# **NIVISIO**

Occasional Paper No. 12/

### Contents

- Summary
- Glossary of terms
- Introduction
- Methods
- Analysis of treatment data
- Conclusions
- References
- Acknowledgements
- Authors

# Trends in treated problem drug use in the seven health board areas outside the Eastern Regional Health Authority, 1998 to 2002

# **Summary**

The data presented in this paper describe trends in treated problem drug use in seven health board areas, namely: the Midland, Mid-Western, North Eastern, North Western, Southern, South Eastern and Western Health Boards. The total numbers include 7,545 cases who lived and were treated in the seven health boards between 1998 and 2002. In this paper, problem drug use is described in relation to person, place and time. This paper will assist policy makers, service planners and public health practitioners to develop appropriate responses to problem drug use in the future.

The analysis presented in this paper is based on data reported to the National Drug Treatment Reporting System.

The main findings and their implications are:

- Both the incidence and prevalence of treated problem drug use almost trebled between 1998 and 2002. For example, the incidence of treated problem drug use increased from 24.8 per 100,000 of the population in 1998 to 69.7 per 100,000 in 2002. This observed increase may be explained by a true increase in use, an increase in access to treatment services, new legislation encouraging more people into treatment, or an increase in the number of centres reporting cases to the NDTRS. The most likely explanation is a combination of all these factors.
- The incidence of treated problem drug use for the reporting period was highest in the Southern Health Board area, followed closely by the South Eastern Health Board area. The Western Health Board area had the lowest incidence, indicating lower drug use rates than in the rest of Ireland, lower access to or uptake of appropriate treatment services, or lower levels of participation in the NDTRS. This requires investigation.
- The total number of cases reporting cannabis as their main problem drug trebled, increasing from 392 in 1998 to 1,328 in 2002. The numbers reporting problem opiate use also increased steadily, from 116 in 1998 to 439 in 2002. Opiate use was more common in the health board areas bordering the Eastern Regional Health Authority area. The second most frequently reported main problem drug was ecstasy for new cases and opiates for previously treated cases. Though small, the number of new cases reporting cocaine use increased from six in 1998 to 42 in 2002, indicating the early stages of an epidemic in these health board areas. These findings indicate that treatment services must cater for a wide spectrum of illicit drugs rather than focus on one or two drugs and be capable of adjusting treatment approaches in accordance with changing patterns of problem drug use.



**Drug Misuse Research Division** Health Research Board Holbrook House **Holles Street** Dublin 2

- Although there was a small percentage decrease in polydrug use, from 84 per cent of cases in 1998 to 79 per cent in 2002, it remained a common practice and is associated with poorer treatment outcomes.
- The number of cases who reported injecting trebled, increasing from 96 in 1998 to 284 in 2002. Injectors have a higher risk of acquiring blood-borne viral infections and experiencing overdose than non-injectors.
- The proportion of cases under 18 years old increased by just over three per cent during the reporting period and, as expected, was much higher for new cases than for those previously treated. Those under 18 years old require different approaches to treatment and it is important that this is a consideration during service planning.
- The main problem drug reported by new cases was examined by selected socio-demographic and drugusing characteristics and some important relationships were identified. Young teenagers initiated drug use with cannabis and volatile inhalants. The use of opiates, ecstasy and amphetamines was commenced in mid to late teens. There were differences in type of drug used by males and females, with very high proportions of males treated for cocaine and cannabis use compared to their female counterparts. The highest rates of employment were among those using drugs commonly associated with social events, and the lowest rates of employment were among those who used opiates and benzodiazepines. This observation (along with the high rates of early school leaving) has important implications for the social and occupational reintegration of opiate and benzodiazepine users.

# Glossary of Terms

- Incidence is a term used to describe the number of new cases of disease or events that develop among a population during a specified time interval. For example, in 2001, ten opiate users living in a specific county sought treatment for the first time. The incidence is the number of opiate cases divided by the population living in the county (say 31,182 persons in this example) expressed per given number of the population, i.e., per 100, per 1,000, per 10,000, etc.
  - The calculation in this case is as follows:  $(10/31,182) \times 10,000$ , which gives an incidence rate of 3.2 per 10,000 of the specific county population in 2001.
- Prevalence is a term used to describe the proportion of people in a population who have a disease or condition at a specific point or period in time. For example, in 2001, ten opiate users living in a specific county sought treatment for the first time, 20 opiate users returned to treatment in the year and five opiate users continued in treatment from the previous year; in total there are 35 people treated for problem opiate use in 2001. The prevalence is the total number of cases (35) divided by the population living in the county (31,182 persons) expressed per given number of the population, i.e., per 100, per 1,000, per 10,000, etc.
  - The calculation in this case is as follows: (35/31,182) x 10,000, which gives a prevalence rate of 11.2 per 10,000 of the specific county population in 2001.
- The median is the value at the mid-point in a sequence of numerical values ranged in ascending or descending order. It is defined as the value above or below which half of the values lie. Unlike the mean (average), the median is not influenced by extreme values (or outliers). For example, in the case of five drug users aged 22, 23, 24, 24 and 46 years respectively, the median (middle value) is 24 years, whereas the mean is 27.8 years. While both the median and the mean describe the central value of the data, the median is more useful since the mean is influenced by the one older person in this example.

# Introduction

The National Drug Treatment Reporting System (NDTRS) is an epidemiological database on treated problem drug use in Ireland. It was established in 1990 in the Greater Dublin Area and was extended in 1995 to cover other areas of the country. The reporting system was originally developed in line with the Pompidou Group's Definitive Protocol (Hartnoll 1994) and subsequently refined in accordance with the Treatment Demand Indicator Protocol (EMCDDA and Pompidou Group 2000). The NDTRS is co-ordinated by staff at the Drug Misuse Research Division (DMRD) of the Health Research Board (HRB) on behalf of the Department of Health and Children.

Drug treatment data are viewed as an indirect indicator of drug misuse as well as a direct indicator of demand for treatment services. These data are used at national and European levels to provide information on the characteristics of clients entering treatment, and on patterns of drug misuse, such as types of drugs used and consumption behaviours. They are 'valuable from a public health perspective to assess needs, ... and to plan and evaluate services' (EMCDDA 1998: 23). Information from the NDTRS is made available to service providers and policy makers and is used to inform local and national drug policy and planning. For example, in 1996 NDTRS data were used to identify a number of local areas with problematic heroin use (Ministerial Task Force 1996). These areas were later designated as Local Drugs Task Force Areas and are continuing to provide strategic responses to drug misuse in their communities.

The monitoring role of the NDTRS is recognised by the Government in its document *Building on Experience: National Drugs Strategy 2001–2008.* Data collection for the NDTRS is one of the actions identified and agreed by Government for implementation by health boards: 'All treatment providers should co-operate in returning information on problem drug use to the DMRD of the HRB' (Department of Tourism, Sport and Recreation 2001: 118).

# Methods

Compliance with the NDTRS requires that one form be completed for each person who receives treatment for problematic drug use at each treatment centre in a calendar year. Service providers at drug treatment centres throughout Ireland collect data on each individual treated for drug misuse. At national level, staff at the DMRD of the HRB compile anonymous, aggregated data.

For the purpose of the NDTRS, treatment is broadly defined as 'any activity which aims to ameliorate the psychological, medical or social state of individuals who seek help for their drug problems'. Clients who attend needle-exchange services are not included in this reporting system. Up to 2004, clients who reported alcohol as their main problem drug were not included in this reporting system. Treatment options include one or more of the following: medication (detoxification, methadone reduction and substitution programmes), addiction counselling, group therapy, psychotherapy and/or life skills training. Treatment is provided in both residential and non-residential settings. In the seven health board areas, data returns to the NDTRS for clients attending treatment services during 2002 were provided by 79 treatment services: 63 non-residential and 16 residential (Table 1).

The main elements of the reporting system are defined as follows:

- All cases treated describes individuals who receive treatment for problematic drug use at each treatment centre in a calendar year, and includes both
  - (a) *Previously treated cases* describes individuals who were treated previously for problematic drug use at any treatment centre and have returned to treatment in the reporting year, and also those individuals continuing in treatment from the preceding calendar year; and
  - (b) New cases treated describes individuals who have never been treated for problem drug use.

In the case of the data for 'previously treated cases' there is a possibility of duplication in the database; for example, where a person receives treatment at more than one centre. For those receiving methadone maintenance or detoxification, this possibility is considered to be small since the introduction of the Misuse of Drugs Regulations in 1998, whereby precautions are taken to ensure that methadone treatment is available from one source only.

As a result of small numbers in 1998 and a high rate (12%) of treatment status unknown, some of the comparisons are limited to the time period 1999 to 2000.

The data presented in this paper provide a description of problem drug use in seven health board areas, namely: the Midland, Mid-Western, North Eastern, North Western, Southern, South Eastern and Western Health Boards. The total numbers include cases who lived and were treated in the seven health boards between 1998 and 2002 and excludes cases resident the Eastern Regional Health Authority and cases not resident in Ireland who were treated in any of the seven health boards. Cases living in any of the seven health board areas and treated in the Eastern Regional Health Authority area were not included as the returns to the reporting system for 2001 and 2002 are not yet complete.

# Analysis of treatment data

The analysis presented provides an overview of the following: service provision for problem drug use; numbers treated for problem drug use; incidence and prevalence of treatment for problem drug use; main problem drugs; risk behaviours; socio-demographic characteristics of cases; and relationship between the main problem drug and selected characteristics. The study population consisted of cases living and treated in the seven health board areas.

### Service provision

The total number of drug treatment services available in the seven health boards outside the Eastern Regional Health Authority area and participating in the NDTRS increased between 1998 and 2002 (Table 1). The largest increase was in outpatient treatment services, while there was a small increase in the number of residential treatment services. The number of general practitioners participating in the NDTRS was very low. In 2002, there were 49 general practitioners prescribing methadone treatment outside the Eastern Regional Health Authority area but only four of these provided returns to the NDTRS. There are no low-threshold services providing low-dose methadone therapy outside Counties Dublin, Kildare and Wicklow. The prison service does not participate in the NDTRS, although it does provide drug treatment services.

