

Focal Point Ireland: national report for 2024 – Harms and harm reduction



Health Research Board. Irish Focal Point to the European Drugs Agency

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T0. Summary

This report summarises the most recently available data with regard to drug-related harms and drug-related harm interventions in the Republic of Ireland.

Ireland maintains a special register that is a complete census of all drug-induced deaths. Established in 2005, the National Drug-Related Deaths Index (NDRDI), which is maintained by the Health Research Board (HRB), is an epidemiological database that records cases of deaths by drug poisoning, and deaths among drug users in Ireland, extending back to 1998. Data for 2021 are included in this report.

Data on drug-related acute emergencies in the Irish context refer to all admissions to acute general hospitals with non-fatal overdoses and are extracted from the Hospital In-Patient Enquiry (HIPE) scheme. Data for 2023 are included in this report.

The Health Protection Surveillance Centre (HPSC) is notified of incidences of newly diagnosed human immunodeficiency virus (HIV), hepatitis B virus (HBV), and hepatitis C virus (HCV). Notification data for 2023 are included in this report.

There were 286 drug-induced deaths in 2021; the comparable figure for 2020 was 352. The majority of those who died were male, aged in their early 40s. Opioids were the most common drug group associated with drug-induced deaths.

There were 4,476 overdose cases in 2023 discharged from Irish hospitals. Opioids were used in 17.6% (n=786) of cases; cocaine in 5.9% (n=263) of cases; and cannabis in 2.7% (n=120) of cases in 2023. No overdose cases (or five or fewer) involving lysergic acid diethylamide (LSD) or other hallucinogens were recorded.

According to data compiled by the HPSC, at the end of 2023, 911 people were newly diagnosed with HIV in Ireland, a notification rate of 17.7 per 100,000 population. This marks an increase of 2.7% compared with 2022 (n=887). Of the HIV notifications in 2023 for whom risk factor data were available (73.5%), 29 were of people who inject drugs (PWID), compared with 35 in 2022. The figure for 2022 was the highest number of PWID among HIV notifications since 2015.

Recent trends indicate that the number of cases of HBV diagnosed and notified in Ireland is stabilising rather than continuing to decline. Of the acute HBV cases notified in 2023 (n=14), none were PWID. There were 537 HCV notifications in Ireland in 2023, an increase of 11.2% on 2022, when there were 480 notifications. There has been a downward trend in HCV notifications since peak numbers (n=1538) were recorded in 2007. Information on the most likely risk factor was available for 36.0% (n=192) of cases in 2023. Of cases with risk factor data, 122 were PWID and 10 were infected through contaminated blood products.

Harm reduction services available in Ireland include needle exchange programmes from fixed sites, mobile units, and outreach work provided by regional authorities and community-based organisations (CBOs). In addition, there are pharmacies providing a needle exchange service in each regional Drug and Alcohol Task Force (RDATF) area within Ireland. At the end of 2023, there were 98 pharmacies providing a needle exchange service. According to the most recent available data, there were 585,411 individual syringes exchanged in Ireland in 2023.

From 2018 to 2020, there were 8,881 units of naloxone supplied by the Health Service Executive (HSE) National Social Inclusion Office to service providers. Overall, 59% of units were intramuscular, with 41% intranasal. The majority of the naloxone was administered by service provider staff (94%), with 3% administered by peers, 2% by an unspecified individual, and 1% by a general practitioner (GP) or a nurse. Between 2018 and 2020, it was reported that naloxone was administered to 569 people. Of these 569 who received naloxone following an opioid overdose, 98% survived while 9 died.

T1. National profile and trends

T1.1 Drug-related deaths

T1.1.1 Overdose deaths

In 2021, there were 286 deaths due to poisoning recorded in Ireland by the NDRDI, as per ‘Selection D’ (Table T1.1.1.1). This is a 19% decrease compared to 2020, when 352 deaths were reported. 2021 is the latest year for which figures are available because of the nature of data sources for the NDRDI. It should be noted that annual data reported for prior years have been changed, as the NDRDI figures have been updated whenever new information has become available.

Table T1.1.1.1 Number of deaths due to poisoning in Ireland (EUDA Selection D), NDRDI 2013–2021

2013	2014	2015	2016	2017	2018	2019	2020	2021
225	226	237	222	258	274	312	352	286

Source: NDRDI (2024)

The increasing trend of poisoning deaths among older people seen in the year span 2013–2021 continues, and the mean age of those who died in 2021 was 41.8 years compared with 36.2 years in 2013. The majority of deaths were male (68.2%), although the proportion was lower than in previous years (77.4% reported for 2014).

The NDRDI does not routinely report the intentionality of the deaths. The overall trends in overdose deaths for the EUDA definition of ‘Selection D’ remain the same, with opioids associated with most poisoning deaths (see Section T1.1.2).

T1.1.2 Toxicology of overdose deaths

Toxicology was available for all 286 poisoning deaths in 2021. Opioids were found in the post-mortem toxicology results of 85.3% of poisoning deaths, similar to other years.

T1.1.3 Mortality cohort studies

There are no mortality cohort studies to report.

T1.1.4 Trends

After a period of stabilisation in the number of poisoning deaths (2013–2016), the number has increased year on year from 258 in 2017 to 352 in 2021, but dropping to 286 in 2021 (see Table T1.1.1.1). The peak reported in 2020 is unlikely to indicate a true change in trends but rather a phenomenon of the COVID-19 pandemic which requires further investigation, with a return to pre-pandemic trends in 2021.

The majority of overdose deaths from the year span 2013–2021 involved opioids. This is not surprising given the prevalence of problem opioid use in Ireland (also see Treatment Demand Indicator (TDI) and the *Treatment workbook*). The number of heroin-related deaths reported in 2021 (79) was the lowest since 2017.

Prior to 2010, more deaths involved heroin, but since then more deaths have involved methadone. There has as yet been no in-depth analysis of why the numbers of methadone-related deaths have increased. The number of clients in opioid substitution treatment (OST) has increased steadily over the same period. For further details on the number of clients in OST, please see Section T2.1 and Figure IV in the *Treatment workbook*.

There was a significant increase in the number of deaths where cocaine was implicated (alone or with other drugs), rising from 26 deaths in 2012 to a peak of 140 deaths in 2020, reducing to 107 deaths in 2021. This overall trend corresponds to increasing evidence of problem cocaine use seen in the drug treatment data over the past number of years. For further information, please see Section T2.1 in the *Treatment workbook*.

Data completeness/coverage; case ascertainment, changes in reporting

The NDRDI has been in existence since 2007, utilising ‘Selection D’ as its definition for reporting to the European Drugs Agency (EUDA). Up to that point, drug-related deaths were reported through the Central Statistics Office (CSO). However, the NDRDI retrospectively collected data back to 1998. Therefore, the NDRDI data supersede any data previously reported between 1998 and 2007.

The NDRDI is a complete census of all drug-related deaths in Ireland, both direct drug deaths through overdose (known as poisoning) and deaths among drug users. Of note, it also collects data on additional deaths which do not meet the ‘Selection D’ criteria but are of national importance, e.g. alcohol only and alcohol in combination with prescription drug poisoning deaths. The NDRDI is a national census, as it collects information from all closed coronial files, all deaths among hospital inpatients which meet the criteria, all deaths among those registered on OST and the general mortality register (GMR) (via the CSO). All of these data sources are matched in order to avoid duplication and to ensure the greatest amount of information on each death. There has been no change in the process since the inception of the NDRDI.

Annual data are updated retrospectively as data become available from late inquests.

T1.1.5 Additional information on drug-related deaths

Latest national data on poisoning deaths in Ireland

The latest national data on poisonings deaths for 2021 report a 19% decrease compared with 2020, from 439 poisoning deaths in 2020 to 354 such deaths in 2021 (see Table T1.1.5.1) (Kelleher et al. 2024b).

The figures reported nationally differ from what is reported to the EUDA, as it also includes a wider range of poisonings deaths, those due to alcohol and prescription drugs, and prescription drugs only. 2021 is the latest year to be reported, as the NDRDI relies on data from closed coronial inquests which are subject to delays.

Table T1.1.5.1 Number of poisoning deaths (excluding alcohol only), NDRDI 2012–2021

	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
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Number of poisoning deaths	273	324	311	310	307	325	361	375	439	354
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Source: NDRDI (2024)

In 2021, there were seven deaths per 100,000 of the population in that year. The majority were male (64.1%). The main specific drugs implicated were methadone (36.4%), diazepam (31.6%), alprazolam (30.2%), cocaine (30.2%), alcohol as part of a polydrug poisoning (25.7%), and pregabalin (23.4%) (see Table T1.1.5.2).

- Methadone was implicated in more than 1 in 3 (36.4%) deaths and in a greater proportion of deaths among males (38.3%) than among females (33.1%).
- Heroin was implicated in 1 in 5 (22.3%) deaths; these were mostly among males (83.5%).
- Diazepam (31.6%) and alprazolam (30.2%) were the most common benzodiazepines, and each was implicated in 3 in 10 deaths overall.
- Antidepressants were implicated in a greater proportion of deaths among females (47.2%) than among males (28.2%). Mirtazapine (13.6%) was the most common antidepressant.
- Cocaine was implicated in 3 in 10 (30.2%) poisoning deaths overall, the majority (4 in 5) (81.3%) of which were among males.
- Pregabalin was implicated in almost 1 in 4 (23.4%) deaths and in a greater proportion of deaths among females (28.3%) than among males (20.7%).

In 2021, 4 in 5 (81.4%, 288) drug poisoning deaths were polydrug poisonings (more than one drug was implicated). Over 1 in 5 (22.9%) polysubstance poisoning deaths had more than one opioid implicated, while almost 3 in 10 (28.3%) had more than one benzodiazepine implicated

The median age of the deceased was 42.5 years (41 years for males and 47 years for females), and over one-half (52.2%) of poisoning deaths were among people aged 35–54 years. More than 1 in 10 (15.3%) of the deceased were experiencing homelessness. Almost 1 in 5 (17.5%, 62) of the deceased were known to have ever injected drugs. Of those, more than 1 in 3 (37.1%) were injecting at the time of death.

Most poisoning deaths (75.1%) occurred in a private dwelling and many of the deceased were alone at the time of the incident (41.0%). At least 15.8% of the deceased had a history of a blood-borne virus. Almost one-half (48.0%) had a recorded history of mental health issues (52.0% of females vs 45.8% of males).

Of note, most (78.2%) of the deceased were in contact with medical services, including substance use treatment services, at the time of death. One-quarter (24.9%) of the deceased were in OST at the time of death (27.8% of males vs 19.7% of females).

Between 2012 and 2021, an upward trend in the number of deaths was observed for opioids, benzodiazepines, antidepressants, cocaine, and gabapentinoid/antiepileptic drugs (mainly pregabalin) (see Table T1.1.5.2).

- Opioids increased by 34.1% (from 182 to 244 deaths).
- Methadone increased by 48.3% (from 87 to 129 deaths) and was the most common opioid implicated in each year.

- Heroin increased by 23.4% (from 64 to 79 deaths), but 2021 had the third lowest rate of the period.
- Benzodiazepines increased by 45.0% (from 129 to 187 deaths), mainly attributable to an over fivefold (494.4%) increase in alprazolam (from 18 to 107 deaths).
- The number of deaths with cocaine implicated increased by 311.5% (from 26 to 107 deaths).
- Pregabalin increased by 492.9% from 14 deaths to 83 deaths (2013 to 2021).

Table T1.1.5.2 Drugs implicated in poisoning deaths (excluding alcohol only), NDRDI 2012–2021

	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
Number of deaths ^a	273	324	311	310	307	325	361	375	439	354
Methadone	87	94	105	91	105	101	123	126	150	129
Diazepam	92	113	121	109	101	97	122	104	139	112
Cocaine	26	32	42	46	42	55	79	108	140	107
Alprazolam	18	43	49	50	53	70	115	99	132	107
Alcohol ^b	54	82	70	67	81	68	72	92	88	91
Pregabalin ^c	~	14	28	50	68	48	69	62	92	83
Heroin	64	88	97	84	74	89	99	108	123	79
Zopiclone	20	53	73	67	67	48	42	73	69	59
Mirtazapine	21	37	41	31	48	26	38	32	51	48
Paracetamol	20	38	33	32	46	44	37	35	42	40
Tramadol hydrochloride	23	25	19	29	23	26	38	26	44	32
Sertraline	~	6	8	10	8	12	12	13	14	27
Codeine	20	17	16	22	18	28	28	21	26	28
Flurazepam	30	42	36	35	44	35	47	31	32	27
Olanzapine	19	28	18	19	23	18	20	15	30	20
Oxycodone hydrochloride	11	6	14	15	7	8	11	20	22	19
Amitriptyline	14	21	23	28	31	11	20	19	22	18
Quetiapine	10	13	18	20	20	13	8	14	24	18
Promethazine	~	~	~	6	~	~	~	~	11	16
Fluoxetine	~	6	11	~	6	~	10	8	11	13
Venlafaxine	6	12	12	11	9	9	14	13	17	13
Morphine	7	12	10	8	14	~	7	9	13	12

Source NDRDI (2024)

^a Many individuals had more than one drug implicated in their death.

^b Alcohol as part of a polysubstance poisoning.

^c Pregabalin was included in routine postmortem toxicology screening by the State Laboratory from 2013.

~ Five deaths or fewer.

Additionally, other changes were seen over the 10-year period: lifetime history of injecting decreased from 23.8% in 2012 to 17.5% in 2021, the lowest rate of the period. Among those who had ever injected, the proportion of people injecting at the time of death was at the lowest level (37.0%) in 2021 compared to a peak of 63.6% in 2015.

Trends in gabapentinoid prescribing, law enforcement, drug seizures, and postmortem toxicology in Ireland, 2010–2020

Gabapentin and pregabalin are collectively known as gabapentinoids. They are licensed as an anti-epileptic, for neuropathic pain and generalised anxiety disorder in Ireland. Since their market introduction (gabapentin 1993; pregabalin 2004) they have risen to become one of the most commonly prescribed medications in a number of countries. One of the theories for the rise in prescribing is the increase in off-label prescribing, i.e. being prescribed for conditions other than that licensed for, such as other pain disorders.

Of concern is that when gabapentinoids are used alongside opioids, there may be an increased risk of respiratory depression, overdose, and death. When first released onto the market, these medications were thought to have a low risk of misuse or dependence; however, since then there has been a growing recognition of those associated risks. There has been an increased reporting of misuse or dependence to various agencies, and an increase in the number of overdose deaths where they are implicated often in combination with opioids, specifically heroin and methadone. In this context, a 2024 retrospective observational study in Ireland looked at prescribing trends, seizures and trends in the detection of gabapentinoids in a national postmortem population (2013–2020) using data from the State Laboratory (Durand et al. 2024).

Postmortem toxicology (2013–2020)

Of the total postmortem toxicology analyses done in the study period, 1,881 (7.14%) cases tested positive for a gabapentinoid: 243 cases were positive for gabapentin (0.92%) and 1,679 (6.37%) positive for pregabalin. Both drugs were detected in a small number of cases (0.16%, n=41) (see Figure T1.1.5.1). There was a statistically significant increase of 28% over the 8 years in positive results, driven by the increasing numbers of pregabalin-positive results.

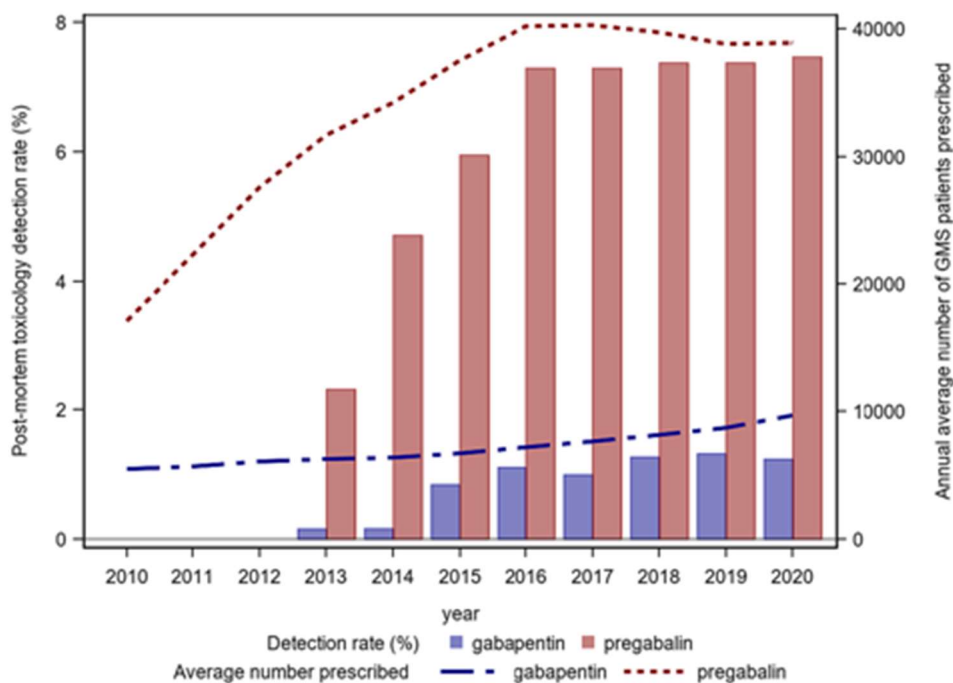


Figure T1.1.5.1 Postmortem toxicology detection rate for gabapentin and pregabalin in Ireland between 2013 and 2020

Source: Durand et al. (2024)

The secondary y-axis shows the annual average number of patients prescribed gabapentinoids in Ireland between 2010 and 2020.

