

Trends in treated problem alcohol use in Ireland, 2004 to 2006

Sarah Fanagan, Siobhán Reynolds, Deirdre Mongan and Jean Long

National Drug
Treatment Reporting
System

Contents

Summary	1
Glossary of terms	4
Introduction	5
Methods	7
Analysis	8
Conclusions	28
References	29
Acknowledgements	32

Summary

The data presented in this paper describe trends in treated problem alcohol use in Ireland and the analysis is based on data reported to the National Drug Treatment Reporting System (NDTRS). In this paper, treated problem alcohol 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 alcohol use in the future.

It is important to note that the reporting system collects data on episodes of treatment, rather than the number of individual people treated each year. This means that individuals may appear more than once if they attend more than one treatment service in a year, and may reappear in subsequent years. When interpreting the findings presented in this paper, it must be noted that not all alcohol treatment services in the country were participating in the NDTRS during the three-year period under review, 2004 to 2006. It may therefore be assumed that the data presented in this paper underestimate the true extent of treated alcohol use in Ireland. The extent to which the number of treated alcohol cases is under-reported varies throughout the country. In particular, the coverage for cases reporting alcohol as their main problem substance is incomplete in the east (Dublin, Kildare and Wicklow) and the west (Galway, Mayo and Roscommon) of Ireland. Up to 2007, the alcohol services managed by the mental health services, which provide a large proportion of the alcohol treatment services in these areas, had not been invited to participate in the reporting system. NDTRS staff completed a service inventory in 2007 in order to improve the reporting system's coverage of alcohol treatment services. The process of recruiting services that have not participated in the NDTRS to date is ongoing.

The main findings and their implications are:

- Of the 16,020 cases treated for problem alcohol use in Ireland between 2004 and 2006, 15,123 (94%) lived in a specified HSE region, 85 (0.5%) did not live in Ireland, and 812 (5%) had no place of residence recorded. Of the 15,123 treated cases recorded as living in Ireland, the largest proportion (43%) lived in the HSE South Region; 23% lived in the HSE West Region; 21% lived in the HSE Dublin Mid-Leinster Region and the remaining 12% lived in the HSE Dublin North East Region.

- The **prevalence** of treated problem alcohol use among 15–64-year-olds living in Ireland, expressed per 100,000 of the population, increased by 7% in the three-year period under review, from 164 in 2004 to 176 in 2006. The **incidence** of treated problem alcohol use among 15–64-year-olds living in Ireland, expressed per 100,000 of the population, increased by 17%, from 94 in 2004 to 110 in 2006. This increase in prevalence and incidence may be explained by an increase in problematic alcohol use in the population, an increase in reporting to the NDTRS, or a combination of both factors.
- The incidence rates of treated problem alcohol use among 15–64-year-olds living in Ireland, expressed per 100,000 of the population, were examined by county for the period 2004 to 2006. The incidence of treatment seeking was highest in Carlow, Sligo, Donegal, Waterford and Kilkenny (with over 200 cases per 100,000). While the incidence rates were low in a number of counties (with under 100 cases per 100,000), Mayo, Galway and Roscommon had the lowest rates during the three-year period (with 16.4, 16.5 and 20.7 cases respectively). It is important to emphasise that the incidence of treatment seeking for problem alcohol use may be an underestimation of the total incidence of problem alcohol use in the population and in treatment, and most likely reflects the fact that, prior to 2007, alcohol counsellors working in the mental health services in the west were not invited to participate in the NDTRS.
- Between 2004 and 2006, over half (54%) of all treated alcohol cases attended outpatient treatment services, while the remaining 46% received treatment at residential centres. Fifty-nine per cent of all those treated for problem alcohol use over the period were treated for the first time, 39% had been previously treated and 2% had an unknown treatment status.
- The use of more than one substance is a relatively common practice among treated cases. Polysubstance use increases the complexity of such cases, and is associated with poorer treatment outcomes. While the majority (79%) of alcohol cases treated between 2004 and 2006 reported problem use of alcohol only, the remaining 21% reported that they used more than one substance. Of those who reported polysubstance use, 11% reported problem use of two substances, 5% of three substances, and 5% of four or more substances. Polysubstance use challenges drug treatment and monitoring systems that have traditionally focused on the use of individual substances. While there are no official links between alcohol and drug treatment services in parts of Ireland, in practice, many drug services also treat clients with problem alcohol use. Over the past few years, there appears to be a growing consensus that responses to problem alcohol and illicit drug use should be integrated. The data presented in this paper indicate that there is a definite overlap between problem alcohol and other drug use, and highlight the need for an integrated approach to the management of problem substance use in this country.
- Information about the combinations of substances used is important in terms of individual clients' care plans. Among the treated cases reporting problem use of more than one substance, the rank order of the top four additional substances used (from most common to least common) was the same in 2004 and 2005, namely: cannabis, cocaine and amphetamines. In 2006, the top four additional substances used remained the same but their rank order changed to: cannabis, cocaine, ecstasy and amphetamines. During the three-year period, the additional substances most commonly reported by new cases alongside alcohol were cannabis, ecstasy and cocaine. These findings highlight the association between alcohol and recreational drugs.

- The NDTRS records the treatment intervention(s) provided when the client is first admitted to a treatment service. A client may have more than one initial treatment, which means that the number of treatments recorded is greater than the number of cases. In 2006 just over half (51%) of those treated for problem alcohol use had just one treatment intervention recorded. Of the remaining cases, almost one-fifth (19%) had two treatment interventions recorded. Counselling was the most common initial treatment intervention in 2006 and was recorded for over three-quarters (77%) of all treated cases.
- During the reporting period, the median age at which new cases began drinking was 16 years in all four HSE regions. Over one-quarter (26%, 1,862) of new cases began drinking when aged under 15 years. Twenty-nine per cent of the 2,166 new cases who had ever used another drug (excluding alcohol) did so before they were 15 years old, of which 24% (519) commenced both alcohol and other drug use at under 15 years of age. This indicates that alcohol and drug-use initiation are linked and highlights the importance of delaying the initiation to drinking among young people. The easy access to and availability of alcohol and other drugs among young people should be minimised.
- The interval between first consuming alcohol and seeking treatment for problem alcohol use varied considerably among new cases. The stage in life at which new cases first entered treatment for problem alcohol use also varied considerably over the three-year period. Just under three-quarters (72%) first attended treatment between the ages of 20 and 49 years.
- As would be expected, new cases were younger than their previously treated counterparts. The median age of previously treated cases ranged between 41 and 42 years over the period, while the median age of new cases treated was between 35 and 37 years. While the proportion of all treated cases aged under 18 years was small (3%), a higher proportion of new cases (4%) than previously treated cases (1%) were in this young age group. Among males, the proportions of previously treated and new cases remained stable over the period and were broadly similar, at 69% and 68% respectively.
- It is difficult to ascertain whether long-standing alcohol problems lead to social disadvantage or whether failure to secure or retain employment and accommodation leads to a greater likelihood of developing chronic alcohol problems. Between 2004 and 2006, 4% of all treated cases were homeless. The proportion was similar among new cases (3%) but increased to 6% among previously treated cases. The number of cases who reported leaving school early was marginally higher among previously treated cases (16%) than among new cases (14%). Employment levels among treated alcohol cases aged 16–64 years were considerably lower than those in the general population (68% in 2006, CSO 2007); for example, 44% of new cases were employed and 33% of previously treated cases were employed.
- There is a clear need for complete and accurate data on those entering treatment for problem alcohol use, and enhanced support from managers and service providers is required to achieve this goal. This requires the continued expansion of the NDTRS to ensure that all alcohol treatment services are participating in the reporting system and recording the information accurately. There is also a need to develop an approach to determine the immediate outcomes for those treated for problem alcohol use. A unique identifier is required to accurately calculate the number of individuals who require treatment for problem alcohol use, their immediate treatment outcomes and follow their progress through different treatment settings.

Glossary of terms

- 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. In this case, the median is more useful since the mean is influenced by the one older person in this example.
- 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 2007, 10 opiate users living in a specific county sought treatment for the first time. The incidence is the number of new opiate cases treated 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, per 100,000 etc.

The calculation in this case is as follows: $(10/31,182) \times 100,000$, which gives an incidence rate of 32 per 100,000 of the specific county population in 2007.

- 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 2007, 10 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 2007. 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, per 100,000 etc.

The calculation in this case is as follows: $(35/31,182) \times 100,000$, which gives a prevalence rate of 112 per 100,000 of the specific county population in 2007.

- Health Service Executive (HSE)
 - On 1 January 2005, the 10 health boards managing the health services in Ireland were replaced by a single entity, the Health Service Executive (HSE). The former health boards were responsible for health care provision to populations in specific geographical areas. In the interest of continuity of care, the HSE maintained these 10 areas for an interim period and called them HSE areas. The former Eastern Regional Health Authority was known as the HSE Eastern region for this interim period. The table below presents the past health board structure and the interim HSE areas structure:

Regional health authority	Health boards	HSE areas
Not applicable	North Eastern Health Board	HSE North Eastern Area
Eastern Regional Health Authority (ERHA*)	Northern Area Health Board	HSE Northern Area
Eastern Regional Health Authority (ERHA)	East Coast Area Health Board	HSE East Coast Area
Eastern Regional Health Authority (ERHA)	South Western Area Health Board	HSE South Western Area
Not applicable	Midland Health Board	HSE Midland Area
Not applicable	South Eastern Health Board	HSE South Eastern Area
Not applicable	Southern Health Board	HSE Southern Area
Not applicable	Mid-Western Health Board	HSE Mid-Western Area
Not applicable	North Western Health Board	HSE North Western Area
Not applicable	Western Health Board	HSE Western Area

*The ERHA was known as the HSE Eastern Region for the interim period

Following a number of years of re-structuring, health care is now provided through four HSE regions and 32 local health offices (LHOs). The local health offices are based on the geographical boundaries of the former community care areas. The table below presents the current HSE structure:

HSE regions	Local health offices		
HSE Dublin North East	North West Dublin	North Dublin	Louth
	Dublin North Central	Cavan/Monaghan	Meath
HSE Dublin Mid-Leinster	Dun Laoghaire	Dublin South West	Wicklow
	Dublin South East	Dublin West	Longford/Westmeath
	Dublin South City	Kildare/West Wicklow	Laois/Offaly
HSE South	Cork South Lee	North Cork	Tipperary South
	Cork North Lee	Kerry	Waterford
	West Cork	Carlow/Kilkenny	Wexford
HSE West	Donegal	Mayo	
	Sligo/Leitrim/West Cavan	Roscommon	Limerick
	Galway	Tipperary North	Clare
			East Limerick

- The data in this paper relating to the average annual incidence of treated problem alcohol use and place of residence of treated cases living in Ireland are presented by HSE region and by former health board area. Each of the four HSE regions is made up of a number of former health board areas and can be easily divided along former health board area boundaries. It is also worth noting that the 10 regional drugs task forces were created to service the areas covered by the former health boards.

Introduction

The National Drug Treatment Reporting System (NDTRS) is an epidemiological database on treated drug and alcohol misuse in Ireland. It is co-ordinated by staff at the Alcohol and Drug Research Unit (ADRU) of the Health Research Board (HRB) on behalf of the Department of Health and Children. The monitoring role of the NDTRS is recognised by the Government in its document *Building on experience: National Drugs Strategy 2001–2008*. The collection and reporting of data to the NDTRS is one of the actions identified and agreed by Government for implementation by the former health boards: 'All treatment providers should co-operate in returning information on problem drug use to the DMRD [now ADRU] of the HRB' (Department of Tourism, Sport and Recreation 2001: 118).

The NDTRS was established in 1990 in the Greater Dublin Area and was extended in 1995 to cover all areas of the country. It was 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). Originally designed to record drug misuse only, the NDTRS recorded problematic use of alcohol only in cases where it was an additional problem substance, that is, where the client's main reason for entering treatment was drug misuse but he/she also reported problematic use of alcohol.

However, it became increasingly evident that alcohol was the main problem substance in Ireland and that a large proportion of cases used both alcohol and drugs (Long *et al.* 2004). In parts of the country, particularly outside Dublin, alcohol and drug treatment services are integrated. Failure to include alcohol data in reporting systems leads to an underestimation of problem substance use, and of the workload of addiction services (Long *et al.* 2004). In recognition of this, the remit of the NDTRS was extended in 2004 to include cases where alcohol is recorded as the main or only reason for seeking treatment. The overlap

between problem alcohol and other drug use has been identified in the current strategic plans of a number of drugs task forces, which have emphasised the need for treatment services that can address the many forms of polysubstance use.

