



The impact of Alcohol on the NHS

IAS Factsheet

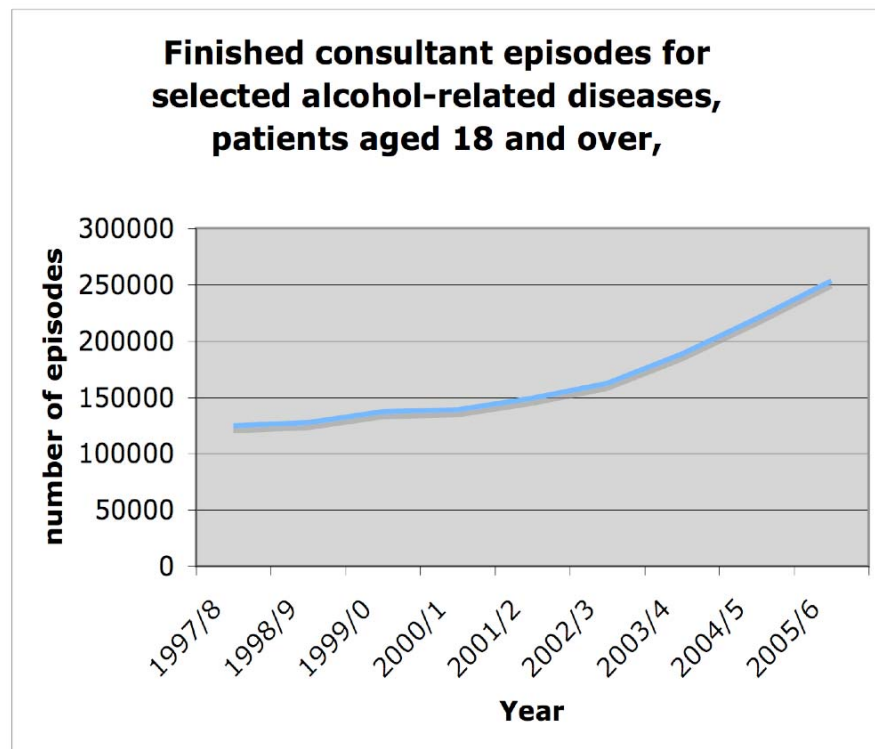
Produced by the Institute of Alcohol Studies,
1 The Quay,
St Ives,
Cams.,
PE27 5AR

Tel: 01480 466766
Fax: 01480 497583
Email: info@ias.org.uk
Website: <http://www.ias.org.uk>

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The Alcohol Needs Assessment Research Report, published in November 2006, identified that £217 million was spent in 2003-4 by Primary Care Trusts and local authorities to support alcohol treatment¹ in England. In 2005/6 there were over a quarter of a million admissions to NHS hospitals in England for selected alcohol-related diagnoses (mental and behavioural disorders due to alcohol, alcoholic liver disease and toxic effects of alcohol). Hospital admissions for these diagnoses have virtually doubled since 1997.²



- Overall probably around 1 in 16 of all hospital admissions are for alcohol-related causes.
- Alcohol-related diseases account for 1 in 8 NHS bed days (around 2 million) and 1 in 8 NHS day cases (around 40,000).³
- Up to 35% of all accident and emergency attendances and ambulance costs are alcohol-related³
- Between 12 midnight and 5am, 70% of attendances are alcohol-related³
- At peak times in A&E Departments,³
 - 40% of all attendees have a raised blood alcohol level
 - 14% are intoxicated
 - 43% are problematic drinkers
- Common reasons for alcohol-related attendance at A&E Departments include:³
 - violent assault
 - road traffic accidents
 - psychiatric emergencies
 - deliberate self harm
- In addition, 1 in 5 patients admitted to hospital for other reasons are drinking at hazardous levels.
- In 1993 Dr. J. Chick reported that in urban hospitals in Britain 15-30% of male medical and surgical patients and 8-15% of women patients have alcohol problems.⁴
- Between 1995-7, Marshal et al conducted a prevalence study of current substance misuse amongst acute general medical admissions in a London hospital. 20 per cent of admissions were identified as substance misusers; the majority (72 per cent) of the identified patients having an alcohol problem. 19 per cent were currently using illegal drugs and 9 per cent were poly drug

