



## **Hospital admissions for substance use and violence in Lancashire, 2001-2005**

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## **Key findings**

Substance use and violence are key public health issues that place huge burdens on individuals, communities and public resources. In order to prevent the harms associated with substance use and violence, the identification of at-risk groups and communities is paramount to ensuring resources are targeted effectively. The following section summarises those most at-risk of emergency hospital admissions relating to substance use or violence.

### **Emergency admissions due to assaults (ICD-10 codes: X85-Y09)**

- During 2001-2005, Preston, Blackburn with Darwen, Burnley and Hyndburn had significantly higher rates of admission for assault compared with the Lancashire average.
- In 2005, Preston, Burnley, Blackpool, Hyndburn and Blackburn with Darwen had the highest rates for emergency admissions for assault.
- During 2001-2005, males aged 15-44 were most at risk of emergency admission to hospital due to an assault.

### **Emergency admissions due to mental and behavioural disorders due to psychoactive substance use (ICD-10 codes: F10-F19)**

- During 2001-2005, Burnley, Blackpool, Preston, Lancaster, Pendle and Blackburn with Darwen had significantly higher rates of admission due to mental and behavioural disorders due to psychoactive substance use compared with the Lancashire average.
- In 2005, Blackpool, Burnley, Preston, Lancaster and Blackburn with Darwen had the highest rates of emergency admissions due to mental and behavioural disorders due to psychoactive substance use.
- During 2001-2005, males aged 45-64 were most at risk of emergency admission to hospital due to mental and behavioural disorders due to psychoactive substance use.

### **Emergency admissions due to toxic effect of alcohol (ICD-10 code: T51)**

- During 2001-2005, Preston, Chorley, Lancaster and South Ribble had significantly higher rates of admission due to the toxic effect of alcohol compared with the Lancashire average.
- In 2005, Chorley, Lancaster, Rossendale, Preston and South Ribble had the highest rates of emergency admissions due to the toxic effect of alcohol.
- During 2001-2005, females aged 15-44 were most at risk of emergency admission to hospital due to the toxic effect of alcohol.

### **Other entries where there is evidence of alcohol involvement determined by blood alcohol level (Y90), or evidence of alcohol involvement determined by level of intoxication (Y91)**

Data were too small to be presented here. Upon review of the data though, it was evident that the majority of episodes came from two LA areas in Lancashire, with all data collected in 2005 only. This suggests that there may be inconsistencies in the collection of such data year on year and between LA areas across Lancashire.

## Introduction

Substance use and violence are key public health issues that place huge burdens on individuals, communities and public resources. Both are major causes of ill health and premature death. In order to prevent the harms associated with substance use and violence, the identification of at-risk groups and communities is paramount to ensuring resources are targeted effectively. Key to this is the sharing and collection of multi-agency data to aid identification of those most at-risk. In England and Wales, Statutory Instrument 2007 No. 1831 sets out regulations for the sharing of depersonalised data amongst relevant authorities working in local government areas. Section nine of the regulations specifically relates to the sharing of information held on residents which live within an area admitted to any hospital within the categories of:

- Assault (ICD-10<sup>1</sup>: X85-Y09);
- Mental and behavioural disorders due to psychoactive substance use (F10-F19<sup>2</sup>);
- Toxic effect of alcohol (T51); and,
- Other entries where there is evidence of alcohol involvement determined by blood alcohol level (Y90), or evidence of alcohol involvement determined by level of intoxication (Y91).

To fulfil these obligations, Lancashire Local Area Agreement, alcohol project board and Lancashire PCTs jointly commissioned the Centre for Public Health, Liverpool John Moores University, to produce a report on admissions to hospital for the categories identified in the statutory instrument (X85-Y09, F10-F19, T51, Y90, Y91). Specifically, the objectives of this report are to:

- Provide baseline statistics on the conditions stated;
- Identify key at-risk groups and communities to inform targeted public health interventions; and,
- Assess trends in admissions over a five year period.

## Data source and methods used

Hospital Episode Statistics (HES) data for the North West were requested and extracted from the North West Public Health Observatory (NWPHO). Emergency admission data were extracted for the last five available years (2001-2005) and were collected individually for each of the diagnosis codes: X85-Y09; F10-F19; T51; Y90; and Y91. Where possible, data were split by age group, gender and area of residence into Local Authority (LA) boundaries and Middle Super Output Areas (MSOA). A split by ethnicity was also considered. However, after consultation with the NWPHO, these data were not used because of low completion rates. Population data were downloaded from National Statistics online<sup>3</sup> for each of the five years by MSA.

As a general approach, annual emergency admission crude rates per 100,000 individuals were calculated for each Lancashire LA area; data were split by gender. To maintain patient confidentiality, data by age group and gender could only be provided by LA area as total counts for the five year period. Thus, average annual emergency admission crude rates per 100,000 individuals were calculated for each Lancashire LA area and split by age group and

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<sup>1</sup> ICD-10: International Classification of Diseases, version 10.

<sup>2</sup> Includes mental and behavioural disorders due to the use of alcohol, opioids, cannabinoids, sedatives/hypnotics, cocaine, other stimulants including caffeine, hallucinogens, tobacco, volatile solvents and multiple/psychoactive drugs.

<sup>3</sup> [www.statistics.gov.uk](http://www.statistics.gov.uk)

gender. Furthermore, directly standardised emergency admission rates were calculated for the total five year figures for each of the diagnosis categories, standardised against the European region population. Data are presented in tables, graphs and maps.

### **Data issues**

Using the HES database, all emergency admissions for the ICD-10 codes selected were extracted for 2001-2005. Within the HES data however, a patient can be coded with up to 14 field diagnosis codes and therefore a single episode may be associated with two or more alcohol/drug related codes. However, out of the 285,402 episodes extracted for the North West, only 10,677 (3.7%) had a combination of two of the alcohol/drug related codes used in this report.

In order to maintain patient anonymity, all admission counts less than five have been suppressed.

## **I. Emergency admissions due to assaults (ICD-10 codes: X85-Y09)**

### **Data summary**

- Overall, during 2001 to 2005 the average annual crude admission rate for assault amongst Lancashire residents was 116 per 100,000 population (directly standardised against the European population; Table 1). This was significantly below the average annual admission rate for the North West (128).
- In general, male admissions for assault were far higher than that of females accounting for 82% of all admissions. The average annual admission rate for males was consequently higher than that of females, 189 per 100,000 compared with 41 per 100,000. Average annual admission rates for males in Lancashire were significantly lower than the respective North West rates (males, 215; Table 2).
- In 2005, Preston, Burnley, Blackpool, Hyndburn and Blackburn with Darwen had the highest rates of emergency admissions for assault (Table 4).
- During 2001-2005, analyses by LA area show some areas have significantly higher rates of admissions for assault compared with the Lancashire average (Table 1). Specifically, Preston (180 per 100,000), Blackburn with Darwen (158), Burnley (157) and Hyndburn (146) had significantly higher rates of admission for assault compared with the Lancashire average. Amongst males, these areas were Preston (289 per 100,000), Blackburn with Darwen (267), Burnley (251) and Hyndburn (244) (Table 2). Amongst females, these areas were Preston (68 per 100,000), Burnley (63) and Blackpool (61) (Table 3).
- Overall 81% of admissions for assault were for individuals aged 15-44 (average annual rate, 224 per 100,000 population; Table 1). The majority (84%) of admissions aged 15-44 were male. This demographic is by far the highest risk group for hospital admissions due to an assault, with an average annual admission rate of 373 per 100,000 population (Table 2). Specifically, males aged 15-44 residing in Preston, Blackburn with Darwen, Burnley, Hyndburn and Pendle LA areas had the highest average annual rates of admission.
- Between 2001 and 2005 the annual rate of admissions for assault decreased by 16% (from 128 per 100,000 to 106); the North West annual rate increased by 14% (Table 4). However, increases were seen in Fylde (+59%), West Lancashire (+44%), Lancaster (+33%), Wyre (+26%), Rossendale (+14%), Blackpool (+13%) and Chorley (+5%) (Table 4).
- Between 2001 and 2005 the annual rate of admissions for assault amongst males decreased by 17% (compared with a 12% increase across the North West), and 11% amongst females (compared with a 25% increase across the North West) (Tables 5 and 6).

#### **Key at-risk groups and communities for assault admissions**

*During 2001-2005, Preston, Blackburn with Darwen, Burnley and Hyndburn had significantly higher rates of admission for assault compared with the Lancashire average.*

*In 2005, Preston, Burnley, Blackpool, Hyndburn and Blackburn with Darwen had the highest rates of emergency admissions for assault.*

*During 2001-2005, males aged 15-44 were most at risk of emergency admission to hospital due to an assault.*

**Table 1: All persons: Count and average annual crude rate of admissions per 100,000 population by age group and Local Authority area, Lancashire 2001-2005, ICD-10 codes X85-Y09**

Local Authority area	0-14		15-44		45-64		65+		All		Upper CI <sup>4</sup>	Lower CI
	Count	Rate	Count	Rate	Count	Rate	Count	Rate	Count	DS Rate <sup>5</sup>		
Blackburn with Darwen	100	60	880	302	95	63	19	21	1094	158	168	149
Blackpool	35	27	636	241	112	61	34	25	817	125	134	116
Burnley	72	77	523	299	54	50	9	13	658	157	169	145
Chorley	28	30	390	192	44	32	9	12	471	96	105	88
Fylde	9	15	118	93	10	10	5	6	142	45	53	38
Hyndburn	44	50	465	289	49	50	<5	6	562	146	158	134
Lancaster	43	36	474	164	63	40	10	8	590	88	95	80
Pendle	59	63	391	225	51	46	9	13	510	121	132	111
Preston	66	52	964	336	143	100	19	20	1192	180	190	169
Ribble Valley	7	13	107	106	6	8	<5	8	124	50	59	41
Rossendale	31	45	278	215	41	48	9	19	359	114	126	103
South Ribble	36	36	398	195	37	27	5	6	476	97	106	88
West Lancashire	19	18	418	204	56	38	<5	2	495	99	108	91
Wyre	13	14	226	123	27	19	12	10	278	61	68	54
Lancashire	562	40	6268	224	788	44	150	13	7768	116	118	113
North West	2260	35	35158	250	4416	52	843	15	42677	128	129	126

