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Trends in treated problem cocaine use in Ireland, 2002 to 2007

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National Drug Treatment Reporting System

Contents

Summary

The data presented in this paper describe trends in treated problem cocaine use in Ireland between 2002 and 2007. The paper describes treated problem cocaine use in relation to person, place and time. The analysis presented is based on data reported to the National Drug Treatment Reporting System (NDTRS). It is important to note that the NDTRS collects data on episodes of treatment in a calendar year, rather than on the individual person treated. This means that individuals may appear in the figures more than once if they receive treatment at more than one centre or at the same centre more than once per year.

The main findings and their implications are:

One-fifth (10,764) of all cases treated for problem drug use between 2002 and 2007 reported cocaine as a problem substance. The annual number of cocaine cases increased by 177%, from 954 in 2002 to 2,643 in 2007. This increase was in line with increases in cocaine seizures, in cocaine use among the general population and in cocaine-related deaths during the same time period.

The number of cases who reported **cocaine as their main problem substance** increased by 502%, from 128 in 2002 to 770 in 2007. The number of cases who reported **cocaine as an additional problem substance** increased by 128%, from 826 in 2002 to 1,885 in 2007.

The prevalence and incidence of treated problem cocaine use reported in this paper are based on the numbers reporting cocaine as their main problem substance. The **prevalence** of treated problem cocaine use among 15–64-year-olds living in Ireland increased from nine per 100,000 in 2002 to 25 per 100,000 in 2007. This indicates that problem cocaine use is a recurring addiction that requires repeated episodes of treatment over time. The **incidence** of treated problem cocaine use among 15–64-year-olds living in Ireland increased steadily from five per 100,000 in 2002 to 15 in 2007. Increasing numbers of new cocaine cases entering treatment is an indicator of recent trends in problem cocaine use in the population. The increase in the number of cocaine cases recorded can be explained by a combination of factors: an increase in the number of treatment places, an increase in cocaine use among the population and an increase in reporting to the NDTRS.

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The average annual incidence of treated problem cocaine use for the period 2002–2007 was highest in Wexford, Louth, Waterford and Carlow (with over 15 cases per 100,000 of the 15–64-year-old population), followed by Cork, Cavan, Limerick, Kildare and Meath (with between 10 and 13 cases per 100,000). The incidence was lowest in counties located mainly in the west and north-west of the country (with between 2 and 4 cases per 100,000). The incidence was lower than expected in Dublin due to the fact than many problem cocaine users in Dublin also used opiates; in such cases the opiate is recorded as the main problem substance and cocaine as an additional problem substance.

While the majority of cocaine cases each year were treated in outpatient services, the number and proportion treated in inpatient services increased gradually over the period. In 2007, 69% of cases were treated as outpatients and 28% as inpatients. Of the 770 cases entering treatment in 2007 who reported cocaine as their main problem substance, 84% received counselling, 43% a brief intervention, 31% complementary therapy and 27% a medication-free therapy. Almost 60% of cases received more than one initial treatment intervention. It is widely recognised that no single intervention will effectively treat problem cocaine use.

Of the 10,764 reported cases in the years 2002 to 2007, almost three-fifths (59%, 6,352) did not specify the type of cocaine used. Of the 4,516 cases who did do so, 3,977 (88%) used powder cocaine and 539 (12%) used crack cocaine. One hundred and four of these cases reported use of both forms of cocaine, of whom 34 reported one form as their main problem substance and another form as an additional problem substance, and 70 reported both forms of cocaine as additional problem substances.

More than four out of five cases who reported cocaine as their main problem substance used more than one drug, although the proportion of such cases decreased from 92% in 2002 to 79% in 2007. It is generally accepted that polysubstance use increases the complexity of these cases and is associated with poorer treatment outcomes. Cannabis (58%), alcohol (56%) and ecstasy (32%) were the most common additional problem substances reported by cases entering treatment in 2007 who reported cocaine as their main problem substance. The main problem substances associated with cocaine as an additional problem substance were opiates (51%) and, to a lesser extent, alcohol (29%) and cannabis (15%). There appeared to be two patterns of cocaine use among those entering treatment: use of opiates alongside cocaine and use of combinations of alcohol, cannabis and ecstasy alongside cocaine. The use of alcohol and cocaine together leads to the formation of a third drug, cocaethylene, which is a more stable compound than the normal by-product of cocaine and is effective for longer in the body. There is evidence to show that cocaethylene increases the incidence and intensity of the cardiovascular and behavioural side effects of cocaine.

Of the 770 cases treated in 2007 who reported cocaine as their main problem substance, 81% snorted it, 13% smoked it, and 4% injected it. Most of the injectors were current or former opiate injectors. Cocaine powder is usually snorted, while crack cocaine is usually smoked; both forms of cocaine can be injected. As is the case with injecting, snorting cocaine poses a risk for the transmission of blood-borne viruses as there is a risk of bleeding and sharing equipment while using the drug.

Of the 770 cases treated in 2007 who reported cocaine as their main problem substance, 13% used it daily, 44% used it on two to six days per week, 11% used it once per week or less and 30% had not used it in the month prior to entering treatment. The fact that the majority of cases reported using cocaine on two to six days per week indicates that cocaine may be used as a week-end drug or as part of a binge.

The median age of previously treated cases who reported cocaine as their main problem substance decreased from 28 to 27 years between 2002 and 2007. In the same period, less than 2% of previously treated cases were aged under 18 years. Five per cent of new cases in 2007 were aged under 18 years, a notable increase on previous years. This may be due to the increase in adolescent treatment services in 2007. In the six-year period, 83% of all cases entering treatment were male and one-third were employed.

Glossary

- **Powder cocaine**, or cocaine hydrochloride, is the most commonly used form of cocaine. It is a white crystalline powder which can be snorted through the nose or which, when dissolved in water, can be injected.
- **Crack cocaine** is a smokeable form of cocaine obtained by heating ordinary cocaine powder in a solution of baking soda until the water evaporates and crystals are formed. Crack cocaine vaporises at a low temperature so it can be easily inhaled via a heated pipe.
- 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 in this case because the mean is influenced by the one older person in this example.
- **Incidence** is the number of new cases of disease or events that develop among a population during a specified time interval. As an example, in 2007, in a county with a population of 31,182, 10 opiate users sought treatment for the first time in 2007. The incidence is the number of new cases treated divided by the county population, expressed per given number of the population, i.e., per 100, per 1,000, per 10,000, per 100,000 etc.

  The rate in this example may be calculated as follows: (10/31,182) x 100,000, which gives an incidence rate of 32 per 100,000 of the county population in 2007.

- **Prevalence** is the proportion of people in a population who have a disease or condition at a specific point or period in time. As an example, in 2007, in a county with a population of 31,182, 10 opiate users sought treatment for the first time, 20 returned to treatment and five continued in treatment from the previous year, giving a total of 35 people treated for problem opiate use in the year. The prevalence is the total number of cases divided by the county population, expressed per given number of the population, i.e., per 100, per 1,000, per 10,000, per 100,000 etc.

  The rate in this example may be calculated as follows: (35/31,182) x 100,000, which gives a prevalence rate of 112 per 100,000 of the county population in 2007.

- **Epidemic** disease levels exist when there is an excess number of new cases among a specific population for that point and place in time. An epidemic can also be called an outbreak. An excess number of cases is defined as a number greater than two standard deviations above the norm expected for that point in time.
- **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 area 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
	North Central Dublin	Cavan/Monaghan	Meath
HSE Dublin Mid-Leinster	Dublin South	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	Limerick
	Sligo/Leitrim/West Cavan	Roscommon	Clare
	Galway	Tipperary North/East Limerick	

– The data in this paper relating to the average annual incidence of treated problem substance 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 their 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 (now HSE regions): 'All treatment providers should co-operate in returning information on problem drug use to the Drug Misuse Research Division [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, 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 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 drug and alcohol misuse 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 continue to co-ordinate 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 more recent years, NDTRS data have been 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 (Corrigan and O'Gorman 2007). The Comptroller and Auditor General (2009) used data from the reporting system in a special report which examined treatment and rehabilitation services provided for people with drug addictions.

The National Advisory Committee on Drugs (NACD) and the Department of Health, Social Services and Public Safety (Northern Ireland) published jointly the results of two successive all-Ireland general population drug prevalence surveys which provide another view of cocaine use in Ireland (NACD and DAIRU 2006, 2008). The 2006/7 survey found that cocaine use had increased overall compared to the 2002/3 survey (Table 1). The proportion of adults who reported using cocaine (including crack) at some point in their lives increased from 3% in 2002/3 to 5% in 2006/7. The proportion of young adults who reported using cocaine in their lifetime also increased, from 5% in 2002/3 to 8% in 2006/7. As expected, more men (7%) than women (3.5%) reported using cocaine in their lifetime. The proportion of adults who reported using cocaine in the last year increased from 1% in 2002/3 to 2% in 2006/7 (Table 1). The proportion of young adults who reported using cocaine in the last year increased from 2% in 2002/3 to 3% in 2006/7.

Table 1 Prevalence of cocaine use (including crack) among the general population in Ireland, 2002/3 and 2006/7

	Adults 15–64 years %		Males 15–64 years %		Females 15–64 years %		Young adults 15–34 years %	
	2002/3	2006/7	2002/3	2006/7	2002/3	2006/7	2002/3	2006/7
Lifetime (ever used)	3.0	5.3	4.3	7.0	1.6	3.5	4.7	8.2
Last year (recent use)	1.1	1.7	1.7	2.3	0.5	1.0	2.0	3.1
Last month (current use)	0.3	0.5	0.7	0.8	0.0	0.2	0.7	1.0

Source: National Advisory Committee on Drugs and Drug and Alcohol Information and Research Unit (2006, 2008)

According to data from the National Drug-Related Deaths Index, the number of poisoning deaths in which cocaine was implicated, alone or with another drug, increased steadily from five in 1998 to 34 in 2005 (Lyons *et al.* 2008). In that eight-year period, cocaine was involved in 100 deaths by poisoning, accounting for 6.4% of the total number of poisonings. Of these 100 deaths, 29 were due to cocaine alone. Heroin and/or methadone were often associated with cocaine in cases of polysubstance poisoning.

