Focal Point Ireland: national report for 2020 – Harms and harm reduction

Health Research Board. Irish Focal Point to the European Monitoring Centre for Drugs and Drug Addiction

Authors of the national report

Lucy Dillon, Brian Galvin, Ciara Guiney, Suzi Lyons, and Sean Millar

Head of Irish Focal Point

Brian Galvin

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(2021) Focal Point Ireland: national report for 2020 – drugs.

Table of Contents

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 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 the year 2018 are included in this report.

Incidences of newly diagnosed HIV, hepatitis B virus (HBV), and hepatitis C virus (HCV) cases are notified to the Health Protection Surveillance Centre (HPSC). Notification data for 2019 are included in this report.

The latest published NDRDI figures show that 376 people died in 2017 from poisoning deaths and that 410 non-poisoning deaths occurred among people who used drugs. People who were injecting at the time of the incident that led to their death represented 4% (n=34) of all drug-related deaths in 2017. The majority were male and involved opioids (94%).

There were 4,675 overdose cases discharged from Irish hospitals in 2018. The number of overdose cases in 2018 was the highest recorded since 2008, with trends indicating a general increase since 2015. Among the overdose cases in 2018, opiates were used in 14.7% (688) of the cases, cocaine in 4.9% (233) and cannabis in 1.9% of cases. There were no overdose cases involving LSD or other hallucinogenic substances.

Recent trends indicate that the number of cases of HBV and HCV diagnosed and notified in the Republic of Ireland is stabilising rather than continuing to decline. Of the acute HBV cases notified in 2018, none was an injecting drug user. The proportion of HCV cases attributed to injecting drug use has decreased from 88% in 2011 to 67% in 2019, but risk factor data were not available for a significant number of cases.

Although there has been an overall increase in the total number of HIV notifications in Ireland between 2004 and 2019, the number of people who inject drugs (PWID) among HIV notifications has shown an overall decrease during this time. An increase in the number of PWID among HIV notifications in 2014–2015 was due to an outbreak of HIV among homeless drug users in Dublin. The outbreak was declared over in February 2016. Key control measures 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 settings in Dublin where patients/clients attended.

Harm reduction services available in Ireland include needle exchange 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 2018, there were 96 pharmacies providing a needle exchange service.

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, Merchants Quay Ireland (MQI) was selected as the preferred bidder to deliver the service. On 24 December 2019, An Bord Pleanála granted MQI permission to build the facility by the Riverbank Centre on Merchant's Quay. The facility will have seven injecting booths, an aftercare area, ancillary bathrooms, a clinical area, a plant space and circulation areas.

T1. National profile and trends

T1.1 Drug-related deaths

T1.1.1 Overdose deaths

There are no data for 2018 (the latest year) because of reporting delays due to the COVID-19 crisis.

T1.1.2 Toxicology of overdose deaths

There are no new data for toxicology because of the reporting delays due to the COVID-19 crisis.

T1.1.3 Mortality cohort studies

There are no mortality cohort studies to report for the year 2019.

T1.1.4 Trends

There are no data on trends for 2018 (the latest year) because of reporting delays due to the COVID-19 crisis.

Data completeness/coverage; case ascertainment, changes in reporting

The NDRDI, the Irish Special Register for Drug-related deaths has been in existence since 2007, utilising Filter D as a selector. 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 Filter D criteria but are of national importance, e.g. alcohol only and alcohol in combination with prescription drug overdose/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 opioid substitution treatment (OST), and 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. However, in winter 2020 (for the 2019 data collection) the NDRDI will move to a new online data collection portal, which will improve efficiency and security.

T1.1.5 Additional information on drug-related deaths

Drug-related deaths and deaths among drug users in Ireland, 2008–2017

The NDRDI reports on poisoning deaths (also known as overdose), which are deaths in the general population due to the toxic effect of a drug (including alcohol) or combination of drugs; and on non-poisonings, which are deaths as a result of trauma, such as hanging; or medical reasons, such as cardiac events, among people who use drugs. The latest published NDRDI figures show that 376 people died in 2017 from poisoning deaths and that 410 non-poisoning deaths occurred among people who used drugs (Health Research Board 2019).

Key findings of the report are:

- Taking a cocktail of drugs (polydrugs) continues to be a significant factor in poisoning deaths, contributing to three in five poisoning deaths.
- There is an increase in cocaine poisoning deaths.
- Alcohol continues to be the main drug implicated in poisoning deaths, alone or with other drugs.
- Hanging is the main cause of non-poisoning deaths.

Injecting

People who were injecting at the time of the incident that led to their death represented 4% (n=34) of all drug-related deaths in 2017. The majority were male and involved opioids (94%). Two in five (41%) occurred in Dublin city and the majority were alone at the time of injecting.

Poisoning deaths (overdose)

The annual number of poisoning deaths increased by 2% from 368 in 2016 to 376 in 2017. As in previous years, the majority (70%) were male. The median age of those who died was 43 years.

Key findings of poisoning deaths in 2017:

- Alcohol was implicated in over one in three poisoning deaths (33%) and alcohol alone was responsible for 16% of all poisoning deaths.
- Opioids were the main drug group implicated in poisonings; methadone was implicated in one-quarter (25%) of poisonings, while heroin-related poisoning deaths increased from 74 deaths in 2016 to 77 in 2017.
- Prescribable (prescription and/or over-the-counter) drugs were implicated in two in every three (67%) poisoning deaths.
- Benzodiazepines were the most common prescribable drug group implicated. Diazepam was the most common benzodiazepine-type drug and was implicated in one in four (90; 24%) of poisonings.
- Methadone was the most common individual prescribable drug, implicated in 95 (25%) of poisoning deaths.

- Alprazolam poisoning deaths increased by 34%, from 47 in 2016 to 63 in 2017.
- Cocaine-related deaths increased from 42 in 2016 to 53 in 2017.
- MDMA-related deaths increased from 8 in 2016 to 14 in 2017.