**Table 2: Males: Count and average annual crude rate of admissions per 100,000 population by age group and Local Authority area, Lancashire 2001-2005, ICD-10 codes X85-Y09**

Local Authority area	0-14		15-44		45-64		65+		All		Upper CI	Lower CI
	Count	Rate	Count	Rate	Count	Rate	Count	Rate	Count	DS Rate		
Blackburn with Darwen	83	99	769	517	75	99	11	29	938	267	284	250
Blackpool	20	32	490	366	86	94	24	42	620	189	204	174
Burnley	44	94	435	502	40	75	<5	10	522	251	273	230
Chorley	21	45	324	305	38	54	5	16	388	154	169	138
Fylde	7	24	99	150	6	12	<5	11	116	72	86	59
Hyndburn	36	81	396	486	40	82	<5	16	476	244	266	222
Lancaster	24	41	409	282	53	68	<5	6	489	145	158	132
Pendle	39	84	343	391	42	75	<5	14	428	203	222	184
Preston	51	81	803	553	106	146	10	25	970	289	308	271
Ribble Valley	6	23	94	183	5	13	<5	10	107	86	102	70
Rossendale	22	65	239	370	34	80	<5	20	299	192	213	170
South Ribble	29	59	334	323	29	43	<5	6	394	160	176	144
West Lancashire	15	29	347	342	44	62	<5	0	406	165	181	149
Wyre	10	22	187	203	23	33	5	10	225	99	112	86
Lancashire	407	59	5269	373	621	70	81	16	6378	189	193	184
North West	1642	50	30000	429	3643	87	424	18	35709	215	217	213

<sup>4</sup> CI = confidence interval.

<sup>5</sup> DS rate is the directly standardised rate, standardised against the European population.

**Table 3: Females: Count and average annual crude rate of admissions per 100,000 population by age group and Local Authority area, Lancashire 2001-2005, ICD-10 codes X85-Y09**

Local Authority area	0-14		15-44		45-64		65+		All		Upper CI	Lower CI
	Count	Rate	Count	Rate	Count	Rate	Count	Rate	Count	DS Rate		
Blackburn with Darwen	17	20	111	78	20	27	8	15	156	46	53	38
Blackpool	15	23	146	112	26	29	10	12	197	61	69	52
Burnley	28	60	88	100	14	26	6	15	136	63	74	53
Chorley	7	15	66	68	6	9	<5	9	83	35	43	27
Fylde	<5	6	19	31	<5	8	<5	2	26	17	23	10
Hyndburn	8	18	69	87	9	19	<5	0	86	45	55	36
Lancaster	19	31	65	45	10	12	7	10	101	30	36	24
Pendle	20	42	48	56	9	16	5	12	82	38	46	30
Preston	15	23	161	113	37	53	9	17	222	68	77	59
Ribble Valley	<5	4	13	26	<5	3	<5	7	17	13	20	7
Rossendale	9	26	39	60	7	17	5	18	60	37	47	28
South Ribble	7	14	64	63	8	11	<5	6	82	33	40	26
West Lancashire	<5	8	71	68	12	16	<5	4	89	35	42	28
Wyre	<5	6	39	43	<5	5	7	10	53	22	28	16
Lancashire	155	22	999	72	167	19	69	10	1390	41	43	39
North West	618	20	5158	73	773	18	419	13	6968	41	42	40

**Table 4: All persons: Count and average annual crude rate of admission per 100,000 population by year and Local Authority area with percentage change from 2001-2005, ICD-10 codes X85-Y09**

Local Authority area	2001		2002		2003		2004		2005		% change
	Count	Rate									
Blackburn with Darwen	295	213	265	190	187	134	188	133	159	113	-46
Blackpool	168	118	136	96	181	127	143	100	189	132	13
Burnley	141	158	127	143	137	155	130	147	123	139	-13
Chorley	103	102	93	92	90	88	77	75	108	104	5
Fylde	27	37	29	39	22	30	21	28	43	57	59
Hyndburn	140	172	82	101	114	139	123	150	103	125	-26
Lancaster	94	70	105	78	119	86	147	105	125	88	33
Pendle	129	144	96	108	86	96	106	118	93	104	-28
Preston	365	280	235	181	209	161	159	122	224	171	-39
Ribble Valley	34	63	22	40	26	47	22	39	20	35	-41
Rossendale	65	99	70	107	75	114	75	113	74	111	14
South Ribble	123	118	103	99	88	84	73	69	89	84	-28
West Lancashire	80	74	86	79	104	95	110	101	115	105	44
Wyre	50	47	65	61	46	43	54	49	63	57	26
Lancashire	1814	128	1514	106	1484	104	1428	99	1528	106	-16
North West	8298	121	7522	110	8482	123	8901	129	9474	137	14

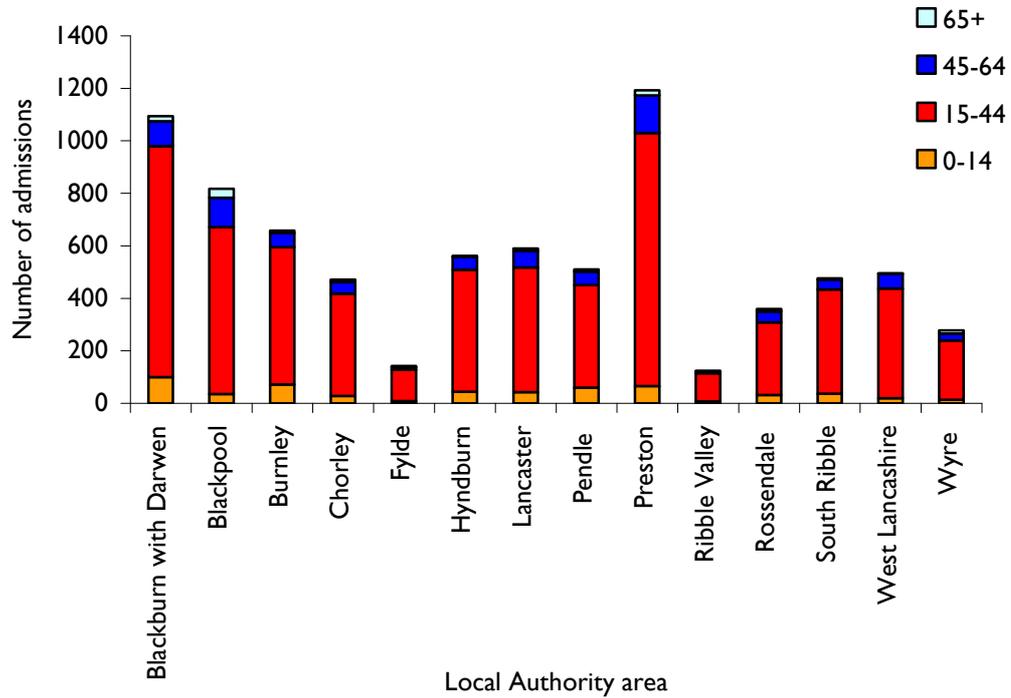
**Table 5: Males: Count and average annual crude rate of admission per 100,000 population by year and Local Authority area with percentage change from 2001-2005, ICD-10 codes X85-Y09**

Local Authority area	2001		2002		2003		2004		2005		% change
	Count	Rate									
Blackburn with Darwen	246	360	238	346	155	224	161	231	138	197	-44
Blackpool	134	195	103	149	130	188	108	155	145	208	8
Burnley	111	256	99	229	105	244	111	258	96	224	-14
Chorley	81	162	76	151	77	151	66	128	88	170	9
Fylde	21	60	24	67	19	53	19	52	33	89	57
Hyndburn	121	304	72	181	99	247	100	248	84	208	-31
Lancaster	78	122	85	131	99	149	120	177	107	155	37
Pendle	111	255	82	188	71	163	93	213	71	161	-36
Preston	302	473	199	312	163	255	127	197	179	275	-41
Ribble Valley	31	117	17	63	22	80	20	72	17	61	-45
Rossendale	52	163	61	191	64	199	61	189	61	188	17
South Ribble	103	203	90	176	75	146	56	108	70	135	-32
West Lancashire	59	113	71	135	82	156	96	182	98	185	66
Wyre	39	78	53	103	33	64	49	94	51	97	31
Lancashire	1489	216	1270	183	1194	171	1187	169	1238	175	-17
North West	7007	210	6343	190	7065	210	7438	220	7856	232	12

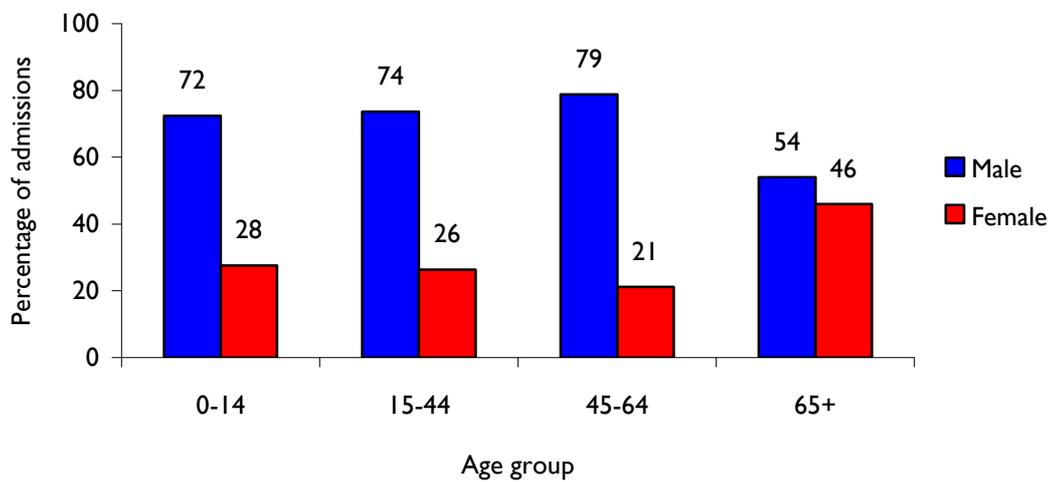
**Table 6: Females: Count and average annual crude rate of admission per 100,000 population by year and Local Authority area with percentage change from 2001-2005, ICD-10 codes X85-Y09**