Rates among individuals with OUD in postmortem toxicology (2013–2020)

An individual was defined as having opioid use disorder (OUD) if they tested positive for heroin or methadone in postmortem toxicology. For the period, 5.2% (n=1379) of individuals tested positive for methadone and 3.2% (n=852) tested positive for heroin; in total 7.2% were classified as OUD. Of this group, 27.8% (n=528) tested positive for pregabalin compared with only 4.7% in the non-OUD group. Similar to other results, a lower number tested positive for gabapentin (n=41, 2.2%) in the OUD group (compared with 0.8% in the non-OUD group). In almost 1 in 10 (8.2%) of OUD cases, benzodiazepines were found along with pregabalin, which increased over the study period, peaking at 37.3% in 2018, and then decreasing slightly to 31.3% in 2020. The proportion of the OUD population where benzodiazepines were found along with gabapentin was lower, but also peaked in 2018, at 3.3% before dropping to 2% in 2020.

Limitations

The study has a number of limitations. The prescription data are estimated to represent one-third of the Irish population and do not include private prescriptions or prescriptions from specialist secondary care. It is likely to over-represent people with a lower socioeconomic status, women, and older people. It does not include any information about what conditions the drugs were prescribed for, or other drugs prescribed along with the gabapentinoids. The number of individuals identified as OUD is likely to be underestimated due to the short half-life of heroin and its metabolite.

Discussion

The authors concluded that similar to other countries there has been an increase in gabapentinoid prescribing, in particular pregabalin, in Ireland over the last number of years. Of concern is the finding of the higher rates of pregabalin in the OUD population compared with the non-OUD population. Concurrent use of an opioid along with pregabalin can increase the risk of overdose, with some research showing that pregabalin can hinder the effectiveness of naloxone in reversing an opioid overdose. A number of counties have implemented regulatory measures. In September 2019, the Irish Medical Council issued an advisory notice to doctors in Ireland when prescribing pregabalin to follow best practice guidelines and only prescribe when unequivocally necessary. The authors note that this advice had no impact on pregabalin prescribing in Ireland. However, the authors also sound a note of caution, in the context of the unintended consequences in Scotland, following implementation restrictions on benzodiazepine prescribing in that jurisdiction, which resulted ultimately in an increase in drug-related deaths.

The authors conclude that their findings raise concerns about the risk of ubiquitous prescribing of pregabalin in Ireland, associated street supply, and in particular the potential serious harmful consequences to people who are also using opioids.

Deaths among people who were homeless at time of death in Ireland, 2020

In 2020, there 121 deaths among people who were homeless and who died in Ireland in 2020, 69 due to poisoning and 52 due to non-poisoning (Kelleher et al. 2024a). Most of these deaths (n=83) were among people who were homeless and in temporary or crisis accommodation; the majority (n=52) of these were poisoning deaths. There were also 23 deaths among people who were sleeping rough.

Most of the deceased (91%) had a history of substance use, many (45%) with alcohol dependency. Heroin (61%), cocaine (56%), and benzodiazepines (36%) were the most common drugs used, and

most people who used drugs (88%) used more than one. One in four (26%) had ever injected drugs (27% males vs 23% females). Fifteen per cent of males were injecting at the time of death.

Over one-half (56%) of those who died were homeless in Dublin. Almost one in two (48%) deaths occurred in temporary or crisis accommodation, while one in three (36%) were in a public place or derelict building and one in 10 (10%) were in a private dwelling.

Hepatitis C was recorded for 16 (13%) deaths, while epilepsy was recorded for 10 (8%). Almost one-half (46%) of the deceased had ever accessed substance use treatment, while 21% of the deceased were receiving OST, mainly methadone, at the time of death (17% males vs 35% females). Almost one-half (46%) of the deceased had a known history of mental health issues.

Of the 69 poisoning deaths:

- 51 were among males and 18 among females.
- The median age at death was 39 years for males and 34.5 years for females.
- The most common drugs implicated in poisoning deaths were opioids, benzodiazepines, and cocaine.
- Alprazolam was implicated in 34 poisoning deaths, while pregabalin was implicated in 16.
- Polysubstance poisoning was a common factor in the deaths of both males (82%) and females (78%).
- One-half (54%) of those whose death involved opioids had previously received substance use treatment and almost two in five (39%) were in treatment when they died.
- A high proportion of deaths involving opioids (69%) occurred in temporary or crisis accommodation, and one in three (33%) of the deceased were with other people at the time of death.

Sociodemographic factors, antecedent stressors and long-term history of self-harm impact on suicide deaths in Ireland

A comprehensive national study examining characteristics and risk factors associated with suicide in Ireland was recently published (McMahon et al. 2024). The study focused on understanding suicides that occur with or without a history of self-harm or other known risk factors.

In total, 1,809 individuals who died by suicide between 2015 and 2017 were included in the study. The study found that men (76.8%) were more likely to die by suicide than women. One-half of those who died were aged 43 years or under. The majority (65.3%) had a history of a mental health condition. Many also had a history of drug or alcohol dependence. Overall, 26.1% had a history of drug dependence; this differed depending on whether there was a history of self-harm. Of those with a history of self-harm, 39.2% had a history of drug dependence whereas the corresponding figure for those with no such history was 22.4%. Overall, 17.4% of those who died by suicide had a history of alcohol dependence, but this figure was higher (30.7%) among those with a history of self-harm than among those with no such history (13.4%).

For females, drug dependence was over twice as likely to be significantly associated with a history of self-harm. In males, this link was not observed. However, alcohol dependence was significantly associated with self-harm.

The most common method of suicide was hanging (61.0%), followed by drowning (13.8%) and poisoning (11.7%). Using latent analysis, the study identified four classes or groups with distinct profiles. Twenty-one percent (21.1%) of the deaths were classified into Group 3 ‘Multiple Challenges’. This group reported high levels of self-harm, mental health conditions, and had the highest rates of drug dependency and alcohol dependency. They were younger and more likely to have established risk factors. They often dealt with relationship difficulties, bereavement, and abuse.

Group 4 ‘Low Visibility but High Risk’ had the lowest proportion of deaths (14.3%) and low levels of self-harm and mental health issues but faced significant stressors such as relationship difficulties and legal problems. Group 4 also reported a history of drug dependency but at a lower level than Group 3. This group predominantly comprised younger males, with hanging the most common method reported.

This study offers critical insights into factors contributing to suicide in Ireland. The findings suggest that while a history of self-harm is a significant risk factor, many individuals who die by suicide do not have such a history or other known risk factors. This reflects the study’s focus on understanding suicides without these factors and indicates that prevention strategies must address a broader range of issues, including drug and alcohol dependence, relationship problems, chronic illness, and isolation. Identifying distinct profiles within the suicide cohort emphasises the importance of tailored interventions that consider specific circumstances faced by different groups, including those with drug and alcohol dependence.

The experience of drug-related client loss for healthcare professionals who support people in addiction

This qualitative study looked at the impact of drug-related client loss for healthcare professionals (HCPs) working within the addiction services in Ireland (O’Callaghan and Lambert 2024). The impact on the individual HCP when their client dies can often be overlooked and there has been limited research in this area. The study used a phenomenological approach and interviewed 15 HCPs from a wide range of disciplines in the addiction services. Three core themes emerged: 1) grief beneath the surface; 2) the cost of caring; and 3) finding closure.

Subthemes included: intrusive flashbacks (trauma from discovering the deceased); the clinical carer’s burden (feelings of guilt that they may have missed an opportunity to prevent the death); the cost of caring (emotional investment in the client they had been working with, often for some time); occupation and vocation; mutual learning and lost potential; shock to the system (even though the HCP understands the higher risk of overdose for their clients, sudden deaths are still traumatic); finding closure; trepid last respects (respecting the family given the stigma of drug-related deaths); and balancing act (between grieving and moving on).

It is important that HCPs are supported and protected when dealing with client loss, as the impact of losing a client can be significant.

T1.2 Drug-related acute emergencies

T1.2.1 Drug-related acute emergencies

Non-fatal drug-related hospital admissions in Ireland, 2023

The HIPE (Hospital In-Patient Enquiry) scheme is a computer-based health information system, managed by the Economic and Social Research Institute (ESRI) in association with the Department of Health and the HSE. It collects demographic, medical, and administrative data on all admissions, discharges, and deaths from acute general hospitals in Ireland. Each HIPE discharge record represents one episode of care; each discharge of a patient, whether from the same or a different hospital, with the same or a different diagnosis, gives rise to a separate HIPE record. The scheme therefore facilitates analysis of hospital activity rather than incidence of disease. HIPE does not record information on individuals who attend emergency departments but are not admitted as inpatients. Monitoring of drug-related acute emergencies in the Irish context refers to all admissions for non-fatal overdoses to acute general hospitals in Ireland.

Drug-related emergencies – non-fatal overdoses

Data extracted from the HIPE scheme were analysed to determine trends in non-fatal overdoses in patients discharged from Irish hospitals in 2023.¹ There were 4,523 overdose cases in 2023, of which 47 died in hospital. Only discharged cases are included in this analysis (n=4476). There was a noticeable increase in overdose cases during the years of the COVID-19 pandemic, with the number of discharged overdose cases in 2020 being the highest recorded in 12 years. Since the end of the pandemic, overdose cases have decreased, with the number of discharged overdose cases in 2022 being the lowest recorded since 2017 (see Figure T1.2.1.1).

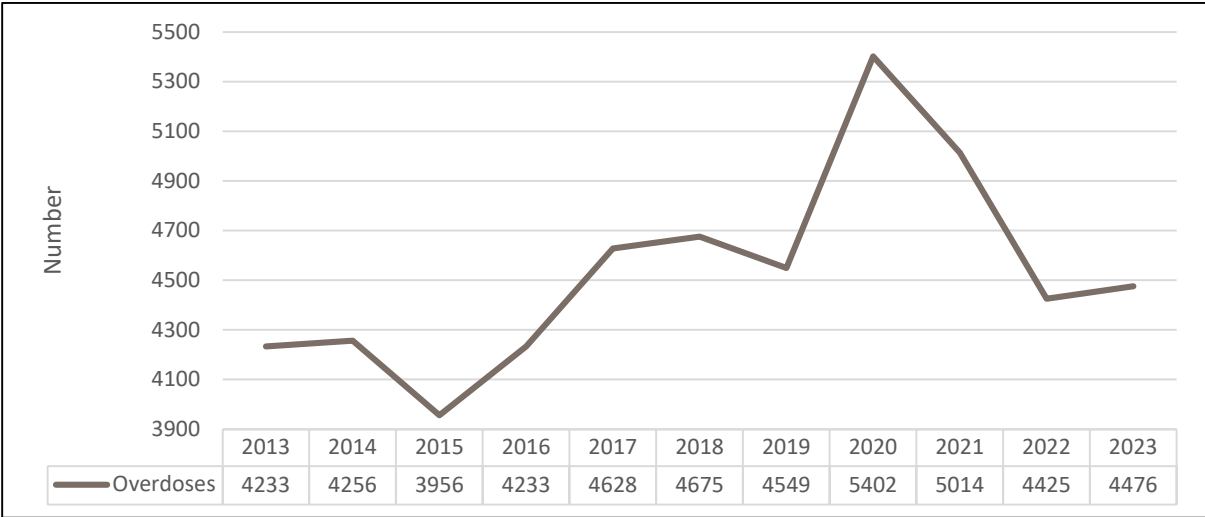


Figure T1.2.1.1 Number of non-fatal overdose cases admitted to Irish hospitals, by year, 2013–2023

Source: HIPE, Healthcare Pricing Office (2024)

Sex of overdose cases

Between 2013 and 2023, there were more overdose cases among females than males, with females accounting for 2,528 (56.5%) of all non-fatal overdose cases in 2023 (see Figure T1.2.1.2).

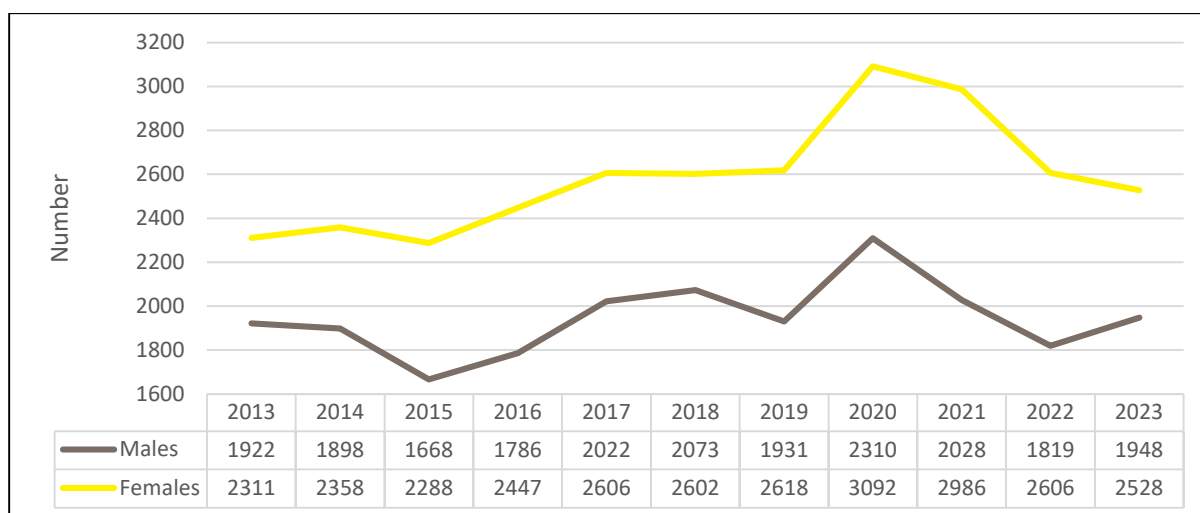


Figure T1.2.1.2 Number of non-fatal overdose cases admitted to Irish hospitals, by year and sex, 2013–2023

Source: HIPE, Healthcare Pricing Office (2024)

Age group

Between 2015 and 2020, there was a general increase in the number of non-fatal overdose cases in all age groups. As noted in previous years, the incidence of overdose cases in 2023 peaked in the 15–24 years age group (see Figure T1.2.1.3). In 2023, some 34.3% of cases were aged under 25 years.

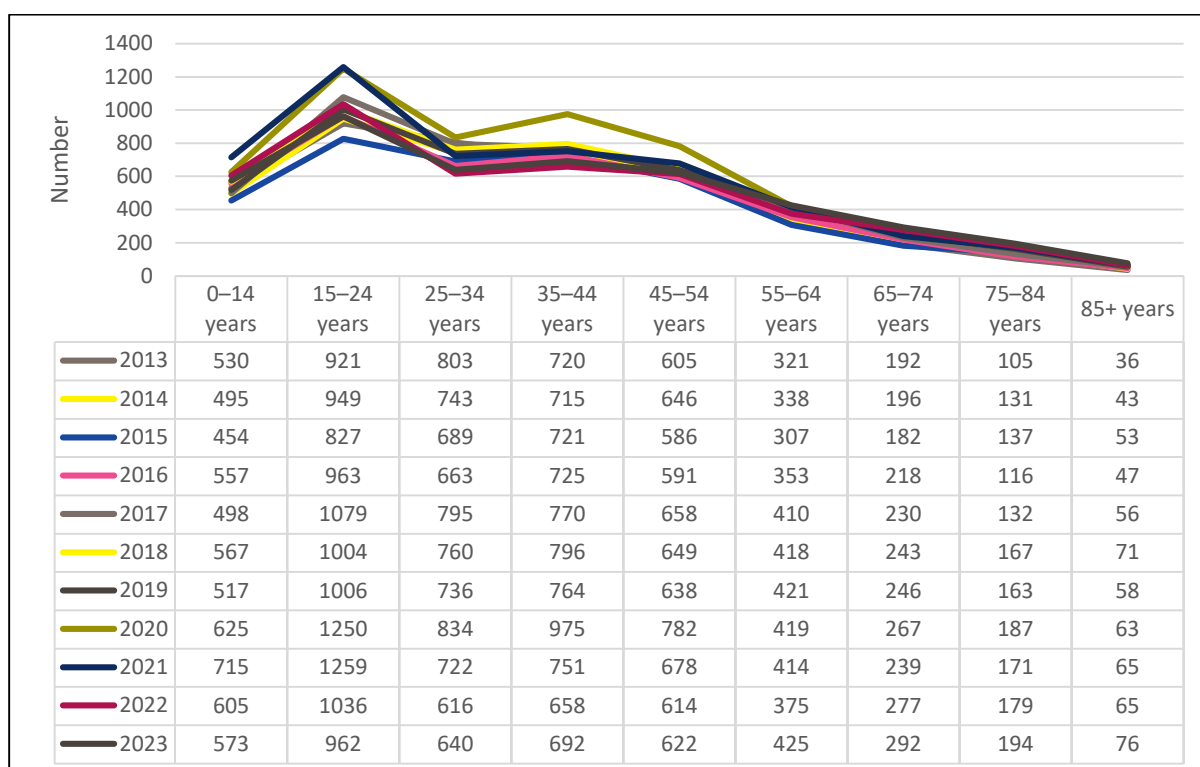


Figure T1.2.1.3 Non-fatal overdose cases admitted to Irish hospitals, by year and age group, 2013–2023

Source: HIPE, Healthcare Pricing Office (2024)

T1.2.2 Toxicology of drug-related acute emergencies

Table T1.2.2.1 presents the positive findings per category of drugs and other substances involved in all cases of overdose in 2023. Non-opioid analgesics were present in 1,541 cases. Paracetamol is included in this drug category and was present in 1,323 cases in 2023. Benzodiazepines and psychotropic agents were taken in 832 and 1,059 cases, respectively. There was evidence of alcohol consumption in 260 cases in 2023. Cases involving alcohol are included in this analysis only when alcohol was used in conjunction with another substance.