Polydrug poisonings in 2017

Taking a cocktail of drugs (polydrugs) can increase the risk of fatal overdose. The majority of poisoning deaths (58%) in 2017 involved polydrugs, with an average of four different drugs taken.

- 51% (64) of deaths where alcohol was implicated involved other drugs, mainly opioids.
- 89% (85) of deaths where methadone was implicated involved other drugs, mainly benzodiazepines.
- 86% (66) of deaths where heroin was implicated involved other drugs, mainly benzodiazepines.
- All diazepam-related poisoning deaths (90) involved other drugs, mainly opioids.
- All alprazolam-related poisoning deaths (63) involved other drugs, mainly opioids.

Non-poisoning deaths in 2017

The number of non-poisoning deaths increased slightly, with 410 deaths in 2017 compared with 404 in 2016. Non-poisoning deaths are categorised as being due to either trauma (n=196) or medical causes (n=214).

The main causes of non-poisoning deaths categorised as trauma were hanging (114; 28%) and those categorised as medical were cardiac events (56; 14%). Six in every 10 (63%) people who died as a result of hanging had a history of mental health problems. The median age for deaths due to medical causes has increased from 42 years in 2014 to 49 years in 2017, which may indicate an ageing cohort of people who use drugs in Ireland.

Has an increase in the dispensing of pregabalin influenced poisoning deaths in Ireland?

Data on poisoning deaths in Ireland show an increase in direct pregabalin-related poisoning deaths from 2013 to 2016. Following the introduction of pregabalin in 2004, international evidence found an increase in its prescription rates. Fatal overdoses related to pregabalin have been reported and are almost always in combination with other drugs. A study was conducted to examine whether or not the increase in the dispensing of pregabalin has impacted on poisoning deaths in Ireland between 2013 and 2016 (Lynn 2019). Of note, pregabalin – a prescribed medicine used in the treatment of several medical conditions, including epilepsy, neuropathic pain, and generalised anxiety disorder – has only been included in the routine postmortem toxicology screen by the State Laboratory since 2013 (also see Treatment workbook, Section T4.2).

Methods

Prescription data were retrieved from the Health Service Executive (HSE) Primary Care Reimbursement Service (PCRS) annual reports, which record payment and prescription frequency for several services in Ireland. These services include the General Medical Services (GMS), which in 2014 related to 43% of the general population, and services that cover the remainder of the population; data on drugs provided through the Long-Term Illness (LTI) Scheme, which covers free drugs for the

treatment of specific long-term illnesses; and data on repayments through the Drugs Payment Scheme (DPS), which reimburses any citizen who pays more than a set amount monthly for medicines.

Data on all poisoning deaths for the years of death 2013–2016 with positive toxicology for pregabalin were extracted from the NDRDI. The NDRDI is an epidemiological census which records all poisoning deaths by drug(s) and/or alcohol. It also records non-poisoning deaths among persons who have a history of drug and/or alcohol dependence or misuse of drugs. The NDRDI's main data source is coronial files. All post-mortem toxicological analyses included in this report were performed by the State Laboratory in Ireland.

Descriptive statistics are presented for the number of dispensings and deaths over time. In addition, correlational analysis using linear regression was applied to estimate the relationship between number of dispensings for pregabalin and deaths over the reported time period.

Results

For the years of death 2013–2016 inclusive, the NDRDI recorded a total of 1,489 poisoning deaths. Pregabalin was present on toxicology reports of 240 (16%) poisoning deaths during this period, increasing from 18 (4.5%) in 2013 to 94 (26%) in 2016, indicating an upward trend ($\chi 2=74.626$, $p=<0.001$) in the presence of pregabalin in poisoning deaths (see Table T1.1.5. 1). The numbers of dispensed pregabalin items are shown in Table T1.1.5.1; these numbers increased year on year.

Table T1.1.5.1 PCRS pregabalin dispensing frequency, number of poisoning deaths with a pregabalin-positive toxicology, and percentage of deaths related to PCRS dispensing, by year, 2013–2016

Year of death	2013	2014	2015	2016
Total PCRS pregabalin items dispensed*	612 641	661 788	715 502	755 159
Breakdown of PCRS pregabalin items by scheme:				
GMS	519 187	559 421	608 801	652 013
DPS	85 210	89 183	89 844	85 321
LTI	8244	13 184	16 857	17 825
All NDRDI poisoning deaths	400	370	365	354
Pregabalin-positive toxicology poisoning deaths	18	53	75	94
Percentage of deaths related to pregabalin items dispensed (%)	0.0029	0.008	0.01	0.012

Source: (Lynn 2019)

*These figures do not include private pregabalin items dispensed that do not fall into these categories.

Figure T1.1.5.1 shows a strong positive correlation between the number of pregabalin items dispensed through the HSE PCRS scheme and the number of poisoning deaths where pregabalin was present on toxicology reports over time, with a coefficient (R^2) value of 0.9843.