Drug and alcohol treatment data are viewed as an indirect indicator of problematic alcohol and other drug use, as well as a direct indicator of demand for treatment services. NDTRS data are used at national level (alcohol and drug data) and at European level (drug data) to provide information on the characteristics of clients entering treatment and on patterns of substance misuse, such as types of substance used and consumption behaviours. Drug data 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 substance misuse policy and planning. 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 (LDTF) areas and are continuing to provide strategic responses to drug misuse in their communities. Again, in 2004, NDTRS data were used to describe treatment-seeking characteristics and behaviours of those aged under 18 years and to inform the deliberations of the Working Group on the need for a specific treatment approach (Working Group on treatment of under 18 year olds 2005). In recent years, NDTRS data were used to inform some of the recommendations of the Working Group on Drugs Rehabilitation (2007), and by the Working Group on residential services to help estimate the number of residential places required to address severe alcohol and drug problems in Ireland (O'Gorman and Corrigan 2008).

Ireland has one of the highest levels of alcohol consumption per capita in Europe. In 2006, 13.36 litres of pure alcohol were consumed in this country for every adult aged 15 years or over. Alcohol is associated with a range of chronic and acute medical conditions, including liver cirrhosis, various cancers, road traffic accidents and suicide. It is the third highest **contributor to** the total burden of disease in developed countries and is estimated to cause the deaths of 195,000 people per year in the European Union. Alcohol-related harm has been shown to correlate with per capita alcohol consumption. Problem alcohol use is pervasive in Irish society, with men and women, the old and the young, experiencing its negative effects (Mongan *et al.* 2007).

Treatment for problem use of alcohol in Ireland is provided by statutory and non-statutory services, including general hospitals, psychiatric hospitals, community-based services and residential centres. Since the publication of *Planning for the future* in 1984, outpatient facilities have become the dominant setting for the treatment of problem alcohol use, except for those who require complicated detoxification in residential settings or those whose problems are more complex and need more intensive treatments (Mongan *et al.* 2007). Psychiatric inpatient units are now considered to be inappropriate for treating the majority of those with alcohol problems. This thinking is reflected in the mental health policy *A vision for change* (Expert Group on Mental Health Policy 2006).

There are two national surveillance systems managed by different units within the Health Research Board which gather information on treatment for problem drug and/or alcohol use, namely the National Drug Treatment Reporting System (NDTRS) and the National Psychiatric In-Patient Reporting System (NPIRS). However, it is important to note that the two reporting systems gather information from different types of service and therefore complement each other. In fact, comprehensive participation by both private and public service providers in these systems will ensure that the data represent the total numbers seeking treatment for problem drug and alcohol use. Both databases capture a number of the same demographic and diagnostic variables; it would therefore be possible to carry out collaborative research on inpatient and outpatient treatments (Long *et al.* 2004).

The NPIRS is managed by the Mental Health Research Unit of the HRB. It is a national psychiatric database that provides detailed information on all admissions to and discharges from 56 inpatient psychiatric services in Ireland. The system records data on cases receiving inpatient treatment for problem drug and alcohol use. Despite the move towards outpatient treatment for problem alcohol use, a large proportion of those with alcohol problems continue to receive treatment in psychiatric units. However, between 1995 and 2005 there was a 43% decrease in the number of admissions with alcohol as the primary diagnosis. According to the NPIRS, there were 5,262 alcohol-related discharges in 1995, compared to 2,995 in 2005. Alcohol-related disorders were ranked as the third most common reason for admission to Irish psychiatric hospitals between 1996 and 2005. In 2005, there were 2,451 discharges from psychiatric units of people with alcohol-related disorders but no co-morbidity (Daly *et al.* 2006). If the mental health policy, *A vision for change*, is adopted, it will have serious implications for alcohol treatment services in Ireland as, to date, it has not been decided who will manage and fund alcohol services or how these services will link with mental health services, addiction services and general practice (Mongan *et al.* 2007).

The NDTRS collects alcohol data from outpatient services (including drug and/or alcohol treatment centres and some psychiatric services), inpatient specialised residential centres (for the treatment of addictions) and low-threshold services (which provide low-dose methadone or drop-in facilities only). This paper is based on NDTRS data (cases treated for problem alcohol use) from 2004 to 2006.

Methods

Compliance with the NDTRS requires that one form be completed for each new client coming for first treatment and for each previously treated client returning to treatment for problem drug and/or alcohol use in a calendar year. Service providers at treatment centres throughout Ireland collect data on each individual who attends for first treatment or returns to treatment in a calendar year. Staff at the ADRU of the HRB compile anonymous, aggregated data, which are analysed and reported at national level.

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 substance misuse problems'. As of 2004, clients who report alcohol as their main problem drug are included in this reporting system. Treatment options for alcohol cases include one or more of the following: brief intervention, alcohol detoxification, psychiatric treatment, medication-free therapy, counselling, family therapy, social and/or occupational reintegration, education/awareness programmes and complementary therapies. Treatment is provided in both residential and non-residential settings (Table 1). Data returns to the NDTRS for clients attending treatment services for problem use of alcohol during 2006 were provided by 133 treatment services – 108 non-residential and 25 residential.

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

All cases treated – describes individuals who receive treatment for problem alcohol use (as a main problem substance) at each treatment centre in a calendar year, and includes:

Previously treated cases – describes individuals who were treated previously for problem alcohol use (as a main problem substance) at any treatment centre and have returned to treatment in the reporting year;

New cases treated – describes individuals who have never been treated for problem alcohol use (as a main problem substance); and

Status unknown – describes individuals whose status with respect to previous treatment for problem alcohol use (as a main problem substance) is not known.

Cases who were treated more than once at the same centre during a calendar year were included as a single case in the analysis presented here. However, in the case of the data for 'previously treated cases' there is a possibility of duplication in the database where a person receives treatment at more than one centre or returns to treatment in a subsequent year.

The data presented in this paper provide a description of problem alcohol use in Ireland by HSE area of residence. There were 16,020 cases treated in Ireland between 2004 and 2006. Of these, 15,123 (94.4%) lived in Ireland, 85 (0.5%) did not live in Ireland, and 812 (5.1%) had no place of residence recorded. The tables presenting data on service provision, treatment status and place of residence are based on the total number of 16,020 treated cases (Tables 1 – 3). The remainder of the tables are based on the 15,123 cases who lived and were treated in Ireland.

When interpreting the findings presented in this paper, it must be noted that not all alcohol treatment services in the country were participating in the NDTRS during the three-year period under review, 2004 to 2006. It may therefore be assumed that the data presented in this paper underestimate the true extent of treated alcohol use in Ireland. The extent to which the number of treated alcohol cases is under-reported varies throughout the country. In particular, the coverage for cases reporting alcohol as their main problem substance is incomplete in the east (Dublin, Kildare and Wicklow) and the west (Galway, Mayo and Roscommon) of Ireland. Up to 2007, the alcohol services managed by the mental health services had never being invited to take part in the reporting system. NDTRS staff completed a service inventory in 2007 in order to improve the reporting system's coverage of alcohol treatment services. The process of recruiting services that have not participated in the NDTRS to date is ongoing.

Analysis

This is the first NDTRS paper to examine trends in treated problem alcohol use on a national basis. The analysis presented will provide an outline of the following: service provision; numbers treated; incidence and prevalence of treatment; additional problem substances and their association with alcohol use; treatment provision; the age at which cases commenced alcohol and other drug use; and the main socio-demographic characteristics of treated cases.

Service provision

Table 1 Number and type of services providing treatment for problem alcohol use and number of cases treated (in brackets) in Ireland and reported to the NDTRS, 2004 to 2006

	2004	2005	2006
All services (cases treated)	124 (4996)	123 (5383)	133 (5641)
Outpatient (cases treated)	102 (2713)	99 (2807)	107 (3122)
Residential (cases treated)	20 (2281)	23 (2572)	25 (2516)
Low-threshold* (cases treated)	1 (1)	1 (4)	1 (3)
Prison-based (cases treated)	1 (1)	0 (0)	0 (0)

*Low-threshold services are services that provide low-dose methadone or drop-in facilities only.

The total number of alcohol treatment services available in Ireland and participating in the NDTRS increased between 2004 and 2006 (Table 1). In the three-year period, over half (54%) of all treated cases attended outpatient treatment services, while the remaining 46% received treatment at a residential centre.

Table 1 does not show the total number of services providing alcohol treatment and the number of cases treated for problem alcohol use because there was incomplete participation of such treatment services in the NDTRS during this period. (This issue is discussed in detail in the methods section.)

Numbers treated

Table 2 Number (%) of cases treated in Ireland, by treatment status, reported to the NDTRS, 2004 to 2006

Treatment status	2004	2005	2006
		Number (%)	
All cases	4996	5383	5641
Previously treated cases	2029 (40.6)	2090 (38.8)	2110 (37.4)
New cases	2827 (56.6)	3226 (59.9)	3432 (60.8)
Treatment status unknown	140 (2.8)	67 (1.2)	99 (1.8)

Of the 16,020 cases treated between 2004 and 2006 and reported to the NDTRS, 9,485 (59%) were treated for the first time, 6,229 (39%) had been previously treated and the treatment status of 306 (2%) was not known. The number of cases previously treated increased marginally (by 4%), from 2,029 in 2004 to 2,110 in 2006 (Table 2). The number of new cases treated increased noticeably (by 21%), from 2,827 cases in 2004 to 3,432 cases in 2006. This increase may be explained by an increase in problematic alcohol use in the population or an increase in reporting to the NDTRS, or a combination of both.

There is a certain amount of overlap in the geographical boundaries within which service providers operate. Selected data in this paper are presented by Health Service Executive (HSE) region, by former health board area and by county of residence.

Table 3 Number (%) of cases treated in Ireland, by place of residence, reported to the NDTRS, 2004 to 2006

Place of residence	2004	2005	2006
		Number (%)	
All cases	4996	5383	5641
Specified HSE region	4714 (94.4)	5070 (94.2)	5339 (94.6)
Ireland, address not recorded	261 (5.2)	288 (5.4)	263 (4.7)
Outside Ireland	21 (0.4)	25 (0.5)	39 (0.7)

Of the 16,020 cases treated in Ireland between 2004 and 2006, 15,123 (94%) lived in a specified HSE region, 85 (0.5%) did not live in Ireland, and 812 (5%) had no place of residence recorded (Table 3).

The tables and figures presented in the remainder of this paper are based on the 15,123 cases who lived in a specified HSE region and were treated for problem alcohol use in Ireland between 2004 and 2006.

Table 4 Number (%) of cases treated in Ireland, by HSE region of residence and by treatment status, reported to the NDTRS, 2004 to 2006

HSE region of residence	2004	2005	2006
		Number (%)	
All cases*	4714	5070	5339
HSE Dublin North East	450 (9.5)	556 (11.0)	852 (16.0)
HSE Dublin Mid–Leinster	965 (20.5)	1033 (20.4)	1196 (22.4)
HSE South	2131 (45.2)	2286 (45.1)	2124 (39.8)
HSE West	1168 (24.8)	1195 (23.6)	1167 (21.9)
Previously treated cases*	1876	1910	1941
HSE Dublin North East	165 (8.8)	200 (10.5)	262 (13.5)
HSE Dublin Mid–Leinster	398 (21.2)	438 (22.9)	459 (23.6)
HSE South	827 (44.1)	814 (42.6)	775 (39.9)
HSE West	486 (25.9)	458 (24.0)	445 (22.9)
New cases*	2706	3108	3318
HSE Dublin North East	270 (10.0)	346 (11.1)	575 (17.3)
HSE Dublin Mid–Leinster	547 (20.2)	584 (18.8)	712 (21.5)
HSE South	1268 (46.9)	1464 (47.1)	1320 (39.8)
HSE West	621 (22.9)	714 (23.0)	711 (21.4)
Treatment status unknown	132	52	80

*Excludes cases whose HSE region of residence is not known or cases who are not normally resident in Ireland.

Between 2004 and 2006, the largest proportion (43%) of treated alcohol cases lived in the HSE South Region, just under one-quarter (23%) lived in the HSE West Region, just over one-fifth (21%) lived in the HSE Dublin Mid-Leinster Region and the remaining 12% lived in the HSE Dublin North East Region (Table 4). The proportions of previously treated and new cases followed a similar trend to that of all cases. However, as already noted, not all alcohol treatment services were participating in the NDTRS during this period. Coverage for cases reporting alcohol as their main problem substance was lowest in the east and in the west of the country, which is reflected in the numbers presented in Table 4.

The number of treated alcohol cases increased each year between 2004 and 2006 in the HSE Dublin North East and HSE Dublin Mid-Leinster regions. This was true for both previously treated and new cases in these regions. The number of previously treated cases in the HSE Dublin North East Region rose by 59% and the number of new cases rose by 113%. These increases can be explained largely by the participation of additional services in the reporting system.