Table T1.2.2.1 Categories of drugs involved in non-fatal overdose cases admitted to Irish hospitals, 2023

Drug category	2023
Non-opioid analgesics	1541
<i>Paracetamol (4-Aminophenol derivatives)</i>	1323
Benzodiazepines	832
Psychotropic agents	1059
Anti-epileptic/sedative/anti-Parkinson agents	1927
Narcotics and hallucinogens	1016
Alcohol*	260
Systemic and haematological agents	196
Cardiovascular agents	183
Autonomic nervous system	137
Anaesthetics	70
Hormones	149
Systemic antibiotics	59
Gastrointestinal agents	91
Other chemicals and noxious substances	307
Diuretics	44
Muscle and respiratory agents	26
Topical agents	46
Anti-infectives/ anti-parasitics	31
Other gases and vapours	36
Other and unspecified drugs	1006

Source: HIPE, Healthcare Pricing Office (2024)

Note: The sum of positive findings is greater than the total number of cases, as some cases involved more than one drug or substance.

* Alcohol was only included for cases where any code from any of the other drug categories in this table was also reported.

Overdoses involving narcotics or hallucinogens

Figure T1.2.2.1 shows positive findings of illicit substances among overdose cases in 2023. Opioids were used in 17.6% (n=786) of cases in 2023; cocaine in 5.9% (n=263) of cases; and cannabis in 2.7% (n=120) of cases. No overdose cases (or five or fewer) involving LSD or other hallucinogens were recorded.

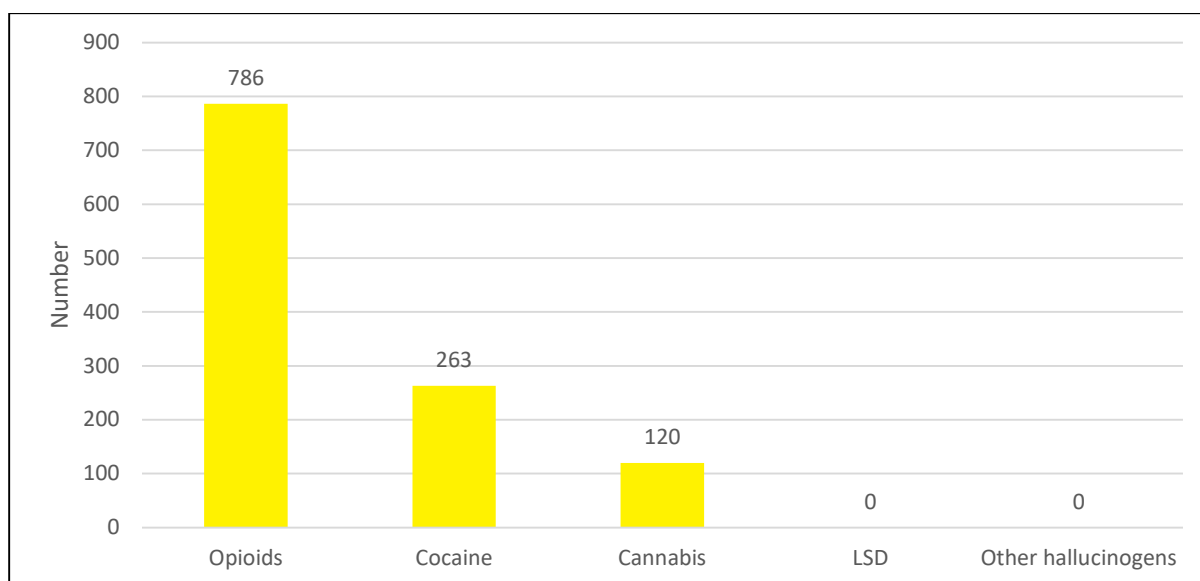


Figure T1.2.2.1 Narcotics and hallucinogens involved in non-fatal overdose cases admitted to Irish hospitals, 2023

Source: HIPE, Healthcare Pricing Office (2024)

Overdoses classified by intent

For 62.1% (n=2779) of cases in 2023, the overdose was classified as intentional (see Figure T1.2.2.2). For 9.6% (n=428) of cases, classification of intent was not clear.

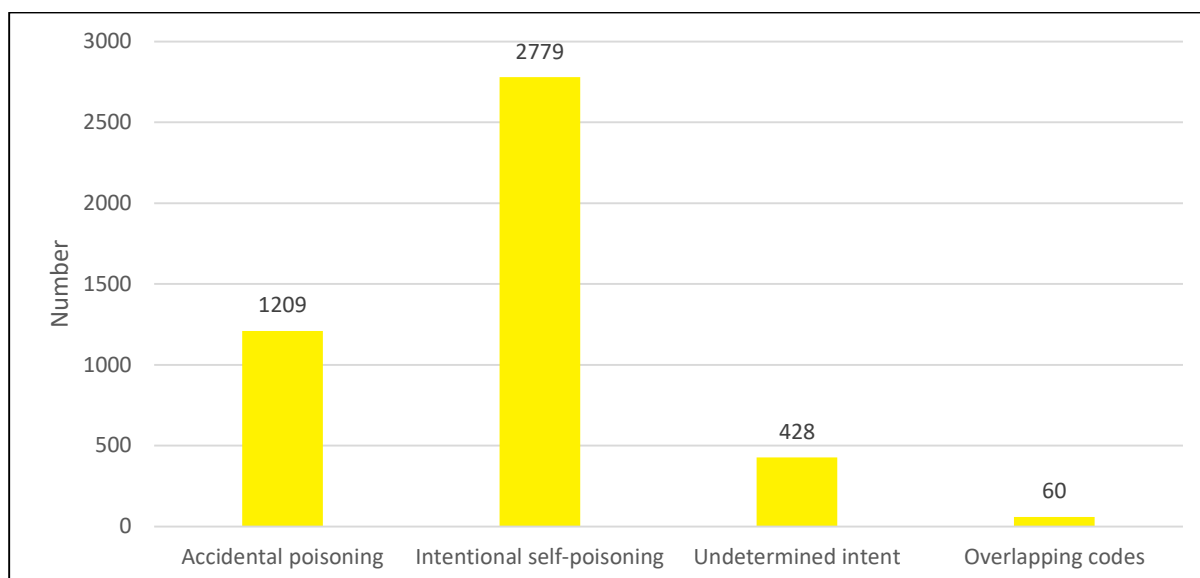


Figure T1.2.2.2 Non-fatal overdose cases admitted to Irish hospitals, classified by intent, 2023

Source: HIPE, Healthcare Pricing Office (2024)

Table T1.2.2.2 presents the positive findings per category of drugs and other substances involved in cases of intentional self-poisoning in 2023 (n=2779). In 2023, non-opioid analgesics were involved in 1,297 cases, benzodiazepines in 531 cases, and psychotropic agents in 838 cases.

Table T1.2.2.2 Categories of drugs involved in intentional self-poisoning cases admitted to Irish hospitals, 2023

Drug category	2023
---------------	------

Non-opioid analgesics	1297
Benzodiazepines	531
Psychotropic agents	838
Anti-epileptic/sedative/anti-Parkinson agents	1375
Narcotics and hallucinogens	479
Alcohol*	207
Systemic and haematological agents	128
Cardiovascular agents	127
Autonomic nervous system	97
Anaesthetics	17
Hormones	89
Systemic antibiotics	40
Gastrointestinal agents	80
Other chemicals and noxious substances	116
Diuretics	24
Muscle and respiratory agents	15
Topical agents	19
Anti-infectives/anti-parasitics	21
Other gases and vapours	6
Other and unspecified drugs	562

Source: HIPE, Healthcare Pricing Office (2024)

Note: As some discharges may be included in more than one drug category, the total count in this table exceeds the total number of discharges.

* Alcohol was only included for cases where any code from any of the other drug categories in this table was also reported.

T1.2.3 Explanations of short-term (5 years) and long-term trends in the number and nature of drug-induced emergencies

See Section T1.2.1 for information regarding trends in drug-related acute emergencies in Ireland.

T1.2.4 Additional information on drug-related acute emergencies

Trends in alcohol and drug admissions to psychiatric facilities

The *National Psychiatric Inpatient Reporting System (NPIRS) Annual Report on the Activities of Irish Psychiatric Units and Hospitals, 2022*, published by the HRB, shows that the rate of new admissions to inpatient care for alcohol disorders has decreased (Daly and Lynn 2023).

In 2022, some 806 cases were admitted to psychiatric facilities with an alcohol disorder, of whom 263 were treated for the first time. Figure T1.2.4.1 presents the rates of first admission between 2002 and 2022 for cases with a diagnosis of an alcohol disorder. Trends over time indicate an overall decline in first admissions. Just over one-third (35.3%) of cases hospitalised for an alcohol disorder in 2022 stayed just under 1 week, while 26.5% of cases were hospitalised for between 1 and 3 months, similar to previous years.

In 2022, some 813 cases were also admitted to psychiatric facilities with a drug disorder. Of these cases, 318 were treated for the first time. Figure T1.2.4.2 presents the rates of first admission between 2002 and 2022 for cases with a diagnosis of a drug disorder. The admission rate in 2022 was lower than that of the previous year and is the lowest rate recorded since 2008. It should be noted that the report does not present data on drug use and psychiatric comorbidity; it is therefore not possible to determine whether or not these admissions were appropriate.

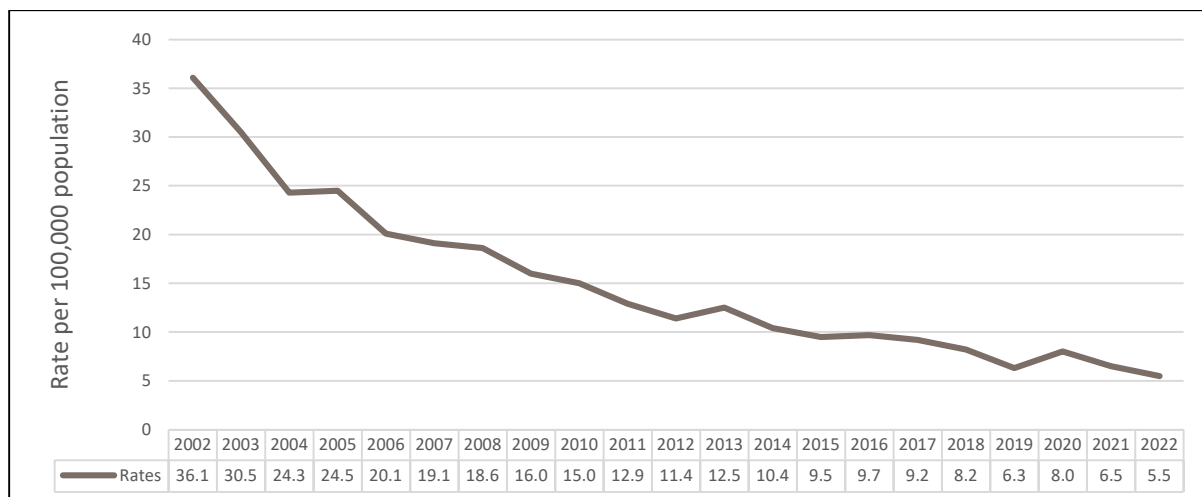


Figure T1.2.4.1 Rates of psychiatric first admission of cases with a diagnosis of an alcohol disorder per 100,000 of population in Ireland, 2002–2022

Source: Daly and Lynn (2023)

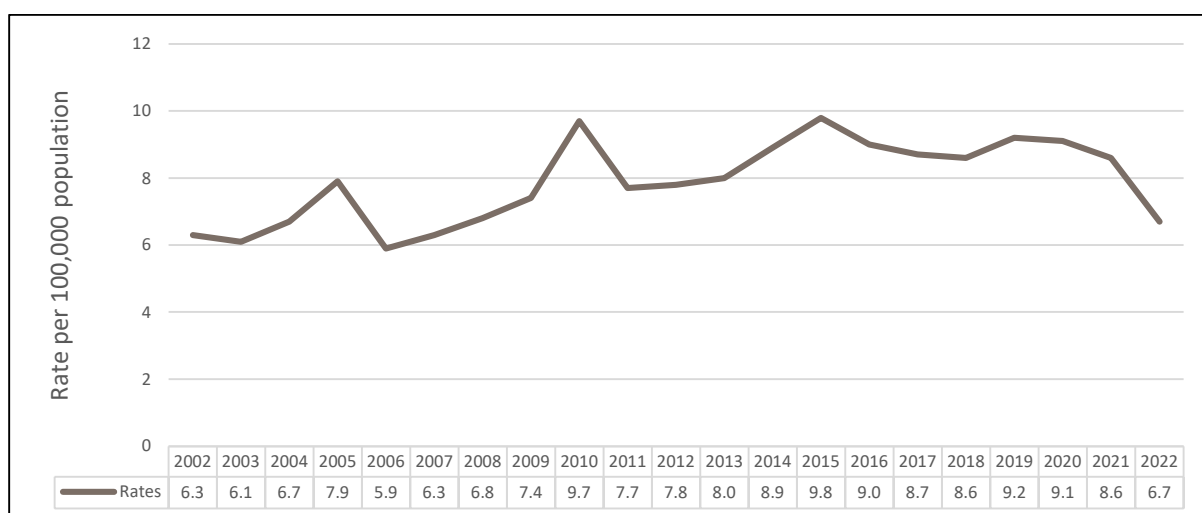


Figure T1.2.4.2 Rates of psychiatric first admission of cases with a diagnosis of a drug disorder per 100,000 of population in Ireland, 2002–2022

Source: Daly and Lynn (2023)

Other notable statistics on admissions for a drug disorder in 2022 include the following:

- Just under one-half of cases hospitalised for a drug disorder stayed under 1 week (44.7%), while 99.4% were discharged within 3 months. It should be noted that admissions and discharges represent episodes or events and not persons.
- 23.0% of first-time admissions were involuntary.
- Similar to previous years, the rate of first-time admissions was higher for men (10.7 per 100,000 population) than for women (2.7 per 100,000 population).

T1.3 Drug-related infectious diseases

T1.3.1 Main drug-related infectious diseases among drug users – HIV, HBV, HCV

Drug-related infectious diseases in Ireland, 2023

The HPSC is Ireland’s specialist agency for the surveillance of communicable diseases. Part of the HSE, and originally known as the National Disease Surveillance Centre, the HPSC endeavours to protect and improve the health of the Irish population by collating, interpreting, and disseminating data to provide the best possible information on infectious diseases. The HPSC has recorded new cases of HIV among injecting drug users since 1982, HBV since 2004, and HCV since 2006. The figures and tables presented in this summary are based on data extracted from the Computerised Infectious Disease Reporting (CIDR) system in July 2024. It should be noted that these data have not yet been extensively validated and should be considered provisional.

Main drug-related infectious diseases among people who use drugs – HIV, HBV, and HCV

HIV notifications, 2023

According to data compiled by the HPSC, at the end of 2023, 911 people were newly diagnosed with HIV in Ireland, a notification rate of 17.7 per 100,000 population. This marks an increase of 2.7% compared with 2022 (n=887) (see Figure T1.3.1.1). It should be noted that this number includes all people newly diagnosed with HIV in Ireland, even if they were previously diagnosed in another country. In 2023, a majority of HIV diagnoses in Ireland were previously diagnosed elsewhere.

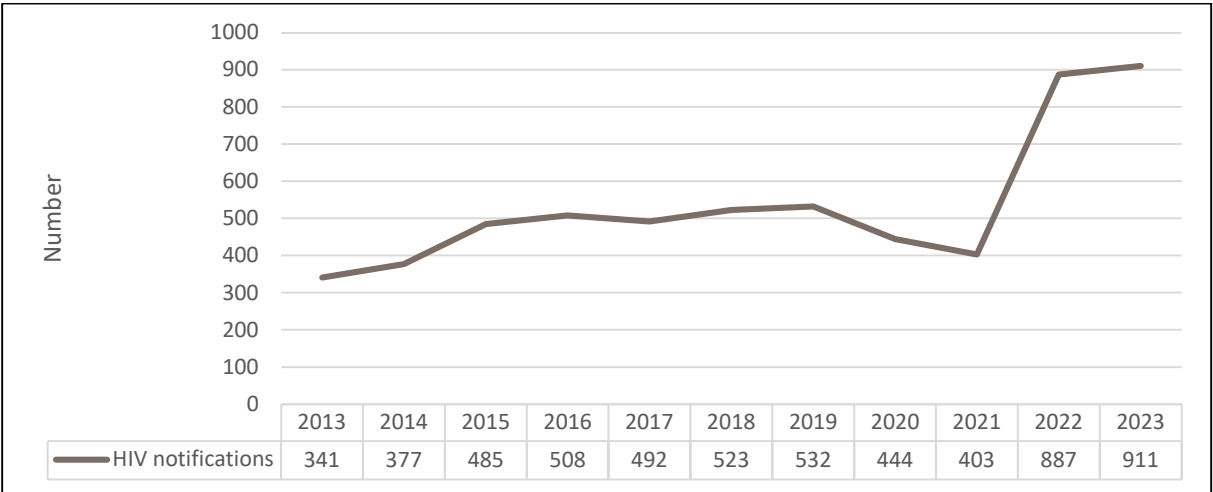


Figure T1.3.1.1 Number of new HIV notifications reported in Ireland, by year of notification, 2013–2023

Source: HSE and HPSC (2024)

Of the HIV notifications in 2023 for whom risk factor data were available (73.5%), 29 were of PWID, compared with 35 in 2022 (see Table T1.3.1.1). The figure for 2022 was the highest number of PWID among HIV notifications since 2015 (see Figure T1.3.1.2).

Table T1.3.1.1 New HIV notifications reported to the HPSC by risk factor status, 2023

Risk factor status	Number
Total number of cases	911
Cases <i>with</i> reported risk factor data	670
Of which:	
Male	453
Female	217
Injecting drug users	29
Men who have sex with men	298

Recipient blood/blood products	-
Other risk factors	343
No known risk factor identified	-
Cases <i>without</i> reported risk factor data	241

Source: HSE and HPSC (2024)

Note: Of the 29 HIV diagnoses among PWID in Ireland in 2023, 22 were previously diagnosed with HIV in another country and arrived in Ireland aware of their HIV diagnosis; 6 were not previously positive (i.e. first-time diagnosis) and 1 was unknown.

