

7 Attributable hospital separations in 1998

Tables 7.1 to 7.3 show the number of hospital separations attributable to tobacco, alcohol and illicit drugs in 1997–98 classified by age, the drug involved and the reason for separation, for males, females and persons. Tables 7.4 to 7.6 present the number of patient days attributable to tobacco, alcohol and illicit drugs in 1997–98 classified by age, the drug involved and the reason for separation, for males, females and persons. These are summary results for groups of reasons for separation. Detailed tables for individual causes of death are available from the Institute on request.

7.1 Alcohol

Alcohol has both a causative and an apparent preventive effect on hospital separations. The largest number of alcohol-related separations among both men and women is due to alcoholism and alcoholic liver cirrhosis. The second-largest number is due to road injuries for men and cancer for women. The male cancer separations are due to oesophageal cancer (37% of attributable cancer separations), oropharyngeal cancer (30%), laryngeal cancer (20%) and liver cancer (13%). The female cancer separations are mainly due to breast cancer (67% of attributable cancer separations); the remainder are attributable to oesophageal cancer (17%), oropharyngeal cancer (9%), liver cancer (4%) and laryngeal cancer (2%).

Alcohol has an apparent protective effect against some conditions classified in the ‘other’ category for both men and women. It should be noted, however, that the estimate for this category is a net figure that includes an increased separation rate due to some causes offset by a reduced separation rate due to other causes. The protective effect of alcohol relates mainly to a reduced risk of hospitalisation from ischaemic heart disease, stroke, cholelithiasis and hypertension with moderate alcohol consumption. However, as noted in Appendix A, high alcohol consumption is related to an increased risk of hospitalisation from a number of causes in this category—including stroke.

The overall net effect of alcohol on the conditions in the ‘other’ category is to increase hospitalisations for men. This is because the number of separations averted due to the protective effect of alcohol is offset by an increase in separations mainly due to unintentional injuries, assault and attempted suicide among younger men and pancreatitis and supraventricular cardiac dysrhythmias among middle-aged and older men. The overall effect for women is a decrease in the number of separations because of the smaller numbers having these conditions.

7.2 Tobacco

The largest specific cause of hospital separations for males attributable to tobacco is ischaemic heart disease, with 29% of the attributable separations. This is followed by cancer (21%) and chronic obstructive pulmonary disease (19%). The cancer category is dominated by lung cancer (50% of attributable cancer separations) and bladder cancer (23%). Oropharyngeal and oesophageal cancer each account for 7% of the attributable cancer

separations; the remaining cancers each account for less than 5% of the attributable cancer separations.

The 'other direct smoking' category accounts for 30% of the attributable separations for males. No single cause dominates this group, but the largest contributors are atherosclerosis (27% of other attributable separations), cardiac dysrhythmias (20%), stroke (20%) and pneumonia (18%).

The largest specific cause of hospital separations for females attributable to tobacco is chronic obstructive pulmonary disease, with 22% of the attributable separations. This is followed by ischaemic heart disease (19%) and cancer (14%). The cancer category is dominated by lung cancer (59% of attributable cancer separations) and bladder cancer (17%). Oesophageal cancer accounts for 9% of the attributable cancer separations and oropharyngeal cancer accounts for 6%. The remaining cancers each account for less than 5% of the attributable cancer separations.

The 'other direct smoking' category accounts for 43% of the attributable separations for females. Again, no single cause dominates this group, but the largest contributors are atherosclerosis (17% of other attributable separations), stroke (17%), cardiac dysrhythmias (16%) and pneumonia (16%).

7.3 Illicit drugs

As with the mortality data, the hospital separations attributable to use of illicit drugs are dominated by opiate dependence, abuse or poisoning, which accounts for 52% of attributable separations for males and 40% for females. The next-largest category of attributable separations is due to drug psychoses, which accounts for 30% of attributable separations for males and 25% for females. For males, cannabis dependence or abuse contributes 6% of the attributable separations and road traffic accidents contribute 4%; all other causes contribute less than 3% each. For females, antepartum haemorrhage and maternal drug dependence each contribute 8% each of the attributable separations; all other causes contribute less than 3% each.