users.⁵

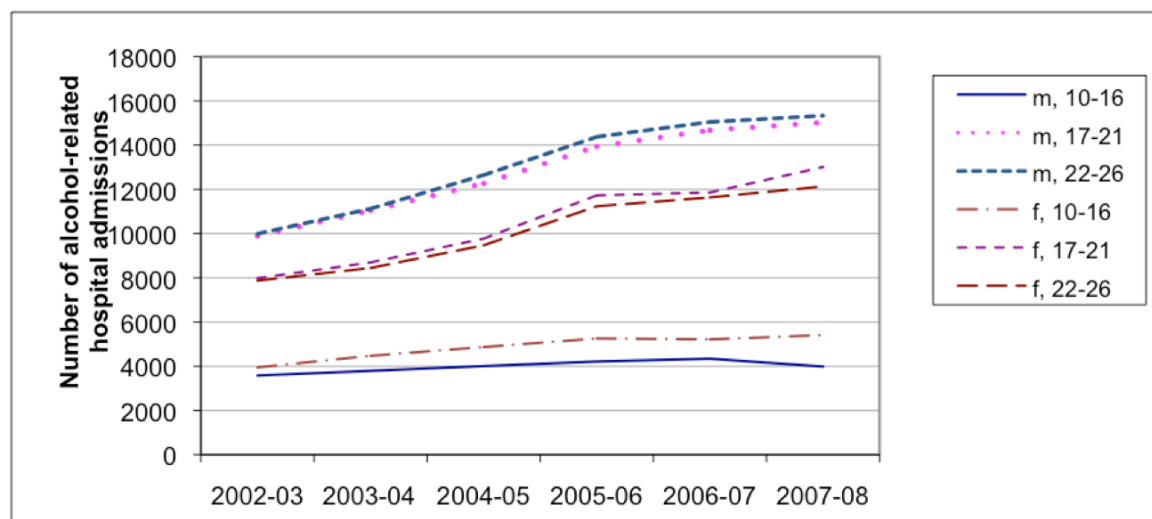
- In 1997-98, the number of bed days in NHS hospitals in England where patients were admitted with a primary diagnosis of alcoholic liver disease was 106,943.⁶
- A study at the Royal Bolton Hospital in 2000, found that in just one month, 600 bed days were occupied on the gastroenterology ward by patients with alcohol-related conditions. Average length of stay was 18.2 days.⁷
- In the same hospital over a 6 month period, 21% of acute psychiatric admissions were alcohol-related, and in one year, 649 patients were referred to the alcohol liaison nurse.⁷
- 1 in 5 patients presenting to primary health care are likely to be excessive drinkers, and based on the average list size, each GP will see 364 excessive drinkers in a 12 month period.⁸
- Problem drinkers consult their GPs twice as often as the average patient.⁸

Variations by Age

Partly related to differences in drinking patterns, young people are more likely than older people to be admitted to hospital for conditions related to acute intoxication rather than others, such as alcoholic liver disease.

NHS hospital admissions (England)

The number of alcohol-related admissions is based on the methodology developed by the North West Public Health Observatory (NWPHO) which, following international best practice, includes a wide range of diseases and injuries in which alcohol plays a part and estimates the proportion of cases that are attributable to the consumption of alcohol.⁹ Figures for under 16s only include admissions where one or more alcohol-specific conditions (those that are wholly attributed to alcohol) were listed. This is because the research on which the attributable fractions are based does not cover under 16s. Figures for the number of episodes in which the patient had an alcohol-related primary or secondary diagnosis represent the number of episodes where an alcohol-related diagnosis was recorded in any of the 20 (14 from 2002-03 to 2006-07 and seven prior to 2002-03) primary and secondary diagnosis fields in a Hospital Episode Statistics (HES) record. Each episode is only counted once in each count, even if an alcohol-related diagnosis is recorded in more than one diagnosis field of the record. The total percentage increase in alcohol-related admissions between 2002-3 and 2007-8 is 1.69%.



Source:

Hospital Episode Statistics (HES), The NHS Information Centre for health and social care. Includes activity in English national health service hospitals and English NHS commissioned activity in the independent sector.

NHS hospital admissions where there was a primary diagnosis of diseases specifically related to alcohol, 1995/6 to 2006/7¹⁰