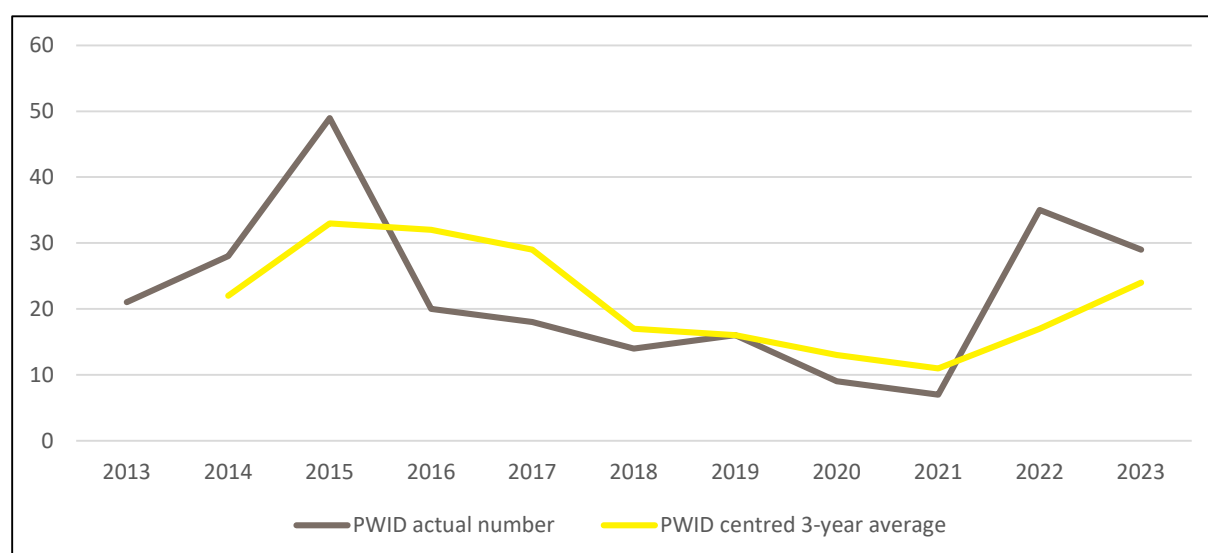


Figure T1.3.1.2 Number and rolling average number of PWID among HIV notifications reported in Ireland, by year of notification, 2013–2023

Source: HSE and HPSC (2024)

Of the 29 PWID among HIV notifications in 2023, 23 were male and 6 were female, with a median age of 42 years. No subjects were aged under 25 years (see Table T1.3.1.2). The increased number of PWID among HIV notifications in 2014–15 was due to an outbreak of HIV among homeless people in Dublin who use drugs. The outbreak was declared over in February 2016. Key control measures that were implemented included raising awareness among clinicians, addiction services, and PWID; intensive case finding and contact tracing; early treatment of HIV infection in those most at risk; greater promotion of needle exchange; increased access to methadone treatment; frontline worker training; and raising awareness about safe injecting and safe sex. Leaflets were distributed in hostels and various settings in Dublin where patients/clients attended.

Table T1.3.1.2 Characteristics of new HIV notifications who reported injecting drug use as a risk factor, 2023

Known injector cases	Number
Total number of cases	29
Sex	
Male	23
Female	6
Sex unknown	0
Age	
Mean age	42.3
Median age	42
Place of residence	

Dublin, Kildare or Wicklow

8

Elsewhere in Ireland

21

Source: HSE and HPSC (2024)

HBV notifications, 2023

There were 588 notifications of HBV in Ireland in 2023, a notification rate of 11.4 per 100,000 population. This was an increase of 13.2% on 2022, when there were 515 notifications. Although provisional data on HBV notifications in 2020 and 2021 were lower than those reported before the COVID-19 pandemic, it should be noted that recent trends since 2014 have suggested that the number of cases diagnosed and notified is stable rather than declining (see Figure T1.3.1.3).

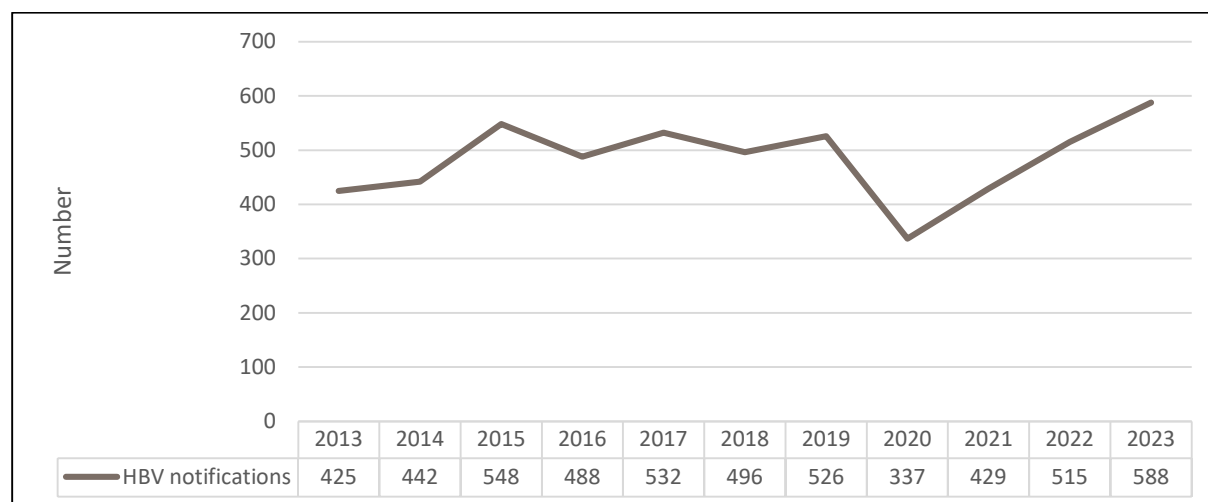


Figure T1.3.1.3 Number of HBV notifications reported in Ireland, by year of notification, 2013–2023

Source: HSE and HPSC (2024)

Of the 588 notifications in 2023, 96.8% (n=569) were chronically infected (long-term infection), while 2.4% (n=14) were acutely infected (recent infection). Risk factor data were available for all of the acute cases notified in 2023. Of these acute cases, none was an injecting drug user (see Table T1.3.1.3).

Table T1.3.1.3 Acute and chronic new HBV cases reported to the HPSC, 2023

HBV status	Acute (n)	Chronic (n)	Unknown (n)
Hepatitis B status	0.3	11.1	0.1
Total number of cases	14	569	5
Percentage of cases by status	2.4	96.8	0.9
Cases with reported risk factor	14	317	3
Percentage of cases with risk factor data	100	56	60
Of which:			
Injecting drug users	0	5	0
Cases without reported risk factor data	0	252	2
Percentage of cases without risk factor data	0	44	40

Source: HSE and HPSC (2024)

Data completeness for chronic cases was 56%. The number of PWID may be higher than shown here. However, chronic HBV cases are not commonly reported in association with drug use in Ireland.

HCV notifications, 2023

There were 537 HCV notifications in Ireland in 2023, an increase of 11.2% on 2022, when there were 480 notifications (see Figure T1.3.1.4). The notification rate for 2023 was 10.4 per 100,000 population. There has been a downward trend in HCV notifications since peak numbers (n=1538) were recorded in 2007. It should be noted that trends in notifications of HCV are difficult to interpret, as acute and chronic infections are frequently asymptomatic, and most cases diagnosed and notified are identified as a result of screening in key risk groups. Therefore, notification patterns are highly influenced by testing practices, which may vary over time and may not reflect incidence very well.

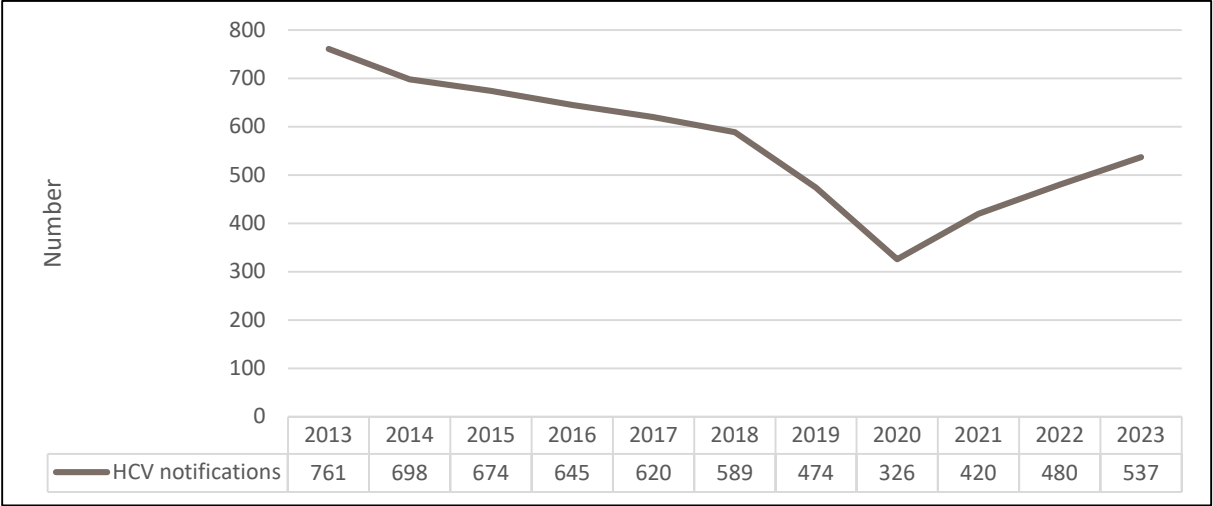


Figure T1.3.1.4 Number of HCV notifications reported in Ireland, by year of notification, 2013–2023
Source: HSE and HPSC (2024)

Information on the most likely risk factor was available for 36.0% (n=192) of cases in 2023 (see Table T1.3.1.4). Of cases with risk factor data, 122 were PWID and 10 were infected through contaminated blood products.

Table T1.3.1.4 New HCV cases reported to the HPSC, by risk factor status, 2023

Risk factor status	Number
Total number of cases	537
Cases <i>with</i> reported risk factor data	192
Of which:	
Injecting drug users	122
Recipient blood/blood products	10
Other risk factors	44
No known risk factor identified	16
Cases <i>without</i> reported risk factor data	345

Source: HSE and HPSC (2024)

The other risk factors category includes 2 cases that were non-injecting drug users. Of the 345 cases without risk factor data, 37 were tested in low-threshold services aimed at homeless people/drug users, or in prisons. The cases without reported risk factor data also includes 85 cases with no information on mode of transmission but whose country of birth has a reported anti-HCV prevalence of >2%. HCV is not commonly acquired vertically so this was not counted in ‘cases with reported risk factor data’ for Table T1.3.1.4.

Of the PWID among HCV notifications in 2022, 95 were male and 26 were female, with a median age of 40.5 years. Eight subjects were aged under 25 years, and 39% of all cases resided in Dublin, Kildare, or Wicklow (see Table T1.3.1.5). It should be noted that the number of cases that were PWID among provisional HCV notification data for 2023 is likely to be a significant underestimate, as risk factor data were not available for a large number of cases. Data for 2023 will improve as further validation work is carried out.

Table T1.3.1.5 Characteristics of new HCV notifications who reported injecting drug use as a risk factor, 2023

Known injector cases	Number
Total number of known injector cases	122
Gender	
Sex	
Male	95
Female	26
Gender not known	1
Age	
Mean age	40.3
Median age	40.5
Under 25 years	8
25–34 years	29
Over 34 years	85
Age not known	0
Place of residence	
Dublin, Kildare or Wicklow	48
Elsewhere in Ireland	74

Source: HSE and HPSC (2024)

T1.3.2 Notifications of drug-related infectious diseases

No new information.

T1.3.3 Prevalence data of drug-related infectious diseases outside the routine monitoring

Estimates of the prevalence of HIV in drug users in Ireland from published studies

A 2018 report by the HRB and other experts examined HIV prevalence studies that have been carried out among PWID living in Ireland over the 20-year period 1997-2017 (Health Protection Surveillance Centre 2018). Depending on the population and setting chosen, the HIV prevalence rate in these studies varied from 1% to 19%. It is evident that certain areas within Dublin's inner city have very high rates (19%) of HIV among PWID (Long et al. 2006). The most recent peer-reviewed study of a sample of 134 patients attending 14 GPs in the Dublin north inner city area who prescribe OST indicated a prevalence rate of 8% (Murtagh et al. 2017). However, although it is clear that HIV prevalence among PWID has been measured by a number of studies in Ireland, there is a lack of more recent and nationally representative data.

HIV incidence among PWID in Ireland, 2000–2018

Globally, there are an estimated 15.6 million PWID (Degenhardt et al. 2017). Among PWID, the risk of acquiring HIV is more than 30 times higher than it is among the rest of the population. However, HIV

incidence has declined among PWID in western Europe over the last two decades. In light of this improved situation, a 2023 study investigated changes in HIV incidence in Ireland among PWID from 2000 to 2018 (McCarron and Smith 2023).

In this study, published in the journal *Addiction*, data on new diagnoses of HIV among PWID, as reported by the HPSC, were examined. New HIV cases in two time periods (2000–2009 and 2010–2018) were compared by sex, age group, area of residence, and country of birth.

HIV incidence

A total of 753 cases were reported in PWID in Ireland between 2000 and 2018. During this time period, HIV incidence among PWID aged 15–29 years in Ireland declined from 5.69 to 0.11 cases per 100,000 persons, equivalent to 0.22 cases per 100,000 annually. Among PWID aged 30–64 years, HIV incidence declined annually by 0.06 cases per 100,000.

Comparisons of new diagnoses

Table T1.3.3.1 shows the numbers of new diagnoses of HIV among PWID during the first half of the study period (2000–2009) compared with the second (2010–2018). Although there was a small increase in the number of males diagnosed with HIV, this finding was not statistically significant. There was a relative increase in HIV cases among older adults, while those born outside of Ireland accounted for a growing minority of cases (14.7% to 28.0%).

Table T1.3.3.1 Comparison of new diagnoses of HIV in Ireland between 2000–2009 and 2010–2018

Variable	2000–2009 n (%)	2010–2018 n (%)	Total n	p
Sex				
Male	367 (67.2)	152 (73.4)	519	0.10
Female	179 (32.8)	55 (26.6)	234	
Age				
Under 30 years	261 (47.8)	46 (22.2)	307	<0.001
Over 30 years	285 (52.2)	161 (77.8)	446	
Area of residence				
East	289 (77.1)	153 (73.9)	442	0.39
Other	86 (22.9)	54 (26.1)	140	
Country of birth				
Ireland	286 (76.3)	121 (58.5)	407	<0.001
Elsewhere	55 (14.7)	58 (28.0)	113	
Unknown	34 (9.1)	28 (13.5)	62	

Source: McCarron and Smyth (2023)

Conclusions

The authors observed that, since 2000, Ireland has achieved an ongoing reduction in HIV among PWID and that this reduction has occurred in the context of a reasonably comprehensive health-led and harm reduction-oriented drugs strategy. Nevertheless, HIV outbreaks among PWID that were observed in 2014–15 in Ireland highlight the ongoing challenges faced by surveillance, treatment, and harm reduction services.

Estimates of the prevalence of HBV in drug users in Ireland from published studies

Results from studies in inner city Dublin indicated a high prevalence of HBV in early heroin injectors. A small cohort (n=82) of heroin injectors in inner city Dublin was recruited for a study in 1985 and followed for 25 years (O’Kelly and O’Kelly 2012). More than 70% ultimately tested positive for HBV

antibodies (indicating a current or past infection). However, this was a particularly high-risk cohort; 9% of 15–24-year-olds in this region of Dublin were estimated to be using heroin in 1981 (O’Kelly et al. 1988). Estimates from other studies involving drug users in prison and treatment settings, carried out between 1997 and 2002, found an HBV core antibody prevalence of 14–28% (Health Protection Surveillance Centre 2018). However, as the vast majority of people infected with HBV as adults clear the infection and develop lifelong immunity, high antibody prevalence in early cohorts of drug users in Dublin did not translate to a high prevalence of chronic HBV infection. Where markers of current infection (HBV surface antigen or deoxyribonucleic acid (DNA) results) were reported, the prevalence ranged from 1% to 5% (Health Protection Surveillance Centre 2018). The low prevalence of chronic HBV infection reported in studies of blood-borne viruses in addiction treatment settings supports the data from statutory notifications, indicating a low prevalence of chronic HBV infection in PWID in Ireland.

HCV infection in Irish drug users and prisoners – a scoping review

Background and methods

The World Health Organization has set a goal to eliminate HCV as a global public health threat by 2030. Targets include reducing new HCV infections by 80%, reducing the number of HCV deaths by 65%, increasing HCV diagnoses from 20% to 90%, and increasing the number of eligible people receiving HCV treatment from <5% to 80% (World Health Organization 2017). Unsafe injecting drug use is the main route of HCV transmission in developed countries (Nelson, *et al.* 2011). Consequently, PWID in the general and prison populations represent a priority population for HCV elimination, given the high prevalence and incidence of infection in this group. However, the prevalence of HCV infection among PWID in Ireland remains poorly understood. A recent study aimed to map key previous findings and identify gaps in the literature (both published and unpublished) on HCV infection in Irish PWID and prisoners (Crowley, *et al.* 2019).

This research, published in the journal *BMC Infectious Diseases*, involved carrying out a scoping review, guided by the methodological framework set out by Levac and colleagues (based on previous work by Arksey and O’Malley) (Levac et al. 2010) (Arksey and O’Malley 2005).

Results

Two 2014 studies identified from the grey literature reported on HCV infection in PWID who were attending methadone maintenance treatment (MMT) in drug clinics outside of Dublin and reported an anti-HCV prevalence of 24% (Horan A: Chart audit of HCV screening measuring the effect of chart labelling, unpublished) (Ryan and Ryan 2014). A published 2017 study reported an anti-HCV prevalence of 63.6% among PWID attending MMT at a north inner city Dublin treatment centre (Keegan et al. 2017).