Table 1 Number and type of services providing treatment for problem drug use and number of cases\* treated (in brackets) in the seven health board<sup>†</sup> areas and reported to the NDTRS, 1998 to 2002

Drug services	19	98	19	999	20	000	:	2001	20	002
Outpatient	36	(592)	35	(754)	50	(1262)	60	(1330)	59	(1510)
Residential	12	(197)	10	(208)	13	(290)	13	(625)	16	(745)
Low threshold	0	(0)	0	(0)	0	(0)	0	(0)	0	(0)
General practitioner	0	(0)	5	(8)	3	(4)	5	(14)	4	(6)
Prison	0	(0)	0	(0)	0	(0)	0	(0)	0	(0)

<sup>\*</sup> Numbers include cases living in the Eastern Regional Health Authority but treated in another health board area, and exclude cases living in one of the seven health board areas but treated in the Eastern Regional Health Authority and recorded in the NDTRS.

### Numbers treated

Of the 8,117 cases treated for problem drug use in the seven health board areas between 1998 and 2002, 7,545 (93%) lived and were treated in these areas, 537 (7%) lived in the Eastern Regional Health Authority area, 30 (0.4%) were not resident in Ireland and five (0.1%) had no address recorded. This paper describes the 7,545 cases who lived and were treated in the seven health board areas in relation to person, place and time.

Overall, the number of new and previously treated cases living in the seven health boards (outside the Eastern Regional Health Authority area) and reported to the NDTRS trebled between 1998 and 2002 (Table 2). Each year, over half of cases were treated for the first time during the period under review.

<sup>†</sup> Midland Health Board, Mid-Western Health Board, North Eastern Health Board, North Western Health Board, Southern Health Board, Southern

Table 2 Number (%) of cases\* living and treated in the seven health board<sup>†</sup> areas by treatment status reported to the NDTRS, 1998 to 2002

Treatment status	1	998	:	1999	200 Numbe		20	001	20	002
All cases	789		970		1556		1969		2261	
Previously treated cases	269	(34.1)	388	(40.0)	565	(36.3)	746	(37.9)	886	(39.2)
New cases	423	(53.6)	556	(57.3)	952	(61.2)	1144	(58.1)	1273	(56.3)
Status unknown	97	(12.3)	26	(2.7)	39	(2.5)	79	(4.0)	102	(4.5)

<sup>\*</sup> Numbers exclude cases living in the Eastern Regional Health Authority but treated in one of the seven health boards and cases living in one of the seven health board areas but treated in the Eastern Regional Health Authority.

The data pertaining to cases who lived and were treated in the seven health board areas between 1998 and 2002 were examined by health board area where the cases resided (Table 3). Although there was considerable variation between the seven health boards in the number of cases treated, the overall figure included cases from every county in Ireland. The total number of cases living in each of the health board areas and treated for problem drug use increased between 1998 and 2000. In 2001 the number treated in the Midland Health Board area fell sharply and increased again in 2002, indicating a possible lapse in participation rather than a true decrease in treatment seeking. In 2002, the numbers treated in the North Eastern Health Board area decreased. According to staff at the North Eastern Health Board, the reduction in numbers reported to the NDTRS in 2002 was due to a reduction in returns to the reporting system rather than an actual reduction in the demand for services. Staff at the North Eastern Health Board's Public Health Department have addressed the reduction in returns to the NDTRS for 2003. The highest number of cases treated in the seven health board areas lived in the Southern Health Board area, followed closely by numbers living in the South Eastern Health Board area.

Previously treated cases are an indirect indicator of chronic drug use among the population living in a geographical area. From 1998 to 2002, the number of previously treated cases who returned to, or continued in, treatment and lived in one of the seven health board areas increased each year in five of the health board areas (Table 3). The number of previously treated cases living in the Mid-Western and North Eastern Health Board areas decreased by 9 and 10 per cent respectively in 2002 compared to 2001. The reason for the drop in previously treated cases in the Mid-Western Health Board is not clear, while the reason for the decrease in the North Eastern Health Board is mentioned above.

New cases are an indirect indicator of recent trends in problem drug use. From 1998 to 2002, the number of new cases who lived and were treated in one of the seven health boards increased each year in five of the health board areas (Table 3). The number of new cases living in the North Eastern Health Board area decreased by 20 per cent in 2002 compared to 2001. The number of new cases living in the Midland Health Board area decreased by 29 per cent between 2000 and 2002; the reason for this is not clear. Anecdotal reports suggest that this is not a true decrease in problem drug use and that the reduction may be explained by a delay in entering treatment, possibly because of a shortage of methadone treatment places in this health board.

<sup>†</sup> Midland Health Board, Mid-Western Health Board, North Eastern Health Board, North Western Health Board, Southern Health Board, South Eastern Health Board and Western Health Board.

Table 3 Number (%) of cases\* treated in the seven health board<sup>†</sup> areas by health board of residence and treatment status reported to the NDTRS, 1998 to 2002

Health board of residence	1	.998	19	99	20	000	20	001	200	02
					Numl	ber (%)				
All cases	789		970		1556		1969		2261	
Midland Health Board	87	(11.0)	129	(13.3)	160	(10.3)	128	(6.5)	173	(7.7)
Mid-Western Health Board	91	(11.5)	156	(16.1)	203	(13.0)	247	(12.5)	244	(10.8)
North Eastern Health Board	73	(9.3)	131	(13.5)	254	(16.3)	367	(18.6)	310	(13.7)
North Western Health Board	46	(5.8)	38	(3.9)	78	(5.0)	100	(5.1)	132	(5.8)
Southern Health Board	298	(37.8)	296	(30.5)	499	(32.1)	621	(31.5)	705	(31.2)
South Eastern Health Board	186	(23.6)	191	(19.7)	336	(21.6)	428	(21.7)	550	(24.3)
Western Health Board	8	(1.0)	29	(3.0)	26	(1.7)	78	(4.0)	147	(6.5)
Previously treated cases	269		388		565		746		886	
Midland Health Board	45	(16.7)	46	(11.9)	59	(10.4)	60	(8.0)	86	(9.7)
Mid-Western Health Board	30	(11.2)	64	(16.5)	79	(14.0)	90	(12.1)	82	(9.3)
North Eastern Health Board	2	(0.7)	41	(10.6)	76	(13.5)	137	(18.4)	123	(13.9)
North Western Health Board	14	(5.2)	14	(3.6)	15	(2.7)	28	(3.8)	58	(6.5)
Southern Health Board	103	(38.3)	132	(34.0)	203	(35.9)	205	(27.5)	262	(29.6)
South Eastern Health Board	69	(25.7)	77	(19.8)	130	(23.0)	196	(26.3)	224	(25.3)
Western Health Board	6	(2.2)	14	(3.6)	3	(0.5)	30	(4.0)	51	(5.8)
New cases	423		556		952		1144		1273	
Midland Health Board	41	(9.7)	78	(14.0)	93	(9.8)	67	(5.9)	66	(5.2)
Mid-Western Health Board	56	(13.2)	88	(15.8)	112	(11.8)	130	(11.4)	145	(11.4)
North Eastern Health Board	1	(0.2)	82	(14.7)	172	(18.1)	208	(18.2)	167	(13.1)
North Western Health Board	29	(6.9)	24	(4.3)	61	(6.4)	70	(6.1)	71	(5.6)
Southern Health Board	182	(43.0)	162	(29.1)	295	(31.0)	403	(35.2)	424	(33.3)
South Eastern Health Board	112	(26.5)	107	(19.2)	196	(20.6)	220	(19.2)	310	(24.4)
Western Health Board	2	(0.5)	15	(2.7)	23	(2.4)	46	(4.0)	90	(7.1)

<sup>\*</sup> Numbers exclude cases living in the Eastern Regional Health Authority but treated in one of the seven health boards and cases living in one of the seven health board areas but treated in the Eastern Regional Health Authority.

In order to adjust for variation in population size in each health board area, the actual incidence of drug use in each area was calculated using the average number of new cases over the five-year period living in each of the seven health board areas; this average was divided by the population aged 15 to 64 years living in the respective health board areas, using the census figures for 2002 (Census 2003). The incidence rate for the reporting period was highest in the Southern Health Board area, followed closely by the South Eastern Health Board area (Figure 1). The Western Health Board area had the lowest incidence, indicating one or more of the following: lower drug use rates than in the rest of Ireland, lower access to or uptake of appropriate treatment services or lower participation in the NDTRS.

<sup>†</sup> Midland Health Board, Mid-Western Health Board, North Eastern Health Board, North Western Health Board, Southern Health Board, Southern



Figure 1 Average annual incidence of treated problem drug use in each health board area among persons aged 15 to 64 years living and treated in the seven health board areas, based on returns to the NDTRS per 100,000 of the population, 1998 to 2003 (Central Statistics Office 2003)

### Incidence and prevalence of treatment

Figure 2 presents the incidence and prevalence of treated problem drug use from 1998 to 2002 among persons aged between 15 and 64 years in the seven health board areas, expressed per 100,000 population. Both the incidence and prevalence of treated problem drug use almost trebled during the reporting period. For example, the incidence of treated problem drug use increased from 24.8 per 100,000 of the population in 1998 to 69.7 per 100,000 in 2002. This observed increase may be explained by a true increase in use, an increase in access to treatment services, new legislation encouraging more people into treatment, or an increase in the numbers of centres reporting cases to the NDTRS. The most likely explanation is a combination of all these factors.