In the HSE South and HSE West regions, the numbers of treated alcohol cases increased in 2005, compared to the 2004 figures, but in 2006 returned to levels very similar to those reported in 2004. The increase in the number of new cases treated dictated the trend reported for all cases during the reporting period, while, in contrast, the number of previously treated cases fell each year over the same period.

Table 5 Number (%) of cases treated in Ireland, by former health board area of residence and by treatment status, reported to the NDTRS, 2004 to 2006

Former health board area of residence	2004		2005		2006	
	Number (%)		Number (%)		Number (%)	
All cases*	4714		5070		5339	
Northern Area (of Dublin)	165	(3.5)	198	(3.9)	262	(4.9)
North Eastern	285	(6.0)	358	(7.1)	590	(11.1)
South Western Area (of Dublin and Wicklow and all of Kildare)	311	(6.6)	457	(9.0)	547	(10.2)
East Coast Area (of Dublin and Wicklow)	80	(1.7)	79	(1.6)	146	(2.7)
Midland	429	(9.1)	481	(9.5)	369	(6.9)
Southern	1004	(21.3)	1153	(22.7)	973	(18.2)
South Eastern	1184	(25.1)	1218	(24.0)	1265	(23.7)
Mid-Western	416	(8.8)	350	(6.9)	379	(7.1)
North Western	650	(13.8)	626	(12.3)	714	(13.4)
Western	89	(1.9)	88	(1.7)	84	(1.6)
Place of residence unknown	101	(2.1)	62	(1.2)	10	(0.2)
Previously treated cases*	1876		1910		1941	
Northern Area (of Dublin)	71	(3.8)	74	(3.9)	77	(4.0)
North Eastern	94	(5.0)	126	(6.6)	185	(9.5)
South Western Area (of Dublin and Wicklow and all of Kildare)	147	(7.8)	193	(10.1)	209	(10.8)
East Coast Area (of Dublin and Wicklow)	41	(2.2)	32	(1.7)	43	(2.2)
Midland	145	(7.7)	151	(7.9)	148	(7.6)
Southern	355	(18.9)	369	(19.3)	285	(14.7)
South Eastern	505	(26.9)	487	(25.5)	547	(28.2)
Mid-Western	155	(8.3)	158	(8.3)	129	(6.6)
North Western	296	(15.8)	261	(13.7)	289	(14.9)
Western	35	(1.9)	39	(2.0)	27	(1.4)
Place of residence unknown	32	(1.7)	20	(1.0)	2	(0.1)
New cases*	2706		3108		3318	
Northern Area (of Dublin)	85	(3.1)	118	(3.8)	180	(5.4)
North Eastern	185	(6.8)	228	(7.3)	395	(11.9)
South Western Area (of Dublin and Wicklow and all of Kildare)	156	(5.8)	256	(8.2)	325	(9.8)
East Coast Area (of Dublin and Wicklow)	38	(1.4)	47	(1.5)	99	(3.0)
Midland	264	(9.8)	197	(6.3)	224	(6.8)
Southern	624	(23.1)	777	(25.0)	669	(20.2)
South Eastern	667	(24.6)	729	(23.5)	707	(21.3)
Mid-Western	246	(9.1)	312	(10.0)	237	(7.1)
North Western	325	(12.0)	353	(11.4)	420	(12.7)
Western	50	(1.8)	49	(1.6)	54	(1.6)
Place of residence unknown	66	(2.4)	42	(1.4)	8	(0.2)

*Excludes cases whose former health board area of residence is not known or cases who are not normally resident in Ireland.

Given the variations in reporting practices already mentioned, it is not surprising that the former South Eastern (Carlow, Kilkenny, South Tipperary, Waterford and Wexford), Southern (Cork and Kerry) and North Western (Donegal, Leitrim and Sligo) health board areas reported the highest numbers of treated alcohol cases between 2004 and 2006 (Table 5). NDTRS coverage in the south east of the country is exemplary, owing to the work of the data co-ordinator for the area. Drug and alcohol treatment services in the area are actively recruited to participate in the NDTRS on an ongoing basis. The data collected have been reported in an overview of substance misuse published each year since 2000 (South Eastern Health Board 2001–2005, HSE South 2006–2007). Alcohol and drug treatment services in the Southern Health Board area are integrated and their level of participation in the NDTRS is generally very high. In the north west of the country NDTRS coverage is very good. Alcohol and drug treatment services in this area are integrated and managed by multi-disciplinary teams of health care professionals. The vast majority of treated cases in the north west were those reporting alcohol as their main problem substance.

The former Western Health Board area (Galway, Mayo and Roscommon), East Coast Area Health Board (parts of Dublin and Wicklow) and Northern Area Health Board (Dublin) reported the lowest numbers of treated alcohol cases during the period. In these areas of the country, alcohol and drug treatment services are provided, in the main, independently of one another. Between 2004 and 2006 the returns made to the NDTRS came mainly from the drug treatment outpatient and residential services in these areas, which accounts for the low numbers of cases reporting alcohol as their main problem substance. Coverage in these areas will improve from 2007 onwards because NDTRS staff are encouraging the alcohol treatment services to participate in the reporting system.

The numbers of treated alcohol cases living in the former South Eastern Health Board area, South Western Area Health Board (parts of Dublin and Wicklow and all of Kildare), North Eastern Health Board area (Louth, Meath, Cavan and Monaghan) and Northern Area Health Board increased between 2004 and 2006. The increase in the numbers of treated cases reporting alcohol as their main problem substance was largest (at 107%) in the North Eastern Health Board area. This can be explained by the fact that a number of alcohol treatment services in the area began to participate in the NDTRS for the first time in 2005. Though the numbers are small, there was also a marked increase in the numbers of treated alcohol cases living in the former South Western Area (parts of Dublin and Wicklow and all of Kildare) and Northern Area (Dublin) health boards over the period, at 76% and 59% respectively. The increase in the number of treated cases living in the former South Eastern Health Board area was more modest at 7%.

In the former East Coast Area Health Board, the number of treated alcohol cases reported to the NDTRS remained stable in 2004 and 2005 but increased by 85% in 2006. The number of treated cases living in the former Mid-Western (Clare, Limerick and North Tipperary) and North Western health board areas fell by 16% and 4% respectively between 2004 and 2005, but rose again in 2006 (by 8% and 14% respectively). However, while the number of treated cases reported in the former North Western Health Board area grew by 10% overall between 2004 and 2006, the number of treated cases reported in the former Mid-Western Health Board area fell by 9% over the period. The fall in numbers in the mid-west is due to a reduction in the number of returns to the reporting system, rather than to an actual reduction in the demand for services. The issue is currently being addressed by the service managers.

The number of treated alcohol cases living in the former Western Health Board area remained stable between 2004 and 2005 but decreased by almost 5% in 2006. In the former Midland (Laois, Offaly, Longford and Westmeath) and Southern health board areas, the numbers of treated alcohol cases increased between 2004 and 2005 but decreased in 2006 to levels below those reported in 2004.

Numbers of previously treated cases are an indirect indicator of the chronic, relapsing nature of alcohol-related health conditions among the population living in a geographical area. Between 2004 and 2006 the number of previously treated cases in the former South Western Area Health Board, North Eastern Health Board area and Northern Area Health Board increased each year.

New cases seeking treatment are an indirect indicator of recent trends in problem alcohol use. The number of new cases treated in the former North Eastern and North Western health board areas, and the South Western Area, Northern Area and East Coast Area health boards increased each year between 2004 and 2006.

Incidence and prevalence of treated alcohol use

In order to adjust for variation in population size in each HSE area and county, the actual incidence of treated alcohol use in each area was calculated using the average number of new cases over the three-year period living in each of the 10 former health board areas and 26 counties; this average was divided by the population aged 15 to 64 years living in the respective former health board areas and counties, using the census figures for 2002 and 2006 (CSO 2007).

As Figure 1 illustrates, between 2004 and 2006 the incidence rate of treated problem alcohol use was highest in the former North Western and South Eastern health board areas (with more than 200 cases per 100,000 of the 15–64-year-old population), followed by the former Southern Health Board area (with 150 to 199 cases), and the former Midland, Mid-Western and North Eastern Health Board areas (with 100 to 149 cases). The former Western Health Board area had the lowest incidence rate, at 17 cases per 100,000. This reflects the fact that alcohol counsellors working in the mental health services in the west have never participated in the reporting system.

The incidence of treatment seeking for problem alcohol use was also examined by county for the period 2004 to 2006 (Figure 2). The incidence rates were highest in Carlow, Sligo, Donegal, Waterford and Kilkenny (with over 200 cases per 100,000 of the 15–64-year-old population) followed by Leitrim, Offaly, Tipperary, Wexford, Cork, Kerry and Cavan (with between 150 and 199 cases). While the incidence rates were low in a number of counties (with under 100 cases per 100,000), Mayo, Galway and Roscommon had the lowest incidence rates during the three-year period. The lower incidence rates observed in Dublin, Kildare, Galway, Mayo, Roscommon and Wicklow are due to the fact that services in these counties did not participate in the NDTRS up to the end of 2006.

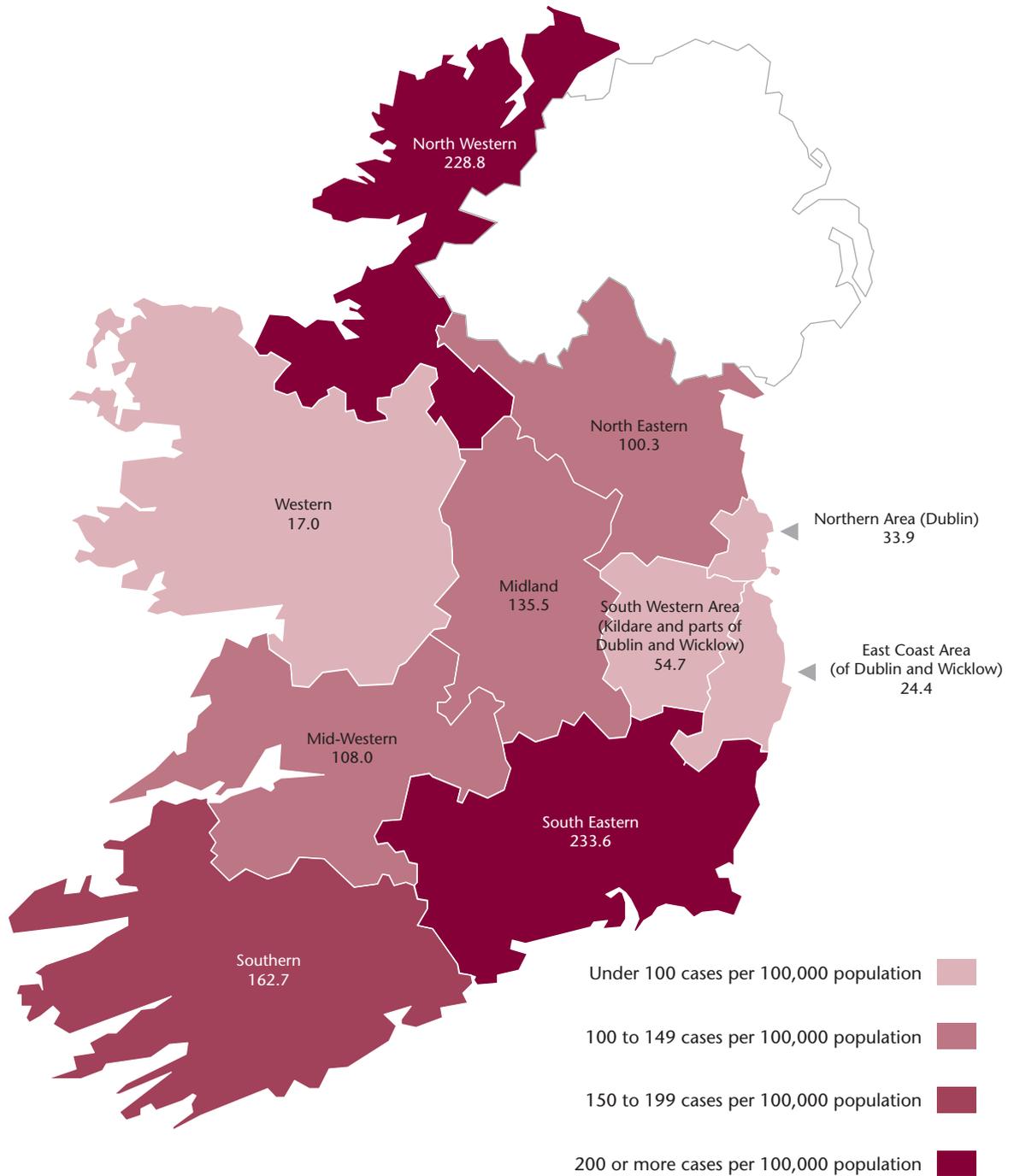


Figure 1 Average annual incidence of treated problem alcohol use among 15–64-year-olds living in Ireland, by former health board area, based on returns to the NDTRS per 100,000 of the population, 2004 to 2006 (Central Statistics Office 2007)