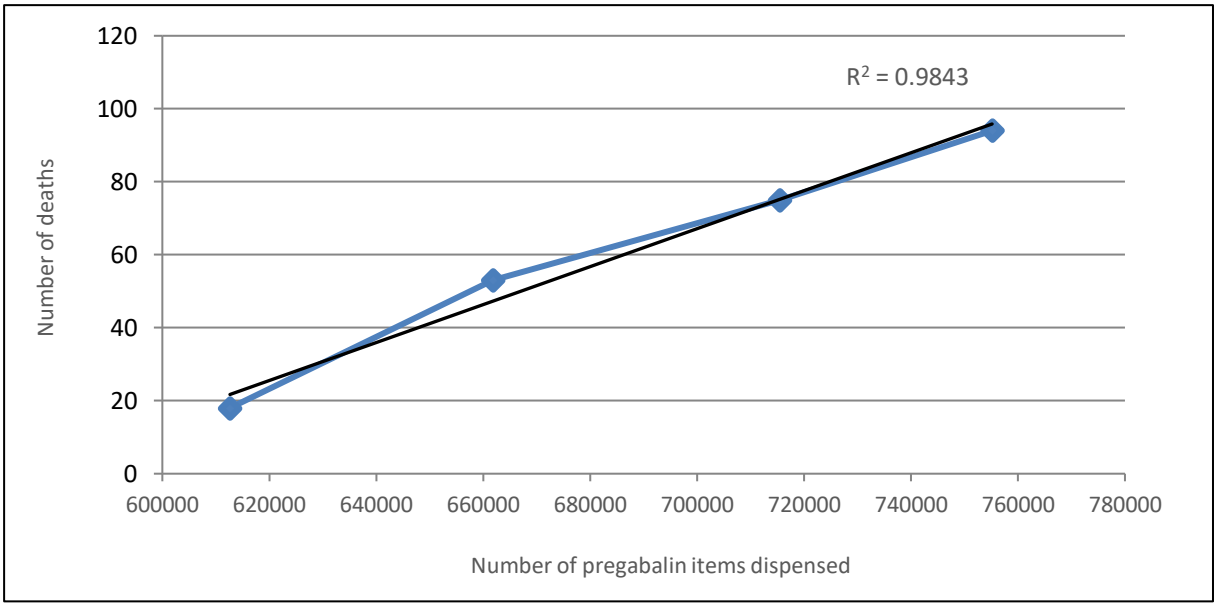


Figure T1.1.5.1 Relationship between the number of pregabalin items dispensed and pregabalin-positive poisoning deaths, NDRDI 2013–2016

Source: (Lynn 2019)

Discussion

This ecological study shows that pregabalin-positive poisoning deaths are increasing in line with the increased dispensing of pregabalin in Ireland. In the United States, it has been suggested that the increase in prescribing pregabalin is related to clinicians using it outside its licensed indicated use, as an alternative to opioids for a variety of pain management. Since April 2019, in the United Kingdom (UK), following recommendations from the Advisory Council on the Misuse of Drugs, pregabalin (and gabapentin) has been classified as a Class C drug. This means that pregabalin cannot be repeat-dispensed and prescriptions will only be valid for 1 month. Despite the acknowledgement that this will incur extra work for doctors, pharmacists, and especially patients, the medical profession in general supports this change. Results from this study support the consideration of similar reclassification of pregabalin in Ireland. In Ireland, the HSE issued correspondence in June 2016 in relation to the dangers associated with prescribing pregabalin; however, this needs to be supported with tighter controls through legislative changes.

Repeated cross-sectional study of factors associated with pregabalin-positive poisoning deaths in Ireland

A recent Irish study, using data from the NDRDI, examined factors associated with pregabalin-positive poisoning death (PPPD) between 2013 and 2016 (Lynn*, et al.* 2020). Pregabalin is a prescribed medication licensed in Europe for use in the treatment of epilepsy, neuropathic pain, and generalised anxiety disorder. However, the pharmacokinetic properties of pregabalin, which include its rapid absorption, fast onset of its relaxant and sedative effects, and its reduced withdrawal symptoms, can lead to the potential risk of misuse.

Data for this study were extracted from the NDRDI. The NDRDI's definition of a poisoning death is a death directly due to the toxic effect of one or more substances on the body. For this study, PPPD

included all poisoning deaths where pregabalin was present on the toxicology report, with years of death 2013–2016 inclusive as the observation period. Analysis included univariate and multivariate logistic regression to estimate unadjusted and adjusted odds ratio (OR) and 95% confidence interval (CI) for factors associated with PPPD (primary outcome) by logistic regression models for the total sample and stratified by gender.

Results

Pregabalin was present on 240 (16%) toxicology reports of 1,489 poisoning deaths, significantly rising from 18 (5%) in 2013 to 94 (27%) in 2016. While the total number of poisoning deaths appeared to decrease over the reporting period, there was an increase in PPPD (see Table T1.1.5.2). Women, opioid misuse, being in receipt of treatment for problem drug use, and year of death (2016 versus 2013) were associated with increased odds of PPPD. Alcohol dependence was associated with reduced odds of PPPD. Analysis was then stratified by gender. For men, opioid misuse, being in receipt of treatment for problem drug use, and year of death were associated with increased odds of PPPD, while alcohol dependence was associated with reduced odds of PPPD. For women, being in receipt of treatment for problem drug use and year of death were associated with increased odds of PPPD.

Polydrugs were present on the toxicology reports of all PPPD (n=240). Almost all (234, 97.5%) had a positive toxicology report for other central nervous system (CNS) depressant drugs, mainly opioids (211, 88%), followed by benzodiazepines (207, 86%) and alcohol (58, 24%). Methadone (122, 51%) was the main opioid reported in PPPD, followed by heroin (44, 18%). The odds of opioid drugs being present on toxicology reports (versus none) were 6.54 times more likely for PPPD than for pregabalin-negative poisoning deaths (PNPD), with the odds for women twice that for men.

Two or more other CNS depressant drugs were present in the majority (205, 85%) of PPPD toxicology reports. The odds of two or more CNS depressant drugs being present on toxicology reports (versus none) were 10.38 times more likely for PPPD than for PNPD, with the odds for women three times that for men. This is significant as pregabalin can exacerbate the side-effects of CNS depressant drugs, and with multiple CNS depressant drugs present in PPPD, the synergistic effect of the combination of these drugs increases the risk of death.

The odds of antidepressant drugs present on toxicology (versus none) were 5.49 times more likely for PPPD than for PNPD; for antipsychotic drugs, the odds ratio was 3.82; and for Z-drugs it was 2.74. The presence of cocaine on toxicology reports was not statistically significantly associated with PPPD.