The number of cocaine seizures increased steadily, from 566 in 2003 to 1,749 in 2007 (CSO 2009).

Methods

Treatment for problem cocaine use in Ireland is provided by statutory and non-statutory services, including residential centres, community-based addiction services, general practices and prison services.

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. Clients who attend needle-exchange services are not included in this reporting system. Cocaine treatment options include one or more of the following: medication (psychiatric treatment), brief intervention, counselling (including cognitive behavioural therapy), medication–free therapy, family therapy, complementary therapy, and/or life-skills training.

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 substance use. Service providers at treatment centres throughout Ireland collect data on episodes of treatment in a calendar year, rather than on the individual person treated.

Staff at the ADRU of the HRB compile anonymous, aggregated data, which are analysed and reported at national and EU levels.

The main elements of the reporting system in the context of this paper are defined as follows:

All cases treated – describes individuals who receive treatment for problem cocaine use at each treatment centre in a calendar year, and includes:

- *Previously treated cases* – describes individuals who were treated previously for problem cocaine or other drug use at any treatment centre and have returned to treatment for problem cocaine use in the reporting year;
- *New cases treated* – describes individuals who have never been treated for problem cocaine or other drug use; and
- *Status unknown* – describes individuals whose status with respect to previous treatment for problem cocaine or other drug use is not known.

In the case of the data for 'previously treated cases', there is a possibility that individuals appear more than once in the database; for example, where a person receives treatment at more than one centre or at the same centre more than once per year.

Analysis

The analysis provides an outline of the following: service provision for treated cocaine users; numbers treated; incidence and prevalence of treatment by year and by place of residence; additional problem substances; patterns of cocaine use; socio-demographic characteristics; and initial treatment intervention(s) provided.

Service provision

The total number of cases reporting cocaine as a problem substance increased by 177%, from 954 in 2002 to 2,643 in 2007 (Table 2). While the majority of cocaine cases each year were treated in outpatient services, the number and proportion treated in inpatient services increased steadily over the period. In 2007, 69% were treated as outpatients and 28% as inpatients. Small numbers of cocaine cases were treated in low-threshold and general practice settings in the years 2002–2007; these cases were also treated for opiate use.

Table 2 Cocaine cases entering treatment* by type of service provider (NDTRS 2002–2007)

	2002		2003		2004		2005		2006		2007	
	n	(%)	n	(%)	n	(%)	n	(%)	n	(%)	n	(%)
All cases	954		1336		1602		1974		2255		2643	
Outpatient	705	(73.9)	950	(71.1)	1079	(67.4)	1391	(70.5)	1608	(71.3)	1820	(68.9)
Inpatient	152	(15.9)	270	(20.2)	394	(24.6)	496	(25.1)	580	(25.7)	746	(28.2)
Low-threshold†	35	(3.7)	43	(3.2)	74	(4.6)	46	(2.3)	25	(1.1)	31	(1.2)
General practitioner	61	(6.4)	72	(5.4)	55	(3.4)	41	(2.1)	42	(1.9)	46	(1.7)
Service type unknown‡	1	(0.1)	1	(0.1)	0	(0.0)	0	(0.0)	0	(0.0)	0	(0.0)

* Excludes cases not normally resident in Ireland.
† Low-threshold services provide low-dose methadone or drop-in facilities only.
‡ Relevant data not recorded on the NDTRS forms returned.

Numbers treated and type of cocaine used

One-fifth (10,764) of all cases treated for problem substance use between 2002 and 2007 reported cocaine as a main or an additional problem substance (Table 3). The number of cases who reported cocaine **as their main problem substance** increased by 502%, from 128 in 2002 to 770 in 2007 (Table 4). The number of cases who reported cocaine **as an additional problem substance** increased by 128%, from 826 in 2002 to 1,885 in 2007 (Table 5).

Of the 10,764 cocaine cases treated in the years 2002–2007, almost three-fifths (59%, 6,352) did not specify the type of cocaine used. Of the 4,516 cases who did do so, 3,977 (88%) used powder cocaine and 539 (12%) used crack cocaine. One hundred and four of these cases reported use of both forms of cocaine, of whom 34 reported one form as their main problem substance and another form as an additional problem substance, and 70 reported both forms of cocaine as additional problem substances.

The number of previously treated cases who reported using powder cocaine increased from 28 in 2002 to 715 in 2006, and to 864 in 2007 (Table 3). The sharp increase in the figures for powder cocaine use in 2006 and 2007 and the parallel drop in figures for use of cocaine of unspecified type were due to a data correction. This correction took effect from 2006 onwards, whereby cases who did not specify the cocaine type used, but who reported snorting cocaine, were recorded as cocaine powder users (crack cocaine cannot be consumed by snorting).

The number of cases who specified crack cocaine as a problem substance increased from 57 in 2002 to 223 in 2007. While this increase reflects a rise in the numbers reporting crack cocaine use in Ireland in recent years, it is also partly due to increased accuracy in data reporting to the NDTRS. Data providers were made aware of the importance of more accurate recording of data and were requested to specify the type of cocaine used by clients where possible.

Throughout the reporting period, crack cocaine use was more commonly reported by previously treated cases than by new cases; it was also more common as an additional problem substance than as a main problem substance. In general, crack cocaine appears to be associated with opiate use (Connolly *et al.* 2008).

Table 3 Cocaine cases entering treatment* by treatment status (NDTRS 2002–2007)

	2002		2003		2004		2005		2006		2007	
	n	(%)	n	(%)	n	(%)	n	(%)	n	(%)	n	(%)
All cases	954		1336		1602		1974		2255		2643	
Cocaine type unspecified	863	(90.5)	1221	(91.4)	1493	(93.2)	1798	(91.1)	536	(23.8)	441	(16.7)
Cocaine powder	42	(4.4)	56	(4.2)	64	(4.0)	137	(6.9)	1667	(73.9)	2011	(76.1)
Crack cocaine	57	(6.0)	71	(5.3)	57	(3.6)	61	(3.1)	70	(3.1)	223	(8.4)
Previously treated cases	546		740		846		1010		1134		1294	
Cocaine type unspecified	485	(88.8)	671	(90.7)	772	(91.3)	922	(91.3)	388	(34.2)	312	(24.1)
Cocaine powder	28	(5.1)	29	(3.9)	39	(4.6)	64	(6.3)	715	(63.1)	864	(66.8)
Crack cocaine	35	(6.4)	46	(6.2)	43	(5.1)	38	(3.8)	41	(3.6)	136	(10.5)
New cases	362		565		709		915		1037		1299	
Cocaine type unspecified	338	(93.4)	526	(93.1)	681	(96.1)	827	(90.4)	113	(10.9)	120	(9.2)
Cocaine powder	12	(3.3)	24	(4.2)	20	(2.8)	73	(8.0)	907	(87.5)	1108	(85.3)
Crack cocaine	18	(5.0)	19	(3.4)	11	(1.6)	23	(2.5)	25	(2.4)	81	(6.2)
Treatment status unknown	46		31		47		49		84		50	

* Excludes cases not normally resident in Ireland.

Table 4 Cases entering treatment* who reported cocaine as their main problem substance, by treatment status (NDTRS 2002–2007)

	2002		2003		2004		2005		2006		2007	
	n	(%)	n	(%)	n	(%)	n	(%)	n	(%)	n	(%)
All cases	128		253		331		467		552		770	
Cocaine type unspecified	121	(94.5)	235	(92.9)	312	(94.3)	420	(89.9)	77	(13.9)	75	(9.7)
Cocaine powder	5	(3.9)	9	(3.6)	11	(3.3)	39	(8.4)	459	(83.2)	646	(83.9)
Crack cocaine	2	(1.6)	9	(3.6)	8	(2.4)	8	(1.7)	16	(2.9)	49	(6.4)
Previously treated cases	56		96		119		175		194		290	
Cocaine type unspecified	52	(92.9)	86	(89.6)	106	(89.1)	149	(85.1)	38	(19.6)	36	(12.4)
Cocaine powder	3	(5.4)	5	(5.2)	8	(6.7)	22	(12.6)	151	(77.8)	224	(77.2)
Crack cocaine	1	(1.8)	5	(5.2)	5	(4.2)	4	(2.3)	5	(2.6)	30	(10.3)
New cases	61		148		195		275		342		462	
Cocaine type unspecified	59	(96.7)	141	(95.3)	189	(96.9)	254	(92.4)	37	(10.8)	34	(7.4)
Cocaine powder	1	(1.6)	3	(2.0)	3	(1.5)	17	(6.2)	295	(86.3)	410	(88.7)
Crack cocaine	1	(1.6)	4	(2.7)	3	(1.5)	4	(1.5)	10	(2.9)	18	(3.9)

* Excludes cases not normally resident in Ireland.