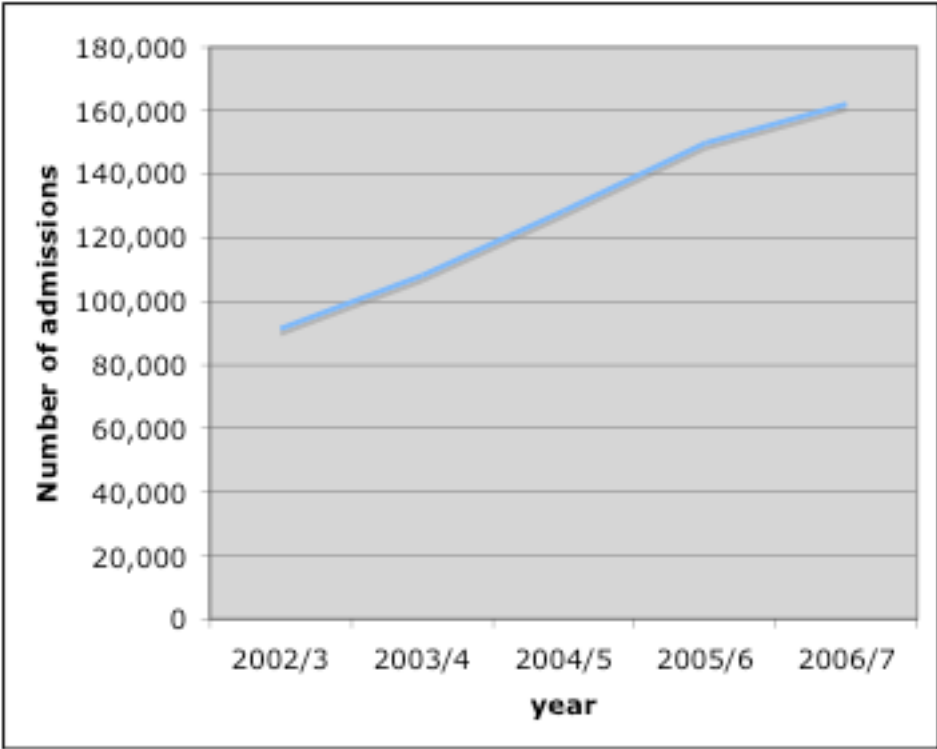
	1995/6	1996/7	1997/8	1998/9	1999/0	2000/1
Mental & behavioural disorders due to use of alcohol	28,636	29,972	30,424	29,483	29,849	28,145
Acute intoxication	7,530	8,148	8,493	8,200	8,932	8,045
Harmful use	2,552	2,619	2,873	2,663	2,644	2,508
Dependence syndrome	13,248	12,872	12,956	11,944	11,232	10,275
Withdrawal state	2,746	3,505	3,580	3,964	4,420	4,887
Withdrawal state with delirium	900	1,066	958	968	962	1,012
Psychotic disorder	503	529	547	540	549	489
Amnesic syndrome	273	256	289	257	263	234
Residual & late-onset psychotic disorder	219	270	223	226	223	191
Other mental & behavioural disorders due to use of alcohol	62	66	53	56	55	54
Unspecified mental & behavioural disorders due to use of alcohol	603	641	452	665	569	450
Alcoholic liver disease	6,940	7,810	8,829	9,148	10,098	10,311
Toxic effect of alcohol	2,116	2,214	2,251	1,930	1,933	1,657
Total	37,692	39,996	41,504	40,561	41,880	40,113

contd:

	2001/2	2002/3	2003/4	2004/5	2005/6	2006/7
Mental & behavioural disorders due to use of alcohol	28,143	28,645	31,998	36,346	39,683	40,872
Acute intoxication	7,886	7,623	9,881	12,397	15,564	16,136
Harmful use	2,375	2,401	2,500	2,925	2,914	2,544
Dependence syndrome	9,974	10,187	10,230	10,388	9,339	8,897
Withdrawal state	5,443	5,914	6,835	8,089	9,403	10,850
Withdrawal state with delirium	927	916	985	1,009	1,109	1,139
Psychotic disorder	533	479	422	451	461	370
Amnesic syndrome	284	289	261	251	242	278
Residual & late-onset psychotic disorder	161	210	203	178	160	147
Other mental & behavioural disorders due to use of alcohol	62	54	60	58	59	56
Unspecified mental & behavioural disorders due to use of alcohol	498	572	621	600	612	455
Alcoholic liver disease	10,802	11,560	12,336	13,201	13,930	14,668
Toxic effect of alcohol	1,784	1,405	1,477	1,656	1,560	1,602
Total	40,729	41,610	45,811	51,203	55,353	57,142

Source: Hospital Episode Statistics. The Information Centre, 2008

Finished Admissions Episodes for patients admitted via Accident and Emergency where the primary or secondary diagnosis was alcohol-related, for data years 2003/4 to 2006/7



Source: <http://www.parliament.uk/deposits/depositedpapers/2008/DEP2008-0716.xls>

Alcohol-related finished admissions for the years 2004-5 to 2006-7¹¹

Alcohol-related finished admissions	Number
2004-5	644,185
2005-6	735,512
2006-7	799,120