Table 7.1: Hospital separations attributable to drug use, by drug, reason for separation and age: males, 1997–98

Drug involved/reason for separation	Age				All ages
	0–14	15–34	35–64	65 and over	
Alcohol					
Cancer	0	20	1,460	1,691	3,171
Alcoholism and alcoholic liver cirrhosis	143	3,783	11,564	2,162	17,652
Road injuries	329	3,083	1,145	233	4,790
Other	229	11,813	2,419	–4,873	9,588
Total alcohol	701	18,699	16,588	–786	35,201
Tobacco					
Direct smoking					
Cancer	0	0	6,961	13,718	20,679
Ischaemic heart disease	0	302	20,685	7,712	28,699
Chronic obstructive pulmonary disease	0	0	3,613	14,656	18,268
Other	94	1,892	11,851	14,917	28,755
Environmental tobacco smoke	873	1	36	127	1,037
Total tobacco	967	2,195	43,146	51,130	97,438
Illicit drugs					
Drug dependence and abuse					
Cannabis	0	421	47	7	475
Opiates	0	2,363	824	6	3,193
Cocaine	0	21	17	1	39
Amphetamines	0	236	35	0	271
Hallucinogens	0	35	1	0	36
Poisoning	0	0	0	0	0
Opiates	0	814	278	11	1,103
Psychostimulants	0	183	35	0	218
Hallucinogens	0	87	16	1	104
Other psychotropic drugs	0	45	46	5	96
Anabolic steroids	0	1	1	0	2
Antepartum haemorrhage	0	0	0	0	0
Low birthweight	0	0	0	0	0
Hepatitis B and non-A, non-B	0	0	0	0	0
AIDS	0	0	0	0	1
Infective endocarditis	0	15	9	0	24
Drug psychoses	0	1,890	439	144	2,473
Newborn toxicity	0	0	0	0	0
Road traffic accidents	28	160	81	26	295
Total illicit drugs	28	6,271	1,829	201	8,329
Total all drugs	1,696	27,166	61,563	50,545	140,969

Note: Columns may not add exactly to totals due to rounding.

Table 7.2: Hospital separations attributable to drug use, by drug, reason for separation and age: females, 1997–98

Drug involved/reason for separation	Age				All ages
	0–14	15–34	35–64	65 and over	
Alcohol					
Cancer	0	93	1,619	1,158	2,869
Alcoholism and alcoholic liver cirrhosis	135	2,081	5,162	728	8,107
Road injuries	81	628	296	50	1,056
Other	118	3,705	–71	–7,953	–4,200
Total alcohol	334	6,508	7,006	–6,016	7,831
Tobacco					
Direct smoking					
Cancer	0	0	1,965	4,328	6,293
Ischaemic heart disease	0	96	5,077	3,248	8,421
Chronic obstructive pulmonary disease	0	0	2,286	7,714	10,000
Other	48	4,894	6,779	7,720	19,442
Environmental tobacco smoke	555	2	136	238	931
Total tobacco	603	4,992	16,243	23,249	45,087
Illicit drugs					
Drug dependence and abuse					
Cannabis	0	153	24	0	177
Opiates	0	1492	466	9	1,967
Cocaine	0	17	3	0	20
Amphetamines	0	126	12	0	138
Hallucinogens	0	15	5	0	20
Poisoning	0	0	0	0	0
Opiates	0	405	97	4	506
Psychostimulants	0	144	21	0	165
Hallucinogens	0	59	15	0	74
Other psychotropic drugs	0	77	70	24	171
Anabolic steroids	0	0	0	0	0
Antepartum haemorrhage	0	549	78	0	627
Low birthweight	0	54	5	0	59
Hepatitis B, and non-A, non-B	0	0	0	0	0
AIDS	0	3	1	1	4
Infective endocarditis	0	11	3	0	14
Drug psychoses	0	958	335	225	1,518
Maternal drug dependence	0	471	40	0	511
Newborn toxicity	0	0	0	0	0
Road traffic accidents	16	71	53	30	170
Total illicit drugs	16	4,605	1,228	293	6,142
Total all drugs	953	16,105	24,477	17,525	59,060

Note: Columns may not add exactly to totals due to rounding.

