive detection rates can be influenced by police practice.

## Indicator 9: Premises licensed to sell alcohol

**Table 9.1: Number of premises licensed to sell alcohol from July 2003 to June 2004**

Petty Session Division	Number of on-licensed premises	Number of off-licensed premises	Total number of licensed premises
Blackburn, Darwen and Ribble Valley	343	130	473
Blackpool and Fylde	1,704	235	1,939
Bolton	406	233	639
Burnley, Pendle and Rossendale	447	249	696
Bury	356	168	524
Carlisle and District	369	117	486
Chester, Ellesmere Port and Neston	471	152	623
Chorley	221	81	302
Eden	303	62	365
Furness and District	398	167	565
Halton	161	83	244
Hyndburn	165	79	244
Knowsley	123	91	214
Lancaster	390	141	531
Liverpool	1,254	430	1,684
Macclesfield	389	100	489
Manchester City	1,189	477	1,666
North Sefton District	368	142	510
Oldham	417	213	630
Ormskirk	167	81	248
Preston	302	149	451
Rochdale, Middleton and Heywood	369	159	528
Salford, City of	297	214	511
South Cheshire	382	164	546
South Lakeland	542	108	650
South Ribble	114	96	210
South Sefton District	145	88	233
St. Helens	293	171	464
Stockport	420	200	620
Tameside	406	208	614
Trafford	483	196	679
Vale Royal	224	90	314
Warrington	286	147	433
West Allerdale and Keswick	391	77	468
Wirral	501	293	794
Whitehaven	208	52	260
Wigan and Leigh	524	301	825
Wyre	138	71	209
<b>North West</b>	<b>16,666</b>	<b>6,215</b>	<b>21,881</b>

**Figure 9.1: Number of premises licensed to sell alcohol from July 2003 to June 2004 per 1,000 of the population**



### Box 9.1: Indicator description

- More recent data covering licensed premises since the changes in legislation are currently unavailable (as there is no routine or consistent data collection method).
- On licensed premises include hotels, nightclubs, public houses and restaurants – those where alcohol is bought and consumed on the premises.
- Off-licensed premises sell alcohol for consumption off the premises and include off-licenses and supermarkets.
- Petty Session Divisions have since been renamed Local Justice Areas under the Local Justice Areas Order (2005). They refer to the areas in which magistrates are assigned to, and broadly correspond to Local Authority areas (although there are some differences).

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# Appendices

## Appendix 1: Codes used for hospitalised admission for alcohol specific conditions

ICD-10* code	Condition
E244	Alcohol pseudo-induced Cushing's syndrome
F10	Mental and behavioural disorders due to use of alcohol
G312	Degeneration of nervous system due to alcohol
G621	Alcoholic polyneuropathy
G721	Alcoholic myopathy
I426	Alcohol cardiomyopathy
K292	Alcoholic gastritis
K70	Alcoholic liver disease
T510	Ethanol poisoning
T511	Methanol poisoning
X45	Accidental poisoning by and exposure to alcohol

\* The World Health Organization's International Classification of Diseases.  
Source: Hughes et al. (2004); Strategy Unit (2003); WHO (1992)

These conditions are entirely due to alcohol and thus have an attributable fraction of 1 (or 100%).

## Appendix 2: Codes used for hospitalised admission for all conditions attributable to alcohol

This indicator also incorporates those codes and conditions identified in Appendix 1.

ICD-10* code	Condition	Average attributable fraction	
		Males	Females
A15-19	Respiratory tuberculosis	0.25	0.25
C00	Lip cancer	0.50	0.50
C01-14 (excl. 11)	Oropharyngeal cancer	0.25	0.12
C15	Oesophageal cancer	0.29	0.29
C16	Stomach cancer	0.20	0.20
C17-21	Colorectal cancer	0.20	0.20
C22	Liver cancer	0.14	0.24
C32	Laryngeal cancer	0.41	0.26
C50	Female Breast cancer	0.00	0.035
E10-14	Diabetes	0.05	0.05
G40-41	Epilepsy	0.15	0.15
I10-15	Hypertension	0.08	0.04
I20-I25	Ishchaemic heart disease	0.01	0.01
I470, I471, I479, I48	Supra ventricular cardiac arrhythmias	0.17	0.09
I50-51	Heart failure	0.00**	0.00**
I60-69	Stroke	0.08	0.08
I85	Oesophageal varices	0.46	0.32
J12-18	Pneumonia and influenza	0.05	0.05
K226	Gastro-oesophageal laceration haemorrhage syndrome	0.29	0.29
K25-27	Peptic ulcer	0.10	0.10
K73	Chronic hepatitis	0.49	0.52
K74	Fibrosis and cirrhosis of liver	0.49	0.52
K85	Acute pancreatitis	0.24	0.24
K860-K861	Chronic pancreatitis	0.72	0.72
L400-404, L408-409	Psoriasis	0.03	0.01
O03	Spontaneous abortion	0.00	0.12
V01-89	Road accidents	0.40	0.31
V90-94	Water transport accidents	0.20	0.11
V95-97	Air/space transport accidents	0.20	0.11
W00-19	Fall injuries	0.29	0.25
W24-31	Work/machine injuries	0.16	0.16
W32-34	Firearm injuries	0.25	0.25
W65-74	Drowning	0.32	0.28
W79	Inhalation and ingestion of food causing obstruction of respiratory tract	0.63	0.63
X00-09	Fire injuries	0.41	0.41
X31	Accidental excessive cold	0.25	0.25
X60-84, Y10-34	Intentional self-harm/Event of undetermined intent	0.34	0.16
X93-Y09	Assault	0.37	0.37