**Count of patients admitted to hospital for alcohol-related conditions by region, SHA and age
2003/4 and 2004/5¹²**

Government office region	SHA	2004 - 05		2003 - 04	
		Under 18	18 & over	Under 18	18 & over
East of England	Norfolk, Suffolk, Cambs	263	4558	51	4381
	Beds & Herts	170	2323	170	1842
	Essex	118	2552	103	2099
London	NW London	107	3953	107	3596
	N Central London	91	2683	75	2275
	NE London	77	2930	109	2916
	SE London	130	3812	121	3131
South East	SW London	156	2584	162	2073
North East	Northumberland, Tyne & Wear	306	6032	246	5512
	Co Durham & Tees Valley	280	4108	247	3481
Yorks & Humber	N & E Yorks & N Lincs	352	4322	348	3837
	W Yorks	283	5447	293	4828
	S Yorks	194	3255	164	2885
North West	Cumbria & Lancs	447	6763	380	6130
	Greater Manchester	642	10707	519	8670
	Cheshire & Merseyside	546	11228	540	10496
South East	Thames Valley	231	3677	201	3050
	Hants & Isle of Wight	279	3722	260	3392
	Kent & Medway	226	3049	191	2650
	Surrey & Sussex	367	5585	340	4677
South West	Avon, Gloucestershire & Wiltshire	281	5687	264	4402
	SW Peninsular	286	4321	296	4113
	Dorset & Somerset	159	2643	145	2216
East Midlands	Trent	399	6897	356	6233
	Leicestershire, Northamptonshire & Rutland	139	2964	131	2530
West Midlands	Shropshire & Staffordshire	237	2958	237	2800
	Birmingham & Black Country	311	6491	324	5945
	W Midlands South	216	2994	222	2746
Other/Unknown		133	4995	107	3758
TOTAL		7426	133240	6709	116664

Number of admissions to NHS hospitals in England where the reason for admission was alcoholic liver failure or toxic liver disease (1995/6 – 2001/2)¹³

	1995/6	1996/7	1997/8	1998/9	1999/0	2000/1	2001/2
Alcoholic liver failure	19,058	22,881	27,083	29,026	33,571	36,923	39,896
Toxic liver disease	652	690	757	787	676	749	670

Alcoholic liver disease primary diagnosis FCEs (finished consultant episodes)

England 1996-2004			
	Completed treatments	Mean length of stay (days)	Total bed days
1996-1997	10,903	12.7	97,785
1997-1998	13,047	12.8	108,580
1998-1999	13,305	12.9	108,996
1999-2000	14,942	12.9	120,601
2000-2001	15,766	13.6	128,701
2001-2002	17,410	14.3	142,500
2002-2003	19,130	14.1	151,086
2003-2004	20,779	14.1	164,226
% increase 1996/97 to 2003/04	91%	11%	68%

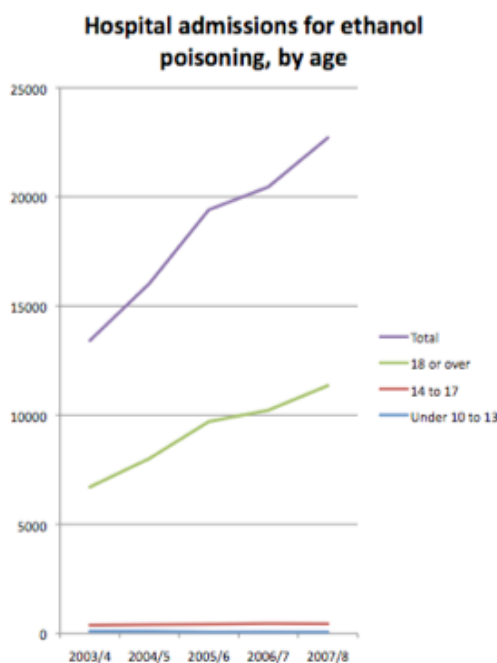
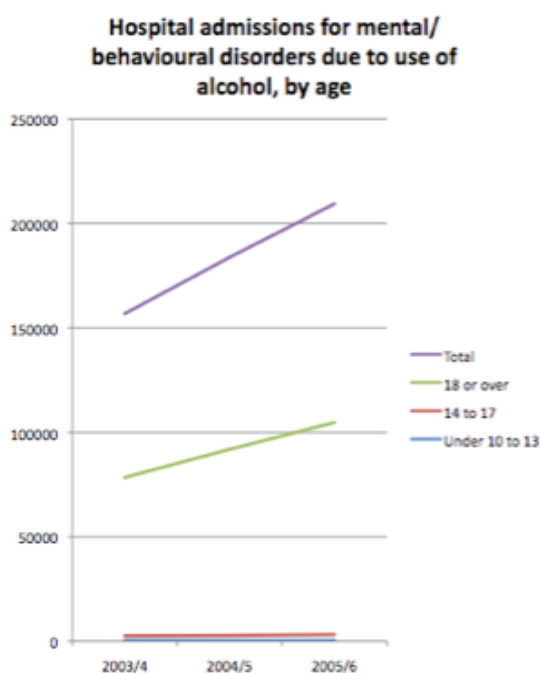
Source: Department of Health

Admissions to acute hospitals in Northern Ireland for people aged under 30 years with a primary or secondary diagnosis of an alcohol-related illness¹⁴

2000/01	2001/2	2002/3	2003/4	2004/5
959	946	805	799	842

All diagnoses count of episodes for alcohol-related cirrhosis of the liver 1996/97 to 2005/06¹⁵