Table T1.1.5.2 Factors significantly associated with PPPD, 2013–2016 (n=1489)

1

All poisoning deaths					Men	Women
			Unadjusted model	**Adjusted model**	**Adjusted model**	**Adjusted model**
Factors (reference category)	PNPD	PPPD	Odds ratio (95% CI)	Odds ratio (95% CI)	Odds ratio (95% CI)	Odds ratio (95% CI)
Sex						
Women	356	111 (24%)	2.16 (1.63–2.86)***	2.69 (1.95–3.70)***		

All poisoning deaths					Men	Women
Men (ref)	893	129 (13%)	1.00	1.00		
Year of death						
2013 (ref)	382	18 (5%)	1.00	1.00	1.00	1.00
2014	317	53 (14%)	3.33 (2.04–6.18)***	3.62 (2.04–6.42)***	4.46 (2.00–10.05)***	2.74 (1.18–6.34)*
2015	290	75 (21%)	5.49 (3.21–9.39)***	5.55 (3.20–9.66)***	5.14 (2.28–11.56)***	6.05 (2.76–13.26)***
2016	260	94 (27%)	7.67 (4.52–13.01)***	7.95 (4.58–13.79)***	11.01 (5.02–24.14)***	5.24 (2.35–11.69)***
History of alcohol dependency						
Yes	360	48 (12%)	0.62 (0.44–0.87)**	0.59 (0.41–0.85)**	0.45 (0.27–0.76)**	0.84 (0.48–1.47)
No (ref)	889	192 (18%)	1.00	1.00	1.00	1.00
History of opioid misuse						
Yes	553	160 (22%)	2.52 (1.88–3.37)***	1.74 (1.17–2.59)**	1.83 (1.09–3.08)*	1.56 (0.81–3.01)
No (ref)	696	80 (10%)	1.00	1.00	1.00	1.00
In receipt of treatment for problematic drug use						
Yes	197	89 (31%)	3.15 (2.32–4.26)***	1.95 (1.33–2.86)**	1.80 (1.10–2.95)*	2.57 (1.31–5.01)**
No (ref)	1052	151 (13%)	1.00	1.00	1.00	1.00

Source: (Lynn, *et al.* 2020)

Conclusion

The authors conclude that the study findings suggest the inappropriate use of pregabalin among those who are known to misuse opioids and those in receipt of treatment for problematic drug use. More guidance and training for prescribers and treatment providers as well as the development of policies, including consideration given to scheduling pregabalin as a controlled drug, is recommended

in order to better inform the public and medical practitioners of the potential harm due to 'off label' prescribing and inappropriate use of pregabalin.

Close monitoring of prescribing practices, diversion, and misuse of pregabalin, especially among those who use opioids and within the treatment setting in Ireland, is urgently required. Any treatment with pregabalin should be subject to regular review, with caution adhered to when considering prescribing pregabalin to women who are taking other drugs, especially CNS depressants. In Ireland, the nationwide implementation of an ePrescription system would assist in this process. In addition, an ePrescription system would assist in preventing people altering prescriptions or receiving multiple private prescriptions from different medical practitioners. In January 2020, the HSE's Medicines Management Programme published a document on appropriate prescribing of pregabalin (common brand name Lyrica) (Health Service Executive 2020b) (see Treatment workbook, Section T4.2).

Risk of drug-related poisoning deaths and all-cause mortality among people who use methadone

Methadone is the most commonly prescribed OST in Ireland. A retrospective cohort study was carried out in all specialist addiction services in Dublin South West and Kildare looking at the risk of death associated with interruptions in methadone maintenance treatment (MMT) for the years 2010–2015 (Durand*, et al.* 2020).

Methods

Using data from the Central Treatment List and the HSE Methadone Treatment Scheme, start and end dates for patient MMT were identified from methadone dispensing data. This information was then linked to mortality data from the NDRDI and prescription data from the GMS. The researchers were therefore able to categorise the treatment status for every day for each patient (addiction services, primary care, prison, out of treatment). 'In treatment' was defined as a continuous daily supply of methadone. If a patient did not receive a new prescription within 7 days after the end of the last prescription, they were considered to be 'off treatment'. The patient remained off treatment until they received a new prescription.

There were five groups within the study: weeks 1–4 following transfer between treatment providers; weeks 1–4 out of treatment; weeks 5–52 out of treatment; weeks 1–4 of treatment initiation; and weeks 5+ of continuous treatment. A drug-related poisoning (DRP) death was classified as the primary outcome measure, while an all-cause mortality (ACM) death was classified as the secondary outcome.

Findings

The study included 2,899 patients over the six-year study period, equating to 13,300 person-years. The median follow-up period was 5.5 years. The majority were male (63.3%), with a median age of 33.9 years. Forty-nine per cent (48.5%) of patients were found to have transferred, on average, three times between services. Most of the transfers were back and forth between prison and addiction services. Many patients included in the study had evidence of physical ill health and/or mental health problems, with 66.9% reporting two additional problems, most commonly mental health problems (66%), diseases of the digestive system (34%), and diseases of the respiratory system (24%). The study also recorded the median methadone dose at the last treatment episode, as follows:

- 40.5% median dose <60 mg

- 56.1% median dose 60–120 mg
- 3.4% median dose ≥120 mg.

Of the 2,899 patients included, 154 (5.3%) were known to have died. There were no deaths recorded in weeks 1–4 following transfer between treatment providers. Of those who died, one-third (n=55, 36.2%) were a DRP (crude DRP mortality rate of 0.41 per 100 person-years [95% CI: 0.30–0.52]). After adjusting the analysis for other factors, the risk of DRP was highest in weeks 1–4 out of treatment and weeks 1–4 of treatment initiation (see Table 1.1.5.2). The risk was higher for women and increasing age. The crude ACM was higher than DRP, with a rate of 1.14 per 100 person-years [95% CI: 0.96–1.32]. As with DRP, the risk of ACM was highest in weeks 1–4 out of treatment and weeks 1–4 of treatment initiation (see Table T1.1.5.3). The risk of ACM was higher for those with a recorded disease of the circulatory system and increasing age, while the risk was reduced for those with a history of imprisonment.