Local Authority area	2001		2002		2003		2004		2005		% change
	Count	Rate									
Blackburn with Darwen	49	70	27	38	32	45	27	38	21	29	-57
Blackpool	34	46	33	45	51	70	35	48	44	60	29
Burnley	30	65	28	61	32	70	19	42	27	60	-10
Chorley	22	44	17	33	13	25	11	21	20	39	-9
Fylde	6	16	5	13	<5	8	<5	5	10	26	67
Hyndburn	19	46	10	24	15	36	23	55	19	45	0
Lancaster	16	23	20	28	20	28	27	37	18	25	13
Pendle	18	39	14	31	15	33	13	28	22	48	22
Preston	63	95	36	54	46	70	32	48	45	68	-29
Ribble Valley	<5	11	5	18	<5	14	<5	7	<5	10	0
Rossendale	13	39	9	27	11	33	14	41	13	38	0
South Ribble	20	38	13	24	13	24	17	32	19	35	-5
West Lancashire	21	37	15	27	22	39	14	25	17	30	-19
Wyre	11	20	12	21	13	23	5	9	12	21	9
Lancashire	325	45	244	33	290	40	241	33	290	39	-11
North West	1291	37	1179	33	1417	40	1463	41	1618	46	25

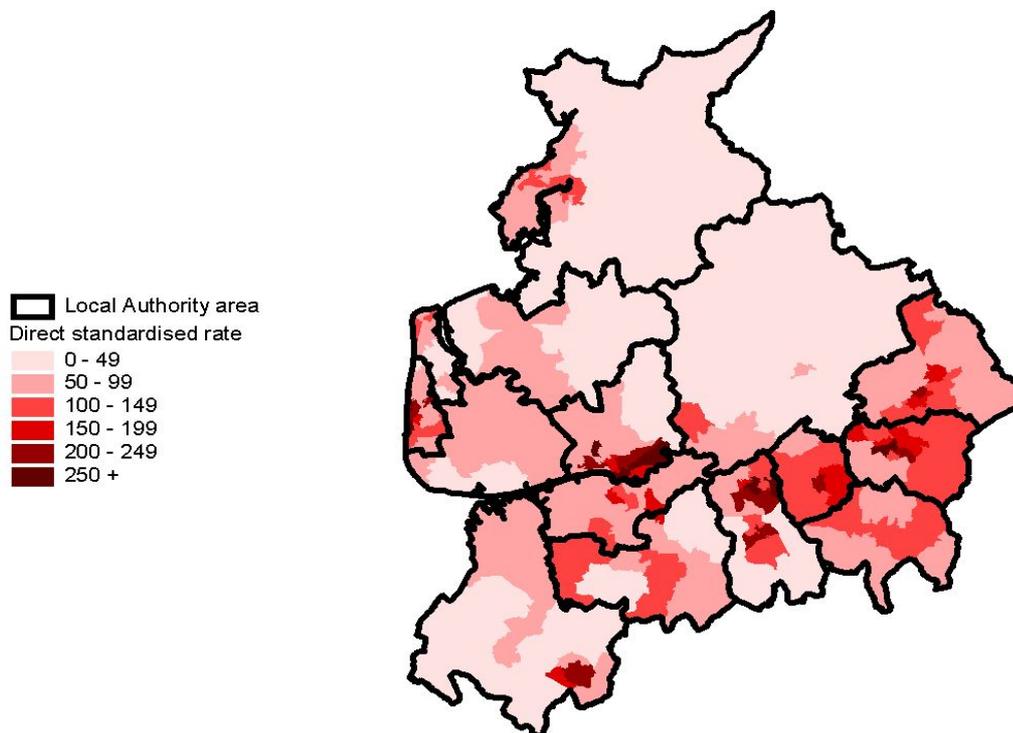
**Figure 1: All persons: Hospital admissions for an assault by age group and Local Authority area, Lancashire, 2001-2005, ICD-10 codes X85-Y09**



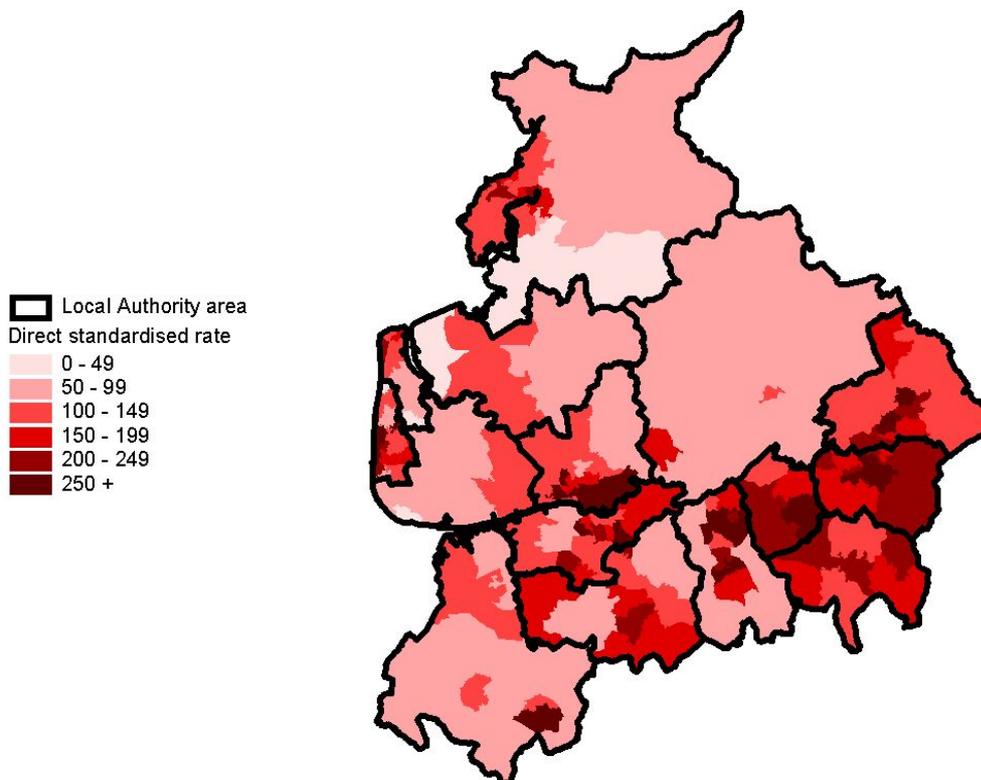
**Figure 2: Percentage of total hospital admissions for an assault in each age group that are male and female, Lancashire, 2001-2005, ICD-10 codes: X85-Y09**



**Figure 3: All persons: Average annual directly standardised rate of admissions per 100,000 population by Middle Super Output Area, Lancashire 2001-2005, ICD-10 codes X85-Y09<sup>6</sup>**

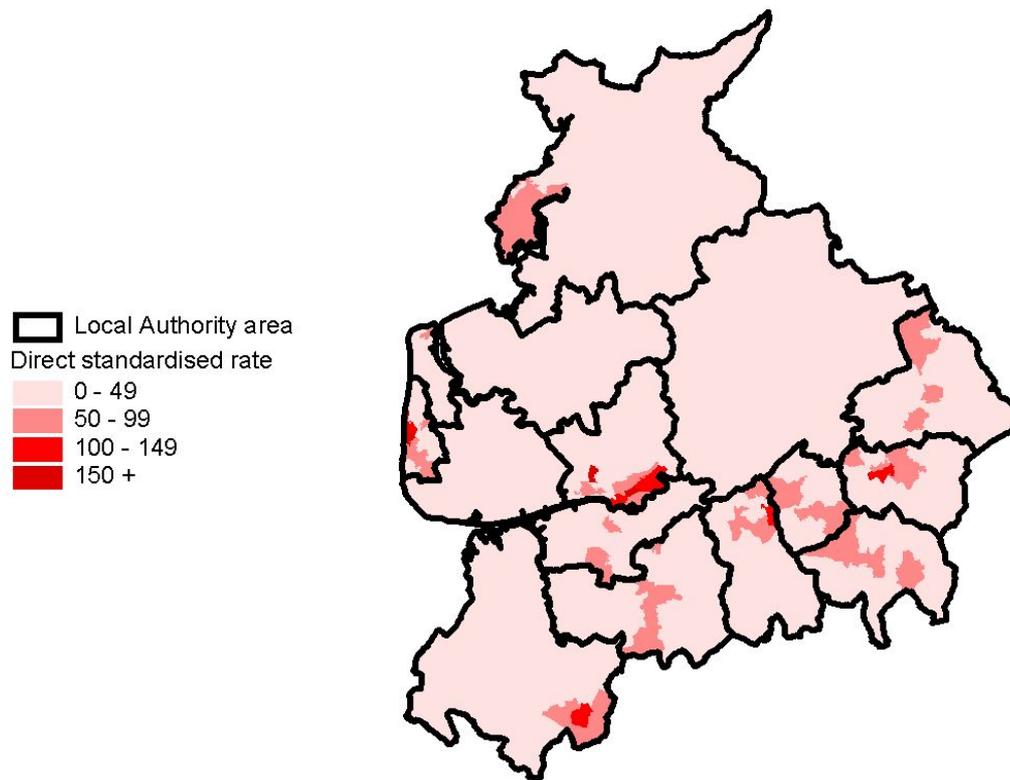


**Figure 4: Males: Average annual directly standardised rate of admissions per 100,000 population by Middle Super Output Area, Lancashire 2001-2005, ICD-10 codes X85-Y09**



<sup>6</sup> For more detailed data on the average annual directly standardised rate of admissions per 100,000 population for Middle Super Output Areas in Lancashire please contact the authors.