Total number	ages 25-34	Total number	of cases
1996/7	270	1996/7	6,967
1997/8	334	1997/8	7,933
1998/9	343	1998/9	8,345
1999/0	375	1999/0	9,682
2000/1	332	2000/1	9,973
2001/2	354	2001/2	10,586
2002/3	399	2002/3	12,343
2003/4	445	2003/4	14,206
2004/5	550	2004/5	16,684
2005/6	642	2005/6	19,390



Source of data for graphs: Parliamentary Question¹⁶

ENGLAND & WALES

Costs to the NHS

The Strategy Unit calculated the cost to the NHS in England and Wales of treating alcohol-related conditions to be up to £1.7 billion per annum.³

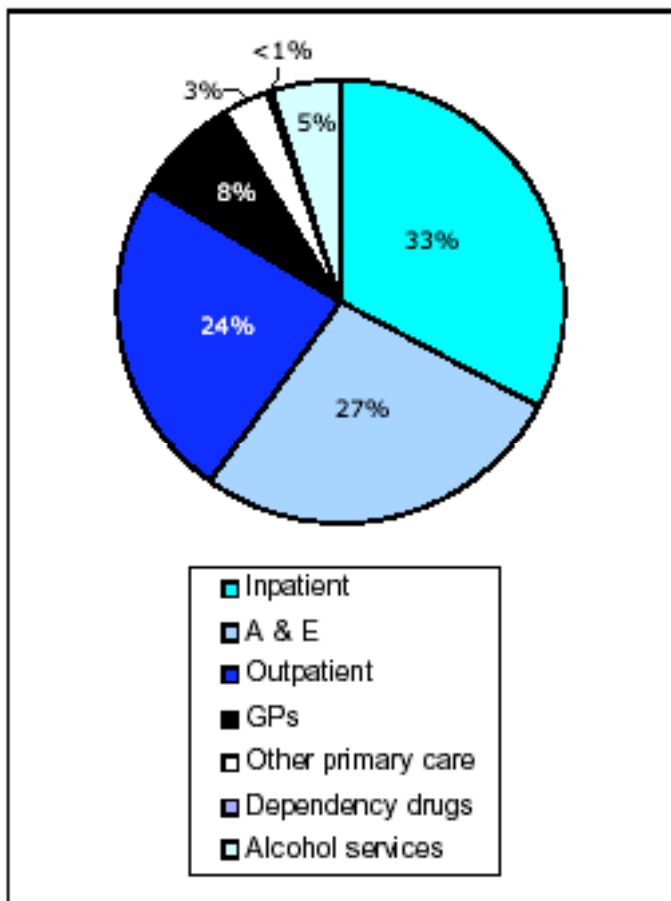
The Alcohol Needs Assessment Research Project estimated that £217 million was spent in 2003-04 on alcohol treatment. The vast majority of this was provided by primary care trusts but some also comes from local authorities and charitable funds. There was no major prevention campaign expenditure to promote alcohol harm reduction in the financial years 1997 to 2005, the only expenditure was for literature and website activity, as follows:

	£ million
2002-3	0.097
2003-4	0.045
2004-5	0.342
2005-6	0.064

In 2006-7 the Department is spending £2million on the 'Know your limits' campaign which is currently running. Additional funding is provided by the Home Office for this campaign. The Department is spending £3.2million on the alcohol identification and brief advice trailblazers project over two years 2006-8.¹⁷

- Alcohol misuse, either directly or indirectly increases the work burden on all aspects of health and social care.
- Cost breakdown of alcohol misuse shows a major strain on NHS hospitals:
 - the NHS is the dominant funder of specialist alcohol services: expenditure is estimated at £95m, with £24m on NHS services and the rest provided by the voluntary sector;
 - alcohol-related diseases account for 1 in 26 NHS bed days (c. 2m) and 1 in 80 NHS day cases (c.40,000); and
 - up to 35 per cent of all accident and emergency (A&E) attendance and ambulance costs (c.£0.5bn) may be alcohol-related.
- The annual cost of other primary care services reaches a total of almost £0.5 bn.
- Total healthcare costs related to alcohol misuse range between £1.4 and £1.7bn, with a middle estimate of about £1.6bn.