Table 7.3: Hospital separations attributable to drug use, by drug, reason for separation and age: persons, 1997–98

Drug involved/reason for separation	Age				All ages
	0–14	15–34	35–64	65 and over	
Alcohol					
Cancer	0	113	3,078	2,849	6,040
Alcoholism and alcoholic liver cirrhosis	278	5,864	16,726	2,890	25,759
Road injuries	410	3,711	1,442	283	5,846
Other	346	15,519	2,348	–12,825	5,388
Total alcohol	1,034	25,207	23,594	–6,802	43,033
Tobacco					
Direct smoking					
Cancer	0	0	8,926	18,046	26,972
Ischaemic heart disease	0	398	25,762	10,960	37,120
Chronic obstructive pulmonary disease	0	0	5,899	22,370	28,268
Other	142	6,787	18,630	22,638	48,196
Environmental tobacco smoke	1,428	2	172	365	1,968
Total tobacco	1,570	7,187	59,389	74,379	142,525
Illicit drugs					
Drug dependence and abuse					
Cannabis	0	574	71	7	652
Opiates	0	3,855	1,290	15	5,160
Cocaine	0	38	20	1	59
Amphetamines	0	362	47	0	409
Hallucinogens	0	50	6	0	56
Poisoning	0	0	0	0	0
Opiates	0	1,219	375	15	1,609
Psychostimulants	0	327	56	0	383
Hallucinogens	0	146	31	1	178
Other psychotropic drugs	0	122	116	29	267
Anabolic steroids	0	1	1	0	2
Antepartum haemorrhage	0	549	78	0	627
Low birthweight	0	54	5	0	59
Hepatitis B and non-A, non-B	0	0	0	0	0
AIDS	0	3	1	2	5
Infective endocarditis	0	26	12	0	38
Drug psychoses	0	2,848	774	369	3,991
Maternal drug dependence	0	471	40	0	511
Newborn toxicity	0	0	0	0	0
Road traffic accidents	44	231	134	55	465
Total illicit drugs	44	10,876	3,057	494	14,471
Total all drugs	2,604	32,394	82,983	67,576	185,558

Note: Columns may not add exactly to totals due to rounding.

Table 7.4: Hospital patient days attributable to drug use, by drug, reason for separation and age: males, 1997–98

Drug involved/reason for separation	Age				All ages
	0–14	15–34	35–64	65 and over	
Alcohol					
Cancer	0	144	10,321	14,383	24,848
Alcoholism and alcoholic liver cirrhosis	164	15,719	146,136	49,969	211,988
Road injuries	1,187	16,651	7,842	2,286	27,967
Other	938	30,856	10,126	–15,397	26,524
Total alcohol	2,289	63,371	174,425	51,241	291,327
Tobacco					
Direct smoking					
Cancer	0	0	40,828	96,422	137,249
Ischaemic heart disease	0	1,018	80,705	39,379	121,102
Chronic obstructive pulmonary disease	0	0	24,802	124,576	149,378
Other	28,744	7,841	61,370	112,806	210,760
Environmental tobacco smoke	2,737	3	139	670	3,549
Total tobacco	31,481	8,861	207,844	373,852	622,038
Illicit drugs					
Drug dependence and abuse					
Cannabis	0	3,118	399	7	3,524
Opiates	0	10,136	4,421	30	14,587
Cocaine	0	109	67	6	182
Amphetamines	0	1,535	251	0	1,786
Hallucinogens	0	86	43	0	129
Poisoning	0	0	0	0	0
Opiates	0	2,082	748	23	2,853
Psychostimulants	0	243	66	0	309
Hallucinogens	0	119	18	1	138
Other psychotropic drugs	0	92	151	42	285
Anabolic steroids	0	2	1	0	3
Antepartum haemorrhage	1	0	0	0	1
Low birthweight	6,578	0	0	0	6,578
Hepatitis B and non-A, non-B	0	0	0	0	0
AIDS	0	5	0	2	7
Infective endocarditis	0	302	106	0	408
Drug psychoses	0	14,212	2,905	1,608	18,725
Newborn toxicity	2,216	0	0	0	2,216
Road traffic accidents	115	831	526	228	1,700
Total illicit drugs	8,909	32,871	9,703	1,948	53,430
Total all drugs	42,680	105,102	391,972	427,041	966,795

Note: Columns may not add exactly to totals due to rounding.