Table 5 Cases entering treatment* who reported cocaine as an additional problem substance, by treatment status (NDTRS 2002–2007)

	2002		2003		2004		2005		2006		2007	
	n	(%)	n	(%)	n	(%)	n	(%)	n	(%)	n	(%)
All cases	826		1084		1274		1516		1712		1885	
Cocaine type unspecified	742	(89.8)	986	(91.0)	1181	(92.7)	1378	(90.9)	459	(26.8)	366	(19.4)
Cocaine powder	37	(4.5)	47	(4.3)	53	(4.2)	98	(6.5)	1208	(70.6)	1365	(72.4)
Crack cocaine	55	(6.7)	62	(5.7)	49	(3.8)	53	(3.5)	54	(3.2)	174	(9.2)
Previously treated cases	490		644		728		840		944		1014	
Cocaine type unspecified	433	(88.4)	585	(90.8)	666	(91.5)	773	(92.0)	350	(37.1)	276	(27.2)
Cocaine powder	25	(5.1)	24	(3.7)	31	(4.3)	42	(5.0)	564	(59.7)	640	(63.1)
Crack cocaine	34	(6.9)	41	(6.4)	38	(5.2)	34	(4.0)	36	(3.8)	106	(10.5)
New cases	301		418		516		644		700		839	
Cocaine type unspecified	279	(92.7)	385	(92.1)	492	(95.3)	573	(89.0)	76	(10.9)	86	(10.3)
Cocaine powder	11	(3.7)	21	(5.0)	17	(3.3)	56	(8.7)	612	(87.4)	698	(83.2)
Crack cocaine	17	(5.6)	15	(3.6)	8	(1.6)	19	(3.0)	15	(2.1)	63	(7.5)

* Excludes cases not normally resident in Ireland.

Incidence and prevalence of treated cocaine use by year

Annual rates for the incidence (new cases) and prevalence (all cases) of treated cocaine use are expressed per 100,000 of the population aged 15–64 years, based on the census figures for 2002 and 2006 and CSO estimated figures for 2007 (CSO 2007, 2008).

Figure 1 presents the annual incidence and prevalence rates of cases treated for cocaine as a main problem substance. The prevalence increased from nine in 2002 to 25 in 2007. This indicates that problem cocaine use is a chronic, recurring health condition that requires repeated episodes of treatment over time. The incidence increased from five in 2002 to 15 in 2007. The numbers of new cases entering treatment are an indirect indicator of recent trends and, along with the results of the NACD general population survey, point to an increase in cocaine use during this period.

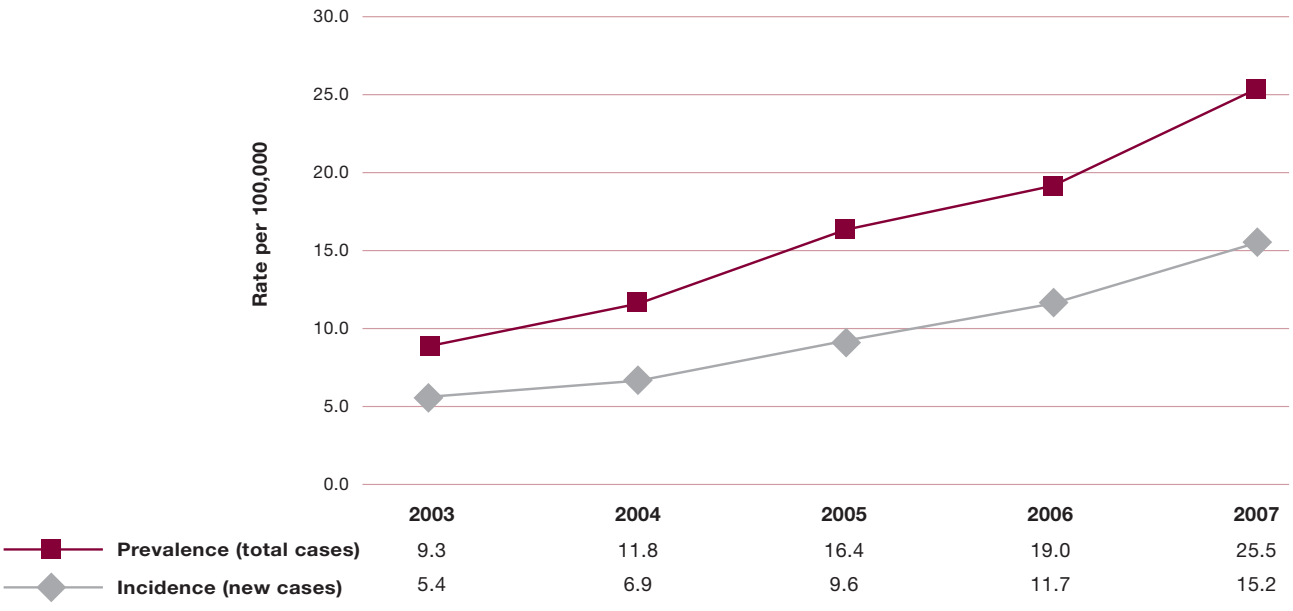

Figure 1 Incidence and prevalence of cases treated for cocaine as their main problem substance, per 100,000 15–64-year-olds (NDTRS 2002–2007; CSO 2007, 2008)

Incidence and prevalence of treated cocaine use by place of residence

Table 6 presents the number of cases entering treatment who reported cocaine as their main problem substance, by year, by HSE region of residence and by treatment status. In 2007, one-third of cases who reported cocaine as their main problem substance lived in the HSE South Region, and 31% lived in the HSE Dublin Mid-Leinster Region. Less than one-fifth of cases lived in the HSE Dublin North East and in the HSE West regions.

Table 6 Cases entering treatment* who reported cocaine as their main problem substance, by HSE region of residence and by treatment status (NDTRS 2002–2007)

	2002		2003		2004		2005		2006		2007	
HSE region of residence	**n**	**(%)**	**n**	**(%)**	**n**	**(%)**	**n**	**(%)**	**n**	**(%)**	**n**	**(%)**
All cases	128		253		331		467		552		770	
Dublin North East	34	(26.6)	58	(22.9)	120	(36.3)	109	(23.3)	147	(26.6)	151	(19.6)
Dublin Mid-Leinster	27	(21.1)	55	(21.7)	94	(28.4)	137	(29.3)	172	(31.2)	239	(31.0)
South	44	(34.4)	102	(40.3)	89	(26.9)	167	(35.8)	171	(31.0)	256	(33.2)
West	23	(18.0)	38	(15.0)	28	(8.5)	54	(11.6)	62	(11.2)	124	(16.1)
Previously treated cases	56		96		119		175		194		290	
Dublin North East	17	(30.4)	31	(32.3)	41	(34.5)	47	(26.9)	43	(22.2)	64	(22.1)
Dublin Mid-Leinster	15	(26.8)	24	(25.0)	55	(46.2)	68	(38.9)	71	(36.6)	97	(33.4)
South	14	(25.0)	32	(33.3)	19	(16.0)	46	(26.3)	60	(30.9)	90	(31.0)
West	10	(17.9)	9	(9.4)	4	(3.4)	14	(8.0)	20	(10.3)	39	(13.4)
New cases	61		148		195		275		342		462	
Dublin North East	16	(26.2)	25	(16.9)	73	(37.4)	58	(21.1)	95	(27.8)	81	(17.5)
Dublin Mid-Leinster	10	(16.4)	29	(19.6)	35	(17.9)	63	(22.9)	96	(28.1)	133	(28.8)
South	26	(42.6)	66	(44.6)	67	(34.4)	118	(42.9)	110	(32.2)	165	(35.7)
West	9	(14.8)	28	(18.9)	20	(10.3)	36	(13.1)	41	(12.0)	83	(18.0)
Treatment status unknown	11		9		17		17		16		18	

* Excludes cases not normally resident in Ireland.

Table 7 presents the number of new cases entering treatment in the period 2002–2007 who reported cocaine as their main problem substance, by regional drugs task force (RDTF) area of residence. The Southern, South Eastern and South Western RDTF areas reported the highest numbers of such cases. The North Western and East Coast areas reported the lowest numbers. The lower than expected number of new cocaine cases in the East Coast RDTF area may be due to the fact that cocaine use was frequently reported in that region as an additional problem substance by cases whose main problem substance was an opiate (see Table 11).

Table 7 New cases entering treatment* who reported cocaine as their main problem substance, by regional drugs task force (RDTF) area of residence (NDTRS 2002–2007)

RDTF area of residence	Number	(%)
All new cases	1483	(100.0)
Southern	288	(19.6)
South East	276	(18.8)
South West (of Dublin and Wicklow and all of Kildare)	250	(17.0)
North Eastern	174	(11.8)
North Dublin City and County	174	(11.8)
Mid West	122	(8.3)
Western	65	(4.4)
Midland	58	(3.9)
East Coast (of Dublin and Wicklow)	34	(2.3)
North West	30	(2.0)
RDTF area unknown	12	

* Excludes cases not normally resident in Ireland.

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. The number of new cocaine cases entering treatment for cocaine as their main problem substance was highest in the Tallaght LDTF area, followed by the North Inner City and Dublin North East LDTF areas (Table 8). The lowest numbers of cases lived in the Ballyfermot and Canal Communities LDTF areas. The lower than expected number of new cocaine cases in some Dublin LDTF areas may be due to the fact that cocaine use was frequently reported in those areas as an additional problem substance by cases whose main problem substance was an opiate (Table 11). In addition, the numbers reported for each area were influenced by treatment availability in the area, and by the extent to which the area services participated in the NDTRS.

Table 8 New cases entering treatment* who reported cocaine as their main problem substance, by local drugs task force (LDTF) (or other) area of residence (NDTRS 2002–2007)

LDTF (or other) area of residence	Number	(%)
All new cases	1483	(100.0)
Tallaght	69	(4.7)
North Inner City	49	(3.3)
Dublin North East	43	(2.9)
Dublin 12	39	(2.6)
Finglas-Cabra	25	(1.7)
Clondalkin	24	(1.6)
Dun Laoghaire–Rathdown	18	(1.2)
South Inner City	18	(1.2)
Blanchardstown	16	(1.1)
Ballymun	11	(0.7)
Bray	7	(0.5)
Ballyfermot	5	(0.3)
Canal Communities	4	(0.3)
Rest of Dublin	49	(3.3)
Outside Dublin (excluding Bray)	1106	(74.5)

* Excludes cases not normally resident in Ireland.