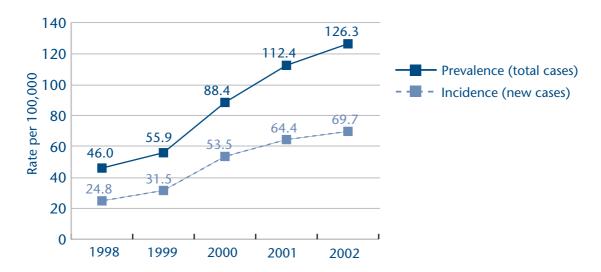


Figure 2 Incidence and prevalence of treated problem drug use among persons aged between 15 and 64 years living and treated in the seven health board areas, based on returns to the NDTRS per 100,000 population, 1998 to 2002 (Central Statistics Office 2003)

### Main problem drugs

The number of cases reporting cannabis as their main problem drug increased substantially, from 392 in 1998 to 1,328 in 2002, and this was the most frequently reported main problem drug (Table 4). The same trend in cannabis use was noted for both new and previously treated cases. The numbers reporting problem opiate use also increased substantially during the period under review. The second most frequently reported main problem drug was ecstasy for new cases and opiates for previously treated cases between 1998 and 2002. The numbers of new cases reporting cocaine use, though small, increased consistently during the reporting period, indicating the early years of an epidemic. The number of previously treated cases reporting benzodiazepine use also increased during the same period.

Table 4 Main problem drug reported by cases\* living and treated in the seven health board<sup>†</sup> areas by treatment status and reported to the NDTRS, 1998 to 2002

Main problem drug	19	998	:	1999		00 er (%)	20	01	200	02
All cases	789		970		1556		1969		2261	
Cannabis	392	(49.7)	543	(56.0)	924	(59.4)	1135	(57.6)	1328	(58.7)
Ecstasy	138	(17.5)	155	(16.0)	250	(16.1)	266	(13.5)	242	(10.7)
Opiates	116	(14.7)	151	(15.6)	220	(14.1)	362	(18.4)	439	(19.4)
Amphetamines	44	(5.6)	41	(4.2)	28	(1.8)	17	(0.9)	28	(1.2)
Benzodiazepines	35	(4.4)	22	(2.3)	42	(2.7)	50	(2.5)	63	(2.8)
Cocaine	22	(2.8)	18	(1.9)	30	(1.9)	49	(2.5)	77	(3.4)
Volatile inhalants	17	(2.2)	24	(2.5)	29	(1.9)	37	(1.9)	43	(1.9)
Other substances	25	(3.2)	16	(1.6)	33	(2.1)	53	(2.7)	41	(1.8)
Previously treated cases	269		388		565		746		886	
Cannabis	109	(40.5)	177	(45.6)	304	(53.8)	362	(48.5)	432	(48.8)
Opiates	54	(20.1)	106	(27.3)	127	(22.5)	223	(29.9)	260	(29.3)
Ecstasy	44	(16.4)	49	(12.6)	65	(11.5)	85	(11.4)	82	(9.3)
Benzodiazepines	19	(7.1)	14	(3.6)	22	(3.9)	23	(3.1)	45	(5.1)
Amphetamines	16	(5.9)	17	(4.4)	11	(1.9)	14	(1.9)	15	(1.7)
Cocaine	13	(4.8)	7	(1.8)	17	(3.0)	18	(2.4)	27	(3.0)
Volatile inhalants	5	(1.9)	8	(2.1)	7	(1.2)	2	(0.3)	8	(0.9)
Other substances	9	(3.3)	10	(2.6)	12	(2.1)	19	(2.5)	17	(1.9)
New cases	423		556		952		1144		1273	
Cannabis	245	(57.9)	357	(64.2)	600	(63.0)	724	(63.3)	843	(66.2)
Ecstasy	84	(19.9)	101	(18.2)	179	(18.8)	176	(15.4)	156	(12.3)
Opiates	35	(8.3)	39	(7.0)	83	(8.7)	126	(11.0)	148	(11.6)
Amphetamines	20	(4.7)	21	(3.8)	17	(1.8)	3	(0.3)	13	(1.0)
Benzodiazepines	12	(2.8)	8	(1.4)	19	(2.0)	25	(2.2)	18	(1.4)
Volatile inhalants	9	(2.1)	15	(2.7)	21	(2.2)	34	(3.0)	34	(2.7)
Cocaine	6	(1.4)	10	(1.8)	12	(1.3)	26	(2.3)	42	(3.3)
Other substances	12	(2.8)	5	(0.9)	21	(2.2)	30	(2.6)	19	(1.5)

<sup>\*</sup> Numbers exclude cases living in the Eastern Regional Health Authority but treated in one of the seven health boards and cases living in one of the seven health board areas but treated in the Eastern Regional Health Authority.

Of the new cases living in each of the seven health board areas between 1998 and 2002, the highest proportion reported that cannabis was their main problem drug (Table 5). The second most commonly reported main problem drug for new cases living in each of the seven health board areas varied; cases living in the Midland Health Board area and the North Eastern Health Board area reported opiates, while cases in the remaining health board areas reported ecstasy. This depicts the gradual spread of opiate use outside the Eastern Regional Health Authority, which will be dealt with in a forthcoming paper.

<sup>†</sup> Midland Health Board, Mid-Western Health Board, North Eastern Health Board, North Western Health Board, Southern Health Board, Southern

Table 5 Main problem drug reported by new cases\* treated in the seven health boards, by health board of residence, and reported to the NDTRS, 1998 to 2002

Main problem drug	M	НВ	M	NHB	N	ЕНВ		/HB er (%)	SI	НВ	SE	НВ	W	НВ
								(70)						
New cases	345		531		630		255		1466		945		176	
Cannabis	198	(57.4)	343	(64.6)	385	(61.1)	165	(64.7)	988	(67.4)	602	(63.7)	88	(50.0
Opiates	76	(22.0)	48	(9.0)	116	(18.4)	2	(8.0)	85	(5.8)	73	(7.7)	31	(17.6
Ecstasy	48	(13.9)	70	(13.2)	80	(12.7)	70	(27.5)	222	(15.1)	166	(17.6)	40	(22.7)
Volatile Inhalants	8	(2.3)	16	(3.0)	18	(2.9)	9	(3.5)	46	(3.1)	7	(0.7)	9	(5.1)
Benzodiazepines	5	(1.4)	7	(1.3)	9	(1.4)	4	(1.6)	44	(3.0)	12	(1.3)	1	(0.6)
Cocaine	4	(1.2)	16	(3.0)	8	(1.3)	2	(8.0)	35	(2.4)	27	(2.9)	4	(2.3)
Amphetamines	1	(0.3)	17	(3.2)	7	(1.1)	2	(8.0)	5	(0.3)	40	(4.2)	2	(1.1)
Other substances	5	(1.4)	14	(2.6)	7	(1.1)	1	(0.4)	41	(2.8)	18	(1.9)	1	(0.6

<sup>\*</sup> Numbers exclude cases living in one of the seven health board areas but treated in the Eastern Regional Health Authority.

Although there was a small proportional decrease in polydrug use, from 84 per cent of cases in 1998 to 79 per cent in 2002 (Table 6), it remained a common practice and is associated with poorer treatment outcomes.

Table 6 Use of more than one drug reported by cases\* living and treated in the seven health board $^{\dagger}$  areas, by treatment status and reported to the NDTRS, 1998 to 2002

Used more than one drug	19	998		1999	2000 Number (%)		2	001	20	02
All cases	660	(83.7)	755	(77.8)	1268	(81.5)	1523	(77.3)	1777	(78.6)
Previously treated cases	235	(87.4)	316	(81.4)	470	(83.2)	564	(75.6)	715	(80.7)
New cases	357	(84.4)	418	(75.2)	768	(80.7)	906	(79.2)	985	(77.4)
Unknown	68		21		30		53		77	

<sup>\*</sup> Numbers exclude cases living in the Eastern Regional Health Authority but treated in one of the seven health boards and cases living in one of the seven health board areas but treated in the Eastern Regional Health Authority.

During the reporting period the proportion of new cases who reported polydrug use varied by health board of residence (Table 7). Ninety–two per cent of cases living in the Southern Health Board reported polydrug use, while less than two-thirds of the new cases living in the Midland and North Eastern Health Board areas reported polydrug use. The lower levels of polydrug use among new cases living in the Midland and North Eastern Health Board areas was surprising, since the highest numbers of opiate users live in these two health board areas.

Table 7 Use of more than one drug reported by new cases\* treated in the seven health boards, by health board of residence, and reported to the NDTRS, 1998 to 2002

New cases used more than one drug	МНВ	MWHB	NEHB	NWHB	SHB	SEHB	WHB
				Number (%)			
New Cases	345	531	630	255	1466	945	176
Used more than one drug	225 (65.2)	428 (80.6)	388 (61.6)	198 (77.6)	1347 (91.9)	719 (76.1)	129 (73.3)

<sup>\*</sup> Numbers exclude cases living in one of the seven health board areas but treated in the Eastern Regional Health Authority.

<sup>†</sup> Midland Health Board, Mid-Western Health Board, North Eastern Health Board, North Western Health Board, Southern Health Board, Southern

Of those cases treated in the seven health board areas between 1998 and 2002 who reported a second problem drug, cases most frequently reported that alcohol, ecstasy or cannabis was their second problem drug (Table 8). The number of cases reporting one of these three substances as their second problem drug increased substantially during the period under review. The numbers reporting amphetamines as their second problem drug decreased, while the numbers reporting benzodiazepines, cocaine and opiates increased. Previously treated cases more commonly reported benzodiazepine or opiate use, while new cases more commonly reported cocaine use.