Two large HCV screening audits in 2016 reported an anti-HCV prevalence of almost 80% and a chronic HCV prevalence of 65% among PWID attending MMT at 23 drug treatment clinics in Dublin (Burke M: Audit of HCV screening using retrospective patient records, unpublished). The most recent prevalence study of PWID attending opioid substitution treatment (OST) in general practice in Ireland reported an anti-HCV prevalence of 77.2% (Murtagh et al. 2018).

With regard to the prison population, a 2014 study reported an anti-HCV prevalence of 13.0% (95% CI: 10.9–15.2%) among the general prison population, increasing to 41.5% in prisoners with a history of injecting drug use and 54.0% in those with a history of injecting heroin (Drummond et al. 2014).

Another prison study from 2014 (of a single site) reported an anti-HCV prevalence of 37% among prisoners on MMT (Galandier et al. 2014).

Conclusions

The authors of the 2018 report noted that only two studies reported on HCV prevalence in PWID outside of Dublin, and both were from secondary urban centres. In addition, the majority of these prevalence studies were more than a decade old and only reported on anti-HCV prevalence and not on HCV ribonucleic acid (RNA) prevalence, which limits their usefulness in estimating the levels of chronic untreated infection and reinfection. Finally, the most recent epidemiological studies included in the report were mostly chart review audits, which limits their usefulness in informing policy and strategy.

T1.3.4 Drug-related infectious diseases – behavioural data

No new information.

T1.3.5 Other drug-related infectious diseases

No new information.

T1.3.6 Additional information on drug-related infectious diseases

DOVE Service, Rotunda Hospital annual report, 2022

The Danger of Viral Exposure (DOVE) Service in the Rotunda Hospital, Dublin was established to meet the specific needs of pregnant women who have or are at risk of blood-borne or sexually transmitted bacterial or viral infections in pregnancy. Exposure may also occur through illicit substance use. Figures from the service for 2022 were published in the hospital's annual report in 2023 (The Rotunda Hospital 2023).

Clinical activity

Figure T1.3.6.1 shows the number of women who booked into the DOVE Service for antenatal care each year during the period 2012–2022. It also shows the diagnosis of viral disease for these women. During 2022, some 157 women booked into the DOVE Service for antenatal care. Of those attending the service, 99 were serology-positive. Of these:

- 14 women were positive for HIV infection.
- 41 women were positive for hepatitis B (HBV) surface antigen.
- 20 women were positive for hepatitis C (HCV) antibody.
- 24 women had positive treponemal serology (syphilis).

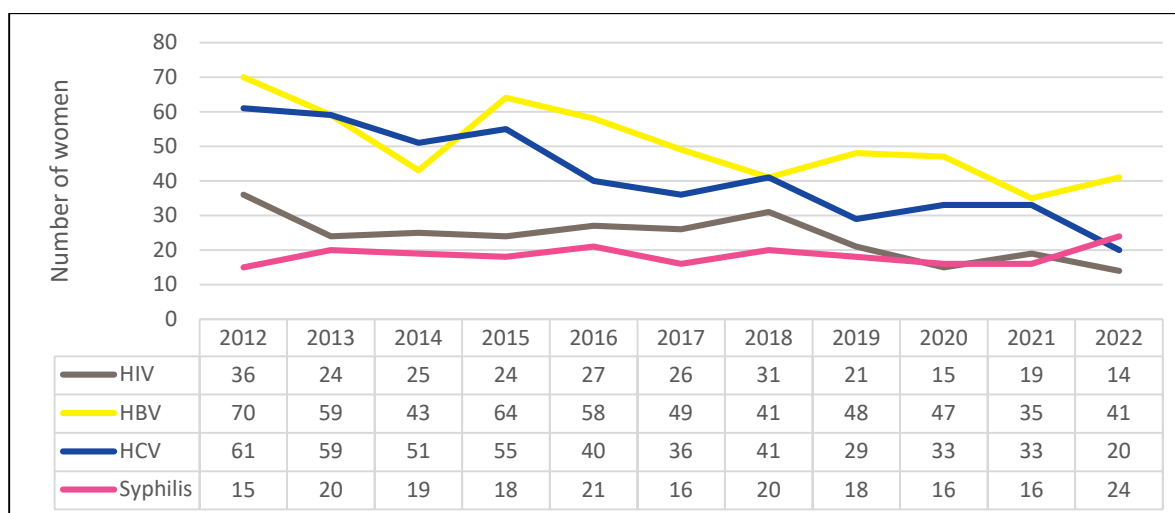


Figure T1.3.6.1 DOVE Service bookings by year, 2012–2022

Source: The Rotunda Hospital (2023)

In addition to the figures presented above, a number of women attended the service for diagnosis and treatment of human papillomavirus (HPV), herpes simplex virus, chlamydia, and gonorrhoea.

It should be noted that these numbers refer to patients who booked for care during 2022. Table T1.3.6.2 summarises the outcome of patients who actually delivered during 2022. Of these patients, 17 were HIV-positive, 37 were HBV-positive, 31 were HCV-positive, and 18 had syphilis. During 2022, some 117 women were referred to the drug liaison midwife (DLM) service, including 36 women who had a history of opioid addiction and were engaged in a methadone maintenance programme. There were a total of 62 deliveries to mothers under the DLM service in 2022, of which 32 were on prescribed methadone programmes.

Table T1.3.6.2 Deliveries to mothers attending the DOVE Service who were positive for HIV, HBV, HCV or syphilis, or who were attending the DLM service, 2022

Mother's status	HIV-positive	HBV-positive	HCV-positive	Syphilis-positive	DLM
Total mothers delivered <500 g (including miscarriage)	0	0	1	0	0
Total mothers delivered ≥500 g	17	37	30	18	62
Live infants	17	38*	29	17	62
Miscarriage	0	0	1	0	0
Stillbirths	0	0	1	1	1
Infants <37 weeks' gestation	3	6	7	5	21
Infants ≥37 weeks' gestation	14	32	23	13	42
Caesarean section	5	12	14	6	21
HIV, HBV, HCV or syphilis-positive infants	0	0*	0**	1	—
Maternal median age	33	32	34	31	—

Source: The Rotunda Hospital (2023)

* One set of twins.

** Final serology test not yet available for all infants.

DLM = drug liaison midwife.

Drug use during pregnancy in Dublin city, 2010–2019

Drug use during pregnancy is a worldwide problem, and the consequences of continued drug misuse in pregnancy can be significant (Covington et al. 2002). Pregnancy may provide opportunities to engage vulnerable women in essential healthcare. However, women with an addiction may have poor adherence to prenatal appointments, presenting late in pregnancy or not until labour. Hence, DLMs were appointed to the three Dublin maternity hospitals in 1999.

In 2023, a retrospective observational cohort study was conducted at an Irish tertiary maternity unit (Corbett et al. 2022). In this study, published in the *European Journal of Obstetrics & Gynecology and Reproductive Biology*, all women with OUD or substance use in pregnancy delivered under this service between 2010 and 2019 were included. Data were collected by combining electronic and hand-held patient records, and trends and outcomes were analysed by year of delivery.

Findings

The main findings from the review included the following:

- Of the 82,669 women delivered, 525 had OUD or substance use in pregnancy (1 in every 160 women booking into the service). Some 11.6% were homeless, 20% were in full-time employment, and 91% smoked tobacco in pregnancy. A total of 66.3% had a history of psychiatric disorders.
- Over the 10 years, there was a significant reduction in women delivered with OUD or substance use in pregnancy (0.8–0.4%, RR=0.55, 95% CI: 0.36–0.85) and a significant reduction in the proportion of women on opioid substitution treatment (RR=0.66, 95% CI: 0.51–0.87).
- Rates of cocaine and cannabis consumption increased (20.6%, RR=3.8, 95% CI: 1.57–9.44; 24%, RR=3.7, 95% CI: 1.58–8.86, respectively).

Conclusions

The authors noted that the study shows a change in the profile of the women with substance use in pregnancy, with significant increases in the numbers of women using cocaine and cannabis in pregnancy. The authors suggest that specialist antenatal addiction services, coordinated by the DLM, are critical in adapting care to respond to this dynamic and vulnerable patient cohort.

T1.4 Other drug-related health harms

T1.4.1 Other drug-related health harms

National Self-Harm Registry Ireland Annual Report 2021

The *National Self-Harm Registry Ireland Annual Report 2021* was published in February 2024 (Joyce et al. 2024). The report contains information relating to every recorded presentation of deliberate self-harm to acute hospital emergency departments in Ireland in 2021 and complete national coverage of cases treated. All individuals who were alive on admission to hospital following deliberate self-harm were included, along with the methods of deliberate self-harm that were used. Accidental overdoses of medication, street drugs, or alcohol were not included.

Rates of self-harm

In 2021, National Self-Harm Registry Ireland recorded 11,415 presentations to hospitals as a result of self-harm, involving 8,595 individuals. Adjusting for the absence of data from two hospitals, it was

estimated that a total of 12,661 self-harm presentations were made by 9,533 individuals in 2021. Taking the population into account, the age-standardised rate of individuals presenting to hospital in the Republic of Ireland following self-harm was 196 per 100,000 population (see Figure T1.4.1.1). This was a decrease of 2% compared with the rate recorded in 2020 (200 per 100,000) and 12% lower than the peak rate recorded by the registry in 2010 (223 per 100,000).

In 2021, the national male rate of self-harm was 160 per 100,000 population, 9% lower than in 2020, and the lowest ever recorded by the registry. The female rate was 232 per 100,000 population, which was 4% higher than in 2020. With regard to age, the peak rate for men was in the 20–24 years age group, at 387 per 100,000 population. As seen in previous years, the peak rate for women was among 15–19-year-olds, at 888 per 100,000 population.

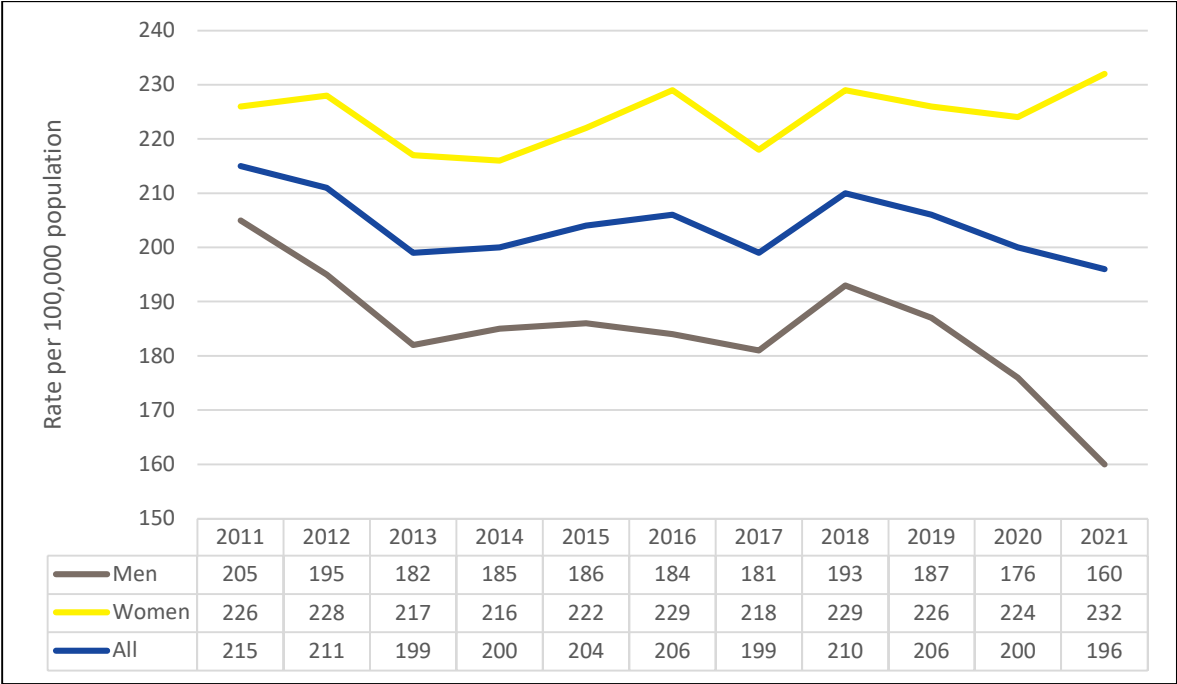


Figure T1.4.1.1 Person-based rate of deliberate self-harm from 2011 to 2021, by sex

Source: National Suicide Research Foundation (2024)
 'All' in the legend refers to the rate for both men and women per 100,000 population.

Self-harm and drug and alcohol use

Intentional drug overdose (IDO) was the most common form of deliberate self-harm reported in 2021, occurring in 6,956 (60.9%) episodes. As observed in 2020, overdose rates were higher among women (65.1%) than among men (54.9%). Minor tranquillisers and major tranquillisers were involved in 28% and 10% of drug overdose acts, respectively. In total, 35% of male and 50% of female overdose cases involved analgesic drugs, most commonly paracetamol, which was involved in 33% of all drug overdose acts. In 67% of cases, the total number of tablets taken was known, with an average of 27 tablets taken in episodes of self-harm that involved a drug overdose.

Although the proportion of self-harm presentations to hospital involving IDO in 2021 was similar to that recorded in 2020, there was a reduction in self-harm presentations involving street/illegal drugs in 2021, specifically for men. While the female rate remains similar to that reported in 2020, the male rate was reduced by almost one-third. Between 2007 and 2021, the rate per 100,000 of IDO involving illegal drugs increased by 31% for men, while the female rate has almost doubled.

Cocaine and cannabis were the most common street drugs recorded by the registry in 2021, present in 7% and 3% of overdose acts, respectively. Cocaine was more common among men than women and was involved in 20% of overdose acts by 25–34-year-olds. Cannabis was most common among men aged 15–24 years and was present in 7% of overdose acts. Alcohol was involved in 30% of presentations. It was more likely to be involved in male presentations than female presentations (36% vs 26% respectively).

Recommendations

The authors noted that over the past 20 years, the highest rates of self-harm have consistently been observed among young people, underlining the need for upstream and preventive interventions such as school-based universal mental health programmes that have been found to be effective in preventing suicide attempts in young adolescents.

Adolescent Addiction Service Report, 2024

The HSE Adolescent Addiction Service (AAS) provides support and treatment in relation to alcohol and drug use for young people and families from the Dublin suburbs of Ballyfermot, Clondalkin, Palmerstown, Lucan, and Inchicore. Services provided include advice, assessment, counselling, family therapy, professional consultations, and medications if required. In 2024, the AAS published a report detailing referrals for 2023 (Murray and Adolescent Addiction Service 2024).

Referrals

In 2023, the AAS worked with 60 young people and their families, with a mean age of 15 years (range: 13–18 years). This figure includes new referrals, re-referrals, and continuances. The majority of young people were male (71%), which reflects a 5% reduction on 2022. In terms of referral areas, the greatest numbers of referrals were from Clondalkin, followed by Lucan, Ballyfermot, Palmerstown, and Inchicore. In comparison with 2022, referrals were up by 13%. However, 6% of referrals were from outside the catchment area; hence, 3% were referred to services within their own area.

Drug and alcohol use

Cannabis (weed) continued to be the main substance used by clients, with an overall use rate at 87%, while alcohol use was at 57% (see Figure T1.4.1.2). Other substances used included cocaine (8%), ketamine (7%), and amphetamines (12%). In addition, 18% admitted to taking nitrous oxide on occasion.

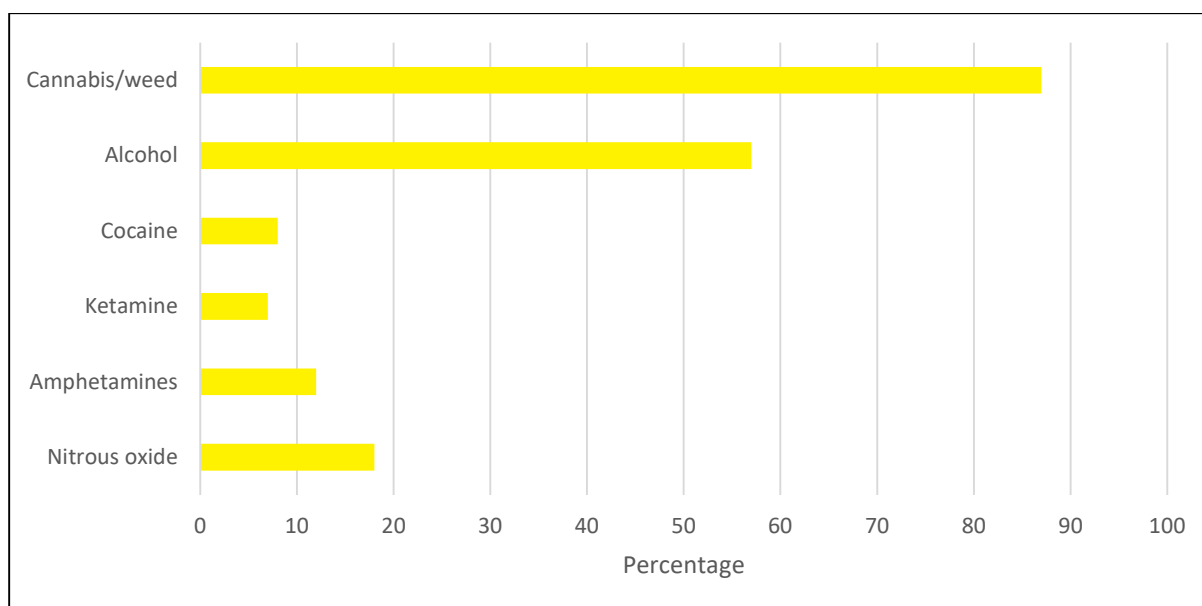


Figure T1.4.1.2 Main substances used by AAS clients, 2023

Source: HSE AAS (2024)

Other issues

As in previous years, most young people had established patterns of substance use prior to referral, with an average of 17 months (range: 1–60 months). The extent to which substance misuse featured within families was 48%, compared with 42% in 2022. The incidence of parental separation was also higher in 2023 at 56%, compared with 28% in 2022. Additionally, some young people had one parent who was deceased, while others had experienced domestic violence or sexual abuse. Although the majority of young people lived with their family, 10% were in residential care or foster care.