**Figure 5: Females: Average annual directly standardised rate of admissions per 100,000 population by Middle Super Output Area, Lancashire 2001-2005, ICD-10 codes X85-Y09**



## 2. Emergency admissions for mental and behavioural disorders due to psychoactive substance use (ICD-10 codes: F10-F19)

### Data summary

- Overall, during 2001 to 2005 the average annual rate of admission for mental and behavioural disorders due to psychoactive substance use (e.g. alcohol/cocaine use!) amongst Lancashire residents was 560 per 100,000 population (directly standardised against the European population; Table 7). This was significantly below the average annual admission rate for the North West (656).
- In general, male admissions were far higher than that of females with 68% of all admissions being male. The average annual admission rate for males was higher than that of females, 761 per 100,000 compared with 363 per 100,000 population. Average annual admission rates for males and females in Lancashire were significantly lower than the respective North West rates (924, males; 400, females; Tables 8 and 9).
- In 2005, Blackpool, Burnley, Preston, Lancaster and Blackburn with Darwen had the highest rates of emergency admissions for mental and behavioural disorders due to psychoactive substance use (Table 10).
- During 2001-2005, analyses by LA area illustrate that some areas have significantly higher rates of emergency admissions compared with the Lancashire average (Table 7). Specifically, Burnley (920 per 100,000), Blackpool (858), Preston (693), Lancaster (628), Pendle (617) and Blackburn with Darwen (604) had significantly higher rates of admission for mental and behavioural disorders due to psychoactive substance use compared with the Lancashire average. Amongst males, these areas were Burnley (1288 per 100,000), Blackpool (1100), Preston (958), Blackburn with Darwen (935), Lancaster (873) and Pendle (858) (Table 8). Amongst females, these areas were Blackpool (618 per 100,000), Burnley (571), Preston (432) and Lancaster (394) (Table 9).
- Overall 55% of admissions were for individuals aged 15-44 (average annual rate, 775 per 100,000 population; Table 7). The majority (66%) of admissions aged 15-44 were male. However, amongst males those aged 45 to 64 years were most at risk of emergency admission to hospital for mental and behavioural disorders due to psychoactive substance use (1052 per 100,000).
- Between 2001 and 2005 the annual rate of admissions increased by 34% (490 per 100,000 to 644); the North West annual rates increased by 63% (Table 10). Increases over the five year period in emergency admission rates were found in all LA areas except in Burnley (-20%) and Pendle (-18%) (Table 10).
- Between 2001 and 2005 the annual rate of admissions amongst males increased by 32% (compared with a 63% increase across the North West), and 39% amongst females (compared with a 61% increase across the North West) (Tables 11 and 12).

#### **Key at-risk groups and communities for admissions due to mental and behavioural disorders due to psychoactive substance use**

*During 2001-2005, Burnley, Blackpool, Preston, Lancaster, Pendle and Blackburn with Darwen had significantly higher rates of admission compared with the Lancashire average.*

*In 2005, Blackpool, Burnley, Preston, Lancaster and Blackburn with Darwen had the highest rates of emergency admissions.*

*During 2001-2005, males aged 45-64 were most at risk of emergency admission to hospital for mental and behavioural disorders due to psychoactive substance use.*

**Table 7: All persons: Count and annual rate of admissions per 100,000 population by age group and Local Authority area, Lancashire 2001-2005, ICD-10 codes F10-F19**

Local Authority area	0-14		15-44		45-64		65+		All		Upper CI	Lower CI
	Count	Rate	Count	Rate	Count	Rate	Count	Rate	Count	DS Rate		
Blackburn with Darwen	81	48	2313	794	1321	879	329	361	4044	604	622	585
Blackpool	66	52	3496	1323	1830	1002	508	367	5900	858	880	836
Burnley	46	49	2193	1254	1344	1250	432	635	4015	920	949	892
Chorley	28	30	1412	695	921	663	163	221	2524	489	508	470
Fylde	18	30	591	465	419	418	174	205	1202	329	348	310
Hyndburn	54	61	899	559	774	793	149	240	1876	473	494	451
Lancaster	36	30	2243	776	1541	967	583	485	4403	628	646	609
Pendle	35	37	1570	904	806	731	288	419	2699	617	640	593
Preston	64	50	2586	900	1470	1029	404	426	4524	693	714	673
Ribble Valley	22	42	237	234	197	254	108	224	564	196	212	179
Rossendale	41	60	934	723	650	768	275	580	1900	572	598	547
South Ribble	44	45	1177	575	628	455	226	270	2075	395	412	378
West Lancashire	67	64	1117	544	763	520	231	261	2178	401	418	384
Wyre	26	28	885	483	594	418	243	200	1748	335	352	319
Lancashire	628	45	21653	775	13258	745	4113	345	39652	560	565	554
North West	2968	46	121493	864	78363	930	25366	458	228190	656	659	653

**Table 8: Males: Count and annual rate of admissions per 100,000 population by age group and Local Authority area, Lancashire 2001-2005, ICD-10 codes F10-F19**

Local Authority area	0-14		15-44		45-64		65+		All		Upper CI	Lower CI
	Count	Rate	Count	Rate	Count	Rate	Count	Rate	Count	DS Rate		
Blackburn with Darwen	38	45	1793	1206	1025	1358	273	721	3129	935	968	903
Blackpool	25	40	2091	1564	1370	1493	321	556	3807	1100	1135	1065
Burnley	31	66	1489	1717	917	1713	322	1123	2759	1288	1336	1240
Chorley	15	32	992	935	603	858	130	413	1740	660	691	629
Fylde	5	17	344	520	216	433	120	344	685	368	397	340
Hyndburn	26	59	659	809	553	1129	97	377	1335	677	713	640
Lancaster	11	19	1487	1024	1122	1435	359	722	2979	873	904	841
Pendle	18	39	1055	1203	606	1087	189	663	1868	858	897	820
Preston	25	40	1721	1185	1071	1479	302	742	3119	958	991	924
Ribble Valley	9	35	161	313	131	340	51	247	352	251	278	225
Rossendale	16	47	614	949	460	1083	199	995	1289	789	832	746
South Ribble	24	49	698	675	408	599	141	392	1271	487	514	460
West Lancashire	22	42	777	766	466	655	162	422	1427	541	569	513
Wyre	12	26	490	532	365	529	161	315	1028	396	421	371
Lancashire	277	40	14371	1016	9313	1052	2827	564	26788	761	770	752
North West	1269	38	82808	1185	55785	1336	17742	763	157604	924	929	920

**Table 9: Females: Count and annual rate of admissions per 100,000 population by age group and Local Authority area, Lancashire 2001-2005 , ICD-10 codes F10-F19**

Local Authority area	0-14		15-44		45-64		65+		All		Upper CI	Lower CI
	Count	Rate	Count	Rate	Count	Rate	Count	Rate	Count	DS Rate		
Blackburn with Darwen	43	52	520	365	296	396	56	105	915	275	293	257
Blackpool	41	63	1405	1076	460	506	187	232	2093	618	644	591
Burnley	15	32	704	799	427	791	110	280	1256	571	603	539
Chorley	13	27	420	433	318	463	33	78	784	312	334	290
Fylde	13	42	247	404	203	404	54	108	517	292	318	266
Hyndburn	28	63	240	302	221	455	52	143	541	270	293	247
Lancaster	25	41	756	525	419	517	224	318	1424	394	414	373
Pendle	17	35	515	599	200	367	99	246	831	378	404	352
Preston	39	60	865	609	399	567	102	189	1405	432	454	409
Ribble Valley	13	50	76	152	66	169	57	206	212	140	159	120
Rossendale	25	72	320	496	190	450	76	277	611	367	396	338
South Ribble	20	40	479	474	220	315	85	178	804	306	328	285
West Lancashire	45	86	340	328	297	392	69	138	751	270	289	250
Wyre	14	30	395	434	229	313	82	117	720	280	301	259
Lancashire	351	50	7282	527	3945	442	1286	186	12864	363	370	357
North West	1699	54	38685	547	22578	531	7624	238	70586	400	403	397

**Table 10: All persons: Count and average annual crude rate of admission per 100,000 population by year and Local Authority area with percentage change from 2001-2005, ICD-10 codes F10-F19**

Local Authority area	2001		2002		2003		2004		2005		% change
	Count	Rate									
Blackburn with Darwen	619	447	662	475	691	494	1078	765	994	704	61
Blackpool	761	535	1003	705	1076	754	1512	1058	1548	1082	103
Burnley	920	1028	686	771	787	888	882	998	740	839	-20
Chorley	506	503	521	515	472	463	424	412	601	581	19
Fylde	156	213	223	302	261	350	278	369	284	375	82
Hyndburn	311	382	273	335	315	385	500	610	477	580	53
Lancaster	673	502	771	571	904	657	1004	718	1051	738	56
Pendle	615	689	422	473	573	641	585	653	504	561	-18
Preston	960	736	864	664	805	619	807	617	1088	828	13
Ribble Valley	98	181	84	153	110	197	151	265	121	211	23
Rossendale	356	542	319	486	375	568	423	640	427	643	20
South Ribble	377	363	413	395	391	372	397	376	497	470	32
West Lancashire	355	327	368	339	507	465	430	394	518	473	46
Wyre	233	220	255	238	302	279	490	449	468	426	101
Lancashire	6940	490	6864	483	7569	529	8961	622	9318	644	34
North West	35654	520	37962	553	44716	649	51864	751	57994	837	63