In order to adjust for variation in population size by geographical area, the actual incidence of treated cocaine use in each area was calculated using the average number of new cases over the six-year period living in each of the 10 regional drugs task force areas, 26 counties and 32 local health office areas; this average was divided by the population aged 15–64 years living in the respective regional drugs task force areas and counties, using the census figures for 2002 and 2006 and CSO estimated figures for 2007, and for local health office areas using CSO figures for 2006 only and estimated figures for 2007 (CSO 2008).

For the period 2002–2007, the average annual incidence of new cases treated for cocaine as their main problem substance was highest in the South Eastern RDTF area (at 16 cases per 100,000), followed by the Southern and North Eastern areas (at 12 cases) (Figure 2). The East Coast RDTF area had the lowest average annual incidence, at 2 cases per 100,000.

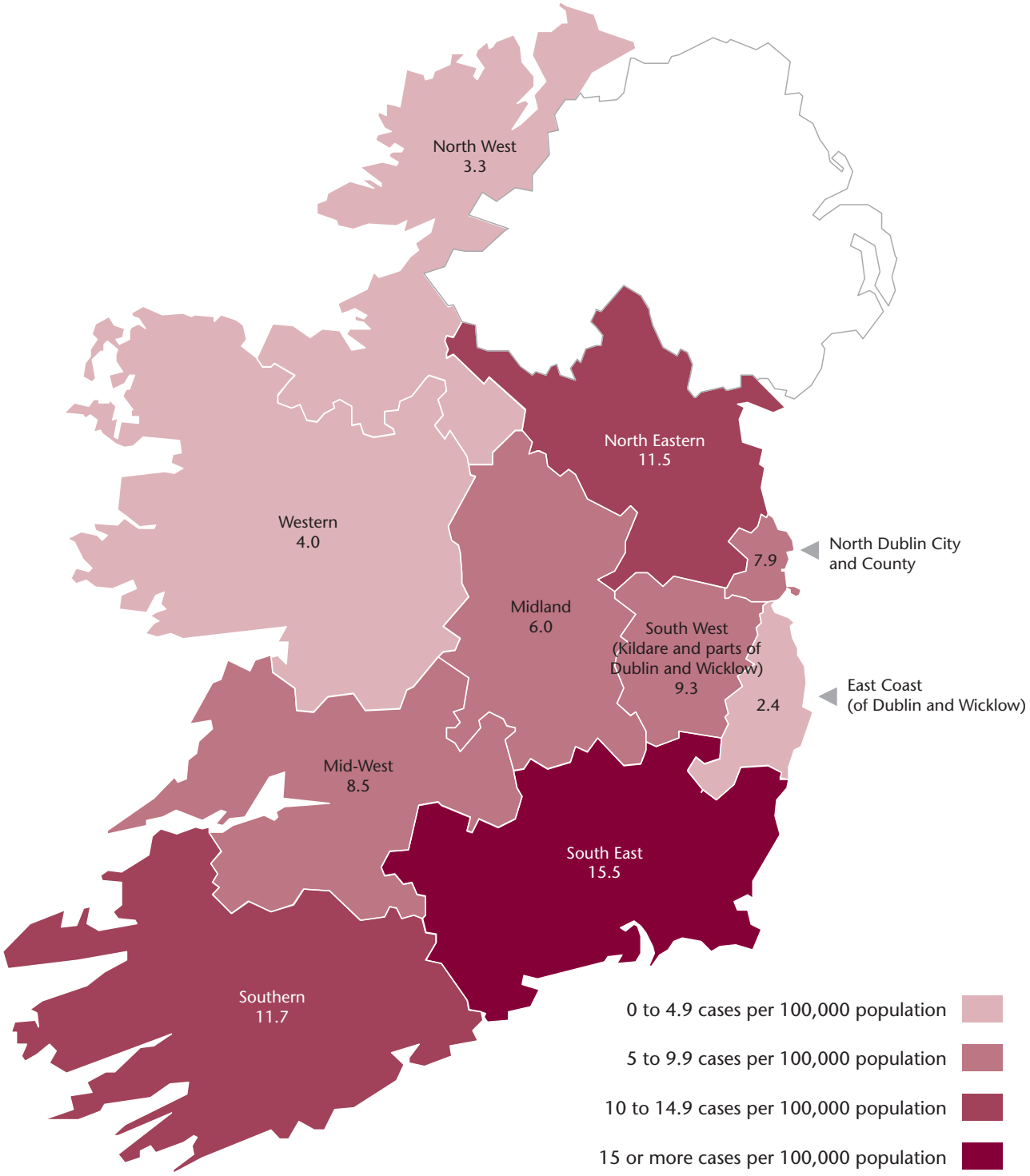

Figure 2 Average annual incidence of cases treated for cocaine as a main problem substance per 100,000 15–64-year-olds, by regional drugs task force area of residence (NDTRS 2002–2007; CSO 2007, 2008)

Treatment data analysed by county indicate that the highest numbers of new cases reporting cocaine as their main problem substance between 2002 and 2007 lived in the main cities of Dublin and Cork (Table 9). The lowest numbers lived in Leitrim, Monaghan and Longford.

Table 9 New cases entering treatment* who reported cocaine as their main problem substance, by county of residence (NDTRS 2002–2007)

County of residence	Number	(%)
All new cases	1483	(100.0)
Dublin	370	(25.4)
Cork	258	(17.4)
Wexford	111	(7.5)
Limerick	81	(5.5)
Louth	80	(5.4)
Kildare	79	(5.3)
Waterford	76	(5.1)
Meath	63	(4.2)
Galway	40	(2.7)
Carlow	34	(2.3)
Kerry	30	(2.0)
Kilkenny	30	(2.0)
Clare	28	(1.9)
Westmeath	27	(1.8)
Cavan	26	(1.8)
Tipperary (SR)	25	(1.7)
Donegal	18	(1.2)
Offaly	15	(1.0)
Wicklow	19	(0.9)
Mayo	13	(0.9)
Tipperary (NR)	13	(0.9)
Roscommon	12	(0.8)
Laois	11	(0.7)
Sligo	9	(0.6)
Longford	5	(0.3)
Monaghan	5	(0.3)
Leitrim	3	(0.2)
County unknown	2	(0.0)

* Excludes cases not normally resident in Ireland.

The average annual incidence of new cases treated for cocaine as their main problem substance was examined by county for the period 2002 to 2007 (Figure 3). The average incidence for the period was highest in Wexford, Louth, Waterford and Carlow, (with over 15 cases per 100,000 of the 15–64-year-old population) followed by Cork, Cavan, Limerick, Kildare and Meath (with between 10 and 13 cases per 100,000). The average incidence was lowest in counties located mainly in the west and north-west of the country (with between 2 and 4 cases per 100,000).

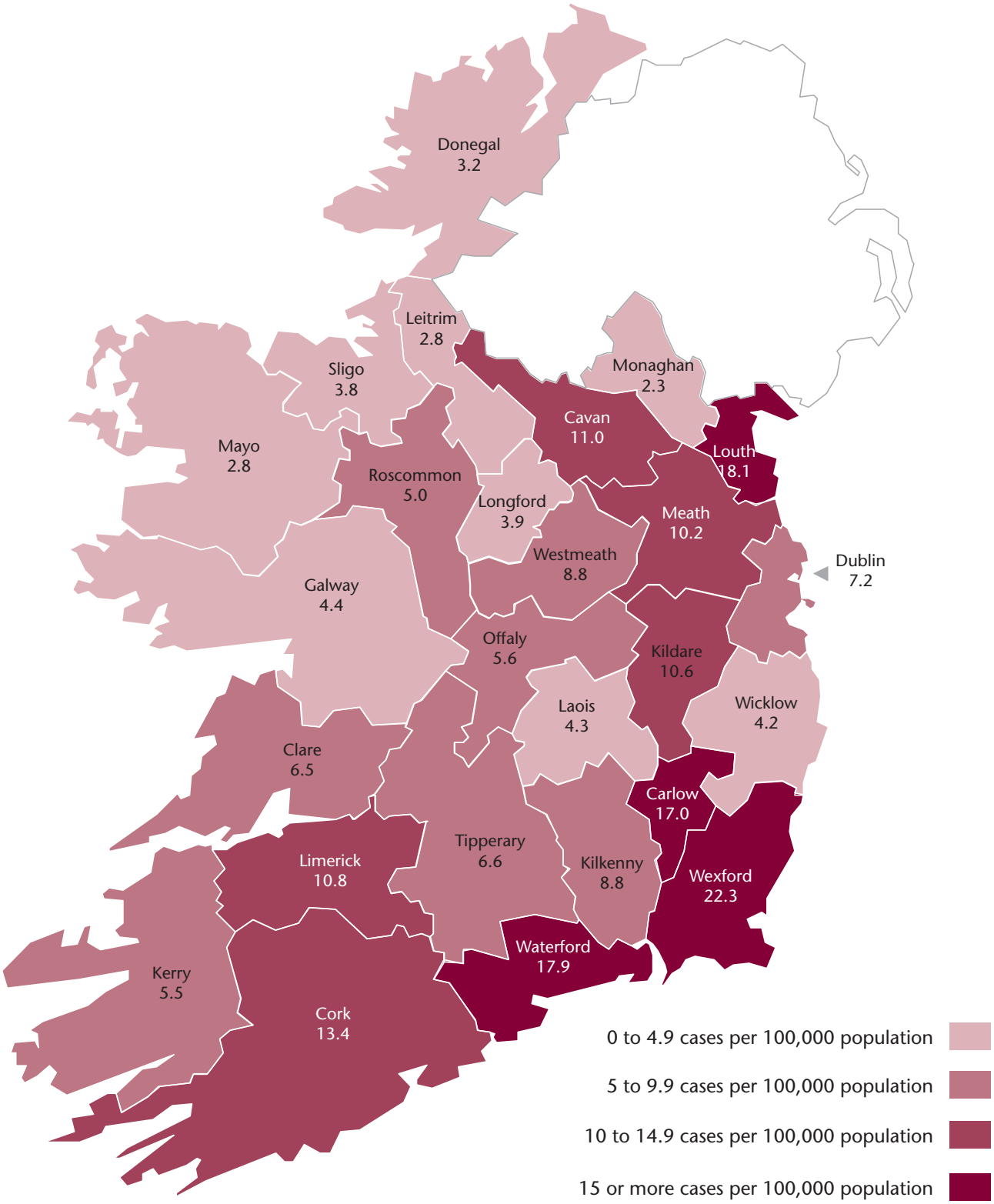

Figure 3 Average annual incidence of cases treated for cocaine as a main problem substance, per 100,000 15–64-year-olds, by county of residence (NDTRS 2002–2007; CSO 2007, 2008)

The highest numbers of new cases reporting cocaine as their main problem substance between 2002 and 2007 lived in Cork, Dublin South West and Wexford local health office (LHO) areas (Table 10). The lowest number lived in the Dublin South LHO area.