Table 8 Second problem drug reported by cases\* living and treated in the seven health board<sup>†</sup> areas, by treatment status and reported to the NDTRS, 1998 to 2002

All cases 660 755 1268 1523 1776  Ecstasy 172 (26.1) 233 (30.9) 396 (31.2) 470 (30.9) 467  Cannabis 153 (23.2) 158 (20.9) 262 (20.7) 336 (22.1) 348  Alcohol 121 (18.3) 138 (18.3) 289 (22.8) 398 (26.1) 589  Amphetamines 108 (16.4) 109 (14.4) 108 (8.5) 69 (4.5) 85  Opiates 21 (3.2) 22 (2.9) 42 (3.3) 47 (3.1) 57  Cocaine 15 (2.3) 26 (3.4) 54 (4.3) 72 (4.7) 98  Benzodiazepines 14 (2.1) 22 (2.9) 39 (3.1) 51 (3.3) 59  Volatile inhalants 2 (0.3) 8 (1.1) 13 (1.0) 18 (1.2) 20  Other substances 54 (8.2) 39 (5.2) 65 (5.1) 62 (4.1) 53  Previously treated cases 235 316 470 564 715  Cannabis 65 (27.7) 70 (22.2) 107 (22.8) 148 (26.2) 157  Alcohol 37 (15.7) 56 (17.7) 93 (19.8) 129 (22.9) 221  Amphetamines 31 (13.2) 37 (11.7) 41 (8.7) 23 (4.1) 33  Opiates 10 (4.3) 17 (5.4) 23 (4.9) 31 (5.5) 39  Benzodiazepines 10 (4.3) 15 (4.7) 24 (5.1) 34 (6.0) 44  Cocaine 5 (2.1) 16 (5.1) 27 (5.7) 31 (5.5) 39  Benzodiazepines 10 (4.3) 15 (4.7) 24 (5.1) 34 (6.0) 44  Cocaine 5 (2.1) 16 (5.1) 27 (5.7) 31 (5.5) 33  Volatile inhalants 0 (0.0) 3 (0.9) 4 (0.9) 5 (0.9) 9  Other substances 24 (10.2) 26 (8.2) 28 (6.0) 15 (2.7) 24  New cases 357 418 768 906 984  Ecstasy 97 (27.2) 150 (35.9) 261 (34.0) 299 (33.0) 293  Alcohol 81 (22.7) 77 (18.4) 189 (24.6) 261 (28.8) 350  Cannabis 76 (21.3) 84 (20.1) 149 (19.4) 182 (20.1) 172  Cocaine 9 (2.5) 10 (2.4) 27 (3.5) 39 (4.3) 57	cond problem drug		1998		1999		000 er (%)	20	001	200	02
Cannabis         153         (23.2)         158         (20.9)         262         (20.7)         336         (22.1)         348           Alcohol         121         (18.3)         138         (18.3)         289         (22.8)         398         (26.1)         589           Amphetamines         108         (16.4)         109         (14.4)         108         (8.5)         69         (4.5)         85           Opiates         21         (3.2)         22         (2.9)         42         (3.3)         47         (3.1)         57           Cocaine         15         (2.3)         26         (3.4)         54         (4.3)         72         (4.7)         98           Benzodiazepines         14         (2.1)         22         (2.9)         39         (3.1)         51         (3.3)         59           Volatile inhalants         2         (0.3)         8         (1.1)         13         (1.0)         18         (1.2)         20           Other substances         235         316         470         564         715           Cannabis         65         (27.7)         70         (22.2)         107         (22.8)         148	cases	660		755		1268		1523		1776	
Alcohol         121         (18.3)         138         (18.3)         289         (22.8)         398         (26.1)         589           Amphetamines         108         (16.4)         109         (14.4)         108         (8.5)         69         (4.5)         85           Opiates         21         (3.2)         22         (2.9)         42         (3.3)         47         (3.1)         57           Cocaine         15         (2.3)         26         (3.4)         54         (4.3)         72         (4.7)         98           Benzodiazepines         14         (2.1)         22         (2.9)         39         (3.1)         51         (3.3)         59           Volatile inhalants         2         (0.3)         8         (1.1)         13         (1.0)         18         (1.2)         20           Other substances         235         316         470         564         715           Cannabis         65         (27.7)         70         (22.2)         107         (22.8)         148         (26.2)         158           Ecstasy         53         (22.6)         76         (24.1)         123         (26.2)         148	stasy	172	(26.1)	233	(30.9)	396	(31.2)	470	(30.9)	467	(26.3)
Amphetamines         108         (16.4)         109         (14.4)         108         (8.5)         69         (4.5)         85           Opiates         21         (3.2)         22         (2.9)         42         (3.3)         47         (3.1)         57           Cocaine         15         (2.3)         26         (3.4)         54         (4.3)         72         (4.7)         98           Benzodiazepines         14         (2.1)         22         (2.9)         39         (3.1)         51         (3.3)         59           Volatile inhalants         2         (0.3)         8         (1.1)         13         (1.0)         18         (1.2)         20           Other substances         54         (8.2)         39         (5.2)         65         (5.1)         62         (4.1)         53           Previously treated cases         235         316         470         564         715           Cannabis         65         (27.7)         70         (22.2)         107         (22.8)         148         (26.2)         158           Ecstasy         53         (22.6)         76         (24.1)         123         (26.2)         148	nabis	153	(23.2)	158	(20.9)	262	(20.7)	336	(22.1)	348	(19.6)
Opiates         21         (3.2)         22         (2.9)         42         (3.3)         47         (3.1)         57           Cocaine         15         (2.3)         26         (3.4)         54         (4.3)         72         (4.7)         98           Benzodiazepines         14         (2.1)         22         (2.9)         39         (3.1)         51         (3.3)         59           Volatile inhalants         2         (0.3)         8         (1.1)         13         (1.0)         18         (1.2)         20           Other substances         54         (8.2)         39         (5.2)         65         (5.1)         62         (4.1)         53           Previously treated cases         235         316         470         564         715           Cannabis         65         (27.7)         70         (22.2)         107         (22.8)         148         (26.2)         158           Ecstasy         53         (22.6)         76         (24.1)         123         (26.2)         148         (26.2)         157           Alcohol         37         (15.7)         56         (17.7)         93         (19.8)         129 <td>ohol</td> <td>121</td> <td>(18.3)</td> <td>138</td> <td>(18.3)</td> <td>289</td> <td>(22.8)</td> <td>398</td> <td>(26.1)</td> <td>589</td> <td>(33.2)</td>	ohol	121	(18.3)	138	(18.3)	289	(22.8)	398	(26.1)	589	(33.2)
Cocaine         15         (2.3)         26         (3.4)         54         (4.3)         72         (4.7)         98           Benzodiazepines         14         (2.1)         22         (2.9)         39         (3.1)         51         (3.3)         59           Volatile inhalants         2         (0.3)         8         (1.1)         13         (1.0)         18         (1.2)         20           Other substances         54         (8.2)         39         (5.2)         65         (5.1)         62         (4.1)         53           Previously treated cases         235         316         470         564         715           Cannabis         65         (27.7)         70         (22.2)         107         (22.8)         148         (26.2)         158           Ecstasy         53         (22.6)         76         (24.1)         123         (26.2)         148         (26.2)         157           Alcohol         37         (15.7)         56         (17.7)         93         (19.8)         129         (22.9)         221           Amphetamines         31         (13.2)         37         (11.7)         41         (8.7)         <	phetamines	108	(16.4)	109	(14.4)	108	(8.5)	69	(4.5)	85	(4.8)
Benzodiazepines         14         (2.1)         22         (2.9)         39         (3.1)         51         (3.3)         59           Volatile inhalants         2         (0.3)         8         (1.1)         13         (1.0)         18         (1.2)         20           Other substances         54         (8.2)         39         (5.2)         65         (5.1)         62         (4.1)         53           Previously treated cases         235         316         470         564         715           Cannabis         65         (27.7)         70         (22.2)         107         (22.8)         148         (26.2)         158           Ecstasy         53         (22.6)         76         (24.1)         123         (26.2)         148         (26.2)         157           Alcohol         37         (15.7)         56         (17.7)         93         (19.8)         129         (22.9)         221           Amphetamines         31         (13.2)         37         (11.7)         41         (8.7)         23         (4.1)         33           Opiates         10         (4.3)         15         (4.7)         24         (5.1)         <	ates	21	(3.2)	22	(2.9)	42	(3.3)	47	(3.1)	57	(3.2)
Volatile inhalants         2         (0.3)         8         (1.1)         13         (1.0)         18         (1.2)         20           Other substances         54         (8.2)         39         (5.2)         65         (5.1)         62         (4.1)         53           Previously treated cases         235         316         470         564         715           Cannabis         65         (27.7)         70         (22.2)         107         (22.8)         148         (26.2)         158           Ecstasy         53         (22.6)         76         (24.1)         123         (26.2)         148         (26.2)         157           Alcohol         37         (15.7)         56         (17.7)         93         (19.8)         129         (22.9)         221           Amphetamines         31         (13.2)         37         (11.7)         41         (8.7)         23         (4.1)         33           Opiates         10         (4.3)         17         (5.4)         23         (4.9)         31         (5.5)         39           Benzodiazepines         10         (4.3)         15         (4.7)         24         (5.1)         <	caine	15	(2.3)	26	(3.4)	54	(4.3)	72	(4.7)	98	(5.5)
Other substances         54         (8.2)         39         (5.2)         65         (5.1)         62         (4.1)         53           Previously treated cases         235         316         470         564         715           Cannabis         65         (27.7)         70         (22.2)         107         (22.8)         148         (26.2)         158           Ecstasy         53         (22.6)         76         (24.1)         123         (26.2)         148         (26.2)         157           Alcohol         37         (15.7)         56         (17.7)         93         (19.8)         129         (22.9)         221           Amphetamines         31         (13.2)         37         (11.7)         41         (8.7)         23         (4.1)         33           Opiates         10         (4.3)         17         (5.4)         23         (4.9)         31         (5.5)         39           Benzodiazepines         10         (4.3)         15         (4.7)         24         (5.1)         34         (6.0)         44           Cocaine         5         (2.1)         16         (5.1)         27         (5.7)         31	nzodiazepines	14	(2.1)	22	(2.9)	39	(3.1)	51	(3.3)	59	(3.3)
Previously treated cases         235         316         470         564         715           Cannabis         65         (27.7)         70         (22.2)         107         (22.8)         148         (26.2)         158           Ecstasy         53         (22.6)         76         (24.1)         123         (26.2)         148         (26.2)         157           Alcohol         37         (15.7)         56         (17.7)         93         (19.8)         129         (22.9)         221           Amphetamines         31         (13.2)         37         (11.7)         41         (8.7)         23         (4.1)         33           Opiates         10         (4.3)         17         (5.4)         23         (4.9)         31         (5.5)         39           Benzodiazepines         10         (4.3)         15         (4.7)         24         (5.1)         34         (6.0)         44           Cocaine         5         (2.1)         16         (5.1)         27         (5.7)         31         (5.5)         33           Volatile inhalants         0         (0.0)         3         (0.9)         4         (0.9)         5	atile inhalants	2	(0.3)	8	(1.1)	13	(1.0)	18	(1.2)	20	(1.1)