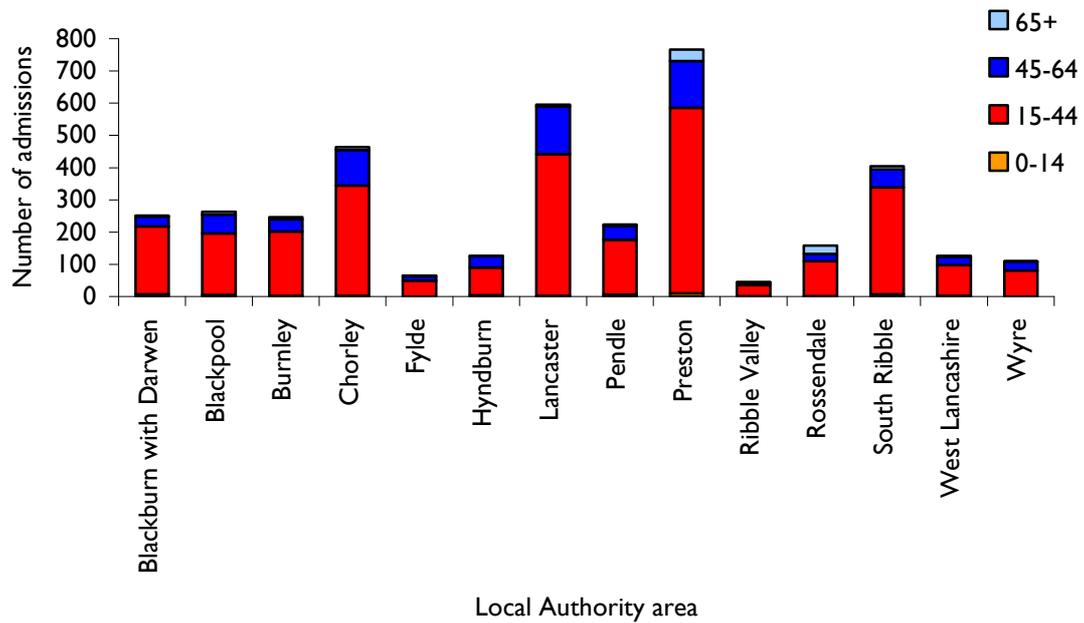
**Table 11: Males: Count and average annual crude rate of admission per 100,000 population by year and Local Authority area with percentage change from 2001-2005, ICD-10 codes F10-F19**

Local Authority area	2001		2002		2003		2004		2005		% change
	Count	Rate									
Blackburn with Darwen	485	710	489	711	524	758	839	1205	792	1133	63
Blackpool	528	768	710	1030	708	1022	858	1232	1003	1436	90
Burnley	641	1476	448	1036	538	1250	650	1511	482	1123	-25
Chorley	316	631	338	671	327	643	304	592	455	881	44
Fylde	94	267	124	349	169	468	144	394	154	416	64
Hyndburn	226	568	182	457	218	544	360	894	349	863	54
Lancaster	455	709	531	818	626	943	651	960	716	1037	57
Pendle	396	909	275	631	423	970	424	969	350	796	-12
Preston	692	1084	583	913	546	855	561	869	737	1132	7
Ribble Valley	57	216	64	239	77	282	79	284	75	267	32
Rosendale	241	754	226	706	270	840	276	855	276	851	15
South Ribble	245	483	263	515	244	475	229	443	290	560	18
West Lancashire	223	426	230	439	335	636	292	553	347	655	56
Wyre	167	332	175	341	183	354	225	430	278	527	66
Lancashire	4766	692	4638	670	5188	744	5892	838	6304	890	32
North West	24624	739	26219	785	30844	919	35705	1058	40212	1187	63

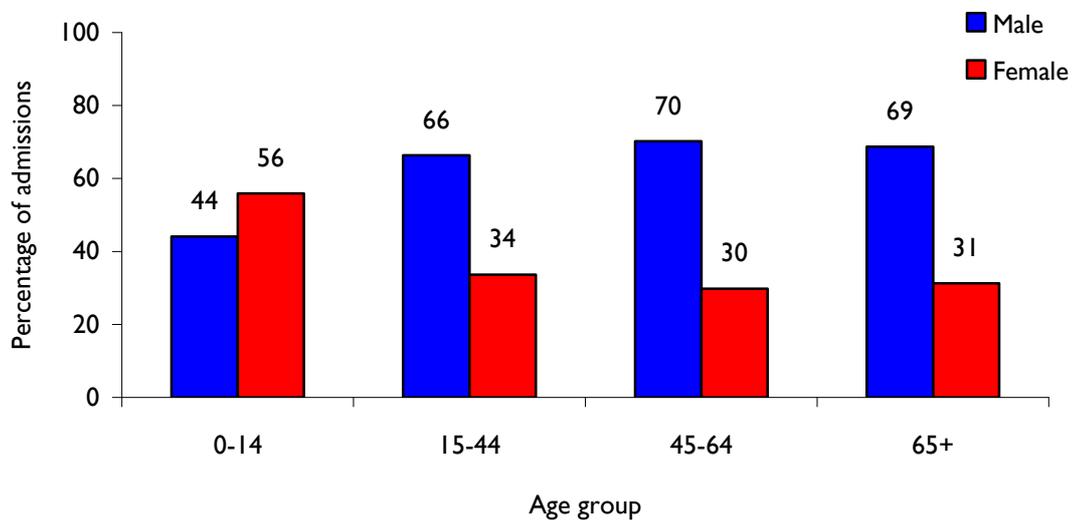
**Table 12: Females: Count and average annual crude rate of admission per 100,000 population by year and Local Authority area with percentage change from 2001-2005, ICD-10 codes F10-F19**

Local Authority area	2001		2002		2003		2004		2005		% change
	Count	Rate									
Blackburn with Darwen	134	191	173	245	167	236	239	336	202	283	51
Blackpool	233	317	293	400	368	502	654	892	545	744	134
Burnley	279	605	238	520	249	547	232	511	258	570	-8
Chorley	190	376	183	360	145	283	120	233	146	282	-23
Fylde	62	163	99	259	92	239	134	346	130	335	110
Hyndburn	85	204	91	218	97	232	140	335	128	306	51
Lancaster	218	312	240	342	278	390	353	490	335	457	54
Pendle	219	479	147	322	150	328	161	352	154	336	-30
Preston	268	403	281	424	259	392	246	372	351	530	31
Ribble Valley	41	148	20	71	33	116	72	248	46	157	12
Rosendale	115	342	93	276	105	310	147	434	151	444	31
South Ribble	132	248	150	281	147	274	168	311	207	383	57
West Lancashire	132	235	138	245	172	305	138	244	171	302	30
Wyre	66	119	80	143	119	211	265	466	190	333	188
Lancashire	2174	298	2226	305	2381	325	3069	417	3014	408	39
North West	11030	312	11743	333	13872	393	16159	457	17782	502	61

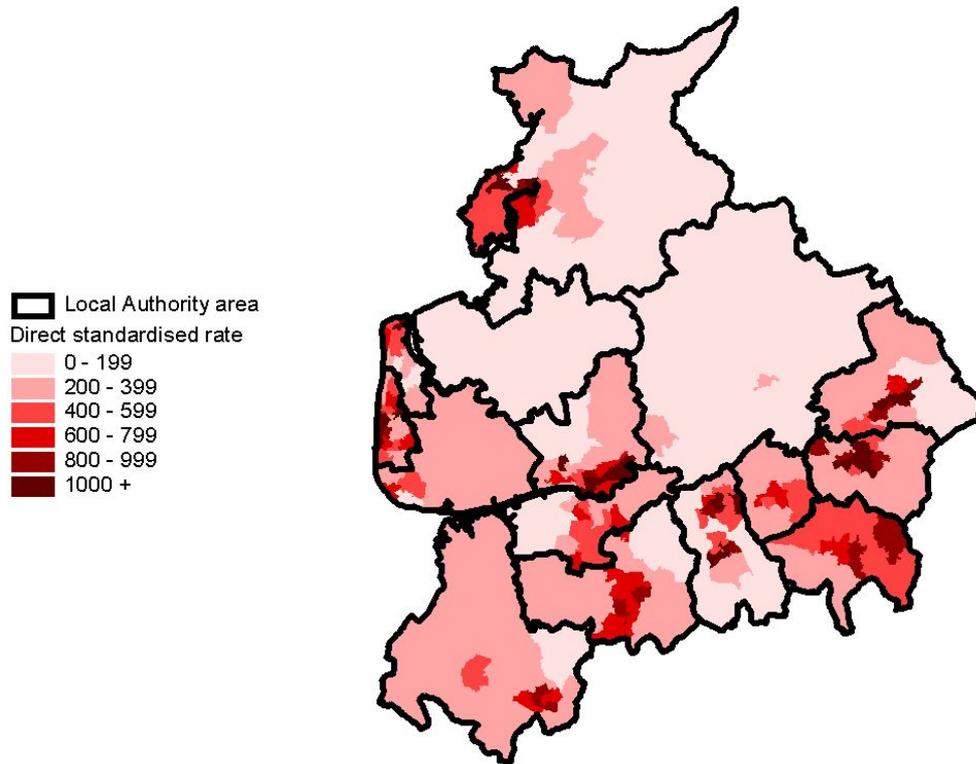
**Figure 6: All persons: Hospital admissions for mental and behavioural disorders due to psychoactive substance use by age group and Local Authority area, Lancashire, 2001-2005, ICD-10 codes F10-F19**