Table 10 New cases entering treatment* who reported cocaine as their main problem substance, by local health office (LHO) area of residence (NDTRS 2002–2007)

LHO area of residence	Number	(%)
All new cases	1483	(100.0)
Cork	258	(17.4)
Dublin South West	112	(7.6)
Wexford	111	(7.5)
Kildare and South West Wicklow	85	(5.7)
Limerick	81	(5.5)
Louth	80	(5.4)
Waterford	76	(5.1)
Carlow and Kilkenny	64	(4.3)
Meath	63	(4.2)
North West Dublin	60	(4.0)
North Dublin	58	(3.9)
Dublin North Central	56	(3.8)
Galway	40	(2.7)
Dublin West	35	(2.4)
Longford and Westmeath	32	(2.2)
Cavan and Monaghan	31	(2.1)
Kerry	30	(2.0)
Clare	28	(1.9)
Dublin South City	28	(1.9)
Laois and Offaly	26	(1.8)
Tipperary SR	25	(1.7)
Donegal	18	(1.2)
Mayo	13	(0.9)
Tipperary NR	13	(0.9)
Wicklow (east coast)	13	(0.9)
Dublin South East	12	(0.8)
Roscommon	12	(0.8)
Sligo and Leitrim	12	(0.8)
Dublin South	9	(0.6)
LHO area unknown	2	(0.1)

* Excludes cases not normally resident in Ireland.

The average annual incidence of new cases treated for cocaine as their main problem substance was examined by local health office area for the period 2002 to 2007 (Figure 4). The incidence was highest in the Wexford, Louth, Dublin South West and Waterford LHO areas (with over 15 cases per 100,000 of the 15–64-year-old population) followed by the Cork, and Carlow–Kilkenny LHO areas (with 12.7 cases) and the Limerick LHO area (with 12.6 cases). The incidence was lowest in three of the LHO areas in south Dublin and in the LHO areas located mainly in the west and north-west of the country (with between 1.7 and 4.7 cases).

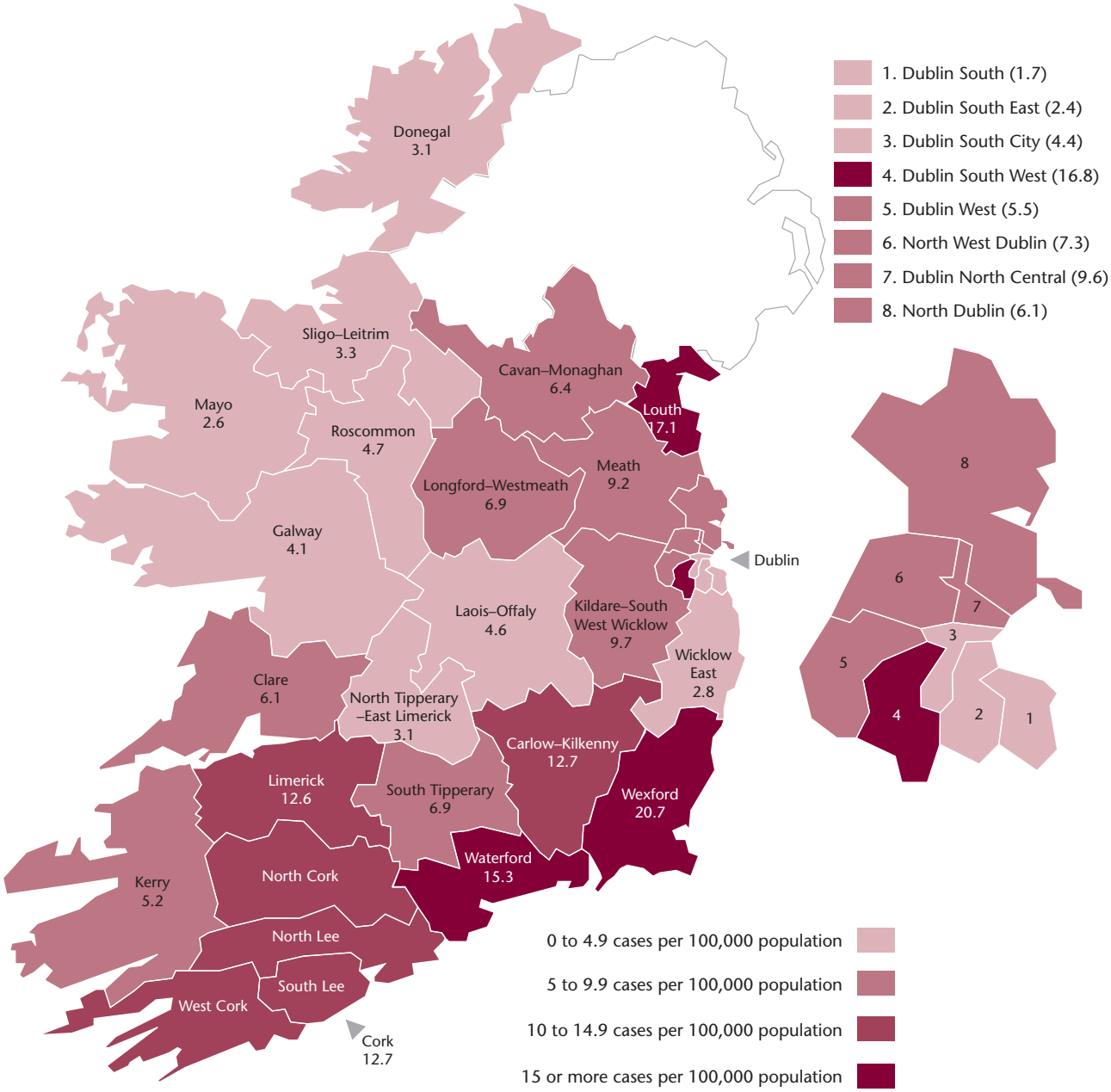

Figure 4 Average annual incidence of cases treated for cocaine as a main problem substance, per 100,000 15–64-year-olds, by local health office area of residence (NDTRS 2002–2007; CSO 2007, 2008)

Main problem substance where cocaine was an additional problem substance

The main problem substances associated with cocaine as an additional problem substance were opiates and, to a lesser extent, alcohol and cannabis (Table 11). This pattern of use may explain the lower than expected incidence rates of cocaine use in counties such as Dublin and Wicklow, where cocaine was frequently reported as an additional problem substance and opiates as the main problem substance.

Table 11 Main problem substance used by cases entering treatment* who reported cocaine as an additional problem substance (NDTRS 2002–2007)

	2002		2003		2004		2005		2006		2007	
Cases reporting cocaine as an additional problem substance	826		1084		1274		1516		1712		1885	
Main problem substance where cocaine was an additional problem substance	**n**	**(%)**	**n**	**(%)**	**n**	**(%)**	**n**	**(%)**	**n**	**(%)**	**n**	**(%)**
Opiates	603	(73.0)	773	(71.3)	746	(58.6)	799	(52.7)	957	(55.9)	953	(50.6)
Alcohol	n.a.†		n.a.†		252	(19.8)	385	(25.4)	359	(21.0)	537	(28.5)
Cannabis	164	(19.9)	224	(20.7)	184	(14.4)	248	(16.4)	316	(18.5)	276	(14.6)
Ecstasy	44	(5.3)	66	(6.1)	61	(4.8)	46	(3.0)	42	(2.5)	51	(2.7)
Benzodiazepines	5	(0.6)	7	(0.6)	20	(1.6)	18	(1.2)	18	(1.1)	38	(2.0)
Amphetamines	8	(1.0)	9	(0.8)	4	(0.3)	10	(0.7)	9	(0.5)	13	(0.7)
Cocaine‡	0	(0.0)	1	(0.1)	3	(0.2)	9	(0.6)	9	(0.5)	12	(0.6)
Volatile inhalants	0	(0.0)	2	(0.2)	0	(0.0)	0	(0.0)	2	(0.1)	3	(0.2)
Other	2	(0.2)	2	(0.2)	4	(0.3)	1	(0.1)	0	(0.0)	2	(0.1)

* Excludes cases not normally resident in Ireland.
† Not available; the NDTRS did not record alcohol as a main problem substance prior to 2004.
‡ A small number of cases reported one form of cocaine as an additional problem substance and another form of cocaine as their main problem substance.

Additional problem substances where cocaine was the main problem substance

The proportion of cases who reported cocaine as their main problem substance and reported use of more than one drug decreased from 92% in 2002 to 79% in 2007 (Table 12). The same trend was noted among new and previously treated cases. It is generally accepted that polysubstance use increases the complexity of these cases and is associated with poorer treatment outcomes.