Cannabis         65         (27.7)         70         (22.2)         107         (22.8)         148         (26.2)         158           Ecstasy         53         (22.6)         76         (24.1)         123         (26.2)         148         (26.2)         157           Alcohol         37         (15.7)         56         (17.7)         93         (19.8)         129         (22.9)         221           Amphetamines         31         (13.2)         37         (11.7)         41         (8.7)         23         (4.1)         33           Opiates         10         (4.3)         17         (5.4)         23         (4.9)         31         (5.5)         39           Benzodiazepines         10         (4.3)         15         (4.7)         24         (5.1)         34         (6.0)         44           Cocaine         5         (2.1)         16         (5.1)         27         (5.7)         31         (5.5)         33           Volatile inhalants         0         (0.0)         3         (0.9)         4         (0.9)         5         (0.9)         9           Other substances         357         418         768         <	er substances	54	(8.2)	39	(5.2)	65	(5.1)	62	(4.1)	53	(3.0)
Ecstasy         53         (22.6)         76         (24.1)         123         (26.2)         148         (26.2)         157           Alcohol         37         (15.7)         56         (17.7)         93         (19.8)         129         (22.9)         221           Amphetamines         31         (13.2)         37         (11.7)         41         (8.7)         23         (4.1)         33           Opiates         10         (4.3)         17         (5.4)         23         (4.9)         31         (5.5)         39           Benzodiazepines         10         (4.3)         15         (4.7)         24         (5.1)         34         (6.0)         44           Cocaine         5         (2.1)         16         (5.1)         27         (5.7)         31         (5.5)         33           Volatile inhalants         0         (0.0)         3         (0.9)         4         (0.9)         5         (0.9)         9           Other substances         357         418         768         906         984           Ecstasy         97         (27.2)         150         (35.9)         261         (34.0)         299	eviously treated cases	235		316		470		564		715	
Alcohol       37       (15.7)       56       (17.7)       93       (19.8)       129       (22.9)       221         Amphetamines       31       (13.2)       37       (11.7)       41       (8.7)       23       (4.1)       33         Opiates       10       (4.3)       17       (5.4)       23       (4.9)       31       (5.5)       39         Benzodiazepines       10       (4.3)       15       (4.7)       24       (5.1)       34       (6.0)       44         Cocaine       5       (2.1)       16       (5.1)       27       (5.7)       31       (5.5)       33         Volatile inhalants       0       (0.0)       3       (0.9)       4       (0.9)       5       (0.9)       9         Other substances       24       (10.2)       26       (8.2)       28       (6.0)       15       (2.7)       24         New cases       357       418       768       906       984         Ecstasy       97       (27.2)       150       (35.9)       261       (34.0)       299       (33.0)       293         Alcohol       81       (22.7)       77       (18.4)       1	ınabis	65	(27.7)	70	(22.2)	107	(22.8)	148	(26.2)	158	(22.1)
Amphetamines       31       (13.2)       37       (11.7)       41       (8.7)       23       (4.1)       33         Opiates       10       (4.3)       17       (5.4)       23       (4.9)       31       (5.5)       39         Benzodiazepines       10       (4.3)       15       (4.7)       24       (5.1)       34       (6.0)       44         Cocaine       5       (2.1)       16       (5.1)       27       (5.7)       31       (5.5)       33         Volatile inhalants       0       (0.0)       3       (0.9)       4       (0.9)       5       (0.9)       9         Other substances       24       (10.2)       26       (8.2)       28       (6.0)       15       (2.7)       24         New cases       357       418       768       906       984         Ecstasy       97       (27.2)       150       (35.9)       261       (34.0)       299       (33.0)       293         Alcohol       81       (22.7)       77       (18.4)       189       (24.6)       261       (28.8)       350         Cannabis       76       (21.3)       84       (20.1) <td< td=""><td>stasy</td><td>53</td><td>(22.6)</td><td>76</td><td>(24.1)</td><td>123</td><td>(26.2)</td><td>148</td><td>(26.2)</td><td>157</td><td>(22.0)</td></td<>	stasy	53	(22.6)	76	(24.1)	123	(26.2)	148	(26.2)	157	(22.0)
Opiates         10         (4.3)         17         (5.4)         23         (4.9)         31         (5.5)         39           Benzodiazepines         10         (4.3)         15         (4.7)         24         (5.1)         34         (6.0)         44           Cocaine         5         (2.1)         16         (5.1)         27         (5.7)         31         (5.5)         33           Volatile inhalants         0         (0.0)         3         (0.9)         4         (0.9)         5         (0.9)         9           Other substances         24         (10.2)         26         (8.2)         28         (6.0)         15         (2.7)         24           New cases         357         418         768         906         984           Ecstasy         97         (27.2)         150         (35.9)         261         (34.0)         299         (33.0)         293           Alcohol         81         (22.7)         77         (18.4)         189         (24.6)         261         (28.8)         350           Cannabis         76         (21.3)         84         (20.1)         149         (19.4)         182         (2	ohol	37	(15.7)	56	(17.7)	93	(19.8)	129	(22.9)	221	(30.9)
Benzodiazepines         10         (4.3)         15         (4.7)         24         (5.1)         34         (6.0)         44           Cocaine         5         (2.1)         16         (5.1)         27         (5.7)         31         (5.5)         33           Volatile inhalants         0         (0.0)         3         (0.9)         4         (0.9)         5         (0.9)         9           Other substances         24         (10.2)         26         (8.2)         28         (6.0)         15         (2.7)         24           New cases         357         418         768         906         984           Ecstasy         97         (27.2)         150         (35.9)         261         (34.0)         299         (33.0)         293           Alcohol         81         (22.7)         77         (18.4)         189         (24.6)         261         (28.8)         350           Cannabis         76         (21.3)         84         (20.1)         149         (19.4)         182         (20.1)         172           Amphetamines         62         (17.4)         69         (16.5)         65         (8.5)         43	phetamines	31	(13.2)	37	(11.7)	41	(8.7)	23	(4.1)	33	(4.2)
Cocaine         5         (2.1)         16         (5.1)         27         (5.7)         31         (5.5)         33           Volatile inhalants         0         (0.0)         3         (0.9)         4         (0.9)         5         (0.9)         9           Other substances         24         (10.2)         26         (8.2)         28         (6.0)         15         (2.7)         24           New cases         357         418         768         906         984           Ecstasy         97         (27.2)         150         (35.9)         261         (34.0)         299         (33.0)         293           Alcohol         81         (22.7)         77         (18.4)         189         (24.6)         261         (28.8)         350           Cannabis         76         (21.3)         84         (20.1)         149         (19.4)         182         (20.1)         172           Amphetamines         62         (17.4)         69         (16.5)         65         (8.5)         43         (4.7)         52	ates	10	(4.3)	17	(5.4)	23	(4.9)	31	(5.5)	39	(5.5)
Volatile inhalants         0         (0.0)         3         (0.9)         4         (0.9)         5         (0.9)         9           Other substances         24         (10.2)         26         (8.2)         28         (6.0)         15         (2.7)         24           New cases         357         418         768         906         984           Ecstasy         97         (27.2)         150         (35.9)         261         (34.0)         299         (33.0)         293           Alcohol         81         (22.7)         77         (18.4)         189         (24.6)         261         (28.8)         350           Cannabis         76         (21.3)         84         (20.1)         149         (19.4)         182         (20.1)         172           Amphetamines         62         (17.4)         69         (16.5)         65         (8.5)         43         (4.7)         52	ızodiazepines	10	(4.3)	15	(4.7)	24	(5.1)	34	(6.0)	44	(6.2)
Other substances         24         (10.2)         26         (8.2)         28         (6.0)         15         (2.7)         24           New cases         357         418         768         906         984           Ecstasy         97         (27.2)         150         (35.9)         261         (34.0)         299         (33.0)         293           Alcohol         81         (22.7)         77         (18.4)         189         (24.6)         261         (28.8)         350           Cannabis         76         (21.3)         84         (20.1)         149         (19.4)         182         (20.1)         172           Amphetamines         62         (17.4)         69         (16.5)         65         (8.5)         43         (4.7)         52	caine	5	(2.1)	16	(5.1)	27	(5.7)	31	(5.5)	33	(4.6)
New cases         357         418         768         906         984           Ecstasy         97 (27.2)         150 (35.9)         261 (34.0)         299 (33.0)         293           Alcohol         81 (22.7)         77 (18.4)         189 (24.6)         261 (28.8)         350           Cannabis         76 (21.3)         84 (20.1)         149 (19.4)         182 (20.1)         172           Amphetamines         62 (17.4)         69 (16.5)         65 (8.5)         43 (4.7)         52	atile inhalants	0	(0.0)	3	(0.9)	4	(0.9)	5	(0.9)	9	(1.3)
Ecstasy       97 (27.2)       150 (35.9)       261 (34.0)       299 (33.0)       293         Alcohol       81 (22.7)       77 (18.4)       189 (24.6)       261 (28.8)       350         Cannabis       76 (21.3)       84 (20.1)       149 (19.4)       182 (20.1)       172         Amphetamines       62 (17.4)       69 (16.5)       65 (8.5)       43 (4.7)       52	er substances	24	(10.2)	26	(8.2)	28	(6.0)	15	(2.7)	24	(3.4)
Alcohol     81 (22.7)     77 (18.4)     189 (24.6)     261 (28.8)     350       Cannabis     76 (21.3)     84 (20.1)     149 (19.4)     182 (20.1)     172       Amphetamines     62 (17.4)     69 (16.5)     65 (8.5)     43 (4.7)     52	w cases	357		418		768		906		984	
Cannabis       76       (21.3)       84       (20.1)       149       (19.4)       182       (20.1)       172         Amphetamines       62       (17.4)       69       (16.5)       65       (8.5)       43       (4.7)       52	stasy	97	(27.2)	150	(35.9)	261	(34.0)	299	(33.0)	293	(29.8)
Amphetamines 62 (17.4) 69 (16.5) 65 (8.5) 43 (4.7) 52	ohol	81	(22.7)	77	(18.4)	189	(24.6)	261	(28.8)	350	(35.6)
	nabis	76	(21.3)	84	(20.1)	149	(19.4)	182	(20.1)	172	(17.5)
Cocaine 9 (2.5) 10 (2.4) 27 (3.5) 39 (4.3) 57	phetamines	62	(17.4)	69	(16.5)	65	(8.5)	43	(4.7)	52	(5.3)
1000000000000000000000000000000000000	caine	9	(2.5)	10	(2.4)	27	(3.5)	39	(4.3)	57	(5.8)
Benzodiazepines 4 (1.1) 6 (1.4) 13 (1.7) 15 (1.7) 14	nzodiazepines	4	(1.1)	6	(1.4)	13	(1.7)	15	(1.7)	14	(1.4)
Volatile inhalants 2 (0.6) 5 (1.2) 9 (1.2) 13 (1.4) 10	atile inhalants	2	(0.6)	5	(1.2)	9	(1.2)	13	(1.4)	10	(1.0)
Opiates 0 (0.0) 4 (1.0) 18 (2.3) 15 (1.7) 18	ates	0	(0.0)	4	(1.0)	18	(2.3)	15	(1.7)	18	(1.8)
Other substances 26 (7.3) 13 (3.1) 37 (4.8) 39 (4.3) 18	er substances	26	(7.3)	13	(3.1)	37	(4.8)	39	(4.3)	18	(1.8)