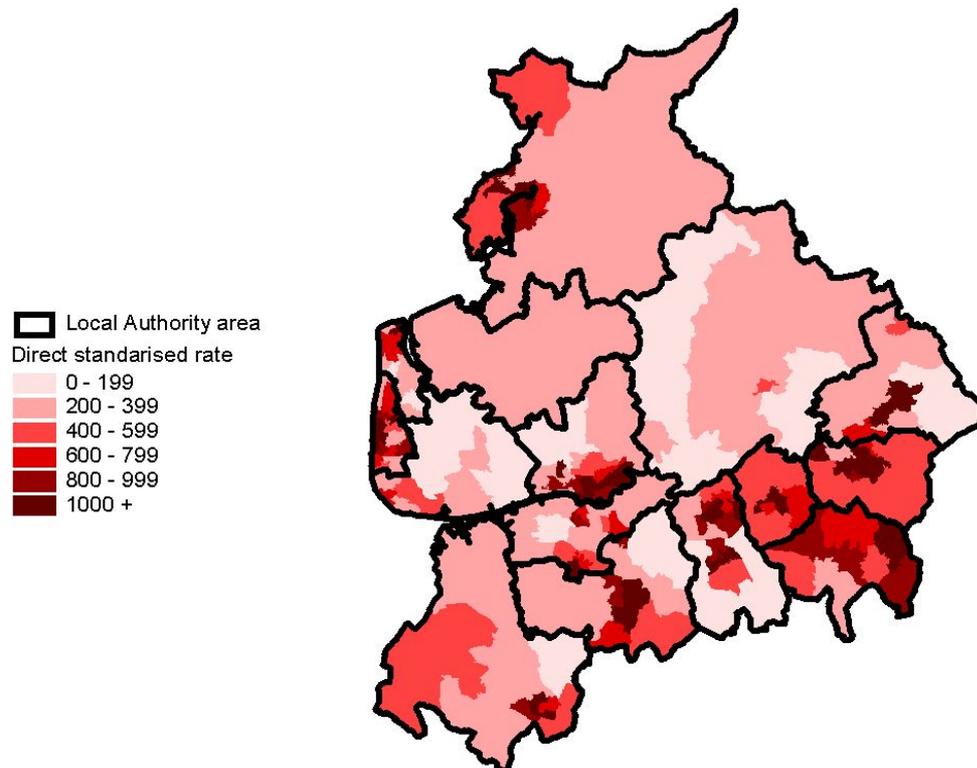
**Figure 7: Percentage of total hospital admissions for mental and behavioural disorders due to psychoactive substance use in each age group that are male and female, Lancashire, 2001-2005, ICD-10 codes F10-F19**



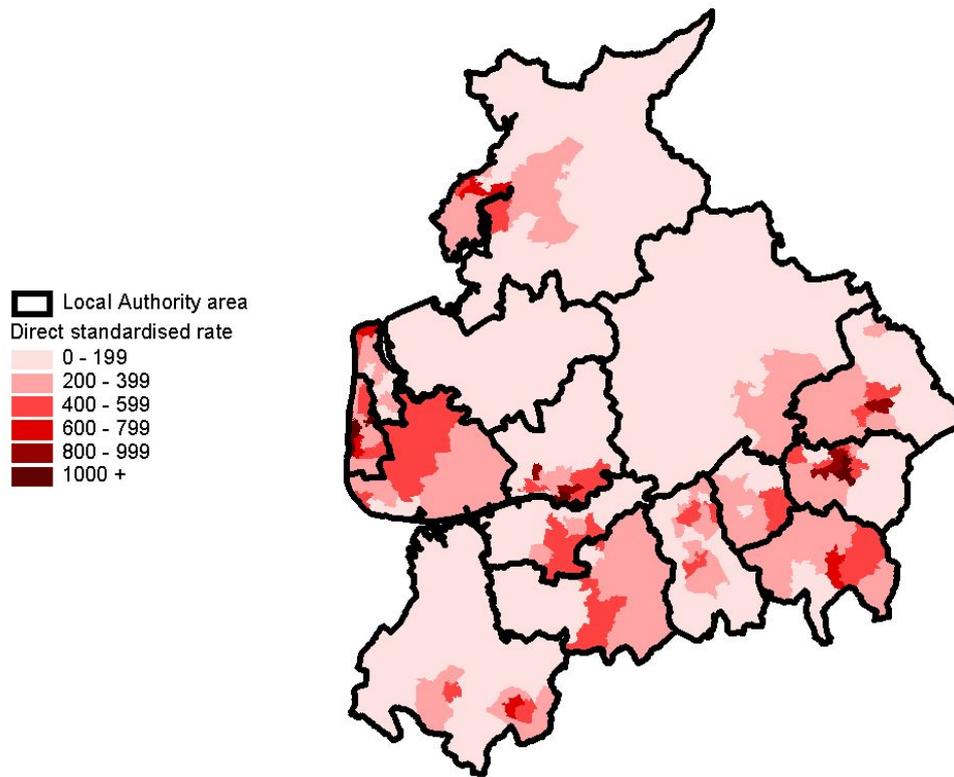
**Figure 8: All persons: Average annual directly standardised rate of admissions per 100,000 population by Middle Super Output Area, Lancashire 2001-2005, ICD-10 codes F10-F19**



**Figure 9: Males: Average annual directly standardised rate of admissions per 100,000 population by Middle Super Output Area, Lancashire 2001-2005, ICD-10 codes F10-F19**



**Figure 10: Females: Average annual directly standardised rate of admissions per 100,000 population by Middle Super Output Area, Lancashire 2001-2005, ICD-10 codes F10-F19**



### 3. Emergency admissions due to the toxic effect of alcohol (ICD-10 code: T51)

#### Data summary

- Overall, during 2001 to 2005 the average annual rate of emergency admissions due to the toxic effect of alcohol amongst Lancashire residents was 56 per 100,000 population (directly standardised against the European population; Table 13).
- In general, female admissions were higher than that of males accounting for 55% of all admissions. The average annual admission rate for females was higher than that of males, 61 per 100,000 compared with 50 per 100,000.
- In 2005, Chorley, Lancaster, Rossendale, Preston and South Ribble had the highest rates of emergency admissions due to the toxic effect of alcohol (Table 16).
- During 2001-2005, analyses by LA area illustrate that some areas have significantly higher rates of emergency admissions compared with the Lancashire average (Table 13). Specifically, Preston (113 per 100,000), Chorley (92), Lancaster (88) and South Ribble (81) had significantly higher rates of admission due to the toxic effect of alcohol compared with the Lancashire average. Amongst females, these areas were Preston (130 per 100,000), Chorley (105), Lancaster (98) and South Ribble (97) (Table 15). Amongst males, these areas were Preston (97 per 100,000), Chorley (80), Lancaster (77) and South Ribble (64) (Table 14).
- Overall 77% of admissions due to toxic effect of alcohol were for individuals aged 15-44 (average annual rate, 104 per 100,000 population; Table 13). Over half (53%) of admissions aged 15-44 were female. This demographic is by far the highest risk group for emergency admissions due to the toxic effect of alcohol, with an average annual admission rate of 112 per 100,000 population (Table 15). Specifically, females aged 15-44 residing in Preston, South Ribble, Chorley, Lancaster and Burnley LA areas had the highest average annual rates.
- Between 2001 and 2005 the annual rate of emergency admissions due to toxic effect of alcohol increased by 34% (from 50 per 100,000 to 66); the North West annual rate increased by 73% (Table 16).

#### **Key at-risk groups and communities for admissions due to the toxic effect of alcohol**

*During 2001-2005, Preston, Chorley, Lancaster and South Ribble had significantly higher rates of admission due to the toxic effect of alcohol compared with the Lancashire average.*

*In 2005, Chorley, Lancaster, Rossendale, Preston and South Ribble had the highest rates of emergency admissions due to the toxic effect of alcohol.*

*During 2001-2005, females aged 15-44 were most at risk of emergency admission to hospital due to the toxic effect of alcohol.*

**Table 13: All persons: Count and annual rate of admissions per 100,000 population by age group and Local Authority area, Lancashire 2001-2005, ICD-10 code T51**

Local Authority area	0-14		15-44		45-64		65+		All		Upper CI	Lower CI
	Count	Rate	Count	Rate	Count	Rate	Count	Rate	Count	DS Rate		
Blackburn with Darwen	7	4	211	72	30	20	<5	1	249	36	41	32
Blackpool	5	4	191	72	58	32	5	4	259	40	44	35
Burnley	<5	2	200	114	37	34	<5	4	242	58	65	50
Chorley	<5	2	342	168	111	80	7	10	462	92	101	84
Fylde	<5	0	49	39	14	14	<5	2	65	20	25	15
Hyndburn	<5	5	86	53	36	37	<5	2	127	33	39	27
Lancaster	<5	2	440	152	148	93	<5	2	593	88	95	81
Pendle	6	6	170	98	44	40	<5	1	221	53	60	46
Preston	10	8	575	200	146	102	17	18	748	113	121	105
Ribble Valley	<5	2	35	35	7	9	<5	4	45	18	23	12
Rossendale	<5	1	109	84	23	27	9	19	142	45	52	37
South Ribble	7	7	331	162	57	41	5	6	400	81	88	73
West Lancashire	<5	2	96	47	26	18	<5	1	125	25	29	20
Wyre	<5	0	81	44	28	20	<5	1	110	24	28	19
Lancashire	49	4	2916	104	765	43	58	5	3788	56	58	54
North West	257	4	15069	107	4076	48	364	7	19766	59	60	58

**Table 14: Males: Count and annual rate of admissions per 100,000 population by age group and Local Authority area, Lancashire 2001-2005, ICD-10 code T51**