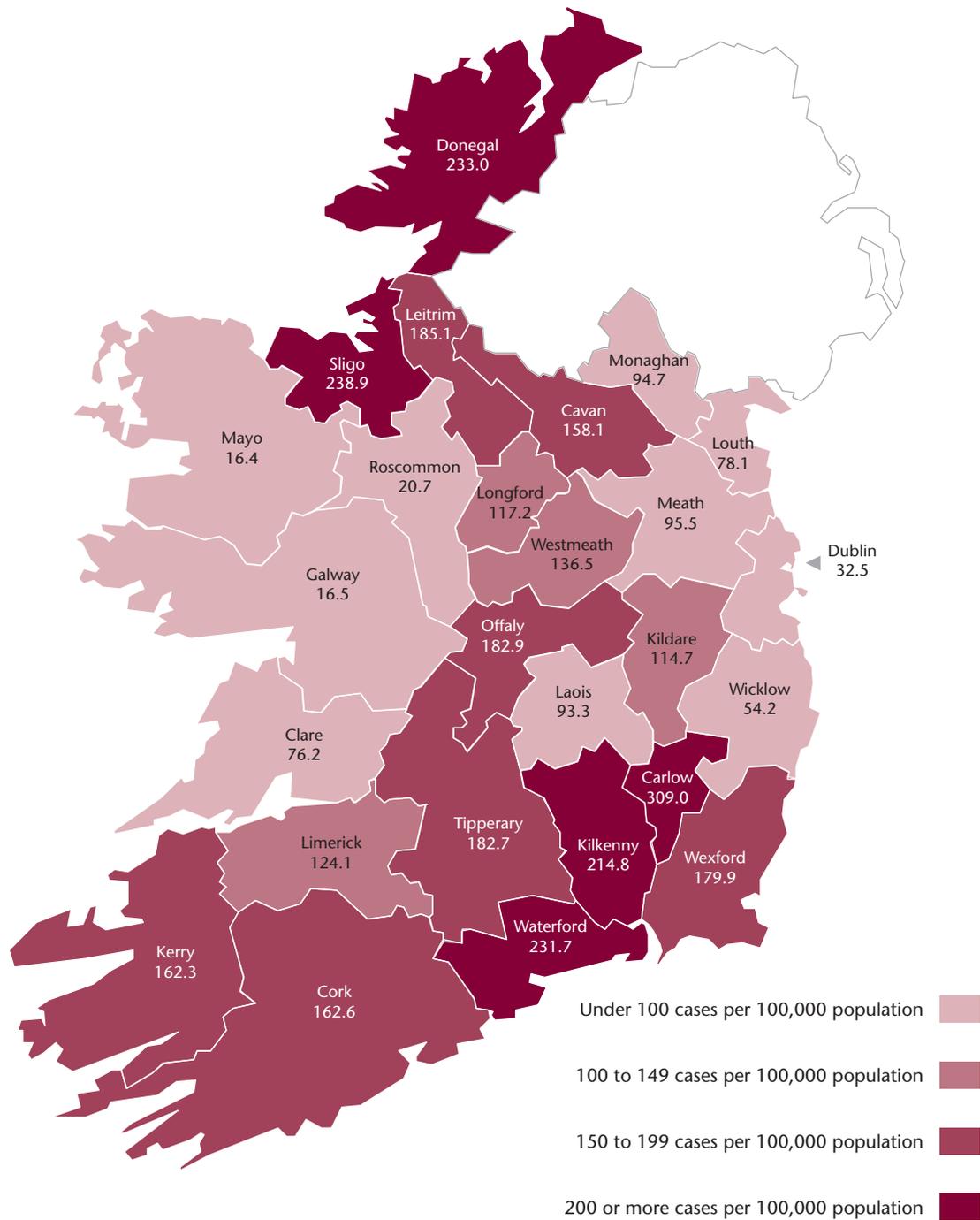


Figure 2 Average annual incidence of treated problem alcohol use among 15–64-year-olds living in Ireland, by county, based on returns to the NDTRS per 100,000 of the population, 2004 to 2006 (Central Statistics Office 2007)

Figure 3 presents the incidence and prevalence of treated problem alcohol use between 2004 and 2006 among 15–64-year-olds living in Ireland, expressed per 100,000 of the population.

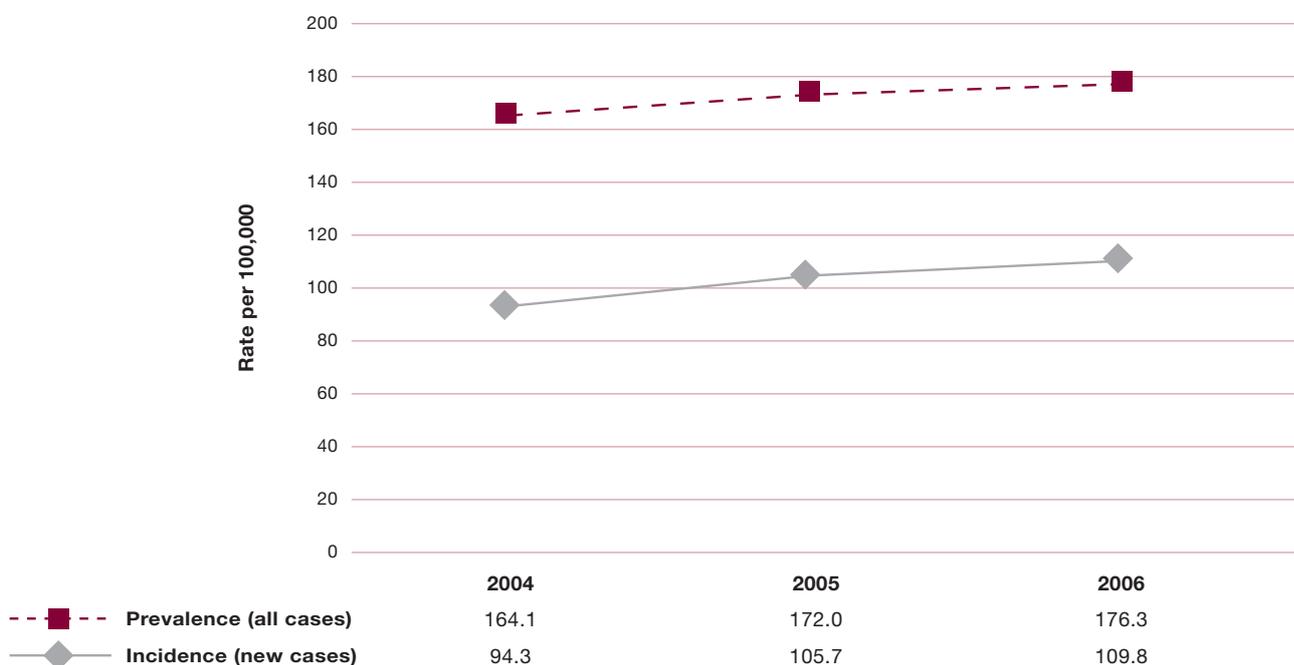


Figure 3 Incidence and prevalence of treated problem alcohol use among 15–64-year-olds living and treated in Ireland, based on returns to the NDTRS per 100,000 population, 2004 to 2006 (Central Statistics Office 2007)

The prevalence of treated problem alcohol use increased marginally (by 7%), from 164 per 100,000 15–64-year-olds in 2004 to 176 in 2006. Along with the increase in participation in the reporting system and a possible increase in alcohol consumption in the population, the increased prevalence of treated problem alcohol use indicates that problem alcohol use may become a chronic, relapsing health condition that requires repeated treatment over time.

The incidence of treated problem alcohol use increased by 17%, from 94 per 100,000 15–64-year-olds in 2004 to 110 in 2006. The increase was greater between 2004 and 2005 (at 12%), than between 2005 and 2006 (at 4%). It is important to note that, despite the increases in prevalence and incidence in the three-year period, both rates are an under-estimate of problem alcohol use.

Additional problem substances

Table 6 Number (%) of cases living and treated in Ireland who used more than one substance, by treatment status, reported to the NDTRS, 2004 to 2006

	2004	2005	2006
Cases using more than one substance		Number (%)	
All cases	4714	5070	5339
All cases using more than one substance	991 (21.0)	1120 (22.1)	1075 (20.1)
Previously treated cases	1876	1910	1941
Previously treated case using more than one substance	366 (19.5)	383 (20.1)	376 (19.4)
New cases	2706	3108	3318
New cases using more than one substance	599 (22.1)	724 (23.3)	676 (20.4)
Treatment status unknown	132	52	80

The total number of cases who reported alcohol as their main problem substance increased steadily between 2004 and 2006. The proportion of cases who reported problems with more than one substance remained stable over the period at approximately 20% (one in five of those receiving treatment). The same trend was noted among previously treated and new cases (Table 6).

Table 7 Number (%) of new cases living and treated in Ireland who used more than one substance, by HSE region of residence, reported to the NDTRS, 2004 to 2006

	Dublin North East	Dublin Mid-Leinster	South	West
	Number (%)			
New cases	1191	1843	4052	2046
New cases using more than one substance	171 (14.4)	313 (17.0)	1059 (26.1)	456 (22.3)

Between 2004 and 2006, the highest proportions reporting problems with more than one substance lived in the HSE South and HSE West regions (Table 7).

While the majority (79%) of alcohol cases treated between 2004 and 2006 reported problem use of alcohol only, the remaining 21% reported that they used more than one substance (polysubstance use). Polysubstance use increases the complexity of such cases, and is associated with poorer treatment outcomes. Of those who reported polysubstance use, 11% reported problem use of two substances, 5% reported problems with three substances and 5% reported problems with four or more substances (Table 8). Previously treated and new cases followed a very similar pattern to all cases over the period.

Table 8 Number of problem substances used by cases treated in Ireland, by treatment status, reported to the NDTRS, 2004 to 2006

Number of problem substances used	2004			2005			2006		
	Number (%)								
All cases	4714			5070			5339		
One substance	3723	(79.0)		3950	(77.9)		4264	(79.9)	
Two substances	483	(10.2)		540	(10.7)		562	(10.5)	
Three substances	259	(5.5)		275	(5.4)		252	(4.7)	
Four substances or more	249	(5.3)		305	(6.0)		261	(4.9)	
Previously treated cases	1876			1910			1941		
One substance	1510	(80.5)		1527	(79.9)		1565	(80.6)	
Two substances	161	(8.6)		183	(9.6)		198	(10.2)	
Three substances	112	(6.0)		82	(4.3)		74	(3.8)	
Four substances or more	93	(5.0)		118	(6.2)		104	(5.4)	
New cases	2706			3108			3318		
One substance	2107	(77.9)		2384	(76.7)		2642	(79.6)	
Two substances	308	(11.4)		351	(11.3)		351	(10.6)	
Three substances	142	(5.2)		190	(6.1)		174	(5.2)	
Four substances or more	149	(5.5)		183	(5.9)		151	(4.6)	
Treatment status unknown	132			52			80		

Table 9 Number of problem substances used by new cases treated in Ireland, by HSE region of residence, reported to the NDTRS, 2004 to 2006

Number of problem substances used	Dublin North East		Dublin Mid-Leinster		South		West	
	Number (%)							
New cases	1191		1843		4052		2046	
One substance	1020	(85.6)	1530	(83.0)	2993	(73.9)	1590	(77.7)
Two substances	91	(7.6)	172	(9.3)	514	(12.7)	233	(11.4)
Three substances	45	(3.8)	74	(4.0)	274	(6.8)	113	(5.5)
Four substances or more	35	(2.9)	67	(3.6)	271	(6.7)	110	(5.4)

Between 2004 and 2006, slightly higher proportions of new cases treated in the HSE South and West regions reported problem use of second, third and fourth substances, compared to those in the other two HSE regions (Table 9). While this may reflect a true difference in the level of polysubstance use around the country, it may also be due to variations in reporting to the NDTRS. For example, more detailed history taking when a client first enters treatment may result in a greater number of additional problem substances being reported.