<sup>\*</sup> Numbers exclude cases living in the Eastern Regional Health Authority but treated in one of the seven health boards and cases living in one of the seven health board areas but treated in the Eastern Regional Health Authority.

<sup>†</sup> Midland Health Board, Mid-Western Health Board, North Eastern Health Board, North Western Health Board, Southern Health Board, South Eastern Health Board and Western Health Board.

The most common second problem drug reported by new cases living in each of the seven health board areas varied, with new cases living in the Southern and Western Health Board areas reporting alcohol, while new cases living in the remaining health boards reported ecstasy (Table 9). New cases living in the Midland and North Eastern Health Board areas were less likely to report alcohol as a second problem drug than new cases living in the other five health board areas.

Table 9 Second problem drug reported by new cases\* treated in the seven health boards, by health board of residence and reported to the NDTRS, 1998 to 2002

Second problem drug		МНВ	M	WHB	N	IEHB		WHB ber (%)	S	НВ	SE	HB	W	НВ
New cases	225		428		388		198		1347		718		129	
Ecstasy	98	(43.6)	153	(35.7)	161	(41.5)	66	(33.3)	384	(28.5)	210	(29.2)	28	(21.7)
Cannabis	81	(36.0)	70	(16.4)	118	(30.4)	56	(28.3)	181	(13.4)	130	(18.1)	27	(20.9)
Amphetamines	18	(8.0)	48	(11.2)	38	(9.8)	7	(3.5)	31	(2.3)	143	(19.9)	6	(4.7)
Alcohol	12	(5.3)	83	(19.4)	9	(2.3)	46	(23.2)	605	(44.9)	163	(22.7)	40	(31.0)
Cocaine	5	(2.2)	23	(5.4)	10	(2.6)	9	(4.5)	49	(3.6)	33	(4.6)	13	(10.1)
Opiates	2	(0.9)	3	(0.7)	10	(2.6)	4	(2.0)	21	(1.6)	11	(1.5)	4	(3.1)
Benzodiazepines	1	(0.4)	9	(2.1)	8	(2.1)	0	(0.0)	18	(1.3)	11	(1.5)	5	(3.9)
Volatile Inhalants	1	(0.4)	7	(1.6)	13	(3.4)	5	(2.5)	9	(0.7)	1	(0.1)	3	(2.3)
Other substances	7	(3.1)	32	(7.5)	21	(5.4)	5	(2.5)	49	(3.6)	16	(2.2)	3	(2.3)

<sup>\*</sup> Numbers exclude cases living in one of the seven health board areas but treated in the Eastern Regional Health Authority.

### Risk behaviours

The number of cases who reported injecting trebled, increasing from 96 in 1998 to 284 in 2002 (Table 10). This increase was noted among both new and previously treated cases. Between 2000 and 2002, fifty per cent of injector cases had started injecting before they were 20 years old. In 2002, almost half of all injector cases had shared injecting equipment. As expected, a higher proportion of previously treated injector cases shared injecting equipment than their new injector counterparts. Injectors have a higher risk of acquiring blood-borne viral infections and experiencing overdose than non-injectors. There are no reliable data on the incidence or prevalence of blood-borne viral illnesses among injecting drug users living outside the Dublin area. There was a steady increase in the number of drug-related deaths outside Dublin, from four in 1995 to 33 in 2001 (unpublished data from the Central Statistics Office).

Table 10 Risk behaviours reported by cases\* living and treated in the seven health board<sup>†</sup> areas, by treatment status and reported to the NDTRS, 1998 to 2002

Injecting and sharing status	1	998	19	99	2	2000	20	01	20	02
All cases injector										
status known	685		919		1499		1906		2180	
Median age (range) <sup>‡</sup>										
started drug use, in years	15	(12-23)	15	(12-22)	15	(11-22)	15	(12-22)	15	(11-23)
Median age (range) <sup>‡</sup>										
started injecting, in years	20	(15-28)	19	(15-28)	20	(15-30)	20	(15-34)	20	(15-28)
Number (%) ever injected	96	(14.0)	124	(13.5)	186	(12.4)	255	(13.4)	284	(13.0)
Of whom:§										
'ever shared'	42	(43.8)	49	(39.5)	93	(50.0)	136	(53.3)	137	(48.2)
'currently injecting'	33	(34.4)	32	(25.8)	66	(35.5)	94	(36.9)	99	(34.9)
'currently sharing'	8	(8.3)	6	(4.8)	18	(9.7)	30	(11.8)	18	(6.3)
Previously treated cases										
injector status known	245		365		545		723		863	
Median age (range) <sup>‡</sup>										
started drug use, in years	15	(11-24)	15	(12-23)	15	(11-23)	15	(12-22)	15	(11-23)
Median age (range) <sup>‡</sup>										
started injecting, in years	20	(14-36)	20	(15-28)	20	(16-30)	20	(15-34)	20	(15-27)
Number (%) ever injected	49	(20.0)	89	(24.4)	117	(21.5)	178	(24.6)	193	(22.4)
Of whom:§										
'ever shared'	21	(42.9)	40	(44.9)	63	(53.8)	107	(60.1)	102	(52.8)
'currently injecting'	15	(30.6)	23	(25.8)	37	(31.6)	64	(36.0)	60	(31.1)
'currently sharing'	4	(8.2)	4	(4.5)	12	(10.3)	22	(12.4)	13	(6.7)
New cases injector										
status known	398		539		926		1123		1235	
Median age (range) <sup>‡</sup>										
started drug use, in years	15	(12-21)	15	(11-22)	15	(11-21)	15	(12-22)	15	(11-22)
Median age (range) <sup>‡</sup>										
started injecting, in years	* *		18	(15-29)	21	(15-30)	21	(15-35)	20	(15-30)
Number (%) ever injected	24	(6.0)	29	(5.4)	59	(6.4)	69	(6.1)	76	(6.2)
Of whom:§										
'ever shared'	9	(37.5)	8	(27.6)	26	(44.1)	26	(37.7)	32	(42.1)
'currently injecting'	4	(16.7)	7	(24.1)	24	(40.7)	25	(36.2)	34	(44.7)
'currently sharing'	1	(4.2)	1	(3.4)	6	(10.2)	8	(11.6)	5	(6.6)

<sup>\*</sup> Numbers include cases living in the Eastern Regional Health Authority but treated in another health board area, and exclude cases living in one of the seven health board areas but treated in the Eastern Regional Health Authority and recorded in the NDTRS.

<sup>†</sup> Midland Health Board, Mid-Western Health Board, North Eastern Health Board, North Western Health Board, Southern Health Board, Southern

<sup>‡</sup> Age range presented is the 5th to 95th percentile (90% of all cases are within this age range).

<sup>§</sup> From the data presented in this table, it is not possible to ascertain the exact percentage of injectors with each risk factor of interest because not all declared injectors were asked the subsequent injecting questions.

<sup>\*\*</sup> Not possible to calculate because of the small number of cases.

The highest number of new injector cases lived in the South Eastern Health Board area, followed closely by the North Eastern Health Board area (Table 11). Of new cases reporting problem drug use, the highest proportion of injectors lived in the Midland and Western Health Board areas.