Table T1.1.5.3 DRP and ACM mortality rates per 100 person-years and adjusted relative risk by interruptions to MMT continuity

Interruptions to MMT continuity		Adjusted relative risk	95% CI
DRP mortality rate per 100 person-years			
Weeks 1–4 following transfer between treatment providers	0.00	–	–
Weeks 1–4 out of treatment	1.29	4.04	1.43–11.43
Weeks 5–52 out of treatment	0.27	1.00	0.03–3.34
Weeks 1–4 of treatment initiation	1.11	3.40	1.20–9.64
Weeks 5+ of continuous treatment	0.39	1.00	–
ACM mortality rate per 100 person-years			
Weeks 1–4 following transfer between treatment providers	0.00	–	–
Weeks 1–4 out of treatment	9.32	11.78	7.73–17.94
Weeks 5–52 out of treatment	1.43	2.04	1.20–3.47
Weeks 1–4 of treatment initiation	4.17	5.11	2.95–8.83
Weeks 5+ of continuous treatment	0.82	1.00	–

Source: Durand *et al*. (2020)

The authors noted that the 7-day rule used to categorise treatment status could be a bias in the study, as some patients may not have stopped treatment. Therefore, they conducted the analysis using 14 days instead of 7 days. This did not change the results, with the exception that the risk of ACM for weeks 1–4 in treatment did not remain significant in the multivariate analysis.

The strength of the study is that it included a large number of patients, representing almost one-half of all those in MMT treatment during that time. There was a long follow-up time and the study utilised a number of existing databases to account for interruptions to treatment and mortality.

Limitations

A number of weaknesses and biases were acknowledged. There were other factors and confounders associated with interruption of treatment that could not be accounted or controlled for. One example cited was where a patient may have left treatment, moved into recovery and had stopped problem opioid use, and had therefore reduced their risk of mortality compared with those who relapsed and returned to treatment. The researchers used a 12-month limit for follow-up after stopping treatment to control for this potential confounder. The study did not include transfers to/from hospital, as hospitals are not required to report to the Central Treatment List. Therefore, given the high proportion of patients who also suffered from physical illnesses, it may be that those off treatment had been admitted to hospital for treatment for those illnesses, which might have influenced the results. Patients on Suboxone were also not included in the study.

Conclusions

This study confirms that the first 4 weeks after treatment initiation and after stopping treatment have the highest risk for mortality among patients in MMT in Ireland. While this trend is similar to findings from UK studies, mortality rates observed in this study were higher. This may be due to ageing among problem opioid users along with higher levels of comorbidity. The increased risk at initiation could be attributed to continued use of illicit opioids or other respiratory depressant drugs, or it could be tolerance related. There were no deaths recorded in the first 4 weeks after transfer between services. Given that many of those transfers were to and from prison, this may reflect the policy of keeping a person's place in community MMT until they are released from prison.

The authors recommend further investigation into the risks for patients caused by transfer between services. Given that the study shows the greatest risk of mortality at treatment initiation or after treatment stops, the authors also recommend closer monitoring of opioid tolerance at these times as well as relapse prevention strategies, which would include provision of take-home naloxone.

T1.2 Drug-related acute emergencies

T1.2.1 Drug-related acute 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 2018. There were 4,737 overdose cases in that year; of these, 62 died in hospital. Only discharged cases are included in this analysis (n=4,675). The number of discharged overdose cases in 2018 was the highest recorded since 2008, with trends indicating a general increase since 2015 (see Figure T1.2.1.1).

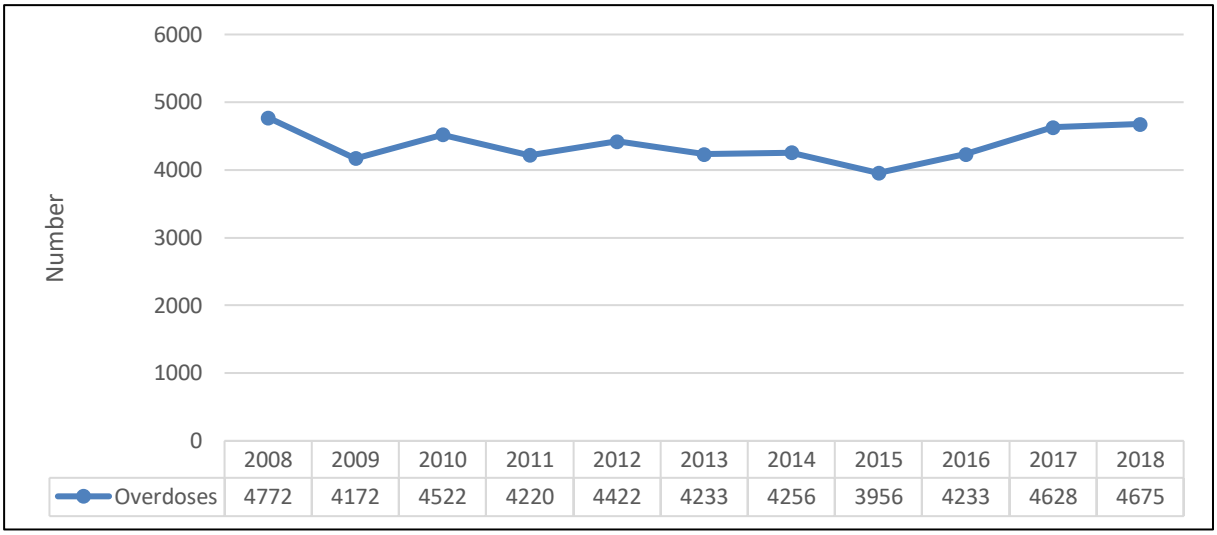


Figure T1.2.1.1 Number of overdose cases admitted to Irish hospitals, by year, 2008–2018

Source: HIPE, Healthcare Pricing Office (2020)

Sex

Between 2008 and 2018, there were more overdose cases among women than men, with women accounting for 2,602 (55.6%) of all non-fatal overdose cases in 2018 (see Figure T1.2.1.2).