The report also noted that in addition to co-occurring mental health issues, other issues presented included school refusal, absconding, drug dealing, joy riding, issues around sexual/gender identity as well as unsafe sexual practices. Issues affecting some families included poverty, accommodation insecurity, multiple moves, and overcrowding, with three or four siblings sharing a bedroom or parents having to share with their children. The AAS notes that these circumstances place added stress on all family members, especially where substance use and domestic violence are both features of family life.

Recreational and sexualised drug use among men who have sex with men

Background and methods

The overall prevalence of recreational drug use (RDU) has risen in Ireland from 5.6% in 2002/2003 to 7.4% in 2019/2020; and males report a higher prevalence of RDU in comparison to females (12.3% and 5.7%, respectively) (Mongan et al. 2021). International evidence suggests that gay, bisexual, and other men who have sex with men (gbMSM) have a higher prevalence of drug use versus age-comparable non-gbMSM (Daly et al. 2023). Previously cited reasons for this drug use disparity may include ‘minority stress’, as well as the perceived ‘normalisation’ of drug use within the gbMSM community, including sexualised drug use (SDU) (Meyer 2003) (Hughes and Eliason 2002) (Amundsen et al. 2022). However, in Ireland, there is a paucity of literature regarding the prevalence of drug use and its determinants among gbMSM.

A 2023 study (Daly et al. 2023) quantified the prevalence of RDU and SDU among gbMSM in Ireland using data from the European Men-Who-Have-Sex-With-Men Internet Survey (EMIS-2017), an online, anonymous, internationally promoted questionnaire. In this research, published in the journal *PLOS One*, multivariable-adjusted logistic regression explored factors associated with RDU and SDU. The main findings from this study are discussed below.

Results

Among gbMSM without HIV (n=1898), some 40.9% and 13.1% engaged in RDU and SDU in the previous year, respectively. Among HIV diagnosed-positive gbMSM (n=141), the past-year respective prevalence estimates were 51.8% and 26.2%. Increased odds of RDU were observed among gbMSM who were younger (OR=2.96; 95% CI: 2.05–4.28), lived in Dublin (OR=1.47; 95% CI: 1.17–1.83), and engaged in condomless anal intercourse (CAI) in the previous year (1–2 partners: OR=1.79; 95% CI: 1.34–2.38, 6+ partners: OR=1.79; 95% CI: 1.18–2.71). Greater odds of SDU were identified among those who lived in Dublin (OR=1.50; 95% CI: 1.07–2.10) and engaged in CAI (1–2 partners: OR=3.16, 95% CI: 2.05–4.88, 3–5 partners: OR=2.50; 95% CI: 1.47–4.26, and 6+ partners: OR=3.79; 95% CI: 2.23–6.43).

Conclusions

The authors noted that gbMSM in Ireland reported a high prevalence of RDU and SDU, and that this was particularly true for men who were living in Dublin, presented for HIV testing, engaged in more CAI encounters, and among those who reported a recent diagnosis of a bacterial sexually transmitted infection. They suggest that messaging should be tailored to subgroups of gbMSM who are likely to be at increased odds of drug-related harms, and that findings from the study may serve as a guideline to relevant partner organisations who work to promote the overall health and well-being of gbMSM nationally.

T1.5 Harm reduction interventions

T1.5.1 Drug policy and main harm reduction objectives

The strategic aims and objectives of the national drugs strategy, *Reducing Harm, Supporting Recovery: A health-led response to drug and alcohol use in Ireland 2017-2025*, with regard to harm reduction interventions are to (Department of Community, Rural and Gaeltacht Affairs 2009):

- Enable people with drug misuse problems to access treatment and other supports and to reintegrate into society
- Reduce the risk behaviour associated with drug misuse
- Reduce the harm caused by drug misuse to individuals, families, and communities
- Encourage and enable those dependent on drugs to avail of treatment in order to reduce dependency and improve overall health and social well-being, with the ultimate aim of leading a drug-free lifestyle, and
- Minimise the harm to those who continue to engage in drug-taking activities that put them at risk.

For further details on the national drugs strategy, *Reducing Harm, Supporting Recovery: A health-led response to drug and alcohol use in Ireland 2017-2025*, see the *Drug policy workbook*.

T1.5.2 Organisation and funding of harm reduction services

The Northern Area Health Board (NAHB), the South Western Area Health Board (SWAHB), and the East Coast Area Health Board (ECAHB) offer harm reduction programmes, including needle exchange from fixed sites, mobile units, and outreach work. Outreach workers frequently practise ‘backpacking’ – a process whereby staff, in the absence of a local clinic or mobile unit, carry supplies of drug-taking paraphernalia for distribution to known drug misusers (Moore et al. 2004).

Additional support services operate from other sites in the greater Dublin area, run in partnership with the Eastern Regional Health Authority (ERHA), in addition to a number of Dublin-based or national CBOs, such as Merchants Quay Ireland (MQI) and the Ana Liffey Drug Project (ALDP). Some of these services are seasonal or simply on a fixed-time, once-per-week basis. Harm reduction services report initiatives including: free needle exchange; supplying alcohol wipes, sterile water, citric acid filters, spoons, and condoms; and providing methadone and naloxone therapy, as well as rehabilitation, education, and community/family support. In addition, there are pharmacies providing a needle exchange service in each RDATF area in Ireland.

T1.5.3 Provision of harm reduction services

Table T1.5.3.1 Equipment and paraphernalia available for drug users in Ireland, 2023

Type of equipment	Routinely available	Often available, but not routinely	Rarely available; available in limited number of settings	Equipment not made available	Information not known
Pads to disinfect the skin	✓	Click here to enter text.	Click here to enter text.	Click here to enter text.	Click here to enter text.
Dry wipes	✓	Click here to enter text.	Click here to enter text.	Click here to enter text.	Click here to enter text.
Water for dissolving drugs	✓	Click here to enter text.	Click here to enter text.	Click here to enter text.	Click here to enter text.
Sterile mixing containers	✓	Click here to enter text.	Click here to enter text.	Click here to enter text.	Click here to enter text.
Filters	✓	Click here to enter text.	Click here to enter text.	Click here to enter text.	Click here to enter text.
Citric/ascorbic acid	✓	Click here to enter text.	Click here to enter text.	Click here to enter text.	Click here to enter text.
Bleach	✓	Click here to enter text.	Click here to enter text.	Click here to enter text.	Click here to enter text.
Condoms	✓	Click here to enter text.	Click here to enter text.	Click here to enter text.	Click here to enter text.
Lubricants	✓	Click here to enter text.	Click here to enter text.	Click here to enter text.	Click here to enter text.
Low dead space syringes	✓	Click here to enter text.	Click here to enter text.	Click here to enter text.	Click here to enter text.

Type of equipment	Routinely available	Often available, but not routinely	Rarely available; available in limited number of settings	Equipment not made available	Information not known
HIV home testing kits	Click here to enter text.	Click here to enter text.	Click here to enter text.	✓	Click here to enter text.
Non-injecting paraphernalia: foil, pipes, straws	✓	Click here to enter text.	Click here to enter text.	Click here to enter text.	Click here to enter text.
List of specialist referral services (e.g. drug treatment; HIV, HCV, or sexually transmitted infection testing and treatment)	✓	Click here to enter text.	Click here to enter text.	Click here to enter text.	Click here to enter text.

Harm reduction services: Infectious disease testing

Guidelines on testing for blood-borne viruses and immunisation in Ireland

The latest clinical guidelines for patients on OST, which were published in 2016 (Health Service Executive 2016), recommend that all patients attending OST services be screened for hepatitis A virus (HAV), HBV, HCV, and HIV, even if they are not injecting drug users, and that all patients be vaccinated against HAV and HBV. Repeat testing is recommended for those who initially test negative for HIV if they report engaging in behaviours that would put them at ongoing risk of infection. The guidelines also recommend referral to specialist services and treatment, as clinically appropriate, for patients who test positive for HCV or HIV. Although these guidelines replaced the Irish College of General Practitioners (ICGP) guidelines *Working with opiate users in community based primary care* (Irish College of General Practitioners 2003), the earlier guidelines also recommended testing for blood-borne viruses as well as vaccinating against HAV and HBV, and this has always been common practice in addiction services. The *Immunisation Guidelines for Ireland* also recommend vaccination against HAV and HBV for non-immune PWID (National Immunisation Advisory Committee of the Royal College of Physicians of Ireland 2019).

Similar testing recommendations were made in the 2017 national HCV screening guidelines (Department of Health 2017), which include a recommendation to offer HCV testing to all those who have ever injected any illicit drugs and to retest those who test negative every 6–12 months if they remain at risk of infection. These guidelines also recommend testing drug users who have never injected drugs if there is a possibility of transmission of HCV by the route of administration, as well as offering testing to all prison inmates on entry to prison or on request.

The *Irish Prison Service Health Care Standards* recommend screening for HAV, HBV, HCV, and HIV for all inmates who volunteer a background history of risk factors for these diseases (Irish Prison Service 2011). Additionally, immunisation against HAV and HBV is recommended for all prison inmates (National Immunisation Advisory Committee of the Royal College of Physicians of Ireland 2019). The prison healthcare standards are currently being revised. In practice, blood-borne virus testing and HAV and HBV vaccination are offered to all inmates on committal regardless of declared risk factors, or at other times if requested.

As a consequence of these policies and guidelines, studies published in recent years have reported high rates of testing (93–95%) for blood-borne viruses, particularly HCV, among patients in OST (Murtagh et al. 2017) (Murphy et al. 2018). However, uptake of testing may be lower in some settings; Cullen *et al.* reported that just over three-quarters (77%) of clients attending 25 general

practices for OST had been tested for HCV (Cullen et al. 2007), but data for this study were collected in 2002 and testing may have improved since then. Routine reporting of blood-borne virus screening uptake and results is not possible for most addiction treatment clinics in Ireland, as most services do not use computerised record-keeping systems. Even in those that do, laboratory results are often scanned rather than entered into the system in an extractable format.

Studies reporting information on HBV immunisation status indicate that vaccination coverage is not as high as would be expected given the recommendations to vaccinate prisoners and PWID. Only 37% of prison inmates reported receiving at least one HBV vaccine dose in a 2011 prison study. However, prisoners with a history of injecting drug use were more likely to have been vaccinated, with more than one-half (54%) reporting having been at least partially vaccinated (Drummond et al. 2014). Similar results were reported in a study of OST clients attending level 1 and level 2 GPs (i.e. GPs with training in substance misuse who can prescribe OST), with just under one-half (49%) of patients having received at least one HBV vaccine dose and only 23% being fully immunised (Cullen et al. 2007).

Immunisation levels may be higher in patients attending specialised OST clinics. In an older study of a sample of clients attending 21 OST clinics in the greater Dublin area, 81% of those who were not infected with HBV had received at least one HBV vaccine dose and 69% had been fully vaccinated. Of the remaining 19%, 4% had been offered immunisation and had refused and 15% had no evidence of vaccination or past infection (Grogan et al. 2005).

There is no adult register for recording HBV vaccine uptake, and information on vaccination may not be recorded systematically in medical notes. In some studies, data on HBV vaccination status are self-reported and may not be accurate. Anecdotally, the practice in OST settings is to vaccinate, and it is likely that the actual vaccination coverage is higher than what is reported here. However, HBV vaccination levels could be optimised by ensuring that an accelerated schedule is used, and also by offering vaccination in needle exchange and other non-OST settings.

The *National Sexual Health Strategy 2015 - 2020* recommended that national HIV testing guidelines should be developed (Department of Health 2015), and the HSE's Sexual Health and Crisis Pregnancy Programme (SHCPP) has established a working group to develop these guidelines. The working group will be guided by the updated HIV and hepatitis testing guidelines which are currently being prepared by the European Centre for Disease Prevention and Control (ECDC). Current guidance from the EUDA and ECDC recommends regularly offering HBV, HCV, and HIV tests to PWID at least once every 6–12 months (European Centre for Disease Prevention and Control (ECDC) and European Monitoring Centre for Drugs and Drug Addiction (EMCDDA) 2011).

Harm reduction services: Needle exchange

There are three models of needle exchange programmes in use in Ireland:

- Pharmacy – 98 sites in regions outside counties Dublin, Kildare, and Wicklow
- Static – 24 sites, mainly in Dublin city, and
- Outreach – 14 sites, mainly in counties Dublin, Kildare, Laois, Offaly, Waterford, and Wicklow.

Information on the number of syringes exchanged in Ireland in 2023 is discussed in the following sections.

Pharmacy-based needle exchange: Overview and number of syringes exchanged

Pharmacy-based needle exchange: Overview and review

The national drugs strategy (2017–2025) aims to reduce harms arising from substance misuse and to reduce the prevalence of blood-borne viruses among PWID through the expansion of needle exchange provision to include community pharmacy-based programmes. In October 2011, the HSE rolled out the national Pharmacy Needle Exchange Programme, which is a partnership initiative between the Elton John AIDS Foundation, the Irish Pharmacy Union, and the HSE. Once pharmacies have signed a service level agreement with the HSE, their contact details are passed on to the relevant HSE services so that they can promote access to sterile injecting equipment at the participating pharmacies and accept referrals for investigation and treatment. There are pharmacies providing needle exchange in each RDAF area, apart from those covering counties Dublin, Kildare, and Wicklow, which are served by a mix of static and outreach needle exchange programmes.

As no published review of the programme has occurred since 2015, a 2024 report aimed to provide an overview of the performance of the HSE Pharmacy Needle Exchange Programme (Evans and Keenan 2024). Specifically, the objectives of the study were to show patterns in terms of the following:

- The number of pharmacies enrolled and retained to provide a pharmacy needle exchange programme
- The number of people attending the programme
- The number of pharmacy needle exchange packs (containing needles, syringes, swabs, vials, citric acid packs, and water)
- The number of sterile needles provided each month and the average number of needles per person returned.

This section presents the main findings from this study.

Main findings

Number of participating pharmacies and number of attendees

The number of pharmacies providing the programme has declined since 2015 (see Table T1.5.3.2). The report noted that if this pattern continues, it is forecast that by 2027 the number of pharmacies will decline by a further 25% (n=68, CI: 59.78–76.13). In 2022, some 1,612 unique individuals per month used the programme. The number of people using the programme increased by 15% from 2015 to 2019, followed by a decline of 19% from 2019 to 2022.

Table T1.5.3.2 Number of pharmacies providing needle exchange in Ireland, by RDAF area, 2013–2023

RDAF area	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
Midland: Longford, Laois, Offaly, Westmeath	15	16	17	18	18	17	17	17	17	17	17
North Eastern: Meath, Louth, Cavan, Monaghan	16	21	22	21	21	16	16	15	17	12	17
Northwest: Sligo, Leitrim, West Cavan, Donegal	7	6	6	6	6	5	5	5	4	7	4
Southern: Cork, Kerry	16	21	19	21	21	17	16	17	16	16	19

South-East: Carlow, Kilkenny, Waterford, Wexford, South Tipperary	22	24	17	17	16	14	14	14	13	14	15
Western: Galway, Mayo, Roscommon	10	13	11	12	13	10	10	12	12	10	11
Mid-West: Clare, Limerick, North Tipperary	13	14	15	16	16	19	19	12	12	12	15
Total	99	115	107	111	111	98	97	92	91	88	98

Source: Unpublished data from the HSE (2024)

Number of pharmacy needle exchange packs and number of sterile needles provided

In 2022, some 3,775 packs were provided per month, which represents an overall decline of 19% compared with 2015. There has also been a decline in the number of packs returned; the overall proportion of packs returned has declined from 23% in 2015 to 16% in 2022. This represents a 28% decline in the proportion of packs returned. There were 21,296 needles provided each month by the programme in 2022, with each person receiving 9.8 needles on average each month. There has been a 4.2% reduction in the average number of needles per individual since 2017.

Recommendations

The report authors suggest that further investigation into the reasons why the programme has declined in terms of the number of pharmacies participating and the level of usage is warranted, and that a survey of those pharmacies that have withdrawn from the programme may provide useful insights in this regard. Anecdotal evidence for Ireland suggests that negative experiences of providing sterile needles to people who use 'crack' cocaine may have contributed to the withdrawal of some pharmacies from the programme in 2019.

Prevalence studies in the 2020s have highlighted the increase in cocaine use in Ireland and identified the emergence of crack cocaine use among a marginalised population that may previously have used heroin (HRB National Drugs Library 2024). The provision of additional training for pharmacies may also encourage ongoing participation in the programme, particularly in terms of emerging trends such as the use of crack cocaine by PWID, as the needs of people who inject crack may present additional challenges.

Pharmacy-based needle exchange: Number of syringes exchanged in 2023

In total, 240,032 individual syringes were exchanged in from pharmacy-based sites in 2023. The average number of syringes provided each month was 20,002.

Dublin areas 6 and 7 needle exchange: Number of syringes exchanged in 2023

There were 35,580 individual syringes in total exchanged from static and outreach sites in Dublin in 2023. The total number of encounters was 7,631 (93.2% male), with 535 unique clients.

ALDP needle exchange: Number of syringes exchanged in 2023

The ALDP provides needle exchange services in Dublin, Limerick city and three counties, Limerick, Clare, and North Tipperary, to people affected by problem substance use. In total, 143,301 individual syringes were exchanged in 2023. The average number of syringes provided each month was 11,941.

MQI needle exchange: Number of syringes exchanged in 2023

MQI is a national voluntary agency providing services for people experiencing homelessness and for drug users. Its Dublin-based needle exchange Health Promotion Unit provides drug users with

information about the risks associated with drug use and the means to minimise such risks. It also provides drug users with a pathway into treatment and the possibility of living life without drugs (Merchants Quay Ireland 2016). A total of 166,498 syringes were provided by MQI's Dublin-based Health Promotion Unit in 2023. The total number of encounters was 26,285, with 3,234 unique clients.