Table 12 Polysubstance use by cases entering treatment* who reported cocaine as their main problem substance, by treatment status (NDTRS 2002–2007)

	2002		2003		2004		2005		2006		2007	
Polysubstance use	**n**	**(%)**	**n**	**(%)**	**n**	**(%)**	**n**	**(%)**	**n**	**(%)**	**n**	**(%)**
All cases	128		253		331		467		552		770	
All cases who used more than one drug	118	(92.2)	233	(92.1)	285	(86.1)	360	(77.1)	458	(83.0)	610	(79.2)
Previously treated cases	56		96		119		175		194		290	
Previously treated cases who used more than one drug	50	(89.3)	87	(90.6)	97	(81.5)	129	(73.7)	165	(85.1)	233	(80.3)
New cases	61		148		195		275		342		462	
New cases who used more than one drug	57	(93.4)	137	(92.6)	174	(89.2)	218	(79.3)	281	(82.2)	366	(79.2)
Treatment status unknown	11		9		17		17		16		18	

* Excludes cases not normally resident in Ireland.

Of the cases treated in 2007 who reported cocaine as their main problem substance, 31% reported problem use of two substances, 30% of three and 19% of four or more (Table 13). Cases with cocaine as their main problem substance most commonly reported three substances as part of their current problem substance use. The trends were similar for previously treated and new cases.

Table 13 Number of problem substances used by cases entering treatment* who reported cocaine as their main problem substance, by treatment status (NDTRS 2002–2007)

	2002		2003		2004		2005		2006		2007	
Number of problem substances used	**n**	**(%)**	**n**	**(%)**	**n**	**(%)**	**n**	**(%)**	**n**	**(%)**	**n**	**(%)**
All cases	128		253		331		467		552		770	
One drug	10	(7.8)	20	(7.9)	46	(13.9)	107	(22.9)	94	(17.0)	160	(20.8)
Two drugs	44	(34.4)	77	(30.4)	98	(29.6)	121	(25.9)	157	(28.4)	237	(30.8)
Three drugs	48	(37.5)	80	(31.6)	108	(32.6)	132	(28.3)	165	(29.9)	230	(29.9)
Four drugs	26	(20.3)	76	(30.0)	79	(23.9)	107	(22.9)	136	(24.6)	143	(18.6)
Previously treated cases	56		96		119		175		194		290	
One drug	6	(10.7)	9	(9.4)	22	(18.5)	46	(26.3)	29	(14.9)	57	(19.7)
Two drugs	20	(35.7)	31	(32.3)	37	(31.1)	48	(27.4)	54	(27.8)	95	(32.8)
Three drugs	20	(35.7)	29	(30.2)	38	(31.9)	45	(25.7)	66	(34.0)	77	(26.6)
Four drugs	10	(17.9)	27	(28.1)	22	(18.5)	36	(20.6)	45	(23.2)	61	(21.0)
New cases	61		148		195		275		342		462	
One drug	4	(6.6)	11	(7.4)	21	(10.8)	57	(20.7)	61	(17.8)	96	(20.8)
Two drugs	18	(29.5)	44	(29.7)	56	(28.7)	67	(24.4)	98	(28.7)	132	(28.6)
Three drugs	23	(37.7)	45	(30.4)	62	(31.8)	84	(30.5)	93	(27.2)	152	(32.9)
Four drugs	16	(26.2)	48	(32.4)	56	(28.7)	67	(24.4)	90	(26.3)	82	(17.7)
Treatment status unknown	11		9		17		17		16		18	

* Excludes cases not normally resident in Ireland.

Table 14 presents the additional problem substances used by those who reported cocaine as their main problem substance and who used more than one drug. Cannabis, alcohol and ecstasy, in that order, were the most common additional problem substances reported by cocaine cases entering treatment in the period 2002–2007. The number of cases reporting cannabis as an additional problem substance increased by over 300% during the reporting period; the number reporting alcohol increased by 719%. The use of alcohol and cocaine together leads to the formation of a third drug, cocaethylene, which is a more stable compound than the normal by-product of cocaine and is effective for longer in the body. There is evidence to show that cocaethylene increases the incidence and intensity of the cardiovascular and the behavioural side effects of cocaine.

The most frequently used additional problem substances reported by previously treated cases in the period under review were alcohol, cannabis and opiates. New cases entering treatment reported cannabis, alcohol and ecstasy as the most commonly used additional problem substances.

Table 14 Additional problem substances used by cases entering treatment* who reported cocaine as their main problem substance, by treatment status (NDTRS 2002–2007)

	2002		2003		2004		2005		2006		2007	
Additional problem substances used†	**n**	**(%)**	**n**	**(%)**	**n**	**(%)**	**n**	**(%)**	**n**	**(%)**	**n**	**(%)**
All cases	118		233		285		360		458		610	
Cannabis	83	(70.3)	143	(61.4)	161	(56.5)	225	(62.5)	270	(59.0)	356	(58.4)
Alcohol	42	(35.6)	99	(42.5)	140	(49.1)	185	(51.4)	293	(64.0)	344	(56.4)
Ecstasy	41	(34.7)	95	(40.8)	105	(36.8)	129	(35.8)	148	(32.3)	194	(31.8)
Opiates	28	(23.7)	63	(27.0)	73	(25.6)	68	(18.9)	65	(14.2)	94	(15.4)
Benzodiazepines	10	(8.5)	19	(8.2)	37	(13.0)	35	(9.7)	54	(11.8)	69	(11.3)
Amphetamines	5	(4.2)	30	(12.9)	27	(9.5)	43	(11.9)	43	(9.4)	36	(5.9)
Cocaine‡	0	(0.0)	1	(0.4)	3	(1.1)	9	(2.5)	9	(2.0)	12	(2.0)
Volatile inhalants	0	(0.0)	0	(0.0)	1	(0.4)	2	(0.6)	1	(0.2)	3	(0.5)
Other	8	(6.8)	13	(5.6)	3	(1.1)	6	(1.7)	9	(2.0)	14	(2.3)
Previously treated cases	50		87		97		129		165		233	
Alcohol	18	(36.0)	34	(39.1)	34	(35.1)	60	(46.5)	101	(61.2)	131	(56.2)
Cannabis	28	(56.0)	41	(47.1)	37	(38.1)	59	(45.7)	88	(53.3)	116	(49.8)
Opiates	20	(40.0)	41	(47.1)	65	(67.0)	52	(40.3)	39	(23.6)	66	(28.3)
Benzodiazepines	6	(12.0)	15	(17.2)	19	(19.6)	14	(10.9)	29	(17.6)	35	(15.0)
Ecstasy	12	(24.0)	26	(29.9)	20	(20.6)	36	(27.9)	38	(23.0)	55	(23.6)
Cocaine‡	0	(0.0)	0	(0.0)	1	(1.0)	5	(3.9)	4	(2.4)	10	(4.3)
Amphetamines	1	(2.0)	7	(8.0)	3	(3.1)	16	(12.4)	19	(11.5)	10	(4.3)
Volatile inhalants	0	(0.0)	0	(0.0)	0	(0.0)	0	(0.0)	0	(0.0)	1	(0.4)
Other	5	(10.0)	5	(5.7)	0	(0.0)	3	(2.3)	3	(1.8)	6	(2.6)
New cases	57		137		174		218		281		366	
Cannabis	47	(82.5)	96	(70.1)	115	(66.1)	157	(72.0)	174	(61.9)	236	(64.5)
Alcohol	23	(40.4)	60	(43.8)	99	(56.9)	117	(53.7)	186	(66.2)	209	(57.1)
Ecstasy	25	(43.9)	67	(48.9)	82	(47.1)	90	(41.3)	109	(38.8)	139	(38.0)
Benzodiazepines	4	(7.0)	3	(2.2)	16	(9.2)	20	(9.2)	23	(8.2)	34	(9.3)
Amphetamines	4	(7.0)	22	(16.1)	24	(13.8)	26	(11.9)	24	(8.5)	26	(7.1)
Opiates	7	(12.3)	21	(15.3)	6	(3.4)	14	(6.4)	23	(8.2)	24	(6.6)
Cocaine‡	0	(0.0)	1	(0.7)	2	(1.1)	4	(1.8)	5	(1.8)	2	(0.5)
Volatile inhalants	0	(0.0)	0	(0.0)	1	(0.6)	2	(0.9)	1	(0.4)	2	(0.5)
Other	1	(1.8)	7	(5.1)	2	(1.1)	3	(1.4)	6	(2.1)	8	(2.2)
Treatment status unknown	11		9		14		13		12		11	

* Excludes cases not normally resident in Ireland.
† By cases reporting use of one, two or three additional drugs
‡ Thirty-four cases reported one form of cocaine as their main problem substance and another form of cocaine as an additional problem substance.

Patterns of cocaine use

In 2007, of the 770 cases who reported cocaine as their main problem substance, 81% snorted it, 13% smoked it, and 4% injected it (Table 15). Cocaine powder is usually snorted, while crack cocaine is usually smoked; both forms of cocaine can be injected. The proportion of cases who injected cocaine decreased considerably during the reporting period. The proportion of injectors was higher among previously treated cases than among new cases. It is likely that those who injected cocaine were former or current opiate injectors.