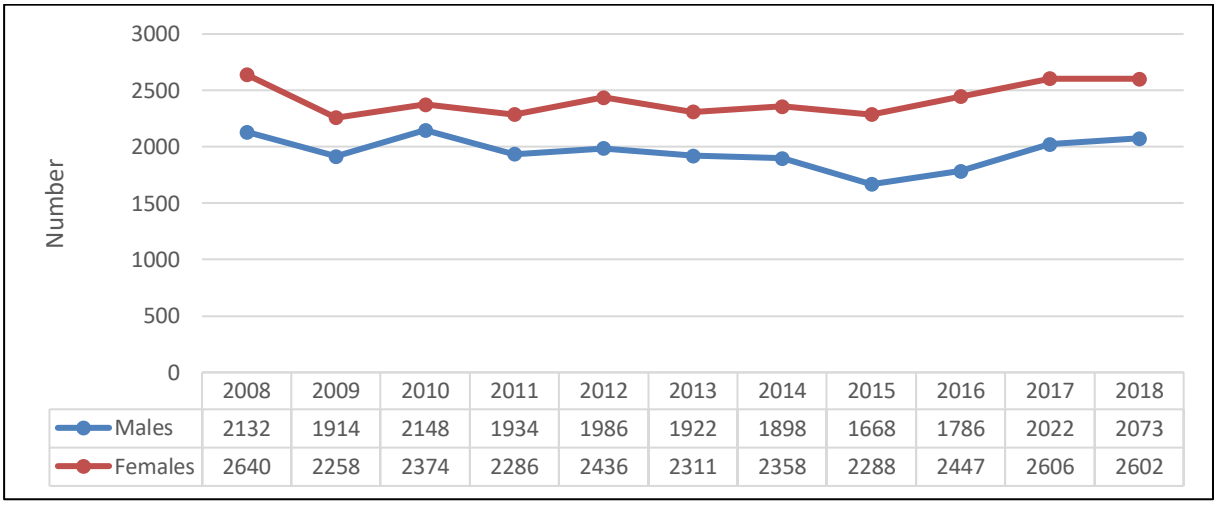
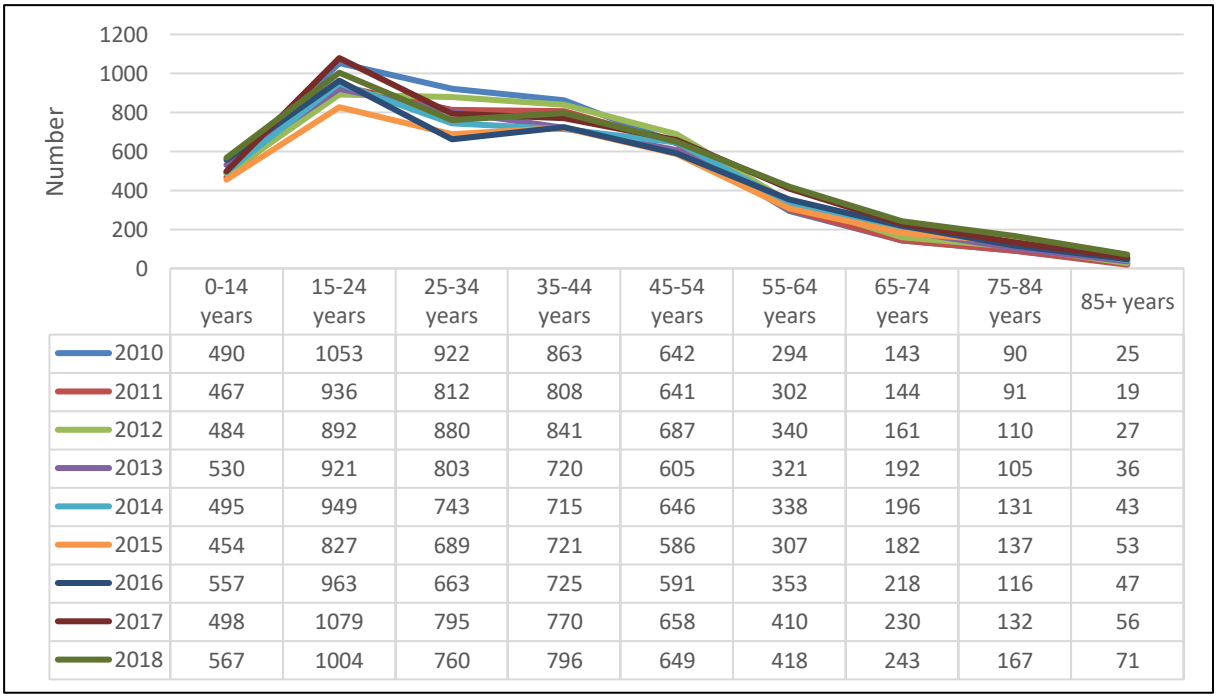


Figure T1.2.1.2 Number of overdose cases admitted to Irish hospitals, by year and gender, 2008–2018

Source: HIPE, Healthcare Pricing Office (2020)

Age group

Between 2015 and 2018, 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 peaked in the 15–24 years age group, and thereafter decreased with age (see Figure T1.2.1.3). In 2018, some 33.6% of cases were under 25 years of age.