Local Authority area	0-14		15-44		45-64		65+		All		Upper CI	Lower CI
	Count	Rate	Count	Rate	Count	Rate	Count	Rate	Count	DS Rate		
Blackburn with Darwen	<5	1	118	79	21	28	<5	3	141	41	48	34
Blackpool	<5	0	94	70	26	28	<5	3	122	37	44	30
Burnley	<5	4	96	111	12	22	<5	7	112	54	64	44
Chorley	<5	0	159	150	48	68	<5	3	208	80	91	69
Fylde	<5	0	17	26	<5	8	<5	0	21	13	18	7
Hyndburn	<5	5	46	56	12	24	<5	0	60	31	39	23
Lancaster	<5	0	212	146	48	61	<5	2	261	77	86	68
Pendle	5	11	91	104	16	29	<5	4	113	54	63	44
Preston	<5	2	251	173	63	87	9	22	324	97	108	87
Ribble Valley	<5	0	11	21	5	13	<5	0	16	12	18	6
Rossendale	<5	3	46	71	11	26	8	40	66	41	51	31
South Ribble	<5	0	131	127	28	41	<5	6	161	64	74	54
West Lancashire	<5	0	56	55	7	10	<5	3	64	26	32	20
Wyre	<5	0	39	42	10	14	<5	0	49	21	27	15
Lancashire	12	2	1367	97	311	35	28	6	1718	50	53	48
North West	56	2	6975	100	1849	44	195	8	9075	54	55	53

**Table 15: Females: Count and annual rate of admissions per 100,000 population by age group and Local Authority area, Lancashire 2001-2005, ICD-10 code T51**

Local Authority area	0-14		15-44		45-64		65+		All		Upper CI	Lower CI
	Count	Rate	Count	Rate	Count	Rate	Count	Rate	Count	DS Rate		
Blackburn with Darwen	6	7	93	65	9	12	<5	0	108	32	38	26
Blackpool	5	8	97	74	32	35	<5	4	137	42	49	35
Burnley	<5	0	104	118	25	46	<5	3	130	61	72	51
Chorley	<5	4	183	189	63	92	6	14	254	105	118	92
Fylde	<5	0	32	52	10	20	<5	4	44	27	36	19
Hyndburn	<5	5	40	50	24	49	<5	3	67	35	43	26
Lancaster	<5	3	228	158	100	123	<5	3	332	98	109	88
Pendle	<5	2	79	92	28	51	<5	0	108	52	62	42
Preston	9	14	324	228	83	118	8	15	424	130	142	118
Ribble Valley	<5	4	24	48	<5	5	<5	7	29	23	32	15
Rosendale	<5	0	63	98	12	28	<5	4	76	48	59	38
South Ribble	7	14	200	198	29	42	<5	6	239	97	110	85
West Lancashire	<5	4	40	39	19	25	<5	0	61	23	29	17
Wyre	<5	0	42	46	18	25	<5	1	61	26	32	19
Lancashire	37	5	1549	112	454	51	30	4	2070	61	64	59
North West	201	6	8094	114	2227	52	169	5	10691	63	64	62

**Table 16: All persons: Count and average annual crude rate of admission per 100,000 population by year and Local Authority area with percentage change from 2001-2005, ICD-10 code T51**

Local Authority area	2001		2002		2003		2004		2005		% change
	Count	Rate									
Blackburn with Darwen	38	27	31	22	19	14	61	43	100	71	163
Blackpool	31	22	32	22	58	41	63	44	75	52	142
Burnley	60	67	42	47	41	46	54	61	45	51	-25
Chorley	98	97	89	88	92	90	70	68	113	109	15
Fylde	11	15	11	15	11	15	17	23	15	20	36
Hyndburn	23	28	11	13	17	21	29	35	47	57	104
Lancaster	50	37	92	68	154	112	160	114	137	96	174
Pendle	63	71	28	31	29	32	61	68	40	45	-37
Preston	196	150	150	115	149	115	133	102	120	91	-39
Ribble Valley	<5	4	10	18	9	16	11	19	13	23	550
Rosendale	21	32	17	26	17	26	25	38	62	93	195
South Ribble	89	86	95	91	66	63	58	55	92	87	3
West Lancashire	9	8	12	11	25	23	22	20	57	52	533
Wyre	16	15	20	19	17	16	23	21	34	31	113
Lancashire	707	50	640	45	704	49	787	55	950	66	34
North West	3145	46	3082	45	3790	55	4300	62	5449	79	73

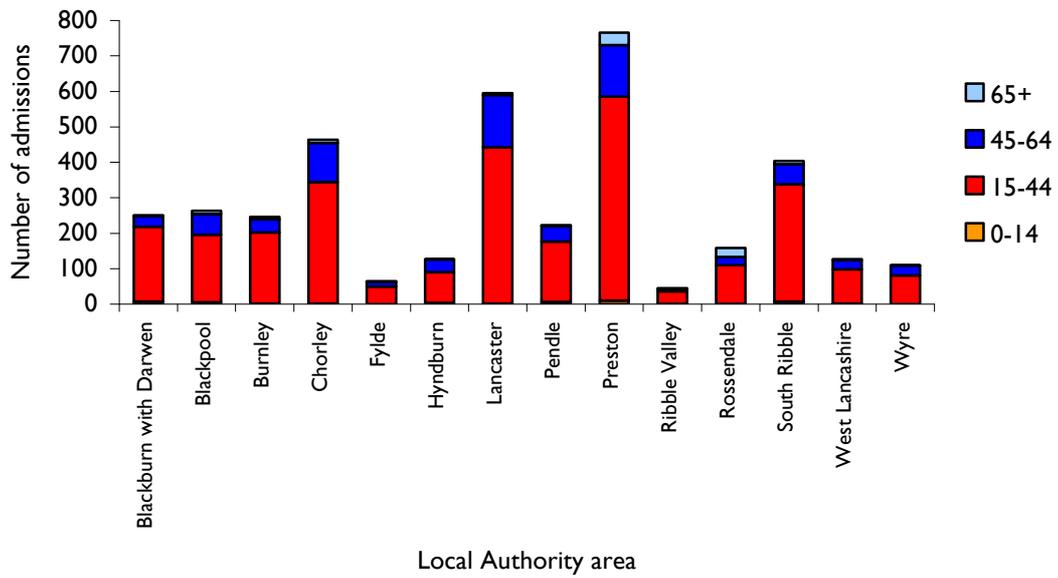
**Table 17: Males: Count and average annual crude rate of admission per 100,000 population by year and Local Authority area with percentage change from 2001-2005, ICD-10 code T51**

Local Authority area	2001		2002		2003		2004		2005		% change
	Count	Rate									
Blackburn with Darwen	25	37	23	33	11	16	30	43	52	74	108
Blackpool	18	26	11	16	30	43	33	47	30	43	67
Burnley	38	88	21	49	13	30	19	44	21	49	-45
Chorley	40	80	44	87	45	88	32	62	47	91	18
Fylde	5	14	<5	6	6	17	<5	8	5	14	0
Hyndburn	10	25	5	13	7	17	12	30	26	64	160
Lancaster	19	30	37	57	67	101	71	105	67	97	253
Pendle	33	76	17	39	11	25	30	69	22	50	-33
Preston	69	108	70	110	63	99	71	110	51	78	-26
Ribble Valley	<5	0	<5	11	<5	15	<5	14	5	18	NA
Rossendale	13	41	5	16	8	25	13	40	27	83	108
South Ribble	37	73	39	76	29	56	30	58	26	50	-30
West Lancashire	<5	6	9	17	11	21	12	23	29	55	867
Wyre	10	20	7	14	<5	8	9	17	19	36	90
Lancashire	320	46	293	42	309	44	369	52	427	60	33
North West	1434	43	1392	42	1760	52	2045	61	2444	72	70

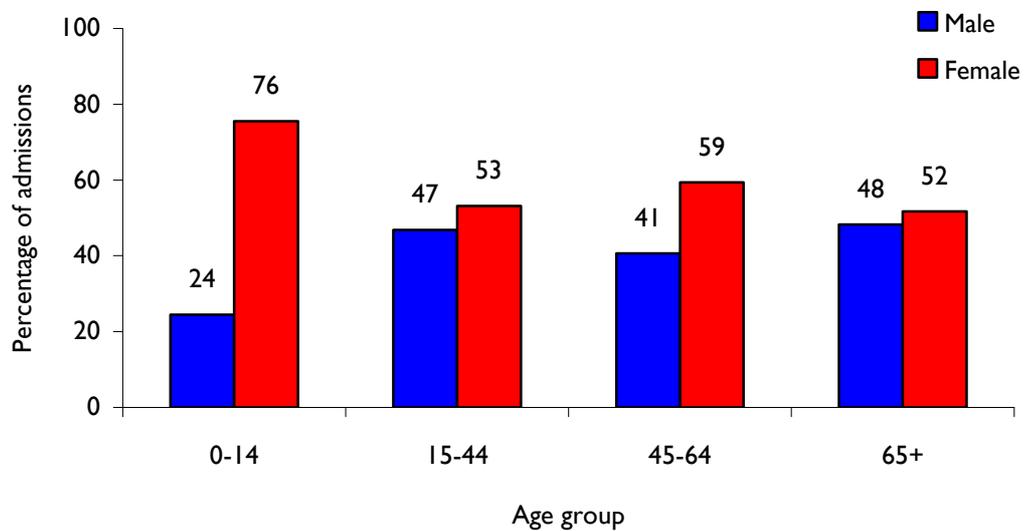
**Table 18: Females: Count and average annual crude rate of admission per 100,000 population by year and Local Authority area with percentage change from 2001-2005, ICD-10 code T51**