Table 11 Risk behaviours reported by new cases\* treated in the seven health board areas, by health board of residence and reported to the NDTRS, 1998 to 2002

Injecting and sharing status	MHB	3	N	/IWHB	N	ЕНВ	N	WHB	S	НВ	SE	НВ	WI	НВ
New cases														
<ul><li>injector status known</li><li>Median age (range)<sup>†</sup></li></ul>	336		494		614		245		1441		917		174	
started drug use, in years Median age (range) <sup>†</sup>	15 (12	2-20)	15	(11-21)	15	(11-20)	15	(11-21)	15	(11-24)	15	(12-24)	15	(12-22)
started injecting, in years	20 (16	6-29)	25	(13-33)	21	(15-27)	§		20	(16-35)	22	(16-37)	§	
Number (%) ever injected Of whom: <sup>‡</sup>	35 (1	10.4)	27	(5.5)	57	(9.3)	6	(2.4)	54	(3.7)	59	(6.4)	19	(10.9)
'ever shared'	15 (4	12.9)	11	(40.7)	27	(47.4)	2	(33.3)	15	(27.8)	26	(44.1)	5	(26.3)
'currently injecting'	14 (4	10.0)	14	(51.9)	20	(35.1)	1	(16.7)	19	(35.2)	19	(32.2)	7	(36.8)
'currently sharing'	6 (1	17.1)	3	(11.1)	2	(3.5)	0	(0.0)	4	(7.4)	6	(10.2)	0	(0.0)

<sup>\*</sup> Numbers exclude cases living in one of the seven health board areas but treated in the Eastern Regional Health Authority

### Socio-demographic characteristics

The median age of previously treated cases attending drug treatment services in the seven health boards increased by over two years, while the median age of new cases increased by six months between 1998 and 2002 (Table 12). The proportion of cases less than 18 years of age increased by just over three per cent over the reporting period. As expected, the proportion of cases less than 18 years of age was much higher among new cases than among those previously treated. Overall, 79 per cent of cases who attended drug treatment services were male. From 2000 to 2002, the proportion of previously treated cases who lived with their parents or family decreased, while the proportion of new cases who lived with parents or family remained constant. The proportion of previously treated cases reporting that they were homeless decreased steadily between 1999 and 2002. Overall, 19 per cent of cases treated in the period under review had left school early. It is clear that early school leavers are over-represented among those seeking treatment for problem drug use and this is an important factor for social and occupational rehabilitation interventions and securing employment. The proportions were marginally higher among previously treated cases when compared to new cases. From 1998 to 2002, the proportion of new cases reporting that they were employed followed national trends, with rates increasing up to 2001 and decreasing by three per cent in 2002. Of note, employment rates were higher among new cases compared to their previously treated counterparts, indicating that those with chronic drug problems may be less likely to find or retain employment.

<sup>†</sup> Age range presented is the 5th to 95th percentile (90% of all cases are within this age range).

<sup>‡</sup> From the data presented in this table, it is not possible to ascertain the exact percentage of injectors with each risk factor of interest because not all declared injectors were asked the subsequent injecting questions.

<sup>§</sup> Not possible to calculate because of the small number of cases.

Table 12 Socio-demographic characteristics of cases\* living and treated in the seven health board $^{\dagger}$  areas by treatment status and reported to the NDTRS, 1998 to 2002

Characteristics‡		1998		1999		2000		2001	2	002
All cases‡	789		970		1556		1969		2261	
Median age (range)§ in years	21.6	(16.5-39.2)	22.0	(16.2-38.5)	22.1	(16.0-39.9)	22.6	(15.8-41.0)	23.0	(15.6-41.5)
Number (%) under 18 years of age	122	(15.6)	160	(16.6)	276	(17.8)	340	(17.3)	420	(18.7)
Number (%) of males	606	(79.2)	753	(78.3)	1229	(79.4)	1522	(77.9)	1745	(80.2)
Number (%) living with parents/family	438	(55.5)	609	(62.8)	959	(61.6)	1151	(58.5)	1339	(59.2)
Number (%) homeless	**		56	(5.8)	77	(4.9)	69	(3.7)	63	(3.0)
Number (%) of early school leavers <sup>††</sup>	78	(15.1)	126	(18.9)	237	(19.8)	305	(20.7)	287	(17.4)
Number (%) still in school	57	(9.9)	76	(10.2)	142	(10.6)	179	(10.8)	288	(14.9)
Number (%) aged 16 to 64										
years employed	233	(31.5)	268	(29.4)	501	(35.0)	637	(35.2)	650	(31.8)
Previously treated cases <sup>‡</sup>	269		388		565		746		886	
Median age (range)§ in years	23.3	(16.8-43.0)	24.6	(17.2-43.5)	23.6	(16.8-41.4)	25.0	(17.1-42.2)	25.4	(16.8-46.4)
Number (%) under 18 years of age	30	(11.2)	33	(8.5)	61	(10.8)	66	(8.9)	83	(9.4)
Number (%) of males	201	(77.3)	291	(75.8)	433	(76.6)	564	(76.1)	671	(78.3)
Number (%) living with parents/family	150	(55.8)	205	(52.8)	306	(54.2)	353	(47.3)	434	(49.0)
Number (%) homeless	* *		28	(7.2)	33	(5.8)	33	(4.7)	28	(3.4)
Number (%) of early school leavers <sup>††</sup>	33	(17.6)	53	(20.0)	92	(20.4)	137	(23.6)	137	(20.1)
Number (%) still in school	14	(6.9)	9	(3.3)	26	(5.4)	27	(4.4)	51	(6.9)
Number (%) aged 16 to 64										
years employed	64	(24.4)	81	(21.7)	157	(29.6)	210	(29.7)	241	(29.0)
New cases‡	423		556		952		1144		1273	
Median age (range)§ in years	20.8	(16.4-37.6)	20.9	(15.8-34.1)	21.2	(15.7-38.2)	21.1	(15.3-38.2)	21.3	(15.3-37.4)
Number (%) under 18 years of age	79	(18.8)	122	(22.1)	212	(22.3)	267	(23.4)	331	(26.2)
Number (%) of males	336	(80.6)	442	(79.8)	764	(80.8)	891	(78.6)	1000	(80.9)
Number (%) living with parents/family	280	(66.2)	392	(70.5)	628	(66.0)	766	(67.0)	851	(66.8)
Number (%) homeless	* *		23	(4.1)	40	(4.2)	27	(2.4)	23	(1.9)
Number (%) of early school leavers <sup>††</sup>	44	(13.7)	68	(17.4)	138	(19.2)	155	(18.4)	138	(15.2)
Number (%) still in school	35	(9.8)	66	(14.5)	113	(13.6)	150	(15.1)	234	(20.5)
Number (%) aged 16 to 64										
years employed	135	(33.9)	183	(35.6)	337	(38.7)	402	(39.0)	384	(34.2)

<sup>\*</sup> Numbers include cases living in the Eastern Regional Health Authority but treated in another health board area, and exclude cases living in one of the seven health board areas but treated in the Eastern Regional Health Authority and recorded in the NDTRS.

The socio-demographic characteristics of new cases attending treatment, by health board of residence (and reported to the NDTRS), were examined (Table 13). Over one-third of new cases treated for problem drug use and living in the Western Health Board area were less than 18 years old between 1998 and 2002. This may reflect the age group that used illicit drugs, the types of services provided or the type of services that submitted data to the NDTRS in this health board area. Over one-quarter of new cases living in the North Eastern Health Board, North Western Health Board and Southern Health Board areas were less than 18 years old. During the reporting period, 24 per cent of new cases living in the Southern Health Board were female, while only 15 per cent of cases living in the South Eastern Health Board were female. This may indicate gender differences in either illicit drug use or treatment seeking for problem drug use in different health board areas.

<sup>†</sup> Midland Health Board, Mid-Western Health Board, North Eastern Health Board, North Western Health Board, Southern Health Board, Southern

<sup>‡</sup> It is not possible to ascertain the percentage with each characteristic of interest from the total number because not all forms had complete data.

<sup>§</sup> Age range presented is the 5th to 95th percentile (90% of all cases are within this age range).

<sup>\* \*</sup> Data not available

tt Left school before the age of 15 years.

The proportion of new cases living with parents or family also varied across health board areas during the period under review. With the exception of the North Eastern Health Board, the health boards with higher proportions of drug users living with their parents and family were not the health boards with higher proportions of young drug users. Overall, the proportion of new cases living in the North Western Health Board who left school early was very small and the explanation for this is not clear. Between 1998 and 2002, a high proportion of new cases living in the North Eastern Health Board were employed, while a low proportion living in the Mid-Western Health Board and Western Health Board were employed.

Table 13 Socio-demographic characteristics of new cases\* treated in the seven health board areas, by health board of residence reported to the NDTRS, 1998 to 2002

New cases characteristics	s† MHB	MWHB	NEHB	NWHB	SHB	SEHB	WHB
New cases	345	531	630	255	1466	945	176
Median age (range) <sup>‡</sup>	21	21.5	20.6	20.6	21.0	21.6	20.5
in years	(16.3-33.1)	(15.9-36.4)	(15.1-35.2)	(15.6-33.7)	(15.2-41.0)	(16.1-36.4)	(14.7-39.1)
Number (%) under	63	101	169	67	383	166	62
18 years of age	(18.4)	(19.1)	(27.1)	(26.5)	(26.1)	(17.6)	(35.4)
Number (%) of males	284	422	495	192	1104	803	133
	(83.3)	(80.1)	(82.4)	(77.4)	(75.9)	(85.2)	(76.4)
Number (%) living	238	372	476	170	948	607	106
with parents/family	(69.0)	(70.1)	(75.6)	(66.7)	(64.7)	(64.2)	(60.2)
Number (%) of	55	71	60	14	207	121	15
early school leavers§	(20.4)	(18.5)	(16.0)	(7.9)	(19.4)	(15.1)	(13.9)
Number (%)	37	68	90	44	216	97	46
still in school	(12.1)	(15.0)	(19.4)	(19.9)	(16.8)	(10.8)	(29.9)
Number (%) aged 16 to	126	135	253	73	469	343	42
64 years employed	(39.4)	(27.8)	(46.2)	(32.0)	(35.9)	(38.3)	(27.6)

<sup>\*</sup> Numbers exclude those living in one of the seven health board areas but treated in the Eastern Regional Health Authority

### Relationship between main problem drug and selected characteristics

In order to highlight important relationships, the main problem drug was examined by selected socio-demographic characteristics. Figures 3a and 3b present the age at which new cases commenced use of their main problem drug in the seven health board areas for the period 1998 to 2002. It is clear that young teenagers initiated drug use with cannabis and, to a lesser extent, ecstasy and volatile inhalants. The use of opiates and amphetamines commenced in mid to late teens. The number reporting benzodiazepines and cocaine as their main problem drug was small, but these are more common as second drugs. Benzodiazepines and cocaine are also more common among older and previously treated problem drug users.

<sup>†</sup> It is not possible to ascertain the percentage with each characteristic of interest from the total number because not all forms had complete data.

<sup>‡</sup> Age range presented is the 5th to 95th percentile (90% of all cases are within this age range).