\* The World Health Organization's International Classification of Diseases.

\*\* The average attributable fraction is less than 0.01.

Source: Hughes et al. (2004); Strategy Unit (2003); WHO (1992)

### Appendix 3: Codes used for reduced life expectancy attributable to alcohol

ICD-10 code	Condition	Average attributable fraction	
		Males	Females
F10	Alcoholic psychosis / Alcohol dependence / Alcohol abuse	1.00	1.00
G621	Alcoholic polyneuropathy	1.00	1.00
I426	Alcoholic cardiomyopathy	1.00	1.00
K292	Alcohol gastritis	1.00	1.00
K70	Alcoholic liver disease	1.00	1.00
T510	Ethanol toxicity	1.00	1.00
T511	Methanol toxicity	1.00	1.00
X45	Alcohol beverage poisoning / Other ethanol poisoning	1.00	1.00
A15-19	Respiratory tuberculosis	0.25	0.25
C00	Lip cancer	0.50	0.50
C01-14 (excl. 11)	Oropharyngeal cancer	0.25	0.12
C15	Oesophageal cancer	0.26	0.14
C16	Stomach cancer	0.20	0.20
C17-21	Colorectal cancer	0.20	0.20
C22	Liver cancer	0.14	0.24
C32	Laryngeal cancer	0.41	0.26
C50	Female breast cancer	0.00	0.35
E10-14	Diabetes	0.05	0.05
G40-41	Epilepsy	0.15	0.15
I10-15	Hypertension	0.08	0.35
I20-25	Ischaemic heart disease	0.10	0.10
I470, I471, I479, I48	Supra ventricular cardiac arrhythmias	0.17	0.09
I50-51	Heart failure	0.00**	0.00**
I60-69	Stroke	0.80	0.80
I85	Oesophageal varices	0.33	0.08
J12-18	Pneumonia and influenza	0.05	0.05
K226	Gastro-oesophageal laceration haemorrhage syndrome	0.29	0.29
K25-27	Peptic ulcer	0.10	0.10
K860-861	Chronic pancreatitis	0.72	0.72
K73-74	Unspecified cirrhosis	0.49	0.52
K85	Acute pancreatitis	0.24	0.24
L40 (excl. L405)	Psoriasis	0.03	0.01
O03	Spontaneous abortion	0.00	0.12
V01-89	Road injuries / Other road accidents	0.40	0.31
V90-94	Water transport accidents	0.20	0.11
V95-97	Air / Space transport accidents	0.20	0.11
W00-19	Fall injuries	0.29	0.25
W24-31	Work / Machine injuries	0.16	0.16
W32-34	Firearm injuries	0.25	0.25
W65-74	Drowning	0.32	0.29
W79	Aspiration	0.63	0.63
X00-09	Fire injuries	0.41	0.41
X31	Accidental excessive cold	0.25	0.25
X60-84, Y10-34	Suicide	0.34	0.16
X93-Y09	Assault	0.37	0.37

\* The World Health Organization's International Classification of Diseases.

\*\* The average attributable fraction is less than 0.01.

Source: Hughes et al. (2004); Strategy Unit (2003); WHO (1992)

#### Appendix 4: Codes used for violent crime attributable to alcohol

Code	Offence		
<b>More serious violent offences</b>			
1	Murder		
2	Attempted murder		
3	Threat or conspiracy to murder		
37.1	Causing death by aggravated vehicle taking		
4.1	Manslaughter		
4.2	Infanticide		
4.3	Child destruction		
4.4/6	Causing death by dangerous or careless driving (including under the influence)		
<b>Wounding</b>			
5	Wounding or other act endangering life		
6	Endangering railway passenger		
7	Endangering life at sea		
8A	Other wounding		
8B	Possession of weapons		
8C	Harassment		
8D	Racially or religiously aggravated other wounding		
8E	Racially or religiously aggravated harassment		
<b>Less serious violent offences</b>			
104	Assault on a constable		
105A	Common assault		
105B	Racially or religiously aggravated common assault		
11	Cruelty to or neglect of children		
12	Abandoning a child under the age of two years		
13	Child abduction		
14	Procuring illegal abortion		
15	Concealment of birth		
Source:	Strategy	Unit	(2003)



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