	0-14 years	15-24 years	25-34 years	35-44 years	45-54 years	55-64 years	65-74 years	75-84 years	85+ years
2010	490	1053	922	863	642	294	143	90	25
2011	467	936	812	808	641	302	144	91	19
2012	484	892	880	841	687	340	161	110	27
2013	530	921	803	720	605	321	192	105	36
2014	495	949	743	715	646	338	196	131	43
2015	454	827	689	721	586	307	182	137	53
2016	557	963	663	725	591	353	218	116	47
2017	498	1079	795	770	658	410	230	132	56
2018	567	1004	760	796	649	418	243	167	71

Figure T1.2.1.3 Non-fatal overdose cases admitted to Irish hospitals, by year and age group, 2010–2018

Source: HIPE, Healthcare Pricing Office (2020)

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 2018. Non-opioid analgesics were present in 1,643 cases. Paracetamol is included in this drug category and was present in 1,352 cases. Benzodiazepines and psychotropic agents were taken in 937 and 1,184 cases, respectively. There was evidence of alcohol consumption in 389 cases. 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, 2018*

Drug category	Count
Non-opioid analgesics	1643
Paracetamol (4-aminophenol derivatives)	1352
Benzodiazepines	937
Psychotropic agents	1184
Anti-epileptic/sedative/anti-Parkinson agents	2148
Narcotics and hallucinogens	939
Alcohol**	389
Systemic and haematological agents	170
Cardiovascular agents	173
Autonomic nervous system agents	143
Anaesthetics	36
Hormones	153
Systemic antibiotics	72
Gastrointestinal agents	90

Drug category	Count
Other chemicals and noxious substances	312
Diuretics	57
Muscle and respiratory agents	32
Topical agents	42
Anti-infectives/anti-parasitics	17

Source: HIPE, Healthcare Pricing Office (2020)

* 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 2018. Opiates were used in 14.7% (688) of cases, cocaine in 4.9% (233), and cannabis in 1.9% (92) of cases. There were no overdose cases involving LSD or other hallucinogenic substances.

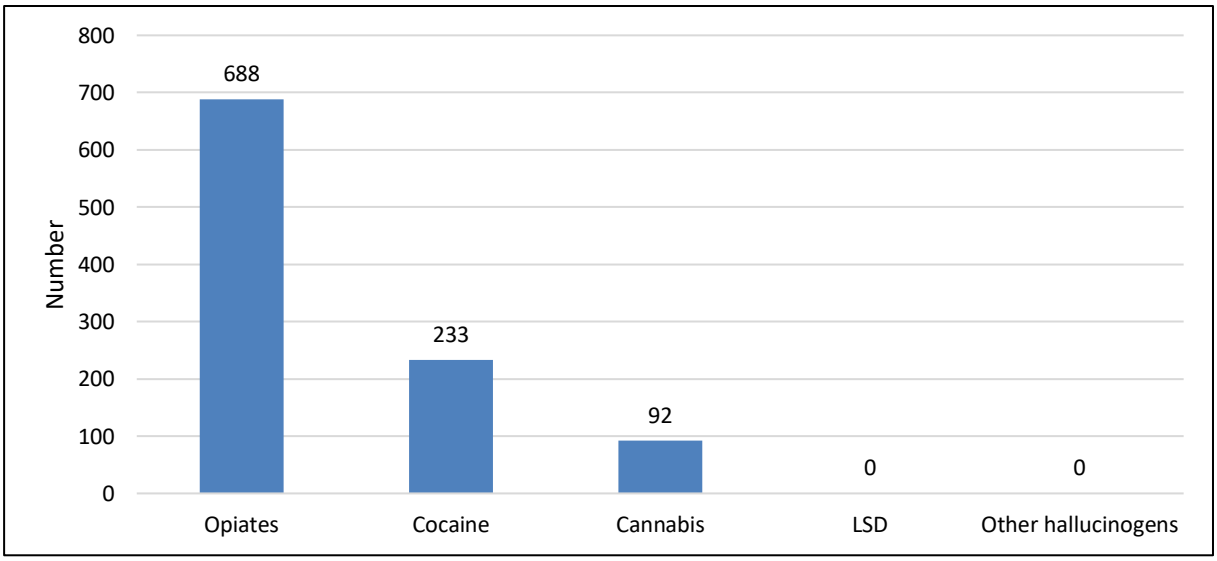


Figure T1.2.2.1 Narcotics and hallucinogens involved in overdose cases admitted to Irish hospitals, 2018

Source: HIPE, Healthcare Pricing Office (2020)

Overdoses classified by intent

In 2018, for 61% (2,853) of cases, the overdose was classified as intentional (see Figure T1.2.2.2). For 10% (471) of cases, classification of intent was not clear.