<sup>§</sup> Left school before the age of 15 years.

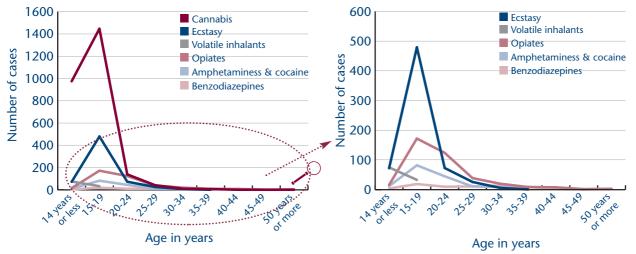


Figure 3a Age commenced use of main problem drug for new cases living and treated in the seven health board areas and reported to the NDTRS, 1998 to 2002

Figure 3b Age commenced use of main problem drug (excluding cannabis) for new cases living and treated in the seven health board areas and reported to the NDTRS, 1998 to 2002

Figures 4a and 4b present the age at which new cases sought treatment in the seven health board areas, by the main problem drug, for the period 1998 to 2002. Although the numbers using volatile inhalants are small, it is the main problem drug for a very young client group. It is clear that cannabis and ecstasy are the drugs that young people seek treatment for in the late teens, while the majority of opiate users seek treatment in their early twenties. Taken together, Figures 3a and 3b and Figures 4a and 4b present the delay between initiation of the main problem drug (such as cannabis and opiates) and seeking treatment for it.

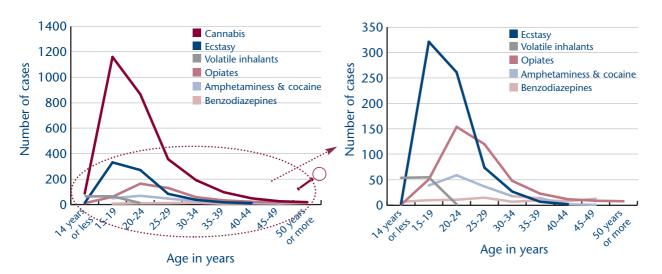


Figure 4a Age attended first treatment by main problem drug for new cases living and treated in the seven health board areas and reported to the NDTRS, 1998 to 2002

Figure 4b Age attended first treatment by main problem drug (excluding cannabis) for new cases living and treated in the seven health board areas and reported to the NDTRS, 1998 to 2002

Figure 5 presents the gender of new cases who sought treatment in the seven health board areas, by the main problem drug, for the period 1998 to 2002. The proportion of males treated for cocaine and cannabis use was very high compared to that of their female counterparts. Although the proportion of males treated for opiate and benzodiazepine use was higher than the proportion of females, the gender difference pertaining to the use of these drugs was not as striking as that pertaining to cocaine and cannabis.

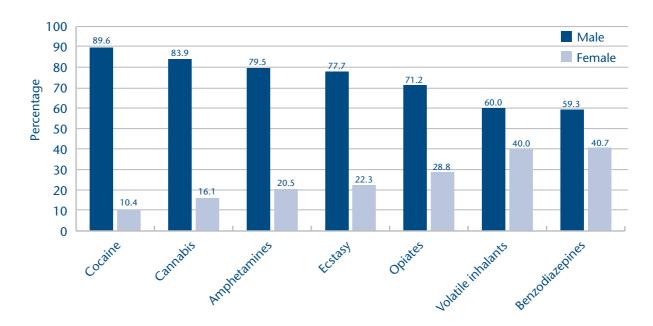


Figure 5 Main problem drug, by gender, for new cases living and treated in the seven health board areas and reported to the NDTRS, 1998 to 2002

Figure 6 presents the employment status of new cases who sought treatment, by the new main problem drug, for the period 1998 to 2002. The highest rates of employment were among those who used drugs commonly associated with social events, and the lowest rates of employment were among those who used opiates and benzodiazepines. This has important implications for the social and occupational reintegration of opiate and benzodiazepine users.

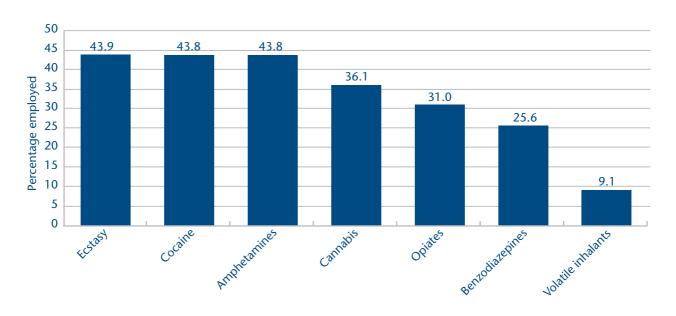


Figure 6 Main problem drug, by regular employment, for new cases aged between 16 and 64 years living and treated in the seven health board areas and reported to the NDTRS, 1998 to 2002

Figure 7 presents the route of administration for their main problem drug reported by new cases who sought treatment between 1998 and 2002. Injecting drug use was associated with opiates and to a lesser extent with amphetamines. Of the new cases reporting cocaine or benzodiazepines as their main problem drug, none reported injecting either drug. The route of administration was examined for new cases reporting cocaine and benzodiazepines as a second drug; six per cent (9/152) of cases reported injecting cocaine as a second drug and only two per cent (1/54) of cases reported injecting benzodiazepines as a second drug.

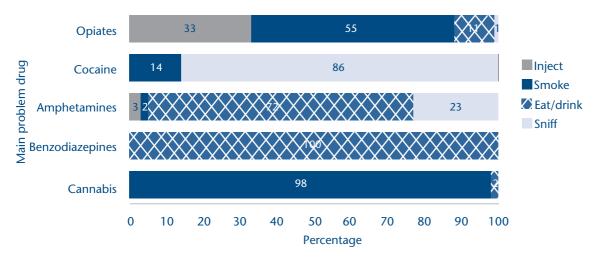


Figure 7 Route of administration for selected main problem drugs for new cases living and treated in the seven health board areas and reported to the NDTRS, 1998 to 2002

# Conclusions

Both the incidence and prevalence of treated problem drug use almost trebled between 1998 and 2002. The incidence of treated problem drug use for the reporting period was highest in the Southern Health Board area, followed closely by the South Eastern Health Board area, while the Western Health Board area had the lowest incidence.

Overall, new and previously treated cases in the seven health board areas between 1998 and 2002 most frequently reported that cannabis was their main problem drug. The numbers reporting problem opiate use also increased steadily. The second most frequently reported main problem drug was ecstasy for new cases and opiates for previously treated cases. Though small, the number of new cases reporting cocaine increased from 6 in 1998 to 42 in 2002, indicating the early stages of an epidemic.

These findings indicate that treatment services need to cater for a wide spectrum of illicit drugs rather than focus on one or two drugs and must be capable of adjusting treatment approaches in accordance with changing patterns of problem drug use. Polydrug use remained a common practice and must also be addressed in treatment plans. The numbers and proportion of cases under 18 years old increased; these young people require different approaches to treatment and it is important that this is included in service planning. The number of cases who reported injecting almost trebled. Injectors have a higher risk of acquiring blood-borne viral infections and experiencing overdose than non-injectors. Reliable data on the incidence or prevalence of blood-borne viral illnesses and drug-related deaths for those living outside the Dublin area are required.

# Conclusions (continued)

The main problem drug reported by new cases was examined by selected socio-demographic and drug-using characteristics and some important relationships were identified. Young teenagers initiated drug use with cannabis and volatile inhalants. The use of opiates, ecstasy and amphetamines was commenced in mid to late teens. There were differences in type of drug used by males and females, with very high proportions of males treated for cocaine and cannabis use compared to their female counterparts. The highest rates of employment were among those using drugs commonly associated with social events and the lowest rates of employment were among those who used opiates and benzodiazepines; this observation, along with the high rates of early school leaving, has important implications for the social and occupational reintegration of opiate and benzodiazepine users.

These treatment data are important to guide future drug policy and planning. They will provide useful information for the upcoming review of the national drugs strategy and provide baseline data for the regional drugs task forces. The increasing importance of alcohol as a second problem drug and the overlap between problem alcohol and drug use point to the need for an integrated approach to the management of substance misuse.

# References

Central Statistics Office (July 2003) Principal Demographic Results. Dublin: The Stationery Office.

Department of Tourism, Sport and Recreation (2001) *Building on Experience: National Drugs Strategy 2001–2008*. Dublin: The Stationery Office.

EMCDDA (1998) 1998 Annual Report on the State of the Drugs Problem in the European Union. Luxembourg: Office for Official Publications of the European Communities.

EMCDDA and Pompidou Group (2000) *Treatment Demand Indicator: Standard Protocol 2.0.* Lisbon: European Monitoring Centre for Drugs and Drugs Addiction.

Hartnoll R (1994) *Drug Treatment Reporting Systems and the First Treatment Demand Indicator:* Definitive Protocol. Strasbourg: Council of Europe, Pompidou Group.

Minister for Health and Children (1998) *Statutory Instrument No 225 of 1998: Misuse of Drugs Regulations.* Dublin: The Stationery Office.

Ministerial Task Force (1996) First Report of the Ministerial Task Force on Measures to Reduce the Demand for Drugs. Dublin: Department of the Taoiseach.

# Acknowledgements

The authors would like to express sincere thanks to all those who contribute to the work of the DMRD. Without the ongoing support of staff at drug treatment services throughout the country it would not be possible to maintain the NDTRS. Their co-operation is very much appreciated and valued. We thank Mr Conor Teljeur of the Small Area Health Research Unit in Trinity College Dublin for the map of the health board boundaries. We thank Dr Joe Barry and Ms Karen Galligan for their helpful comments on earlier drafts of this paper. We would also like to thank Ms Joan Moore for editing the work.

# **Authors**

Jean Long Tracy Kelleher Fionnola Kelly Hamish Sinclair Drug Misuse Research Division Health Research Board Holbrook House Holles Street Dublin 2 t (01) 6761176 f (01) 6618567 e dmrd@hrb.ie w www.hrb.ie