Table 10 Additional problem substances used by cases living and treated in Ireland, by treatment status, reported to the NDTRS, 2004 to 2006

Additional problem substance(s) used*	Number (%)†		
	2004	2005	2006
All cases	4714	5070	5339
Cannabis	761 (16.1)	883 (17.4)	818 (15.3)
Ecstasy	368 (7.8)	398 (7.9)	325 (6.1)
Cocaine	250 (5.3)	380 (7.5)	350 (6.6)
Amphetamines	107 (2.3)	109 (2.2)	114 (2.1)
Opiates	98 (2.1)	89 (1.8)	86 (1.6)
Benzodiazepines	82 (1.7)	95 (1.9)	103 (1.9)
Volatile inhalants	14 (0.3)	8 (0.2)	10 (0.2)
Other substances	64 (1.4)	43 (0.9)	43 (0.8)
Not recorded	4 (0.1)	0 (0.0)	0 (0.0)
Previously treated cases	1876	1910	1941
Cannabis	257 (13.7)	289 (15.1)	279 (14.4)
Ecstasy	133 (7.1)	121 (6.3)	99 (5.1)
Cocaine	83 (4.4)	128 (6.7)	114 (5.9)
Opiates	52 (2.8)	44 (2.3)	50 (2.6)
Benzodiazepines	50 (2.7)	54 (2.8)	46 (2.4)
Amphetamines	42 (2.2)	49 (2.6)	47 (2.4)
Volatile inhalants	9 (0.5)	1 (0.1)	3 (0.2)
Other substances	37 (2.0)	15 (0.8)	20 (1.0)
Not recorded	1 (0.1)	0 (0.0)	0 (0.0)
New cases	2706	3108	3318
Cannabis	481 (17.8)	586 (18.9)	526 (15.9)
Ecstasy	226 (8.4)	271 (8.7)	221 (6.7)
Cocaine	162 (6.0)	247 (8.0)	226 (6.8)
Amphetamines	63 (2.3)	59 (1.9)	65 (2.0)
Opiates	44 (1.6)	44 (1.4)	34 (1.0)
Benzodiazepines	29 (1.1)	40 (1.3)	52 (1.6)
Volatile inhalants	5 (0.2)	6 (0.2)	5 (0.2)
Other substances	26 (1.0)	27 (0.9)	23 (0.7)
Not recorded	3 (0.1)	0 (0.0)	0 (0.0)

* By cases reporting use of one, two or three additional substances.

† The percentages shown are the proportions of all problem alcohol users who used each additional problem substance.

The top four additional problem substances (from most common to least common) reported by treated alcohol cases who used more than one substance were the same in 2004 and 2005, namely: cannabis, followed by ecstasy, cocaine and amphetamines (Table 10). In 2006, the additional substances remained the same but their rank order changed to cannabis, cocaine, ecstasy and amphetamines. New cases reported the same pattern of additional substance use over the three-year period.

The pattern of substance use among previously treated cases was similar to that reported by all cases and new cases in that cannabis, ecstasy and cocaine were the top three additional substances used between 2004 and 2006. However, the rank order of these three additional substances was slightly different. In 2004 the top three additional substances reported by previously treated cases were cannabis, ecstasy and cocaine, while in 2005 and 2006 cocaine was ranked second and ecstasy ranked third. Opiates were ranked as the fourth most common additional problem substance among previously treated cases in 2004 and 2006, while benzodiazepines were ranked fourth in 2005.

Though overall numbers are small, it is important to note that the number of cases receiving treatment for both alcohol and cocaine use increased by 40% over the three-year period. The most marked increase occurred between 2004 and 2005 when the use of cocaine alongside alcohol increased by 52%. In sharp contrast, between 2005 and 2006, the use of cocaine as an additional substance fell by 8%. The overall trend was very similar among previously treated and new cases. The use of alcohol and cocaine together results in the formation of cocaethylene, which may potentiate the cardiotoxic effects of cocaine alone. The combination of substances may also increase the likelihood of violent thoughts and threats which may in turn lead to an increase in violent behaviours (Pennings *et al.* 2002).

Table 11 Additional problem substances used by new cases living and treated in Ireland, by HSE region of residence, reported to the NDTRS, 2004 to 2006

Additional problem substance(s) used*	Dublin North East	Dublin Mid-Leinster	South	West
	Number (%†)			
New cases	1191	1843	4052	2046
Cannabis	131 (11.0)	230 (12.5)	874 (21.6)	358 (17.5)
Cocaine	70 (5.9)	92 (5.0)	338 (8.3)	135 (6.6)
Ecstasy	52 (4.4)	99 (5.4)	379 (9.4)	188 (9.2)
Opiates	13 (1.1)	44 (2.4)	48 (1.2)	17 (0.8)
Benzodiazepines	7 (0.6)	19 (1.0)	70 (1.7)	25 (1.2)
Amphetamines	5 (0.4)	26 (1.4)	117 (2.9)	39 (1.9)
Volatile inhalants	0 (0.0)	2 (0.1)	3 (0.1)	11 (0.5)
Other substances	8 (0.7)	9 (0.5)	43 (1.1)	16 (0.8)
Not recorded	0 (0.0)	0 (0.0)	3 (0.1)	0 (0.0)

* By new cases reporting use of one, two or three additional substances.

† The percentages shown are the proportions of all problem alcohol users who used each additional problem substance.

The top three additional problem substances reported by new cases were the same in all four HSE regions, namely cannabis, ecstasy and cocaine. In the HSE Dublin Mid-Leinster, South and West regions, the additional problem substances were reported in the afore-mentioned rank order. However, in the HSE Dublin North East Region the rank order was slightly different, with cocaine ranked as the second most common additional problem substance and ecstasy ranked third (Table 11). Opiates were ranked as the fourth most common additional problem substance in both the HSE Dublin North East and the HSE Dublin Mid-Leinster regions.

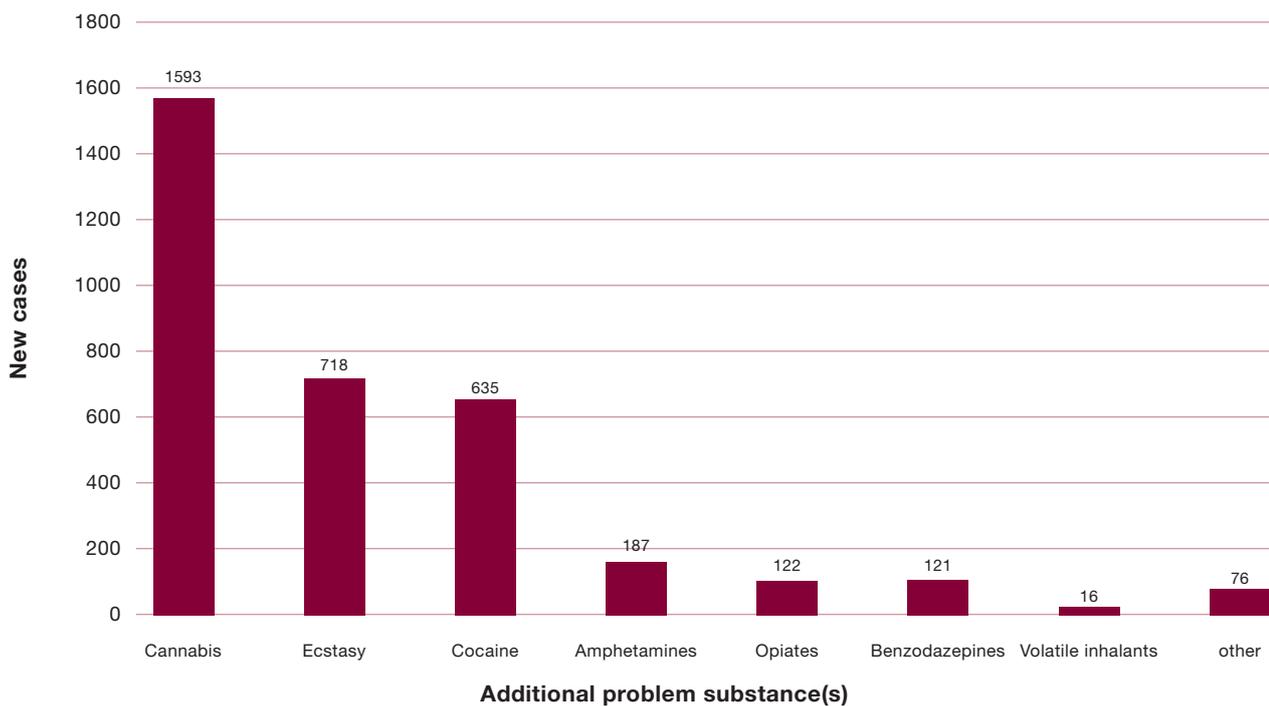


Figure 4 Additional problem substances associated with alcohol as a main problem substance, among new cases living and treated in Ireland and reported to the NDTRS, 2004 to 2006

The association between alcohol and additional problem substances among new cases was examined for the period 2004 to 2006. Information about the combinations of substances used is important in terms of individual clients' care plans. Cannabis, ecstasy and cocaine were the most commonly reported substances used alongside alcohol during this period (Figure 4). This highlights the association between alcohol and other recreational drugs.

Treatment provision

It is well recognised that there is no single treatment modality to address alcohol problems. In practice, there are a number of effective treatments that may be provided in various treatment settings and which meet the needs of different types of problem alcohol users. Cases whose problems are more complex due to severe dependence, psychological morbidity or social disorganisation are likely to need more intensive treatments (Raistrick *et al.* 2006). A broad range of services covering treatment and rehabilitation is provided throughout the country. The NDTRS records the treatment intervention(s) provided when the client is first admitted to a treatment service. Figures 5 and 6 are based on the 5,339 cases who were resident in Ireland and treated for problem alcohol use in 2006.

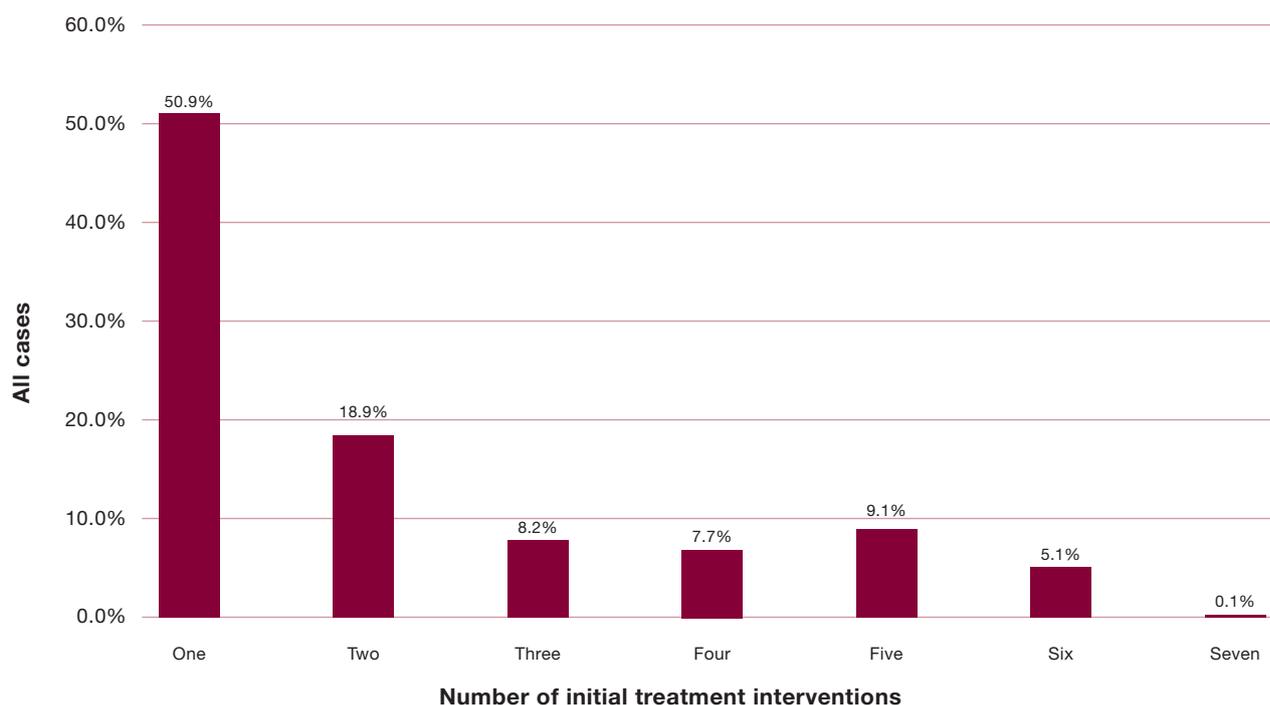


Figure 5 Percentage of cases living and entering treatment in Ireland, by the number of treatment interventions availed of, reported to the NDTRS, 2006

Clients attending treatment may have more than one initial treatment recorded, which means that the number of treatments is greater than the number of cases. As shown in Figure 5, in 2006 just over half of those treated for problem alcohol use had just one treatment intervention recorded. Of the treated cases remaining, almost one-fifth (19%) had two treatment interventions recorded.