Needle exchange in Ireland: Total number of syringes exchanged in 2023

Table T1.5.3.3 shows the total number of individual syringes exchanged from pharmacy, static, outreach, and CBO sites. According to the most recent available data, 585,411 individual syringes were exchanged in Ireland from these sites in 2023.

Table T1.5.3.3 Total number of individual syringes exchanged from pharmacy, static, outreach, and CBO sites in 2023

Provider	Pharmacy	Dublin (static and outreach)	ALDP	MQI	Total
Number of individual syringes	240 032	35 580	143 301	166 498	585 411

Source: Unpublished data from the HSE, ALDP, and MQI (2024)

Harm reduction services: Naloxone provision

Naloxone administration in Ireland, 2018–2020

Opioids are the main drug group implicated in drug overdose deaths in Ireland. Naloxone is an antidote for opioid overdose that reverses the depressant effects of opiates such as heroin. Following a successful pilot of the Naloxone Demonstration Project in 2015, the HSE developed a naloxone training programme for service providers. However, there has been little evaluation of the expanded naloxone programme since its initial pilot phase. A report published in 2022 aimed to provide an assessment of the impact of the provision of naloxone and training to addiction and homeless service providers in Ireland (Evans et al. 2022). This section highlights the main findings.

Number of units provided and outcomes

From 2018 to 2020, there were 8,881 units of naloxone supplied by the HSE National Social Inclusion Office to service providers (see Table T1.5.3.4). Overall, 59% of units were intramuscular, with 41% intranasal. The majority of naloxone units were administered by service provider staff (94%), with 3% administered by peers, 2% by an unspecified individual, and 1% by a GP or a nurse. Between 2018 and 2020, it was reported that naloxone was administered to 569 people. Of these 569 who received naloxone following an opioid overdose, 98% survived the overdose, while 9 died. The number of people receiving naloxone has fluctuated, with a 13% increase experienced in 2020 compared with 2018 (see Table T1.5.3.5).

Table T1.5.3.4 Number of naloxone units supplied to service providers, 2018–2020

Type of naloxone	2018	2019	2020
Nyxoid (intranasal)	775	818	2037
Prenoxad (injectable)	1201	1132	2909
Total	1985	1950	4946

Source: Evans et al. (2022)

Year	Fatality		Non-fatality		Total	
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	n	%	n	%	n	%
2018	5	2.6	184	97.4	189	33.2
2019	0	0	166	100.0	166	29.2
2020	4	1.9	210	98.1	214	37.6

Table T1.5.3.5 Naloxone administration by outcome, 2018–2020

Source: Evans et al. (2022)

Profile of those receiving naloxone

Age and sex information was supplied for 79% and 91%, respectively, of those receiving naloxone. Between 2018 and 2020, 61% of those receiving naloxone were male, with this proportion significantly increasing from 51% in 2018 to 75% in 2020. Seventy-one per cent were aged between 25 and 44 years, with an average age of 37.6 years.

Other findings

Other notable findings from the report include the following:

- Four areas of Dublin city (Dublin 7, Dublin 1, Dublin 8, and Dublin 2) accounted for over two-thirds (67%) of overdoses where naloxone was administered.
- Fifty-one per cent of those who had received naloxone were reported to have taken more than one substance, with 35% taking two substances.
- Sixty-two per cent of people were reported to have overdosed by injection. Over two-thirds (68%) of those who had taken heroin had injected.
- It is estimated that the naloxone programme has saved the lives of at least 22 people between 2018 and 2020.

Harm reduction services: Supervised injecting facilities

As outlined in the 2017 national report, the Misuse of Drugs (Supervised Injecting Facilities) Act 2017 was signed into Irish law on 16 May 2017. In the Introduction, the Act is summarised as:

An Act to provide for the establishment, licensing, operation and regulations of supervised injecting facilities for the purposes of reducing harm to people who inject drugs; to enhance the dignity, health and well-being of people who inject drugs in public places; to reduce the incidence of drug injection and drug-related litter in public places and thereby to enhance the public amenity for the wider community; and to provide for matters related thereto.

Following a procurement process, MQI was selected as the preferred bidder to deliver the service. In July 2019, Dublin City Council refused planning permission for the facility, citing the lack of a “robust” policing plan and the potential impact it could have on the local economy, particularly in relation to tourism. After a successful appeal, on 24 December 2019, An Bord Pleanála granted MQI permission to build the facility next to the Riverbank Centre on Merchant’s Quay, Dublin. However, on 15 July 2021, the Irish High Court overturned An Bord Pleanála’s permission to establish the facility. Judicial review proceedings against the proposed facility had been taken by a nearby primary school. However, in December 2022, permission was finally granted for the establishment of an 18-month pilot of a medically supervised injecting facility to be based in MQI’s Riverbank Court building in Dublin (Murray 2022). Building work began during the first week of June 2024. It is expected that the facility will open in the last quarter of 2024.

Harm reduction services: Vaccination

See section on Guidelines for testing for blood-borne viruses and immunisation for information regarding vaccination for blood-borne viruses in Ireland.

Harm reduction services: Community-based organisations (CBOs)

MQI annual review, 2022

Merchants Quay Ireland (MQI) is a national voluntary agency providing services for homeless people and those who use drugs. There are 27 MQI locations in 14 counties in the Republic of Ireland (see Figure T1.5.3.1). MQI aims to offer accessible, high-quality, and effective services to people dealing with homelessness and addiction to meet their complex needs in a non-judgemental and compassionate way. This section highlights services provided by MQI to people who use drugs in Ireland in 2022 (Merchants Quay Ireland 2023).

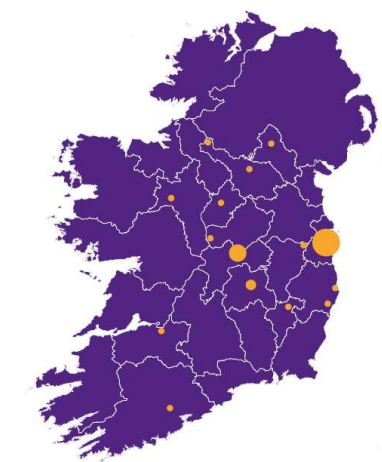


Figure T1.5.3.1 MQI locations in the Republic of Ireland

Source: MQI annual review 2021, p. 36

The 13 counties are Dublin, Wicklow, Carlow, Cork, Limerick, Offaly, Westmeath, Laois, Longford, Roscommon, Cavan, Monaghan, and Kildare.

Harm reduction services

The aim of harm reduction is to minimise the risks stemming from sharing drug-taking paraphernalia. In 2022, MQI facilitated 35,787 interventions in its needle exchange and harm reduction services; 3,808 of these clients were unique.

Community detoxification and opioid substitution therapy

In 2022, some 82 clients accessed the community detoxification service in the Riverbank Centre, Dublin, with 60 clients accessing benzodiazepine detoxification and 12 clients accessing alcohol detoxification; 144 clients accessed opioid substitution therapy.

Assertive In-Reach Service and community engagement

MQI has an Assertive In-Reach Service which supports and empowers clients to link in with different services to access appropriate and specialist supports. In 2022, the Assertive In-Reach worker supported 82 unique clients and provided 197 interventions.

A Community Engagement Team operates in the neighbourhood around Riverbank, Dublin to strengthen relationships with the local community and stakeholders and proactively engage with

clients and people sleeping rough in the area. The team also responds to calls and queries from the general public in relation to the local area as well as collecting drug litter. The team carried out 687 patrols in 2022, engaged with residents and local businesses, and collected 3,200 items of drug litter.

Hepatitis C treatment

The hepatitis C worker is the member of the MQI team who liaises with the primary healthcare team to ensure that clients who use drugs intravenously are screened for blood-borne viruses. This worker advocates for testing; if a client is positive, a GP refers the client to a specialist nurse. The hepatitis C worker continues to regularly check in with clients in these situations, ensuring that they are attending appointments and receiving care where required. In 2022, some 176 unique clients engaged with the worker.

Midlands services

Drug and Alcohol Treatment Supports project

MQI's Drug and Alcohol Treatment Supports team provides a community-based drug and alcohol treatment support service for individuals aged over 18 years and their families in the Midlands area (counties Longford, Westmeath, Laois, and Offaly). Services provided include an outreach-based crisis support service, mobile harm reduction, needle and syringe exchange, rehabilitation and aftercare supports, and support for families affected by substance use. In 2022, some 725 unique individuals were supported through 9,008 interventions.

Recovery services

St Francis Farm and High Park

The St Francis Farm (SFF) Rehabilitation Service offers a 13-bed therapeutic facility with a 14-week rehabilitation programme set on a working farm in Tullow, Co Carlow. At SFF, MQI provides a safe environment where service users can explore the reasons for their drug use, adjust to life without drugs, learn effective coping mechanisms, make positive choices about their future, and gain hands-on experience in animal care and vegetable production. In 2022, there were 173 referrals to the service, which was an increase of 4% compared with 2021 figures. There were 40 individuals admitted to SFF in 2022, and 27 people completed the programme.

At High Park in Drumcondra, Dublin, MQI operates a 14-week residential programme in a 13-bed facility. The emphasis is on assisting clients to gain insight into the issues that underpin their problematic drug use and on developing practical measures to prevent relapse, remain drug-free, and sustain recovery. In 2022, the service received 235 referrals; of these, 205 people completed assessments, 39 were admitted, and 27 completed treatment.

Prison-based services

Addiction Counselling Service and Mountjoy Drug Treatment Programme

MQI, in partnership with the Irish Prison Service, delivers a national prison-based Addiction Counselling Service aimed at prisoners with drug and alcohol problems in 11 Irish prisons. This service provides structured assessments, one-to-one counselling, therapeutic group work, and multidisciplinary care, in addition to release-planning interventions with clearly defined treatment plans and goals. Services offered include:

- Brief interventions

- Motivational interviewing and motivational enhancement therapy
- A 12-step facilitation programme
- Relapse prevention and overdose reduction
- Cognitive behavioural therapy
- Harm reduction approaches
- Individual care planning and release planning.

In 2022, MQI counselling staff saw a total of 2,126 unique clients, an increase of 10% on the previous year. In addition, MQI continued to operate a national helpline where prisoners could access telephone support; the service received 6,943 calls in 2022.

Ana Liffey Drug Project (ALDP)

The Ana Liffey Drug Project (ALDP) is a 'low-threshold, harm reduction' project working with people who are actively using drugs and experiencing associated problems. The ALDP has been offering harm reduction services to people in the north inner city area of Dublin since 1982, from premises at Middle Abbey Street. The ALDP offers a wide variety of low-threshold, harm reduction services that provide pathways for people who use drugs out of their current circumstance, including addiction and homelessness.

The services offered in Dublin include:

- Open access
- Assertive outreach
- Needle and syringe programme
- Medical services
- Stabilisation group
- Detoxification group
- Harm reduction group
- Treatment options group
- Assessment for residential treatment
- Key working and case management, and
- Prison in-reach.

Midwest region

The ALDP Midwest region provides harm reduction services in Limerick city and three counties to people affected by problematic substance use, their families, and the wider community. The counties served are Limerick, Clare, and North Tipperary. The ALDP Online and Digital Services team also offers support and information to the general public and to people who use drugs, as well as to other agencies that work with people with problematic drug use.

Annual report

The 2022 ALDP annual report was published in 2023 (Ana Liffey Drug Project 2023). The report noted that in 2022 the Law Engagement and Assisted Recovery (LEAR) programme, which had been running for 8 years, came of age with increased cooperation with An Garda Síochána, which committed more time and effort to it than ever before. The aim of LEAR is to support people who have complex and multiple needs, such as addiction, criminality, homelessness, and mental health, to engage effectively with support services and to identify and achieve their goals. A key focus of the project is supporting people to move away from criminality and antisocial behaviour and towards their personal recovery. In April 2022, the ALDP expanded LEAR into Dublin's northeast inner city, with four additional staff and two more Garda stations in Mountjoy and Fitzgibbon Street coming on board. The report noted that prior to the COVID-19 pandemic, the ALDP was renowned for its open access drop-in service, whereas the emphasis is now on working with service users in community settings.

In 2022, the ALDP also facilitated training on overdose prevention and naloxone use for hundreds of staff working in private emergency accommodation and for people who use drugs.

Coolmine Annual Report 2022 2022

Coolmine Therapeutic Community is a drug and alcohol treatment centre providing community, day, and residential services to men and women with problematic substance use, and to their families, in Ireland. Established in 1973, Coolmine was founded on the philosophies of the therapeutic community approach to addiction treatment. This is primarily a self-help approach in which residents are responsible for their own recovery, with peers and staff acting as facilitators of change. Participants are expected to contribute to the general running of the community and to their own recovery by actively participating in educational activities and in group and individual therapy. This section highlights services provided by Coolmine in 2022 (Coolmine 2023).

Coolmine House

Located in Dublin city centre, services provided at Coolmine House include one-to-one counselling, assessment, and information to support and assist clients to make the right choice to get help. The Drug-free Day Programme (DFDP) provides a supportive setting for clients to build self-confidence and the skills to maintain a drug-free life. The programme lasts a minimum of 10 months: 5 months of primary treatment and 5 months of aftercare. Clients engage in open therapy groups, self-development workshops, one-to-one key working sessions, relapse prevention groups, and various other therapeutic/educational programmes. In 2022, some 908 individuals were supported in Coolmine House, with 38 DFDP participants and a retention rate of 62%.

D15 Community Addiction Team

The D15 Community Addiction Team (D15 CAT) service provides focused care pathways specifically to the local community in Dublin 15 impacted by problem substance use. It includes treatment and rehabilitation support for adult men and women with problem substance use; contact and interventions to young people and adolescents at risk of experiencing problematic substance use; tailored support to members of ethnic and new communities impacted by problematic substance use; and integrated family work to deliver whole-family outcomes. Services include:

- Information and support
- Specific support for young people

- Cannabis programme
- Family support
- Alcohol programme
- Support for new community members, and
- Mindfulness-based stress reduction programme
- Support for all problematic substance use.

In 2022, some 237 individuals were supported by the D15 CAT team, with 39 clients participating in the alcohol programme and 43 individuals being supported for cocaine use.

Coolmine residential services

Coolmine Lodge – men’s residential

Coolmine Lodge in Dublin 15 is a therapeutic community that hosts a 5-month residential treatment programme for men who are working towards an independent life, free from addiction. It provides a supportive, peer-led environment where clients can build confidence, strength, resilience, and hope for a positive future. The service can admit men who may be prescribed medication, or those detoxifying from methadone, following assessment. In 2022, some 110 men were supported in residential treatment at Coolmine Lodge, with a 78% retention rate. Thirty-three per cent of admissions to Coolmine Lodge in 2022 were referrals from the Probation Service or Irish Prison Service.

Ashleigh House – women and children’s residential

Ashleigh House in Dublin 15 is a residential therapeutic community for women, expectant mothers, and mothers with young children. The service can admit women who may be prescribed medication, or those detoxifying from methadone, following assessment. Ashleigh House is designed to help women in recovery develop the skills they need to live a drug-free, independent life. In 2022, some 86 women were supported in residential treatment at Ashleigh House, with a 68% retention rate.

New services

In 2021, Coolmine had established community-based facilities in the mid-west and south-west of Ireland. All Coolmine community and day services now provide assertive outreach strategies, pre-entry supports, stabilisation, and day programmes. By the end of 2022 there were 15 facilities and 22 satellite clinics operating nationally (see Figure T1.5.3.2). During 2022, there were 262 new referrals to Coolmine Midwest, while 995 individuals were worked with in Coolmine Southwest. 2022 was the first year that Coolmine services became fully operational across the Southwest. Through the establishment of six regional hubs in Cork City North, Cork City South, North Cork, East Cork, West Cork, and Kerry, and through the use of 20 satellite venues, people can now access drug and alcohol services in their communities across all of counties Cork and Kerry.