Table 7.5: Hospital patient days attributable to drug use, by drug, reason for separation and age: females, 1997–98

Drug involved/reason for separation	Age				All ages
	0–14	15–34	35–64	65 and over	
Alcohol					
Cancer	0	346	8,116	9,176	17,638
Alcoholism and alcoholic liver cirrhosis	149	7,756	30,202	10,342	48,449
Road injuries	319	3,231	1,667	456	5,673
Other	524	9,751	–3,123	–82,742	–75,590
Total alcohol	991	21,084	36,863	–62,768	–3,830
Tobacco					
Direct smoking					
Cancer	0	0	12,632	37,151	49,783
Ischaemic heart disease	0	356	19,325	17,377	37,058
Chronic obstructive pulmonary disease	0	0	14,945	72,813	87,757
Other	25,181	15,695	34,021	65,344	140,241
Environmental tobacco smoke	1,738	6	545	1,278	3,567
Total tobacco	26,919	16,057	81,467	193,963	318,406
Illicit drugs					
Drug dependence and abuse					
Cannabis	0	1,081	156	0	1237
Opiates	0	7,905	2,922	97	10,924
Cocaine	0	132	9	0	141
Amphetamines	0	1,179	105	0	1,284
Hallucinogens	0	56	20	0	76
Poisoning	0	0	0	0	0
Opiates	0	834	256	23	1,113
Psychostimulants	0	220	27	0	247
Hallucinogens	0	82	38	0	120
Other psychotropic drugs	0	255	360	253	868
Anabolic steroids	0	0	0	0	0
Antepartum haemorrhage	2	1,868	452	0	2,322
Low birthweight	5,827	336	53	0	6,216
Hepatitis B and non-A, non-B	0	0	0	0	0
AIDS	0	3	1	9	13
Infective endocarditis	0	229	46	0	275
Drug psychoses	0	5,109	2,415	2,945	10,469
Maternal drug dependence	0	2,782	237	0	3,019
Newborn toxicity	2,449	0	0	0	2,449
Road traffic accidents	74	340	302	263	979
Total illicit drugs	8,352	22,410	7,399	3,590	41,752
Total all drugs	36,262	59,551	125,729	134,785	356,327

Note: Columns may not add exactly to totals due to rounding.

Table 7.6: Hospital patient days attributable to drug use, by drug, reason for separation and age: persons, 1997–98

Drug involved/reason for separation	Age				All ages
	0–14	15–34	35–64	65 and over	
Alcohol					
Cancer	0	490	18,438	23,558	42,486
Alcoholism and alcoholic liver cirrhosis	313	23,475	176,338	60,311	260,437
Road injuries	1,506	19,883	9,509	2,742	33,640
Other	1,462	40,607	7,003	–98,138	–49,066
Total alcohol	3,281	84,455	211,288	–11,527	287,497
Tobacco					
Direct smoking					
Cancer	0	0	53,459	133,573	187,032
Ischaemic heart disease	0	1,373	100,030	56,756	158,160
Chronic obstructive pulmonary disease	0	0	39,747	197,388	237,136
Other	53,925	23,536	95,390	178,150	351,001
Environmental tobacco smoke	4,475	9	685	1,948	7,116
Total tobacco	58,399	24,918	289,311	567,815	940,444
Illicit drugs					
Drug dependence and abuse					
Cannabis	0	4,199	555	7	4,761
Opiates	0	18,041	7,343	127	25,511
Cocaine	0	241	76	6	323
Amphetamines	0	2,714	356	0	3,070
Hallucinogens	0	142	63	0	205
Poisoning	0	0	0	0	0
Opiates	0	2,916	1,004	46	3,966
Psychostimulants	0	463	93	0	556
Hallucinogens	0	201	56	1	258
Other psychotropic drugs	0	347	511	295	1,153
Anabolic steroids	0	2	1	0	3
Antepartum haemorrhage	3	1,868	452	0	2,323
Low birthweight	12,405	336	53	0	12,794
Hepatitis B and non-A, non-B	0	0	0	0	0
AIDS	0	7	1	11	20
Infective endocarditis	0	531	152	0	683
Drug psychoses	0	19,321	5,320	4,553	29,194
Maternal drug dependence	0	2,782	237	0	3,019
Newborn toxicity	4,665	0	0	0	4,665
Road traffic accidents	189	1,170	828	491	2,678
Total illicit drugs	17,262	55,281	17,102	5,537	95,182
Total all drugs	61,680	109,373	500,599	556,288	1,227,940

Note: Columns may not add exactly to totals due to rounding.