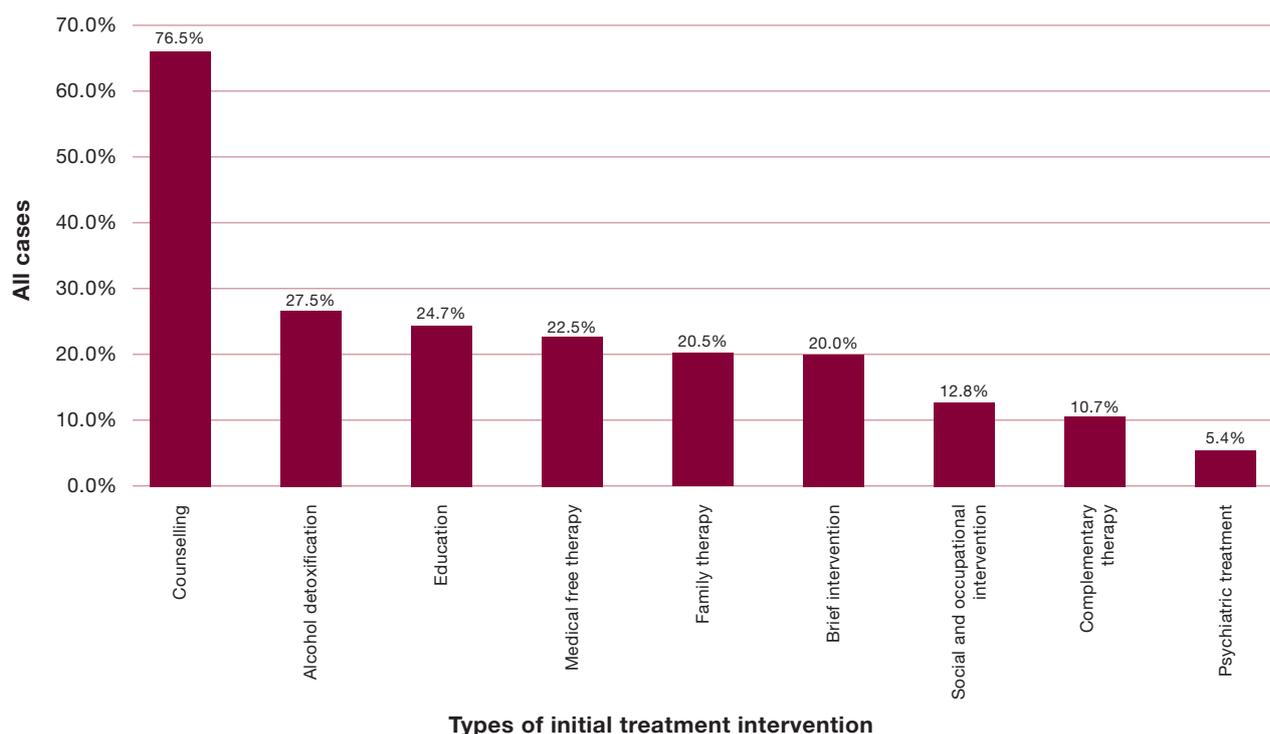


Figure 6 Percentage of cases living and entering treatment in Ireland who availed of each type of initial treatment intervention provided, reported to the NDTRS, 2006

In 2006 counselling was the most common initial treatment intervention provided, with over three-quarters (77%) of all treated cases attending for this intervention (Figure 6). This was followed by alcohol detoxification, which was provided to 28% of cases, and education awareness programmes provided to one-quarter (25%) of cases. Approximately one in five treated cases received medication-free therapy (23%), family therapy (21%) or brief intervention (20%). Social and occupational reintegration (13%), complementary therapy (11%) and psychiatric treatment (5%) were other initial interventions recorded for treated cases in 2006.

Age at which alcohol and other drug use commenced

Table 12 Age at which alcohol and other drug use commenced, among cases living and treated in Ireland, by treatment status, reported to the NDTRS, 2004 to 2006

Age at which substance use commenced	2004	2005	2006
All cases			
Number of responses for age first used any drug (excluding alcohol)	977	1209	1276
Median age (range*) started use of any drug (excluding alcohol), in years	16 (12–28)	16 (12–29)	16 (12–29)
Number of responses for age first used alcohol	3329	3876	4027
Median age (range*) started use of alcohol, in years	16 (12–22)	16 (12–23)	16 (12–23)
Previously treated cases			
Number of responses for age first used any drug (excluding alcohol)	357	417	469
Median age (range*) started use of any drug (excluding alcohol), in years	16 (12–30)	16 (12–30)	16 (12–33)
Number of responses for age first used alcohol	1235	1383	1450
Median age (range*) started use of alcohol, in years	16 (12–23)	16 (12–23)	16 (12–24)
New cases			
Number of responses for age first used any drug (excluding alcohol)	596	780	790
Median age (range*) started use of any drug (excluding alcohol), in years	16 (12–26)	16 (12–28)	16 (12–28)
Number of responses for age first used alcohol	2041	2466	2534
Median age (range*) started use of alcohol, in years	16 (12–22)	16 (12–23)	16 (12–23)

* Age range presented is the 5th to 95th percentile (90% of cases are included within this range).

Between 2004 and 2006, half of all those treated for problem alcohol use had commenced the illicit use of drugs (excluding alcohol and tobacco) by the time they were 16 years old (Table 12). The same proportion also began drinking by the age of 16 years. This was true for both new and previously treated cases.

Table 13 Age at which alcohol and other drug use commenced, among new cases living and treated in Ireland, by HSE region of residence, reported to the NDTRS, 2004 to 2006

Age at which substance use commenced	Dublin North East	Dublin Mid-Leinster	South	West
New cases				
Number of responses for age first used any drug (excluding alcohol)	200	339	1144	483
Median age (range*) started use of any drug (excluding alcohol), in years	15 (11–22)	16 (13–28)	16 (12–26)	16 (12–29)
Number of responses for age first used alcohol	657	1093	3642	1649
Median age (range*) started use of alcohol, in years	16 (12–22)	16 (12–21)	16 (12–23)	16 (12–23)

* Age range presented is the 5th to 95th percentile (90% of cases are included within this range).

Between 2004 and 2006, the median age at which new cases commenced the illicit use of drugs was similar across all four HSE regions (Table 13). In the HSE Dublin North East Region 50% of new cases started illicit use of drugs by age 15, while in the HSE Dublin Mid-Leinster, South and West regions the median age was slightly higher at 16 years. During the reporting period, the median age at which new cases began drinking was 16 in all four HSE regions.

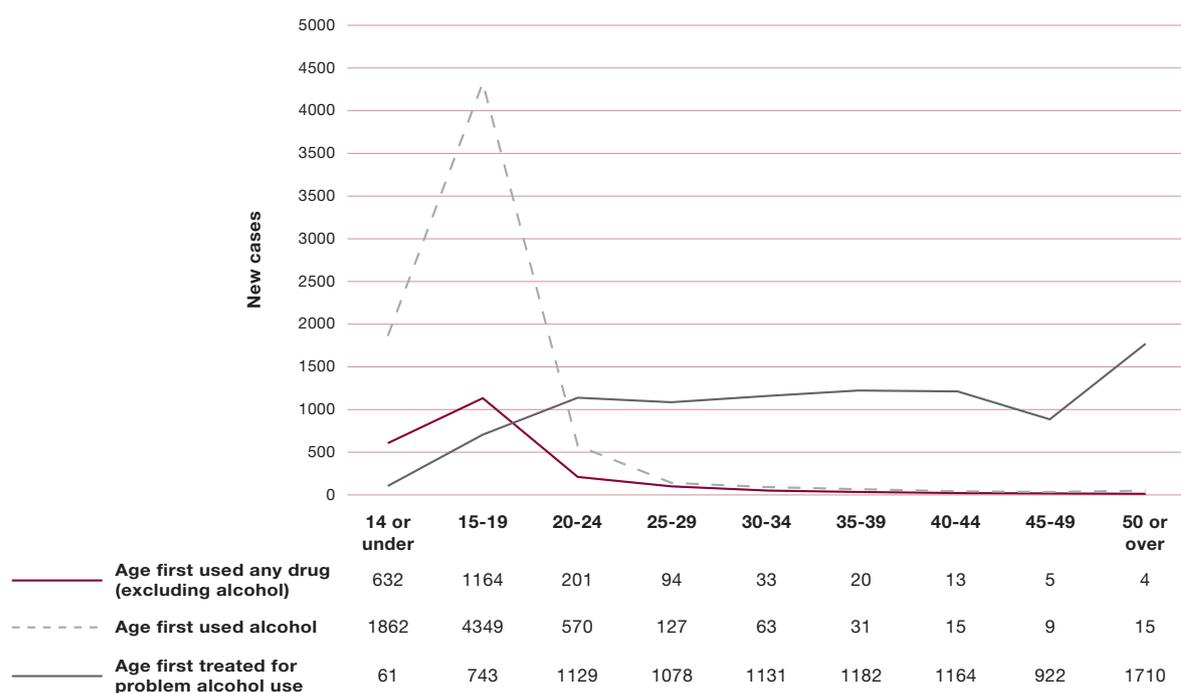


Figure 7 Age at which alcohol and other drug use commenced, and age at entry to treatment for problem alcohol use, among new cases living and treated in Ireland, reported to the NDTRS, 2004 to 2006

Figure 7 presents the age at which new cases living and treated in Ireland in the period 2004 to 2006 commenced use of any drug (excluding alcohol and tobacco), started drinking, and first entered treatment for problem alcohol use. Over half (54%) of those who reported the illicit use of a drug began using when they were aged between 15 and 19 years, while 29% first used a drug when aged 14 years or under.

Over one-quarter (26%, 1,862) of new cases began drinking when aged under 15 years. Twenty-nine per cent of the 2,166 new cases who had ever used a drug (excluding alcohol) did so before they were 15 years old, of which 24% (519) commenced both alcohol and other drug use at under 15 years of age (not shown in Figure 7). This indicates a link between the initiation of alcohol use and other drug use, and highlights the importance of delaying the initiation to drinking among young people. The easy access to and availability of alcohol and other drugs among young people should be minimised. As would be expected, a large proportion of new cases (62%, 4,349) reported that they started drinking when aged between 15 and 19 years, and the majority (96%, 6,781) had started drinking by the age of 24 years.

The interval between first consuming alcohol and seeking treatment for problem alcohol use varied considerably among new cases. The stage in life at which new cases first entered treatment for problem alcohol use also varied considerably over the three-year period. Nine per cent of new cases entered their first treatment when aged 19 years or younger. Just under three-quarters (72%) first attended treatment between the ages of 20 and 49 years and almost one-fifth (19%) commenced treatment when aged 50 years or older. Of those aged between 20 and 49 years, 35% were aged between 30 and 39 years, one third (33%) were aged between 20 and 29 years and 32% were aged between 40 and 49 years.

Socio-demographic characteristics

Table 14 Socio-demographic characteristics of cases living and treated in Ireland, by treatment status, reported to the NDTRS, 2004 to 2006

Characteristics	2004	2005	2006
All cases*	4714	5070	5339
Median age (range [†]) in years	38 (18–60)	38 (19–61)	39 (19–62)
Number (%) under 18 years of age	168 (3.6)	132 (2.6)	160 (3.0)
Number (%) of males	3236 (68.6)	3483 (68.7)	3610 (67.6)
Number (%) living with parents/family	1422 (30.2)	1492 (29.4)	1496 (28.0)
Number (%) homeless	165 (3.5)	217 (4.3)	188 (3.5)
Number (%) Irish	4527 (96.0)	4844 (95.5)	5047 (94.5)
Number (%) left school early (aged 14 years or under)	672 (14.3)	791 (15.6)	778 (14.6)
Number (%) employed (aged 16–64 years)	1849 (40.6)	1909 (39.1)	2000 (39.1)
Previously treated cases*	1876	1910	1941
Median age (range [†]) in years	42 (21–61)	41 (22–63)	42 (21–63)
Number (%) under 18 years of age	27 (1.4)	19 (1.0)	16 (0.8)
Number (%) of males	1292 (68.9)	1319 (69.1)	1349 (69.5)
Number (%) living with parents/family	445 (23.7)	439 (23.0)	438 (22.6)
Number (%) homeless	85 (4.5)	132 (6.9)	105 (5.4)
Number (%) Irish	1809 (96.4)	1812 (94.9)	1845 (95.1)
Number (%) left school early (aged 14 years or under)	278 (14.8)	307 (16.1)	327 (16.8)
Number (%) employed (aged 16–64 years)	634 (34.8)	613 (33.3)	591 (31.8)
New cases*	2706	3108	3318
Median age (range [†]) in years	35 (17–59)	36 (18–60)	37 (18–61)
Number (%) under 18 years of age	138 (5.1)	109 (3.5)	143 (4.3)
Number (%) of males	1853 (68.5)	2125 (68.4)	2206 (66.5)
Number (%) living with parents/family	950 (35.1)	1035 (33.3)	1038 (31.3)
Number (%) homeless	67 (2.5)	85 (2.7)	80 (2.4)
Number (%) Irish	2591 (95.8)	2982 (95.9)	3132 (94.4)
Number (%) left school early (aged 14 years or under)	378 (14.0)	479 (15.4)	440 (13.3)
Number (%) employed (aged 16–64 years)	1179 (45.3)	1278 (42.6)	1383 (43.5)
Treatment status unknown	132	52	80

* It is not possible to ascertain the percentage with each characteristic of interest from the total number because complete data were not reported in all cases.