COST BREAKDOWN OF ALCOHOL MISUSE



SCOTLAND

Provisional 2004/05 Non-psychiatric hospital standardised discharge rate per 100,000 population with alcohol-related problems by sex¹⁸

<u>Area of Residence</u>	<u>Sex</u>		
	Both Sexes	Male	Female
Scotland	748	1,121	407
Aberdeen City	866	1,278	475
Aberdeenshire	418	564	274
Angus	357	495	229
Argyll & Bute	860	1,234	501
Scottish Borders	522	736	320
Clackmannanshire	481	697	280
West Dunbartonshire	903	1,456	416
Dumfries & Galloway	550	730	383
Dundee City	667	997	371
East Ayrshire	935	1,367	537
East Dunbartonshire	321	515	150
East Lothian	548	721	393
East Renfrewshire	561	868	291
City of Edinburgh	634	904	390
Falkirk	444	671	235
Fife	534	718	363
City of Glasgow	1,430	2,316	646
Highland	939	1,376	522
Inverclyde	1,254	2,127	477
Midlothian	565	760	396
Moray	652	974	339
North Ayrshire	999	1,441	610
North Lanarkshire	742	1,170	356
Orkney Islands	999	1,548	463
Perth & Kinross	441	651	244
Renfrewshire	865	1,383	405
Shetland Islands	671	964	365
South Ayrshire	991	1,428	590
South Lanarkshire	649	999	335
Stirling	591	814	395
West Lothian	587	840	358
Western Isles	1,554	2,332	780

1 Excludes mental illness hospitals, psychiatric units and maternity hospitals, transfer cases have been excluded and includes Scottish residents only.

2 Discharges where alcohol-related problems are recorded as either primary or secondary reasons for admission to hospital.

3 Diseases recorded using the World Health Organisation's International Classification of Diseases 10th Revision (ICD10)

4 Caution is necessary when interpreting these figures. The recording of alcohol misuse may vary from hospital to hospital. Where alcohol misuse is suspected but unconfirmed it may not be recorded by the hospital.

5 The sum of the rows may exceed the total because the same patient may appear in more than one diagnostic group.

1996/97 – 2004/05 Non-psychiatric hospital discharges with alcohol-related problems by diagnosis ¹⁸

Diagnosis	Discharge Period								
	1996/97	1997/98	1998/99	1999/00	2000/01	2001/02	2002/03	2003/04	2004/05 [*]
All Alcohol Related Conditions	27,919	30,537	31,351	33,580	33,413	35,448	37,490	37,546	40,448
Alcoholic Cardiomyopathy	145	166	144	182	176	141	155	132	143
Alcoholic Gastritis	501	520	532	571	661	591	657	765	838
Alcohol-Induced Chronic Pancreatitis	327	416	453	475	550	599	643	731	756
Mental & Behavioural Disorders Due to the Use of Alcohol [‡] of which	19,255	20,834	21,979	23,653	22,729	24,102	25,841	25,482	26,535
Acute Intoxication	8,874	9,234	9,380	10,269	8,986	9,603	9,265	8,174	7,668
Harmful Use	4,866	5,668	6,734	7,200	7,444	8,607	10,481	11,230	12,060
Alcohol Dependence	3,614	4,116	4,069	4,393	4,330	3,907	3,940	3,729	4,336
Alcohol Psychoses	2,177	2,377	2,460	2,644	2,842	2,908	3,282	3,492	3,930
Other & Unspecified Mental & Behavioural Disorders	208	148	180	139	58	46	71	112	90
Alcoholic Liver Disease [‡] of which	3,332	3,600	3,708	3,970	4,305	4,959	5,132	5,546	6,027
Fatty liver	46	26	38	44	32	46	64	76	63
Acute hepatitis	280	295	275	297	339	365	395	424	510
Cirrhosis	834	911	832	780	583	746	842	897	1,118
Alcoholic hepatic failure	160	186	196	229	209	245	304	431	456
Unspecified	2,088	2,279	2,457	2,717	3,229	3,624	3,641	3,830	3,999
Toxic Effect of Alcohol [‡] of which	2,167	3,244	2,904	2,913	2,969	3,044	3,063	2,712	2,840
Accidental Poisoning by & Exposure to Alcohol	382	431	252	314	655	577	256	240	92
Intentional Self-Poisoning by & Exposure to Alcohol	1,749	2,786	2,621	2,550	2,281	2,442	2,762	2,336	1,101

1 Excludes mental illness hospitals, psychiatric units and maternity hospitals, transfer cases have been excluded and includes Scottish residents only.

2 Discharges where alcohol-related problems are recorded as either primary or secondary reasons for admission to hospital.

3 Diseases recorded using the World Health Organization's International Classification of Diseases: 10th Revision (ICD10)

4 Caution is necessary when interpreting these figures. The recording of alcohol misuse may vary from hospital to hospital. Where alcohol misuse is suspected but unconfirmed it may not be recorded by the hospital.