Local Authority area	2001		2002		2003		2004		2005		% change
	Count	Rate									
Blackburn with Darwen	13	19	8	11	8	11	31	44	48	67	269
Blackpool	13	18	21	29	28	38	30	41	45	61	246
Burnley	22	48	21	46	28	61	35	77	24	53	9
Chorley	58	115	45	89	47	92	38	74	66	127	14
Fylde	6	16	9	24	5	13	14	36	10	26	67
Hyndburn	13	31	6	14	10	24	17	41	21	50	62
Lancaster	31	44	55	78	87	122	89	124	70	96	126
Pendle	30	66	11	24	18	39	31	68	18	39	-40
Preston	127	191	80	121	86	130	62	94	69	104	-46
Ribble Valley	<5	7	7	25	5	18	7	24	8	27	300
Rossendale	8	24	12	36	9	27	12	35	35	103	338
South Ribble	52	98	56	105	37	69	28	52	66	122	27
West Lancashire	6	11	<5	5	14	25	10	18	28	49	367
Wyre	6	11	13	23	13	23	14	25	15	26	150
Lancashire	387	53	347	48	395	54	418	57	523	71	35
North West	1711	48	1690	48	2030	57	2255	64	3005	85	76

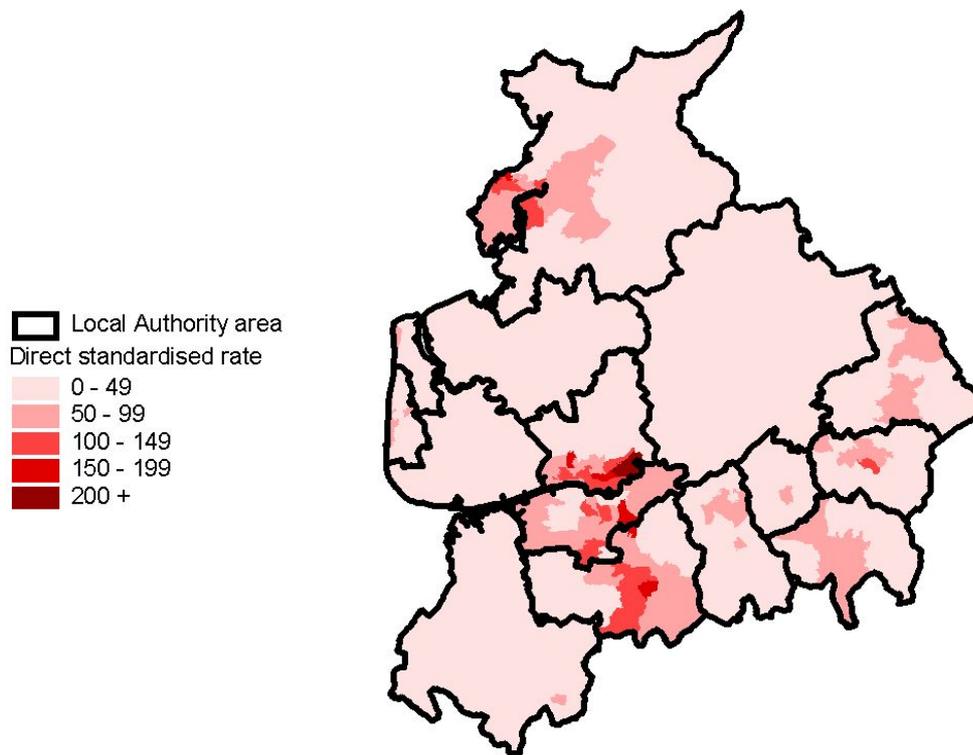
**Figure 11: All persons: Hospital admissions due to the toxic effect of alcohol by age group and Local Authority area, Lancashire, 2001-2005, ICD-10 code T51**



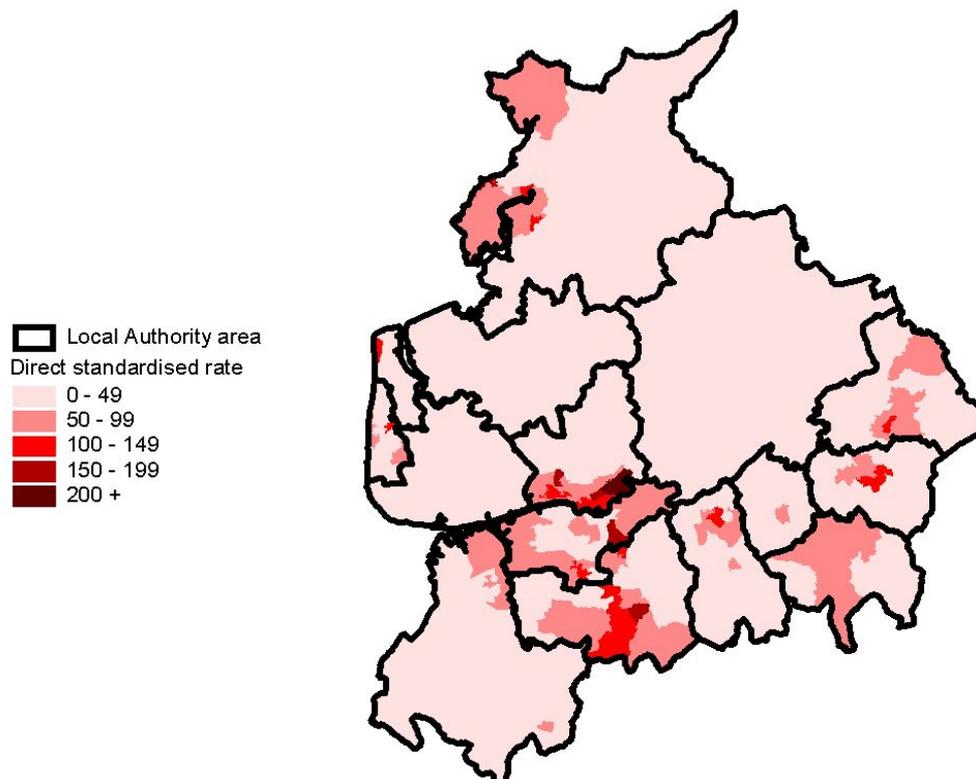
**Figure 12: Percentage of total hospital admissions due to the toxic effect of alcohol in each age group that are male and female, Lancashire, 2001-2005, ICD-10 code T51**



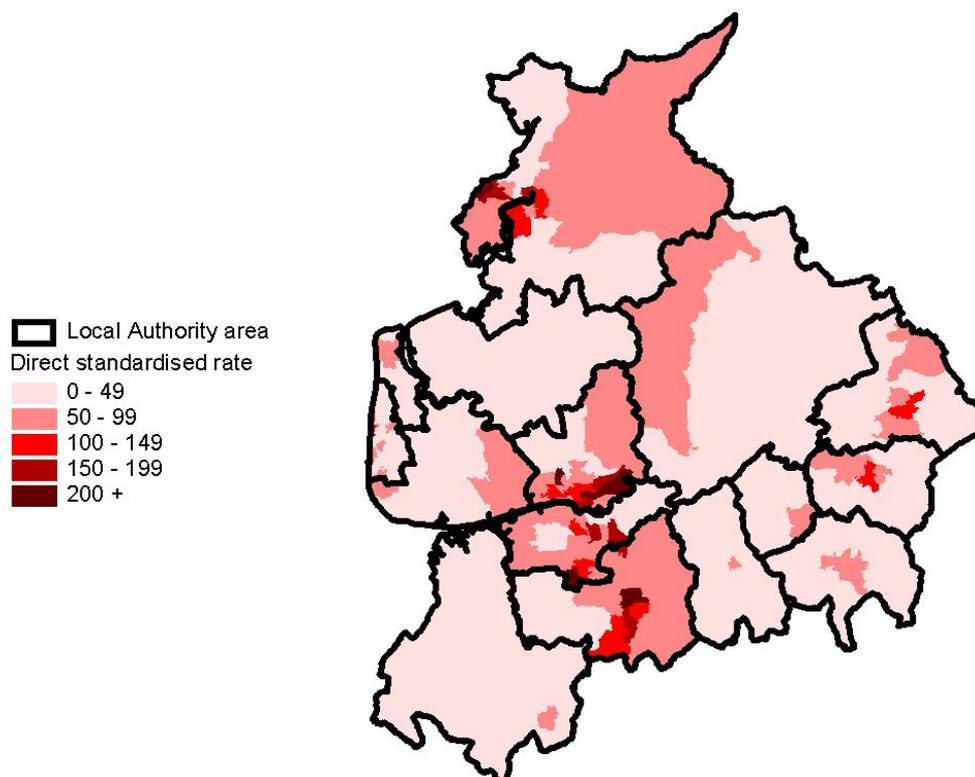
**Figure 13: All persons: Average annual directly standardised rate of admissions per 100,000 population by Middle Super Output Area, Lancashire 2001-2005, ICD-10 code T51**



**Figure 13: Males: Average annual directly standardised rate of admissions per 100,000 population by Middle Super Output Area, Lancashire 2001-2005, ICD-10 code T51**



**Figure 13: Females: Average annual directly standardised rate of admissions per 100,000 population by Middle Super Output Area, Lancashire 2001-2005, ICD-10 code T51**



**4. Other entries where there is evidence of alcohol involvement determined by blood alcohol level (ICD-10 code: Y90), or evidence of alcohol involvement determined by level of intoxication (ICD-10 code: Y91)**

**Data summary**

Data extracted for ICD-10 codes Y90 and Y91 were so few that they could not be presented here due to patient confidentiality. Upon review of the data though, it was evident that the majority of episodes came from two LA areas in Lancashire, with all data collected in 2005 only. This suggests that there may be inconsistencies in the collection of such data year on year and between LA areas across Lancashire.

## Acknowledgements

We would like to thank the North West Public Health Observatory for providing data used in this report and their valuable guidance on analysing such data, in particular Dan Dedman, Sacha Wyke and Joan Olajide. We would also like to thank Dan Hungerford and Sara Hughes for their assistance in compiling the report. Finally, we would like to acknowledge the Lancashire Local Area Agreement, specifically the alcohol project board, and Lancashire Primary Care Trusts (PCTs), for funding this report.



***WHO Collaborating Centre for Violence Prevention***