[†] Age range presented is the 5th to 95th percentile (90% of cases are included within this range).

Table 14 presents the socio-demographic characteristics of treated alcohol cases from 2004 to 2006. The median age of all cases treated increased by one year between 2004 and 2006 (from 38 to 39 years). As would be expected, new cases were younger than their previously treated counterparts. The median age of previously treated cases ranged between 41 and 42 years over the period. The median age of new cases treated was five to seven years younger and increased by two years (from 35 to 37 years) between 2004 and 2006. While the proportion of all treated cases aged under 18 years was small (3%), a higher proportion of new cases (4%) than previously treated cases (1%) were in this young age group. The average proportions of previously treated and new male cases remained relatively stable over the period and were broadly similar, at 69% and 68% respectively.

It is difficult to ascertain whether long-standing alcohol problems lead to social disadvantage or whether failure to secure or retain employment and accommodation leads to a greater likelihood of developing chronic alcohol problems. One-third of new cases lived with their parents or family members over the three-year period, while less than a quarter (23%) of previously treated cases had similar living arrangements. Four per cent of all treated cases between 2004 and 2006 were homeless. The proportion was similar among new cases (3%) but increased to 6% among previously treated cases. While the majority of alcohol cases treated between 2004 and 2006 were Irish (95%), the proportions of treated cases of other nationalities reported to the NDTRS increased marginally each year.

The findings in relation to early school leaving and employment among treated alcohol cases during the period under review were consistent with those for the South Eastern and Southern health board areas between 2000 and 2002 as reported in Occasional Paper 10 (Long *et al.* 2004). The number of cases who reported leaving school early was slightly higher among previously treated cases (16%) than among new cases (14%). This may indicate that those with fewer prospects are more likely to develop chronic problem alcohol use than their more privileged counterparts. Employment levels among treated alcohol cases aged 16 to 64 years were considerably lower than those in the general population (68% in 2006, CSO 2007): for example, 44% of new cases were employed and 33% of previously treated cases were employed. The fact that a higher proportion of new cases than previously treated cases were employed at the time they sought treatment suggests that prolonged problem alcohol use may lead to loss of employment or, alternatively, that the factors (low self-esteem and inadequate problem-solving skills) associated with failed treatment (or chronic addiction) are similar to those associated with failure to secure or retain employment.

Table 15 Socio-demographic characteristics of new cases living and treated in Ireland, by HSE region of residence, reported to the NDTRS, 2004 to 2006

Characteristics	Dublin North East	Dublin Mid-Leinster	South	West
New cases*	1191	1843	4052	2046
Median age (range [†]) in years	37 (18-61)	37 (18-59)	36 (18-60)	36 (17-61)
Number (%) under 18 years of age	46 (3.9)	67 (3.6)	152 (3.8)	125 (6.1)
Number (%) of males	801 (67.3)	1237 (67.1)	2792 (68.9)	1354 (66.2)
Number (%) living with parents/family	398 (33.4)	614 (33.3)	1332 (32.9)	679 (33.2)
Number (%) homeless	29 (2.4)	33 (1.8)	115 (2.8)	55 (2.7)
Number (%) Irish	1155 (97.0)	1790 (97.1)	3865 (95.4)	1895 (92.6)
Number (%) left school aged 14 or under	117 (9.8)	207 (11.2)	665 (16.4)	308 (15.1)
Number (%) employed (aged 16–64 years)	539 (47.1)	857 (48.1)	1650 (42.2)	794 (40.8)

* It is not possible to ascertain the percentage with each characteristic of interest from the total number because not all forms had complete data.

† Age range presented is the 5th to 95th percentile (90% of cases are included within this range).

The socio-demographic characteristics of new cases treated were examined by HSE region of residence for the period 2004 to 2006 (Table 15). The median age of new cases was broadly similar across all four HSE regions, ranging between 36 and 37 years. A slightly higher proportion of new cases were under 18 years of age in the HSE West Region (6%) than in the other three regions (4%). Of new cases living in the HSE South Region, 69% were male; of those in the HSE Dublin North East and Dublin Mid-Leinster regions, 67% were male; and of those in the HSE West Region, 66% were male.

One-third of new cases in each region lived with their parents or family members, while between 2% and 3% were homeless. Although the majority of new cases in all four HSE regions were Irish, the proportions of other nationalities were somewhat higher in the HSE West (7%) and South (5%) regions. The proportions of new cases who left school early were greatest in the HSE South (16%) and West (15%) regions. The proportions of new cases aged between 16 and 64 years and in employment were highest in the HSE Dublin Mid-Leinster (48%) and Dublin North East (47%) regions.

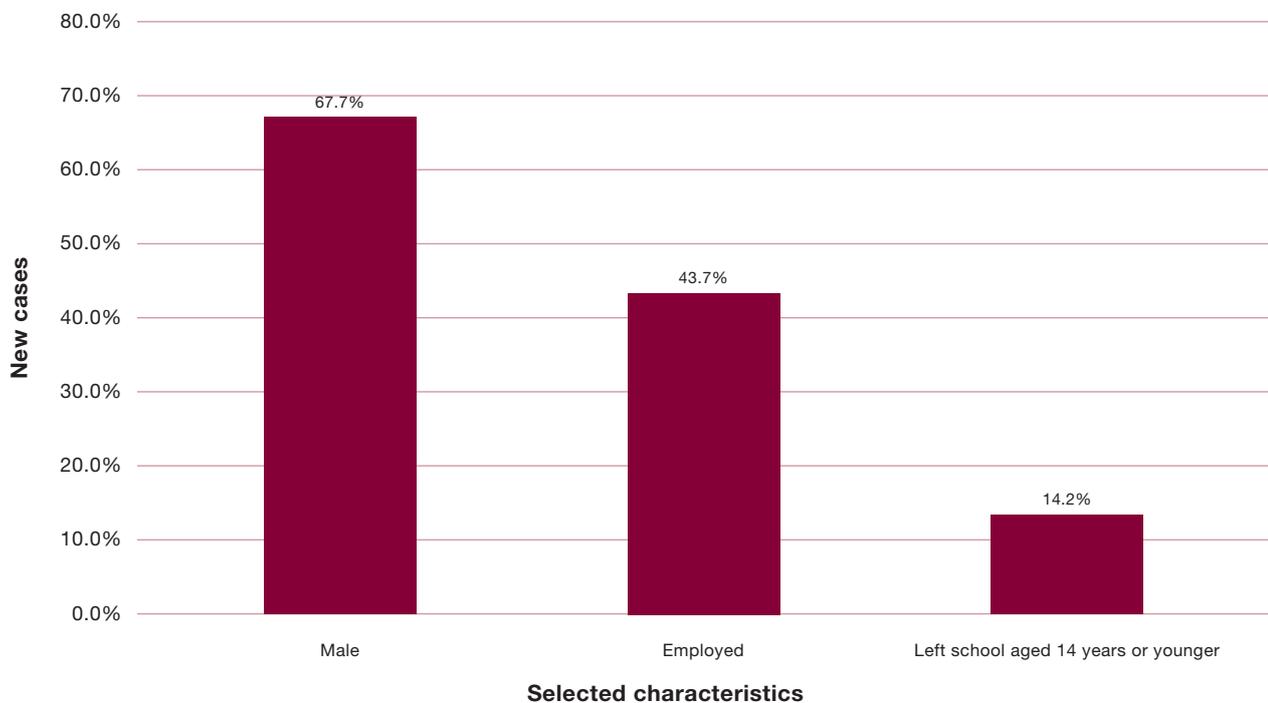


Figure 8 Characteristics of new cases living and treated in Ireland, reported to the NDTRS, 2004 to 2006

Figure 8 highlights some of the key characteristics of new cases treated for problem alcohol use between 2004 and 2006. Although the proportion of new male cases (68%) was higher than the proportion of new female cases (32%), NDTRS data show that the gender difference pertaining to the use of alcohol is not as striking as that pertaining to the use of other substances (particularly illicit drugs). While the rate of employment of new treated alcohol cases (44%) is lower than that in the general population (68% in 2006, CSO 2007), it is relatively high compared to NDTRS data for new cases using other substances.

Relationship between alcohol and selected characteristics

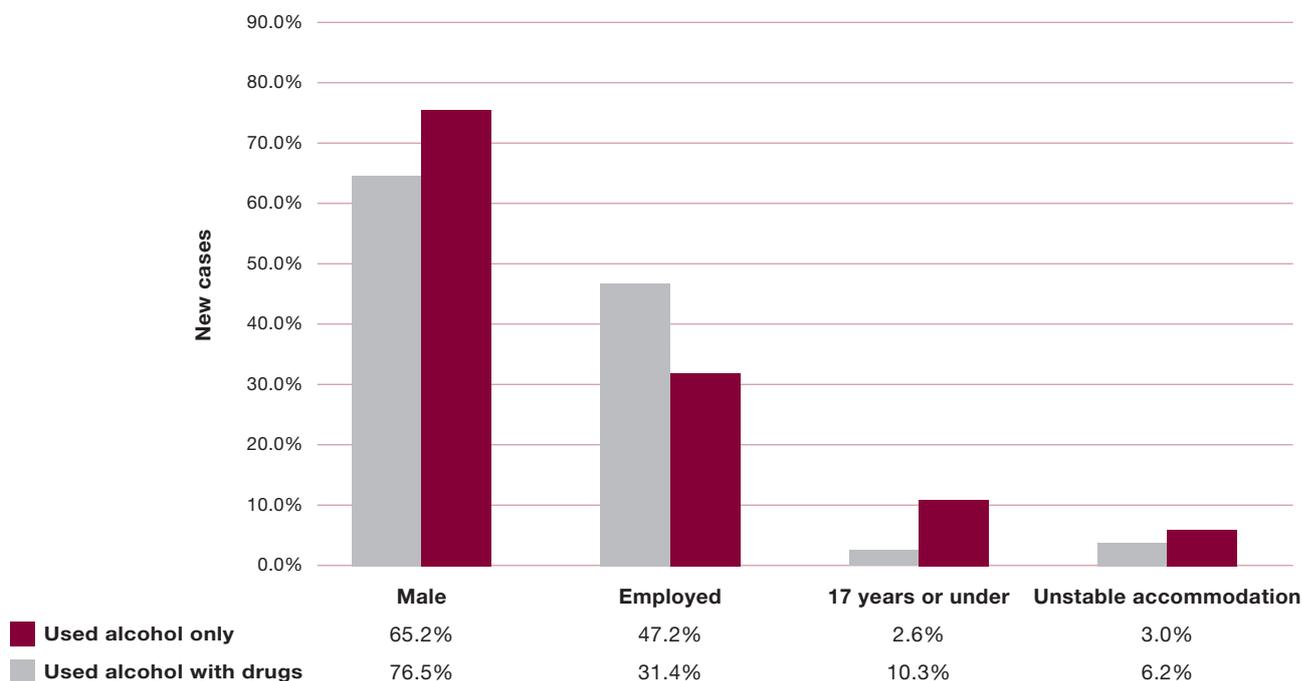


Figure 9 Characteristics of new cases living and treated in Ireland, reported to the NDTRS, by alcohol and other drug use status, 2004 to 2006

While the majority (79%) of alcohol cases treated between 2004 and 2006 reported problem use of alcohol only, the remaining 21% reported use of more than one substance (polysubstance use). Figure 9 presents social and demographic characteristics of new cases who used alcohol only, compared to those who used alcohol and other drugs. The proportions of males and young substance users who reported problems with alcohol combined with other drugs were higher than the proportions who reported problems with alcohol only. A lower proportion of polysubstance users than alcohol-only users were employed and a higher proportion lived in unstable accommodation.