Table 15 Route of administration for cases entering treatment* who reported cocaine as their main problem substance, by treatment status (NDTRS 2002–2007)

	2002		2003		2004		2005		2006		2007	
Route of administration	**n**	**(%)**	**n**	**(%)**	**n**	**(%)**	**n**	**(%)**	**n**	**(%)**	**n**	**(%)**
All cases	128		253		331		467		552		770	
Inject	23	(18.0)	30	(11.9)	52	(15.7)	45	(9.6)	27	(4.9)	31	(4.0)
Smoke	9	(7.0)	27	(10.7)	29	(8.8)	34	(7.3)	61	(11.1)	101	(13.1)
Eat or drink	0	(0.0)	0	(0.0)	0	(0.0)	0	(0.0)	5	(0.9)	4	(0.5)
Sniff or snort	95	(74.2)	190	(75.1)	244	(73.7)	379	(81.2)	454	(82.2)	621	(80.6)
Not recorded	1	(0.8)	6	(2.4)	6	(1.8)	9	(1.9)	5	(.9)	13	(1.7)
Previously treated cases	56		96		119		175		194		290	
Inject	20	(35.7)	25	(26.0)	49	(41.2)	40	(22.9)	22	(11.3)	29	(10.0)
Smoke	4	(7.1)	10	(10.4)	14	(11.8)	12	(6.9)	22	(11.3)	52	(17.9)
Eat or drink	0	(0.0)	0	(0.0)	0	(0.0)	0	(0.0)	1	(0.5)	0	(0.0)
Sniff or snort	32	(57.1)	59	(61.5)	53	(44.5)	120	(68.6)	147	(75.8)	206	(71.0)
Not recorded	0	(0.0)	2	(2.1)	3	(2.5)	3	(1.7)	2	(1.0)	3	(1.0)
New cases	61		148		195		275		342		462	
Inject	2	(3.3)	4	(2.7)	1	(0.5)	3	(1.1)	4	(1.2)	1	(0.2)
Smoke	5	(8.2)	17	(11.5)	12	(6.2)	22	(8.0)	38	(11.1)	46	(10.0)
Eat or drink	0	(0.0)	0	(0.0)	0	(0.0)	0	(0.0)	4	(1.2)	3	(0.6)
Sniff or snort	53	(86.9)	123	(83.1)	180	(92.3)	244	(88.7)	294	(86.0)	405	(87.7)
Not recorded	1	(1.6)	4	(2.7)	2	(1.0)	6	(2.2)	2	(0.6)	7	(1.5)
Treatment status unknown	11		9		17		17		16		18	

* Excludes cases not normally resident in Ireland.

In 2007, of the 770 cases who reported cocaine as their main problem substance, 13% used it daily, 44% used it on two to six days per week, 11% used it once per week or less and 30% had not used it in the month prior to entering treatment (Table 16). The fact that the majority of cases reported using cocaine on two to six days per week indicates that cocaine may be used as a week-end drug or as part of a binge. Over the reporting period there was a fall in the proportion of cases reporting daily use. Figures for 'daily' use and for 'no use' in the past month were much higher for previously treated cases than for new cases. The cases who had not used cocaine in the month prior to treatment were mainly those entering medication-free therapy.

Table 16 Frequency of cocaine use in the month prior to entering treatment* by cases who reported cocaine as their main problem substance, by treatment status (NDTRS 2002–2007)

	2002		2003		2004		2005		2006		2007	
Frequency of use in the month prior to treatment	**n**	**(%)**	**n**	**(%)**	**n**	**(%)**	**n**	**(%)**	**n**	**(%)**	**n**	**(%)**
All cases	128		253		331		467		552		770	
Daily	27	(21.1)	61	(24.1)	67	(20.2)	95	(20.3)	83	(15.0)	101	(13.1)
2–6 days per week	48	(37.5)	106	(41.9)	127	(38.4)	197	(42.2)	243	(44.0)	336	(43.6)
Once a week or less	12	(9.4)	22	(8.7)	37	(11.2)	55	(11.8)	73	(13.2)	84	(10.9)
No use in the last month	35	(27.3)	58	(22.9)	83	(25.1)	109	(23.3)	143	(25.9)	229	(29.7)
Not known	6	(4.7)	6	(2.4)	17	(5.1)	11	(2.4)	10	(1.8)	20	(2.6)
Previously treated cases	56		96		119		175		194		290	
Daily	13	(23.2)	27	(28.1)	26	(21.8)	46	(26.3)	31	(16.0)	47	(16.2)
2–6 days per week	15	(26.8)	29	(30.2)	43	(36.1)	58	(33.1)	68	(35.1)	100	(34.5)
Once a week or less	8	(14.3)	11	(11.5)	9	(7.6)	19	(10.9)	28	(14.4)	28	(9.7)
No use in the last month	16	(28.6)	27	(28.1)	29	(24.4)	47	(26.9)	63	(32.5)	108	(37.2)
Not known	4	(7.1)	2	(2.1)	12	(10.1)	5	(2.9)	4	(2.1)	7	(2.4)
New cases	61		148		195		275		342		462	
Daily	10	(16.4)	33	(22.3)	38	(19.5)	45	(16.4)	49	(14.3)	52	(11.3)
2–6 days per week	28	(45.9)	69	(46.6)	80	(41.0)	131	(47.6)	171	(50.0)	231	(50.0)
Once a week or less	3	(4.9)	11	(7.4)	26	(13.3)	35	(12.7)	43	(12.6)	53	(11.5)
No use in the last month	19	(31.1)	31	(20.9)	47	(24.1)	60	(21.8)	74	(21.6)	116	(25.1)
Not known	1	(1.6)	4	(2.7)	4	(2.1)	4	(1.5)	5	(1.5)	10	(2.2)
Treatment status unknown	11		9		17		17		16		18	

* Excludes cases not normally resident in Ireland.

Between 2002 and 2007, the median age at which new cocaine cases commenced use of any illicit drug was 15 years (Table 17). The median age at which new cases commenced cocaine use was 19 years. Half of the new cocaine cases had used cocaine for four years or more before seeking treatment. These findings indicate that cocaine cases often used other drugs prior to commencing cocaine use and that they used cocaine for a considerable period before seeking treatment. The median age at first cocaine use was similar to the median age at first opiate use.

Table 17 Median age (range) at significant points, and time between first use of cocaine and entry into treatment for new cases* who reported cocaine as their main problem substance (NDTRS 2002–2007)

New cases reporting cocaine as their main problem substance (n=1477)	**Age first used any drug (n=1394)**	**Age first used cocaine (n=1360)**	**Age first sought treatment for cocaine use (n=1477)**	**Years between first used cocaine and first entered treatment (n=1360)**
Median age (range†)	15 (12–24)	19 (15–30)	24 (18–38)	4 (0–13)

* Excludes cases not normally resident in Ireland.
† Age range presented is 5th percentile to 95th percentile (90% of cases are included within this range).

Socio-demographic characteristics

The median age of previously treated cases entering treatment for cocaine as their main problem substance decreased from 28 to 27 years between 2002 and 2007, while the median age of new cases decreased by two years, from 25 to 23 years (Table 18). In 2007, 5% of new cases were under 18 years of age, while just over 2% of previously treated cases were in this age group. The proportion of new cases aged under 18 years increased noticeably in 2007, which may be due to an increase in the provision of in adolescent treatment services in 2007. In the same year, 84% of cases entering treatment for cocaine as their main problem substance were male. In 2007, the proportion of cocaine cases who reported leaving school early was higher among previously treated cases (18%) than among new cases (12%). In the same year, one-third of treated cocaine cases were employed. Each year small proportions of cocaine cases reported being homeless.

Table 18 Socio–economic characteristics of cases entering treatment* who reported cocaine as their main problem substance, by treatment status (NDTRS 2002–2007)

	2002		2003		2004		2005		2006		2007	
Characteristics of cases†	n	(%)	n	(%)	n	(%)	n	(%)	n	(%)	n	(%)
All cases	128		253		331		467		552		770	
Median age (range‡)	27	(18-43)	26	(18-39)	24	(17-38)	25	(18-39)	25	(18-39)	25	(18-39)
Under 18 years	~		7	(2.8)	17	(5.1)	11	(2.4)	15	(2.7)	31	(4.0)
Male	107	(83.6)	207	(81.8)	258	(77.9)	381	(81.6)	469	(85.0)	649	(84.3)
Living with parents and family	68	(53.1)	119	(47.0)	190	(57.4)	273	(58.5)	296	(53.6)	415	(53.9)
Homeless	7	(5.5)	12	(4.7)	12	(3.6)	14	(3.0)	25	(4.5)	29	(3.8)
Non-Irish nationals	~		12	(4.7)	~		9	(1.9)	11	(2.0)	18	(2.3)
Early school leavers	26	(20.3)	44	(17.4)	50	(15.1)	80	(17.1)	91	(16.5)	113	(14.7)
Still at school	~		~		10	(3.0)	9	(1.9)	5	(0.9)	17	(2.2)
Employed (aged 16–64)	44	(34.4)	61	(24.2)	111	(34.0)	150	(32.4)	194	(35.4)	268	(35.3)
Previously treated cases	56		96		119		175		194		290	
Median age (range‡)	28	(20-44)	27	(19-38)	26	(20-38)	27	(18-40)	26	(18-40)	27	(18-42)
Under 18 years	~		~		~		~		7	(3.6)	7	(2.4)
Male	47	(83.9)	71	(74.0)	82	(68.9)	143	(81.7)	168	(86.6)	247	(85.2)
Living with parents and family	26	(46.4)	51	(53.1)	61	(51.3)	93	(53.1)	101	(52.1)	137	(47.2)
Homeless	5	(8.9)	~		~		7	(4.0)	9	(4.6)	11	(3.8)
Non-Irish nationals	~		~		~		6	(3.4)	~		~	
Early school leavers	15	(26.8)	20	(20.8)	25	(21.0)	49	(28.0)	44	(22.7)	53	(18.3)
Still at school	~		~		~		~		~		~	
Employed (aged 16–64)	11	(19.6)	19	(19.8)	27	(22.7)	36	(20.7)	48	(24.9)	87	(30.2)
New cases	61		148		195		275		342		462	
Median age (range‡)	25	(18-43)	25	(18-41)	22	(16-36)	24	(18-38)	24	(18-37)	23	(17-35)
Under 18 years	~		~		17	(8.7)	9	(3.3)	8	(2.3)	23	(5.0)
Male	51	(83.6)	128	(86.5)	163	(83.6)	226	(82.2)	287	(83.9)	386	(83.5)
Living with parents and family	35	(57.4)	65	(43.9)	119	(61.0)	170	(61.8)	185	(54.1)	271	(58.7)
Homeless	~		7	(4.7)	8	(4.1)	7	(2.5)	16	(4.7)	17	(3.7)
Non-Irish nationals	~		8	(5.4)	~		~		7	(2.0)	12	(2.6)
Early school leavers	7	(11.5)	23	(15.5)	23	(11.8)	29	(10.5)	43	(12.6)	57	(12.3)
Still at school	~		~		10	(5.1)	9	(3.3)	5	(1.5)	16	(3.5)
Employed (aged 16–64)	27	(44.3)	40	(27.2)	81	(42.6)	109	(40.1)	141	(41.6)	175	(38.5)
Treatment status unknown	11		9		17		17		16		18	

* Excludes cases not normally resident in Ireland.
† 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 5th percentile to 95th percentile (90% of cases are included within this range).
~ Numbers of cases less than five cannot be reported.