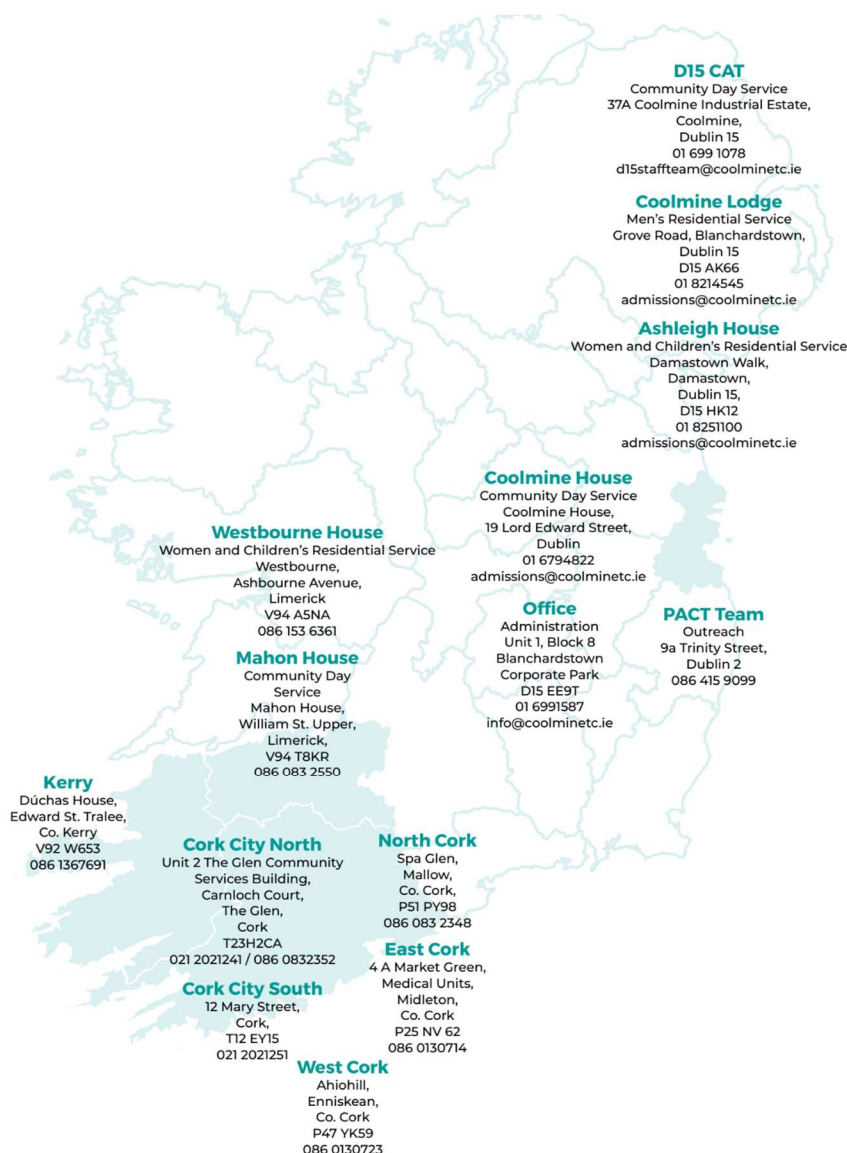


Figure T1.5.3.2 Coolmine services in Ireland, 2022

Source: Coolmine Annual Report 2022, p. 22

Tabor Group Annual Report 2023

The Tabor Group is a provider of residential addiction treatment services in Ireland. It aims to offer hope, healing, and recovery to clients suffering from addictions through integrated and caring services. In addition to two residential facilities, the organisation provides a Continuing Care Programme to clients who have completed treatment to assist with their recovery, as well as a community-based programme. Its Family Support Programme offers counselling to families whose loved ones are struggling with an addiction. In 2024, the Tabor Group published its annual report for 2023 (Tabor Group 2024). This section highlights services provided by the Tabor Group to individuals with a substance use addiction in 2023.

Tabor Lodge: residential addiction treatment centre

Tabor Lodge is a residential addiction treatment centre for people addicted to alcohol, drugs, gambling, and food. It is situated in Belgooly, 15 miles south of Cork city. Tabor Lodge is guided by the Hazelden Minnesota Model of addiction treatment in delivering its treatment programme. This model is characterised by the understanding that addiction is primarily a substance use disorder. The main focus of the treatment programme is to educate clients on the dynamics of this disorder as they manifest in the life of the individual. Another important focus of the treatment programme is to help clients develop the skills necessary to manage their disorder while going forward in their lives.

Tabor Fellowship: Integrated Recovery Programme

Tabor Fellowship is located at Spur Hill in Doughcloyne on the outskirts of Cork city. The Integrated Recovery Programme is based on the Hazelden Minnesota Model and promotes total abstinence. The aim is to build on and consolidate the work of recovery already begun in primary treatment – even if that treatment was not in the recent past and the client is struggling to maintain sobriety.

In 2023, Tabor Group responded to 898 telephone calls: 406 people were offered assessments, with 363 people completing them. Of these 363 people, 271 were admitted to Tabor Group, with 172 admissions for residential treatment and 99 admitted to the Integrated Recovery Programme. In addition, 248 family members were supported through the Family Support Programme, while 235 people in recovery were supported through the Continuing Care Programme.

On 30 June 2023, Tabor Group made a submission to the Citizens' Assembly on Drugs Use titled 'From Criminalisation to Care: Rethinking Our Response to Drugs Use in Ireland'. Seven focus groups were held in May 2023 with clients, their families, staff, and volunteers. In total, 90 people participated in the focus groups. One of the 10 recommendations of the Tabor Group submission was to 'take necessary measures to destigmatise the issue of drugs use, the experience of people who use drugs and their families and whole communities' (p. 16) (Tabor Group 2024).

T1.5.4 Harm reduction services: availability, access and trends

Availability and access of harm reduction services for drug users

See Section T1.5.3 for information on the availability and access of harm reduction services for drug users in Ireland. For information on the availability and access of harm reduction services within Irish prisons, see the *Prison workbook* Section T1.3.3.

T1.5.5 Additional information on harm reduction activities

HSE Safer Nightlife Programme: feedback on provision of harm reduction outreach in Irish festival settings

The HSE National Social Inclusion Office launched a multicomponent programme in May 2022 to engage with people who use drugs specifically in festival settings. This involved a media campaign, the development of resources, recruiting and training volunteers, and coordinating outreach teams at three specific festivals: Life Festival, Indiependence (Indie), and Electric Picnic. The aim of the programme was to engage with and support festival attendees in a non-judgemental way on the topic of substance use and related issues that emerge in nightlife spaces.

A report (Killeen et al. 2023) published in 2023 noted that throughout the three events ecstasy, cocaine, ketamine, cannabis, and alcohol appeared to be the drugs most commonly discussed with volunteers, often in combination. However, while stimulants remained a dominant theme, feedback identified the need for tailored information on both psychedelics and dissociative-type drugs, with some volunteers requesting more detailed information on these topics to support their roles. The report also noted that festival attendees were often unaware of drug interactions or the dangers associated with consuming substances as part of a polydrug pattern. Consequently, the report authors suggest that the main aim of the programme moving forward should be a focus on supporting the public to minimise the number of substances consumed.

The report also highlighted, based on interactions across events, that it was obvious it was the first time that many young people were being provided with drug information materials and health information on the topic of substance use. One main area of discussion which arose for volunteers throughout the events was the misconception by festival attendees that they would be removed or prosecuted if they accessed medical services following the consumption of substances. At each event, situations emerged for volunteers where they had to support and reassure attendees to access the medical tent when they or a friend appeared unwell following use. In addition, volunteer feedback highlighted the need for drug analysis, with many attendees requesting a drug testing service.

The report makes a number of key recommendations, which include:

- To establish a festival oversight group with the aim of providing guidance on drug responses and safety in festival settings
- To partner with a minimum of three festivals to deliver ‘back of house’ drug monitoring
- To review placement of volunteer teams and surrender bins at events to maximise engagement based on volunteer feedback
- To increase awareness of the programme through frequent engagement with the public and to develop resources based on the trends identified by volunteers as well as detailed media communication plans and materials to explain the operational and logistical components of a ‘back of house’ drug monitoring system
- To review expansion of harm reduction to wider nightlife settings in partnership with the Department of Health and Department of Culture (i.e. Department of Tourism, Culture, Arts, Gaeltacht, Sport and Media).

T1.6 Targeted intervention for other drug-related health harms

T1.6.1 Targeted interventions for other drug-related health harms

E-SHEILD: Enabling Students and Higher Education Institutions to Lead the response on Drugs

The MyUSE Research Group in University College Cork (UCC) is to receive funding over the next 3 years under the Department of Health’s National Drug Prevention and Education Funding Programme. The funding programme aims to increase the delivery in Ireland of prevention programmes that are supported by evidence and adhere to international prevention standards

(United Nations Office on Drugs and Crime and World Health Organization 2018) (European Drug Prevention Quality Standards 2015).

The MyUSE Research Group includes Dr Michael Byrne, head of the UCC Student Health Department; Dr Samantha Dockray and Dr Conor Linehan, senior lecturers in the School of Applied Psychology; Professor Ciara Heavin, professor of business information systems; and Dr Seán Millar, research support officer and postdoctoral researcher in the School of Public Health.

Funding will be used to enact the Enabling Students and Higher Education Institutions to Lead the response on Drugs (E-SHEILD) programme. This programme will support students and higher education institutions (HEIs) in reducing harms experienced through drug use. It also aims to reduce the overall number of students choosing to take drugs. Each participating Irish HEI will be provided with MyUSE (see Figure T1.6.1.1), a mobile app/web-based prevention, education, and behavioural change intervention, which aims to:

- Increase mindful decision-making with respect to drug use
- Cultivate harm reduction practices, and
- Promote alternatives to drug use activities.

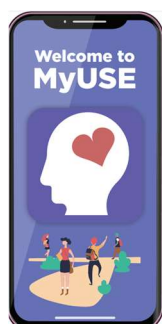


Figure T1.6.1.1 MyUSE evidence-informed mobile app

For further information on MyUSE and the E-SHEILD programme, contact Dr Michael Byrne at: m.byrne@ucc.ie

MyUSE is a new evidence-informed mobile app that has been purpose-developed for students in higher education (see Figure T1.6.1.1). Specific evidence-based behaviour-change techniques are delivered via the clinical algorithm contained within the app.

T1.7 Quality assurance of harm reduction services

T1.7.1 Quality assurance of harm reduction services

No new information.

T1.7.2 Additional information on any other drug-related harms data

Psychotic illness triggered by widely available semi-synthetic cannabinoid

Cannabis has been shown to be linked to the development of psychotic illness. Although it has been legalised in many jurisdictions over the last 20 years, its apparent detrimental effects on mental

health has slowed its legalisation on a widespread basis in Europe. However, a possible consequence of continuing illegality is that users in an unregulated environment are consuming high-potency or synthetic cannabinoids, which may also lead to adverse effects, including psychosis (Murray et al. 2016).

In Ireland, the Criminal Justice (Psychoactive Substances) Act 2010 prohibited the sale of any psychoactive substance, including synthetic cannabinoids, with the capacity to 'produce stimulation or depression of the central nervous system of the person, resulting in hallucinations or a significant disturbance in, or significant change to, motor function, thinking, behaviour, perception, awareness or mood' (p. 4) (Criminal Justice (Psychoactive Substances) Act 2010). However, hexahydrocannabinol (HHC) is classified as semi-synthetic, rather than synthetic, because it is synthesised from cannabidiol, which in turn is often derived from low-tetrahydrocannabinol (THC) cannabis (hemp). Consequently, HHC is marketed openly as a 'legal' alternative to cannabis products and has been produced and marketed in various forms, including being sprayed onto low-THC cannabis flower and resin. Although it has been hypothesised that semi-synthetic cannabinoids such as HHC may lead to psychotic illness, no such relationship has yet been reported in the scientific literature.

In a 2024 article published in the *Irish Journal of Psychological Medicine*, O'Mahony et al. describe two cases of psychotic illness which appear to have been precipitated by use of legally purchased HHC (O'Mahony et al. 2024). In both cases, the patients were regular cannabis users, but the episodes of psychotic illness only developed when they began vaping HHC. Both were diagnosed with synthetic cannabinoid-induced psychotic disorder (ICD-11 code 6C42.6). As with cannabis-induced psychosis, the presentations were heterogeneous in phenomenology. One patient presented with delusions of guilt and persecution, as well as auditory hallucinations. The other patient presented with prominent thought disorder, notably alogia, as well as disordered subjective time.

The authors note that, as of March 2023, HHC use has been reported in 70% of European Union member states, which likely represents an underestimate. Given the widespread and increasing use of vaping and the ready access to this compound, they suggest that clinicians and policy-makers should be aware of HHC's psychotogenic potential in order to protect potentially vulnerable patients from deleterious effects through psychoeducation and legislative restriction.

Frostbite injuries from recreational nitrous oxide use

In Ireland and internationally, there has been much attention on the growing popularity of inhaled nitrous oxide (N₂O), colloquially known as 'laughing gas' or 'hippy crack'. Although the prevalence of nitrous oxide use is not routinely collected in Ireland's National Drug and Alcohol Surveys, a web survey (n=4398) conducted in 2021 found that 23.3% of respondents had ever used nitrous oxide, while a 2022 study (n=1193) of attendees at music festivals in Ireland found that 28% had used it in the last year (Mongan et al. 2022) (Ivers et al. 2022). The popularity of nitrous oxide as a recreational drug can be attributed to the fact that it is cheap, readily available, and undetectable on routine drug screening. Recreational users tend to obtain it in small silver canisters known as 'whippets' or 'silver bullets', which are attached to a palm-sized 'nitrous cracker' to fill a balloon, from which the gas is inhaled. However, as nitrous oxide is cooled to its gaseous form for inhalation, container mishandling can cause frostbite injuries to the face and extremities.

In an article (Murphy et al. 2024) published in February 2024 in the *Irish Medical Journal*, Murphy et al. discuss that over a 6-month period from September 2022 to March 2023, seven frostbite injuries

due to recreational nitrous oxide use were managed by adult and paediatric burns services in Ireland. Although injuries tended to be small, they involved critical structures such as the hands or face. Presentation for medical care was often delayed, with one patient requiring ICU-level care for toxic shock syndrome. The mechanism of injury was most commonly associated with the filling of balloons from nitrous oxide canisters and subsequent freezing of the canister exterior. Larger commercial canisters tended to cause bilateral thigh and forearm burns, whereas single-use 'bulb' canisters were associated with smaller finger burns. The burden of care was significant, with two out of seven patients requiring debridement and grafting, and others attending for prolonged periods of dressings and/or rehabilitation.

In their discussion, the authors note that current legislation in Ireland allows for the sale of nitrous oxide canisters for industrial purposes. However, the Criminal Justice (Psychoactive Substances) Act 2010 prohibits its sale or importation for psychoactive properties (Criminal Justice (Psychoactive Substances) Act 2010). They recommend that more information about the risks and harms associated with nitrous oxide use be made available at music festivals and entertainment venues.

T2. Trends (not relevant in this section – included above)

T3. New developments

T3.1 New developments in drug-related deaths and emergencies

No new information.

T3.2 New developments in drug-related infectious diseases

No new information.

T3.3 New developments in harm reduction interventions

No new information.

T4. Additional information

T4.1 Additional sources of information

No new information.

T4.2 Further aspects of drug-related harms and harm reduction

No new information.

T5. Sources and methodology

T5.1 Sources

Data for this workbook were provided using five sources:

- National Drug-Related Deaths Index (NDRDI)
- Health Protection Surveillance Centre (HPSC)
- Hospital In-Patient Enquiry (HIPE) scheme
- National Psychiatric Inpatient Reporting System (NPIRS)

- National Self-Harm Registry Ireland

T5.2 Methodology

Established in 2005, the **National Drug-Related Deaths Index (NDRDI)**, which is maintained by the HRB, is an epidemiological database that records cases of death by drug poisoning, and deaths among drug users in Ireland, extending back to 1998. The NDRDI also records data on alcohol-related poisoning deaths and deaths among those who are alcohol dependent, extending back to 2004.

The **Health Protection Surveillance Centre (HPSC)** is Ireland's specialist agency for the surveillance of communicable diseases. Part of the HSE, and originally known as the National Disease Surveillance Centre, the HPSC endeavours to protect and improve the health of the Irish population by collating, interpreting, and disseminating data in order to provide the best possible information on infectious diseases. The HPSC has recorded new cases of HIV among injecting drug users since 1982, HBV since 2004, and HCV since 2006.

The **Hospital In-Patient Enquiry (HIPE)** is a computer-based health information system, managed by the ESRI in association with the Department of Health and the HSE. It collects demographic, medical, and administrative data on all admissions, discharges, and deaths from acute general hospitals in Ireland. It was started on a pilot basis in 1969 and then expanded and developed as a national database of coded discharge summaries from the 1970s onwards. Each HIPE discharge record represents one episode of care; each discharge of a patient, whether from the same or a different hospital, with the same or a different diagnosis, gives rise to a separate HIPE record. The scheme, therefore, facilitates analysis of hospital activity rather than of the incidence of disease. HIPE does not record information on individuals who attend accident and emergency units but are not admitted as inpatients.

The **National Psychiatric Inpatient Reporting System (NPIRS)**, administered by the HRB, is a national psychiatric database that provides detailed information on all admissions to, and discharges from, 56 inpatient psychiatric services in Ireland. It records data on cases receiving inpatient treatment for problem drug and alcohol use. The NPIRS does not collect data on the prevalence of psychiatric comorbidity in Ireland. The HRB publishes an annual report on the data collected in the NPIRS titled *Activities of Irish Psychiatric Units and Hospitals*.

The **National Self-Harm Registry Ireland** is a national system of population monitoring for the occurrence of deliberate self-harm, established in 2000 at the request of the Department of Health and Children by the National Suicide Research Foundation. Since 2006–2007, the Registry has achieved complete national coverage of hospital-treated deliberate self-harm. The Registry defines deliberate self-harm as:

an act with a non-fatal outcome in which an individual deliberately initiates a non-habitual behaviour that, without intervention from others, will cause self-harm, or deliberate ingestion of a substance in excess of the prescribed or generally recognised therapeutic dosage, and which is aimed at realising changes that the person desires via the actual or expected physical consequences.

All methods of deliberate self-harm are recorded in the Registry, including drug overdoses and alcohol overdoses, where it is clear that the self-harm was intentionally inflicted. All individuals who are alive on admission to hospital following a deliberate act of self-harm are included. Not considered deliberate self-harm are accidental overdoses, e.g. where an individual takes additional

medication in the case of illness, without any intention to self-harm; alcohol overdoses alone, where the intention was not to self-harm; accidental overdoses of street drugs (drugs used for recreational purposes) without the intention to self-harm; and when individuals are dead on arrival at hospital as a result of suicide.

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European Drugs Agency

The EUDA is a decentralised European Union (EU) agency based in Lisbon. The EUDA provides the EU and its member states with information on the nature, extent, and consequences of, and responses to, illicit drug use. It supplies the evidence base to support policy formation on drugs and addiction in both the EU and its member states.

There are 30 national focal points that act as monitoring centres for the EUDA. These focal points gather and analyse country data according to common data collection standards and tools and supply these data to the EUDA. The results of this national monitoring process are supplied to the EUDA for analysis, from which it produces the annual *European Drug Report* and other outputs.

The Irish Focal Point to the EUDA is based in the HRB. The focal point writes and submits a series of textual reports, data on the five epidemiological indicators, and supply indicators in the form of standard tables and structured questionnaires on response-related issues such as prevention and social reintegration. The focal point is also responsible for implementing Council Decision 2005/387/JHA on the information exchange, risk assessment, and control of new psychoactive substances.

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