Polysubstance use increases the complexity of such cases, and is associated with poorer treatment outcomes (Stimmel 2002). The long-term consequences of problem alcohol use seem to be associated with social exclusion. Such negative outcomes are more common among polysubstance users than among those who use alcohol only. In order to address deficiencies in education, training and accommodation, the treatment and rehabilitation of chronic alcohol users needs to be enhanced through the provision of social reintegration interventions.

Conclusions

The value of detailed information about cases treated for problem alcohol use is that it allows health care managers to understand the extent of the problem, the personal and substance-using characteristics of those seeking treatment, and trends in treatment seeking over time. The data presented here will enable planners to rank problem alcohol use alongside other public-health priorities in the population and to allocate appropriate resources to its treatment.

There is a clear need for complete and accurate data on those entering treatment for problem alcohol use, and enhanced support from managers and service providers is required to achieve this goal. This requires the continued expansion of the NDTRS to ensure that all alcohol treatment services are participating in the reporting system and recording the information accurately. There is also a need to develop an approach to determine the immediate outcomes for those treated for problem alcohol use. A unique identifier is required to accurately calculate the number of individuals who require treatment for problem alcohol use, **record** their immediate treatment outcomes and follow their progress through different treatment settings.

The rise in polysubstance use presents a challenge to drug treatment and monitoring systems that have traditionally focused on the use of individual substances. While there are no official links between alcohol and drug treatment services in Ireland, in practice, many drug services also treat clients with problem alcohol use. There appears to be a growing consensus that responses to problem alcohol and illicit drug use should be integrated. The data presented in this paper indicate that there is a definite overlap between problem alcohol and other drug use, and highlight the need for an integrated approach to the management of substance misuse in this country.

It is important that accurate data on those being treated for problem alcohol use who also have psychiatric co-morbidity is recorded and made available. This will be possible with the implementation of the community-based mental health information system, WISDOM (formerly NPIRS and COMCAR).

The data presented in this paper indicate that alcohol and drug-use initiation are linked. This highlights the need to delay the initiation to drinking among young people. The easy access to and availability of alcohol and drugs among young people should be minimised.

References

- Central Statistics Office (2007 April) *Measuring Ireland's progress, 2006*. Dublin: Stationery Office.
- Central Statistics Office (2002 and 2006) Tables index. Available online at http://www.cso.ie/census/interactive_tables.htm
- Daly A, Walsh D, Ward M and Moran R (2006) *Activities of Irish psychiatric units and hospitals 2005*. Dublin: Health Research Board.
- Department of Tourism, Sport and Recreation (2001) *Building on experience: National Drugs Strategy 2001–2008*. Dublin: 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 Pempidou Group (2000) *Treatment demand indicator: standard protocol 2.0*. Lisbon: European Monitoring Centre for Drugs and Drug Addiction.
- Expert Group on Mental Health Policy (2006) *A vision for change*. Dublin: Stationery Office.
- Hartnoll R (1994) *Drug treatment reporting systems and the first treatment demand indicator: definitive protocol*. Strasbourg: Council of Europe, Pempidou Group.
- Kidd M (2001) *Data co-ordination overview of drug misuse 2000*. Waterford: South Eastern Health Board.
- Kidd M (2002) *Data co-ordination overview of drug misuse 2001*. Waterford: South Eastern Health Board.
- Kidd M (2003) *Data co-ordination overview of drug misuse 2002*. Waterford: South Eastern Health Board.
- Kidd M (2004) *Data co-ordination overview of drug misuse 2003*. Waterford: South Eastern Health Board.
- Kidd M (2005) *Data co-ordination overview of drug misuse 2004*. Kilkenny: HSE South Eastern Area.

- Kidd M (2006) *Data co-ordination overview of drug misuse 2005*. Kilkenny: HSE South.
- Kidd M (2007) *Data co-ordination overview of drug misuse 2006*. Kilkenny: HSE South.
- Long J, Jackson T, Kidd M, Kelleher T and Sinclair H (2004) *Treatment demand for problem alcohol use in the South Eastern and Southern Health Board areas, 2000 to 2002*. Occasional Paper 10. Dublin: HRB.
- Long J, Kelleher T, Kelly F and Sinclair H (2004) *Trends in treated problem drug use in the seven health board areas outside the Eastern Regional Health Authority, 1998 to 2002*. Occasional Paper 12. Dublin: HRB.
- Minister for Health and Children (1998) *Statutory Instrument No 225 of 1998: Misuse of Drugs Regulations*. Dublin: Stationery Office.
- Ministerial Task Force (1996) *First report of the ministerial task force on measures to reduce the demand for drugs*. Dublin: Stationery Office.
- Mongan D, Reynolds S, Fanagan S and Long J (2007) *Health-related consequences of problem alcohol use*. Overview 6. Dublin: HRB.
- O’Gorman A and Corrigan D (2008) Report of the HSE Working Group on residential treatment and rehabilitation. Unpublished.
- Pennings EJM, Leccese AP and de Wolff FA (2002) *Effects of concurrent use of alcohol and cocaine*. *Addiction*, 97: 773–783.
- Raistrick D, Heather N and Godfrey C (2006) *Review of the effectiveness of treatment for alcohol problems*. London: National Treatment Agency for Substance Misuse.
- Stimmel B (2002) *Alcoholism, drug addiction and the road to recovery*. New York: Haworth Medical Press.
- Working group on treatment of under 18 year olds (2005) *Report of the working group on treatment of under 18 year olds presenting to treatment services with serious drug problems*. Dublin: Health Service Executive.

About the HRB

The Health Research Board (HRB) is the lead agency supporting and funding health research in Ireland. We also have a core role in maintaining health information systems and conducting research linked to national health priorities. Our aim is to improve people’s health, build health research capacity, underpin developments in service delivery and make a significant contribution to Ireland’s knowledge economy.

Our information systems

The HRB is responsible for managing five national information systems. These systems ensure that valid and reliable data are available for analysis, dissemination and service planning. Data from these systems are used to inform policy and practice in the areas of alcohol and drug use, disability and mental health.

Our research activity

The main subjects of HRB in-house research are alcohol and drug use, child health, disability and mental health. The research that we do provides evidence for changes in the approach to service delivery. It also identifies additional resources required to support people who need services for problem alcohol and drug use, mental health conditions and intellectual, physical and sensory disabilities.

The Alcohol and Drug Research Unit is a multi-disciplinary team of researchers and information specialists who provide objective, reliable and comparable information on the drug situation, its consequences and responses in Ireland. The ADRU maintains two national drug-related information systems and is the Irish national focal point for the European Monitoring Centre for Drugs and Drug Addiction (EMCDDA). The unit also manages the National Documentation Centre on Drug Use. Through its activities, the ADRU aims to inform policy and practice in relation to problem alcohol and drug use.

The HRB Trends Series monitors changing patterns and emerging trends in problem alcohol and drug use, child health, disability and mental health by analysing data over time.

The HRB Trends Series continues and expands the scope of the HRB Occasional Papers, published in 17 issues between 2002 and 2005, as follows:

- O'Brien M, Kelleher T and Cahill P (2002) *Trends in treated drug misuse in the Southern Health Board Area 1996–2000*. Occasional Paper No. 1. Dublin: HRB.
- O'Brien M, Kelleher T and Cahill P (2002) *Trends in treated drug misuse in the North Western Health Board Area 1996–2000*. Occasional Paper No. 2. Dublin: HRB.
- O'Brien M, Kelleher T and Cahill P (2002) *Trends in treated drug misuse in the Midland Health Board Area 1996–2000*. Occasional Paper No. 3. Dublin: HRB.
- O'Brien M, Kelleher T and Cahill P (2002) *Trends in treated drug misuse in the Western Health Board Area 1996–2000*. Occasional Paper No. 4. Dublin: HRB.
- O'Brien M, Kelleher T and Cahill P (2002) *Trends in treated drug misuse in the Mid Western Health Board Area 1996–2000*. Occasional Paper No. 5. Dublin: HRB.
- O'Brien M, Kelleher T and Cahill P (2002) *Trends in treated drug misuse in the North Eastern Health Board Area 1996–2000*. Occasional Paper No. 6. Dublin: HRB.
- O'Brien M, Kelleher T and Cahill P (2002) *Trends in treated drug misuse in the South Eastern Health Board Area 1996–2000*. Occasional Paper No. 7. Dublin: HRB.
- O'Brien M, Kelleher T and Cahill P (2002) *Trends in treated drug misuse in the Eastern Health Board Area 1996–2000*. Occasional Paper No. 8. Dublin: HRB.
- O'Brien M, Kelleher T, Cahill P, Kelly F and Long J (2003) *Trends in treated drug misuse in the Republic of Ireland, 1996 to 2000*. Occasional Paper No. 9. Dublin: HRB.
- Long J, Jackson T, Kidd M, Kelleher T and Sinclair H (2004) *Treatment demand for problem alcohol use in the South Eastern and Southern Health Board areas, 2000 to 2002*. Occasional Paper No. 10. Dublin: HRB.
- Long J, Kelleher T, Kelly F and Sinclair H (2004) *Treatment demand in the seven health board areas outside the Eastern Regional Health Authority, 1998 to 2002*. Occasional Paper No. 11. Dublin: HRB.
- Long J, Kelleher T, Kelly F and Sinclair H (2004) *Trends in treated problem drug use in the seven health board areas outside the Eastern Regional Health Authority, 1998 to 2002*. Occasional Paper No. 12. Dublin: HRB.
- Long J, Kelleher T, Kelly F and Sinclair H (2004) *Trends in treated problem opiate use in the seven health board areas outside the Eastern Regional Health Authority, 1998 to 2002*. Occasional Paper No. 13. Dublin: HRB.
- Kelleher T, Long J, Kelly F and Sinclair H (2004) *Trends in treated problem cannabis use in the seven health board areas outside the Eastern Regional Health Authority, 1998 to 2002*. Occasional Paper No. 14. Dublin: HRB.
- Kelly F, Lynn E and Long J (2005) *Treatment demand in the Health Service Executive Eastern Region,, 1998 to 2002*. Occasional Paper No. 15. Dublin: HRB.
- Kelly F, Long J and Lynn E (2005) *Trends in treated problem drug use in the Health Service Executive Eastern Region, 1998 to 2002*. Occasional Paper No. 16. Dublin: HRB.
- Long J, Lynn E and Kelly F (2005) *Trends in treated problem drug use in Ireland, 1998 to 2002*. Occasional Paper No. 17. Dublin: HRB.

Recent publications in the HRB Overview Series

Connolly J (2006) *Drugs and crime in Ireland*. Overview 3. Dublin: HRB

Long J (2006) *Blood-borne viral infections among injecting drug users in Ireland, 1995 to 2005*. Overview 4. Dublin: HRB.

Keane M (2007) *Social reintegration as a response to drug use in Ireland*. Overview 5. Dublin: HRB.

Mongan D, Reynolds S, Fanagan S and Long J (2007) *Health-related consequences of problem alcohol use*. Overview 6. Dublin: HRB.

Recent publications in the HRB Research Series

Ward M, Tedstone Doherty D and Moran R (2007) *It's good to talk: distress disclosure and psychological wellbeing*. Research Series 1. Dublin: HRB.

Tedstone Doherty D, Moran R, Kartalova-O'Doherty Y and Walsh D (2007) *HRB National psychological wellbeing and distress survey: baseline results*. Research Series 2. Dublin: HRB.

Daly A, Tedstone Doherty D and Walsh D (2007) *Re-admissions to Irish psychiatric units and hospitals 2001–2005*. Research Series 3. Dublin: HRB.

Recent publications in the HRB Statistics Series

Tedstone Doherty D, Walsh D, Moran R and Bannon F (2007) *High support community residences census 2006*. Statistics Series 1. Dublin: HRB.

Kelly F, Kelly C and Craig S (2007) *Annual report of the National Intellectual Disability Database Committee 2007*. Statistics Series 2. Dublin: HRB.

O'Donovan, MA, Doyle A and Craig S (2007) *National Physical and Sensory Disability Database Committee annual report 2007*. Statistics Series 3. Dublin: HRB.

Acknowledgements

The authors would like to express sincere thanks to all those who contribute to the work of the ADRU, in particular, Delphine Bellerose, Vivion McGuire and Katie Moore. Without the ongoing support of staff at alcohol and 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 Dr Anne Hope and Professor Joe Barry for their helpful comments on earlier drafts of this paper. We would also like to thank Joan Moore for editing the work.