5 The sum of the rows may exceed the total because the same patient may appear in more than one diagnostic group.

* Provisional

Trends in emergency admission rates for people with a primary or secondary diagnosis of acute intoxication and harmful use by age group, for the period 1 April 1996 to 31 March 2004 ¹⁹

	Emergency admissions (rate per 10,000 population)							
	Year (Apr-Mar)							
	1996-97	1997-98	1998-99	1999-00	2000-01	2001-02	2002-03	2003-04
Males								
0-15	6.7	6.5	6.1	6.8	6.2	6.2	5.3	4.4
16-24	46.8	44.8	48.2	53.8	45.9	53.6	52.6	47.1
25-44	45.5	48.0	53.1	56.9	52.7	57.0	60.7	58.4
45-64	54.6	64.2	64.9	74.6	72.4	79.0	88.9	89.6
65 & over	47.9	53.5	59.8	65.4	60.0	67.7	73.1	78.5
All Ages	40.3	43.9	46.7	51.8	48.3	53.1	57.1	56.5
Females								
0-15	5.6	6.3	5.6	6.3	6.0	6.2	5.3	4.5
16-24	19.2	18.1	19.6	20.4	19.0	20.5	23.2	19.4
25-44	17.0	18.4	20.0	20.1	18.6	21.5	22.0	20.2
45-64	15.6	16.9	19.6	20.2	20.6	24.2	26.2	25.6
65 & over	8.1	9.7	11.3	11.1	10.1	11.4	12.1	12.5
All Ages	13.2	14.2	15.7	16.0	15.3	17.4	18.3	17.2

Source: ISD Scotland (SMR01) and GRO(S) (mid-year population estimates).

Trends in emergency admission rates for people with a primary or secondary diagnosis of alcoholic liver disease by sex and age group for the period 1 April 1996 to 31 March 2004¹⁹

	Emergency admissions (rate per 10,000 population)							
	Year (Apr-Mar)							
	1996-97	1997-98	1998-99	1999-00	2000-01	2001-02	2002-03	2003-04
Males								
25-44	5.5	6.7	6.4	6.6	7.7	9.5	9.5	9.3
45-64	16.6	16.8	18.5	19.0	21.7	25.7	27.8	30.6
65 & over	11.7	10.8	10.8	12.4	12.8	13.5	15.2	16.8
All Ages	7.3	7.6	8.0	8.3	9.4	11.1	11.8	12.6
Female								
25-44	2.9	2.7	2.7	3.0	4.2	4.7	4.1	4.6
45-64	7.2	8.3	8.2	10.2	9.8	11.9	12.1	14.5
65 & over	2.8	3.7	3.3	3.4	3.8	4.7	4.3	4.2
All Ages	3.1	3.4	3.4	4.0	4.2	5.1	4.9	5.6

a Data for patients under 25 are not presented due to small numbers, however they are included in the 'all ages' total.

Source: ISD Scotland (SMR01) and GRO(S) (mid-year population estimates).

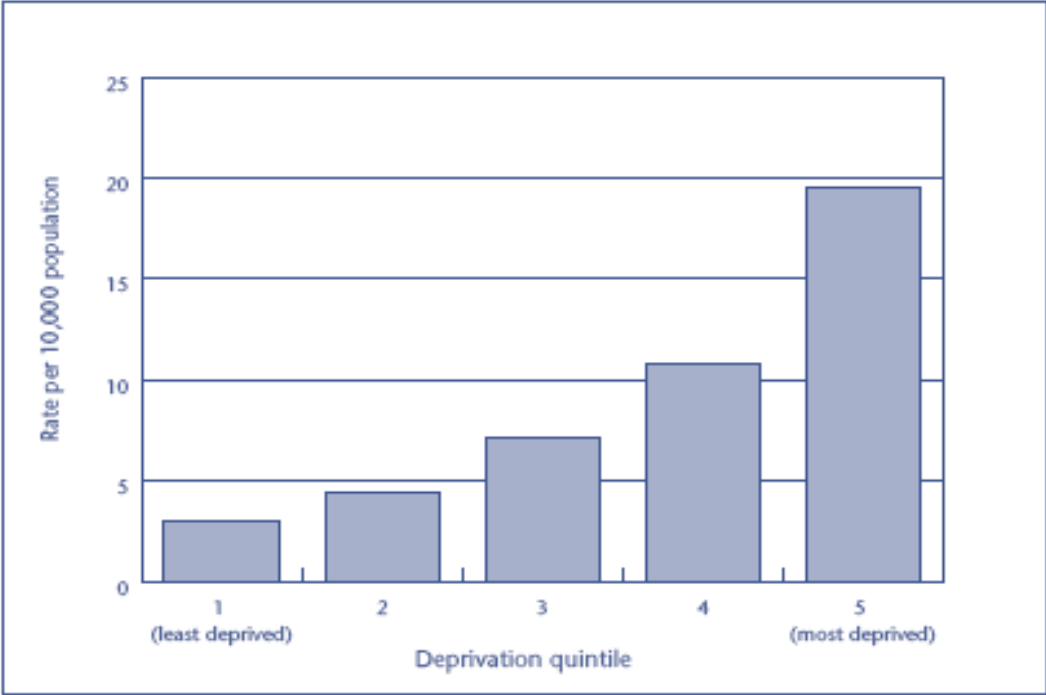
Trends in emergency admission rates for people with a primary or secondary diagnosis of chronic liver disease by sex and age group for the period 1 April 1996 to 31 March 2004¹⁹