Treatment provision

Of the 770 cases entering treatment who reported cocaine as their main problem substance in 2007, 84% received counselling, 43% a brief intervention, 31% complementary therapy and 27% medication-free therapy (Figure 5). Almost 60% of cases received more than one initial treatment intervention (Figure 6). It is widely recognised that no single intervention will effectively treat problem cocaine use. It is important to note that the NDTRS form records only the initial treatment provided in each case. Treatment interventions that may be provided subsequently are not recorded. In recent years there has been an increase in the types of intervention provided and a greater emphasis on brief intervention, counselling (including cognitive behaviour therapy), family therapy, aftercare and social re-integration. Alcohol detoxification and methadone substitution were provided for some cases who reported alcohol or opiates as additional problem substances.

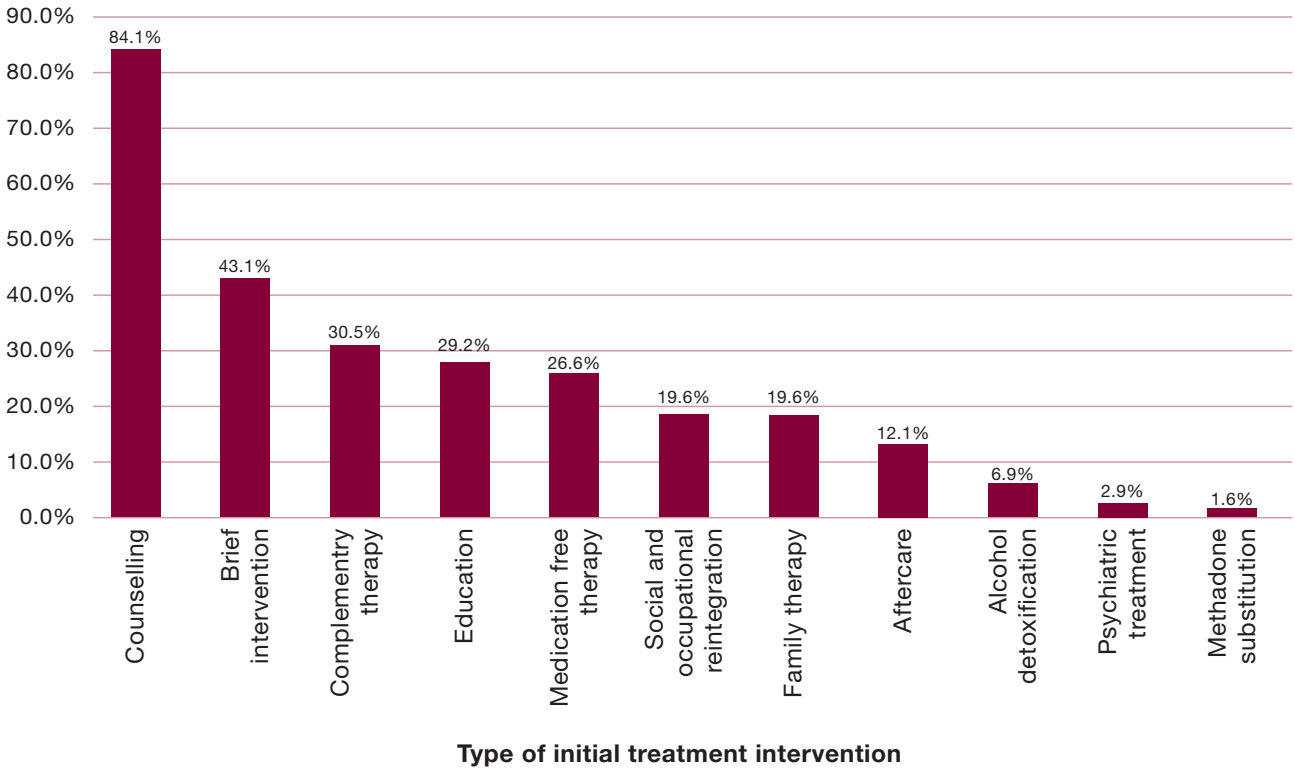

Figure 5 Percentage of cases entering treatment who reported cocaine as their main problem substance, by type of initial treatment intervention availed of (NDTRS 2007)

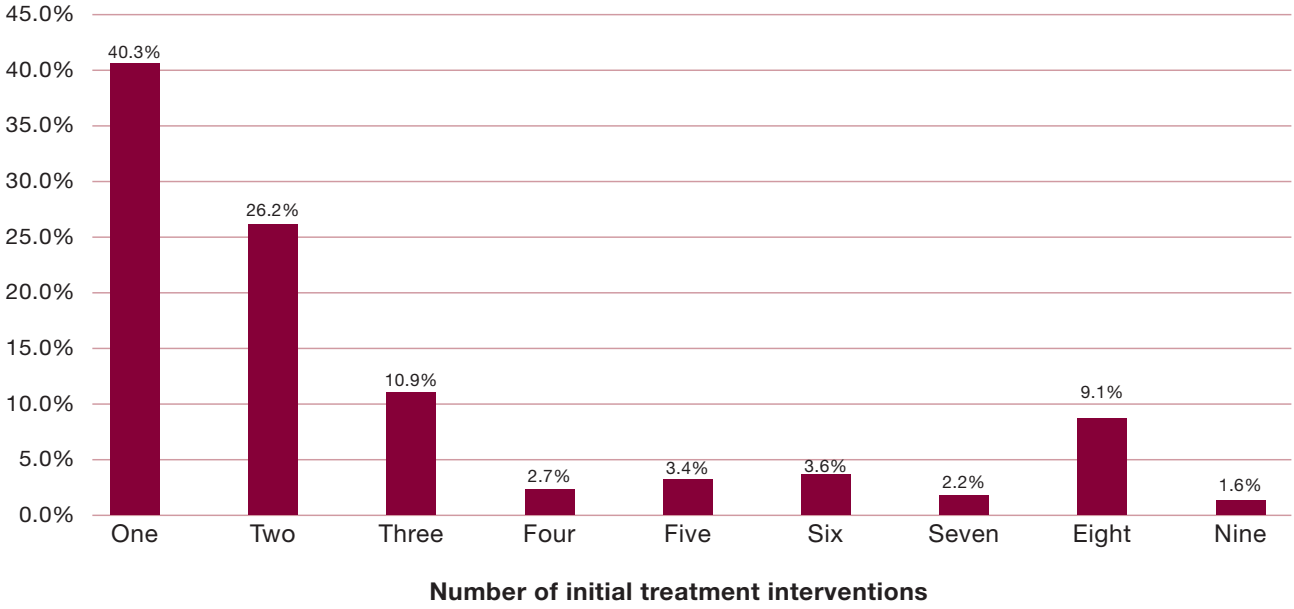

Figure 6 Percentage of cases entering treatment who reported cocaine as their main problem substance, by the number of treatment interventions availed of (NDTRS 2007)

Conclusions

The number of cases entering treatment and reporting cocaine as their main problem substance or as an additional problem substance increased steadily between 2002 and 2007. The higher incidence of treatment for cocaine as a main problem substance was in the north-eastern, south eastern and southern counties. In Dublin, cocaine was reported as an additional problem to opiates. The increase in treated cocaine cases was in line with increases in cocaine seizures, in cocaine use among the general population and in cocaine-related deaths. It was also in line with an increase in treatment interventions for cocaine users and an increase in reporting to the NDTRS.

Almost four out of five cases who reported cocaine as their main problem substance used more than one drug. Cocaine was used alongside opiates, cannabis, alcohol and ecstasy. There appeared to be two profiles of cocaine user entering treatment, those who used opiates alongside cocaine and those who used combinations of alcohol, cannabis and ecstasy alongside cocaine. The majority of cases who reported cocaine as their main problem substance used it on two to six days per week, indicating that cocaine may be used as a week-end drug or a part of a binge. Half of the cases were under 27 years old; 83% were men and 33% were employed. The proportion of treated cocaine cases in employment was higher than the proportion reported for treated opiate cases, 35% versus 13%, and the proportion of treated cocaine cases who left school early was lower than the proportion reported for treated opiate cases, 15% versus 25%, indicating that treated cocaine users had a mixed social profile while opiate cases had a deprived social profile. Sixty-nine per cent of cocaine users were treated at outpatient services. There is a wide variety of interventions provided to cocaine cases, but until there are national data on immediate treatment outcome it is difficult to comment on the effectiveness of these interventions.

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