	Emergency admissions (rate per 10,000 population)							
	Year (Apr-Mar)							
	1996-97	1997-98	1998-99	1999-00	2000-01	2001-02	2002-03	2003-04
Males								
25-44	0.7	1.1	1.0	1.3	1.5	1.5	1.9	1.8
45-64	2.9	2.3	2.5	3.0	3.3	4.0	4.9	5.1
65 & over	2.3	2.4	2.6	2.5	3.5	3.7	4.6	4.5
All Ages	1.3	1.3	1.3	1.5	1.8	2.0	2.5	2.5
Females								
25-44	0.7	0.4	0.3	0.7	0.6	0.8	0.8	1.0
45-64	1.6	1.6	1.6	1.9	1.9	2.2	2.4	3.2
65 & over	1.0	1.2	1.2	1.7	2.0	1.9	2.3	2.6
All Ages	0.8	0.8	0.7	1.0	1.0	1.2	1.3	1.6

a Data for patients under 25 are not presented due to small numbers, however they are included in the 'all ages' total.

Source: ISD Scotland (SMR01) and GRO(S) (mid-year population estimates).

Trends in emergency admission rates for people with a primary or secondary diagnosis of chronic pancreatitis by sex and age group for the period 1 April 1996 to 31 March 2004¹⁹



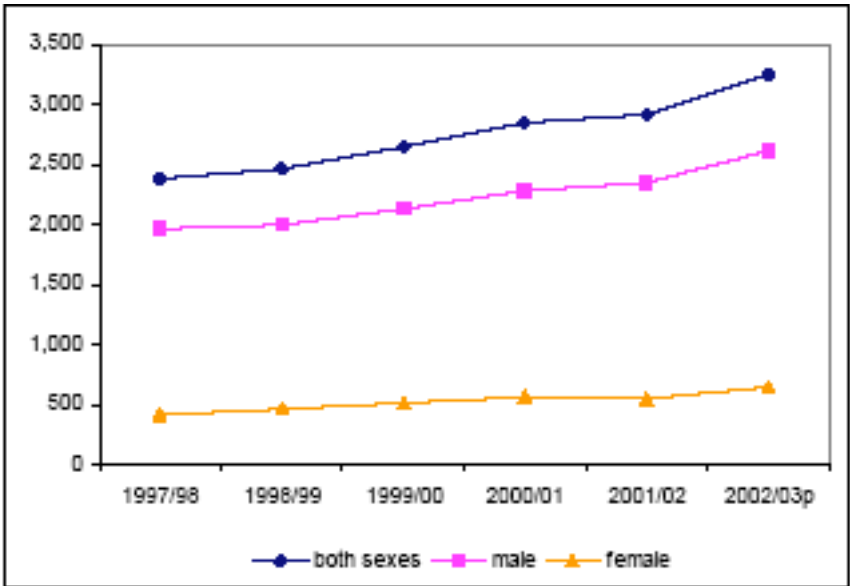
Source: ISD Scotland (SMR01) and GRO(S) (2001 census population).

There has been a 36% increase in patients leaving general hospitals with recorded alcohol psychosis.²⁰

32% increase in male alcohol psychoses hospital discharges since 1997/98

56% increase in female alcohol psychoses hospital discharges since 1997/8

Alcohol psychoses hospital discharges, Scotland, by gender, 1997/8 – 2002/3



Scotland 2001/2002. Annual NHS Scotland costs of alcohol misuse at 2001/2002 prices²¹

Health service resource use associated with:	Annual resource use	Annual cost (£ million)
GP consultations	211 516	3.6
GP-prescribed drugs	6% of drugs prescribed by GPs for substance dependence	0.2
Consultations with practice and district nurses and health visitors	No information currently recorded. Unable to quantify	
Laboratory tests	147 256	1.8
Hospitalisation days	275 775	54.3
Accident and emergency attendances	187 951	9.6
Outpatient visits	93 999	8.1
Day hospital attendances	44 800	3.1
Community psychiatric team visits	8% of total community psychiatric team expenditure	4.0
Ambulance journeys	64 382	9.1
Health promotion/prevention by Health Education Board for Scotland (HEBS)	HEBS, Drinkwise, Alcohol Development Officers	1.2
NHS Board expenditure to alcohol-related voluntary organisations	Funding to 25 organisations	0.6
Total for NHS Scotland		95.6

Institute of Alcohol Studies

5 May 2009

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