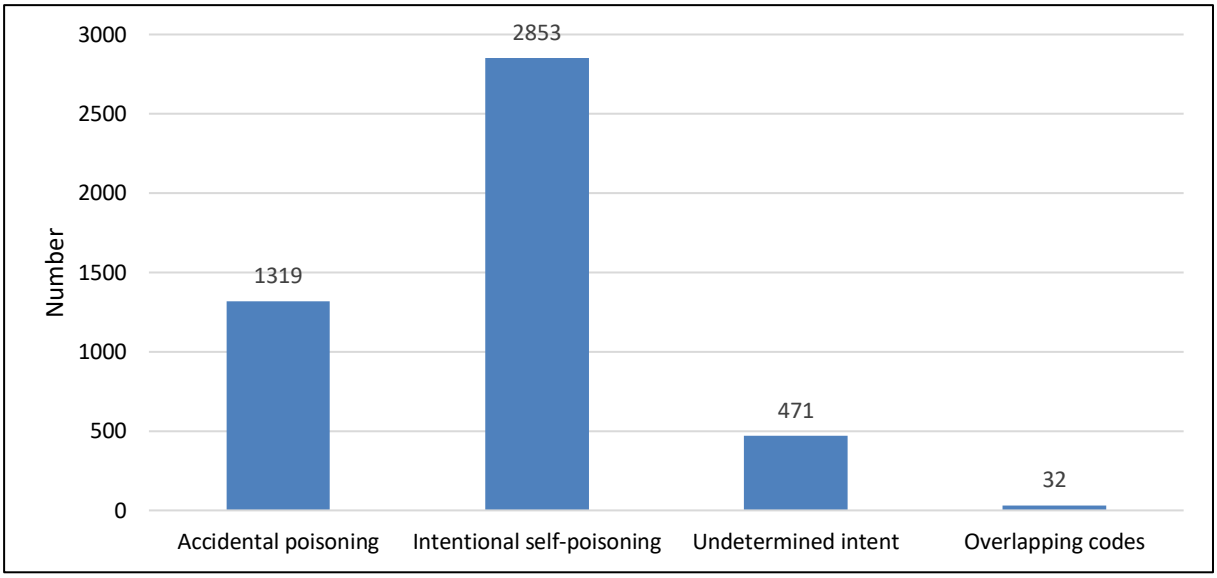


Figure T1.2.2.2 Overdose cases admitted to Irish hospitals, classified by intent, 2018

Source: HIPE, Healthcare Pricing Office (2020)

Table T1.2.2.2 presents the positive findings per category of drugs and other substances involved in cases of intentional self-poisoning (n=2,853) in 2018. Non-opioid analgesics were involved in 1,292 cases, benzodiazepines in 632, and psychotropic agents in 920 cases.

Table T1.2.2.2 Categories of drugs involved in intentional self-poisoning cases admitted to Irish hospitals, 2018*

Drug category	Count
Non-opioid analgesics	1292
Benzodiazepines	632
Psychotropic agents	920
Anti-epileptic/sedative/anti-Parkinson agents	1531
Narcotics and hallucinogens	456
Alcohol**	261
Systemic and haematological agents	99
Cardiovascular agents	93
Autonomic nervous system agents	95
Anaesthetics	8
Hormones	88
Systemic antibiotics	47
Gastrointestinal agents	60
Other chemicals and noxious substances	107
Diuretics	25
Muscle and respiratory agents	18
Topical agents	9
Anti-infectives/anti-parasitics	10
Other gases and vapours	8
Other and unspecified drugs	558

Source: HIPE, Healthcare Pricing Office (2020)

* 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

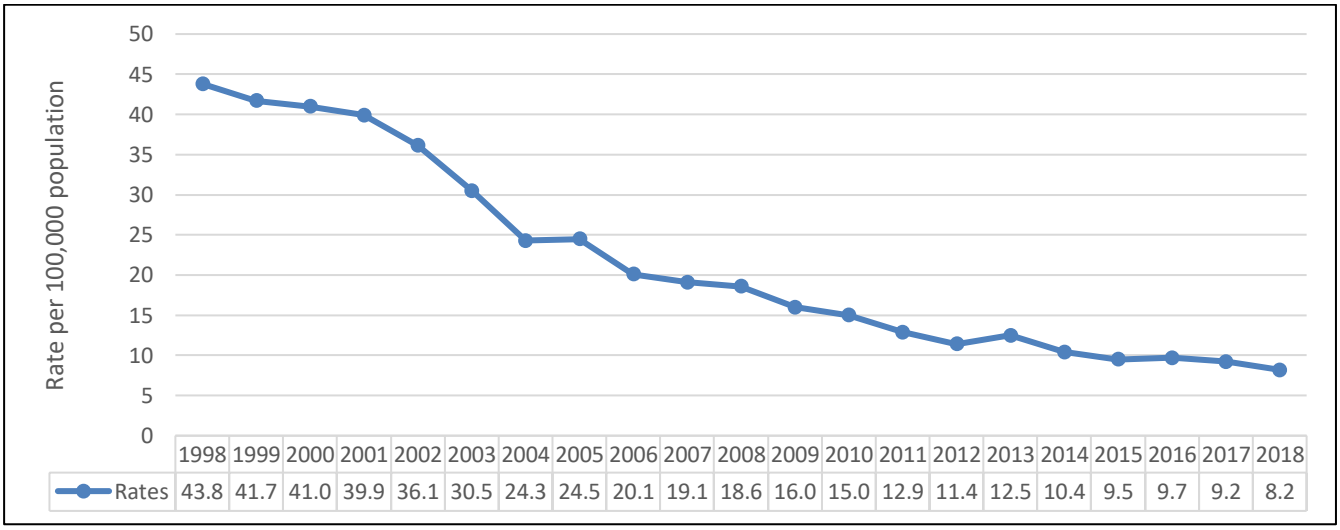
See Section T1.2.1 for information regarding trends in drug-related acute emergencies in the Republic of Ireland.

T1.2.4 Additional information on drug-related acute emergencies

Trends in alcohol and drug admissions to psychiatric facilities

The annual report published by the HRB's Mental Health Information Systems Unit, *Activities of Irish psychiatric units and hospitals 2018*, shows that the rate of new admissions to inpatient care for alcohol disorders has decreased (Daly, Antoinette and Craig 2019).

In 2018, some 1,086 cases were admitted to psychiatric facilities with an alcohol disorder; of these, 389 were treated for the first time. Figure T1.4.2.1 presents the rates of first admission between 1998 and 2018 for cases with a diagnosis of an alcohol disorder. The admission rate in 2018 was lower than the previous year, and trends over time indicate an overall decline in first admissions. One-third of cases hospitalised for an alcohol disorder in 2018 stayed just under one week, while 33% of cases were hospitalised for between 1 and 3 months, which was similar to previous years.

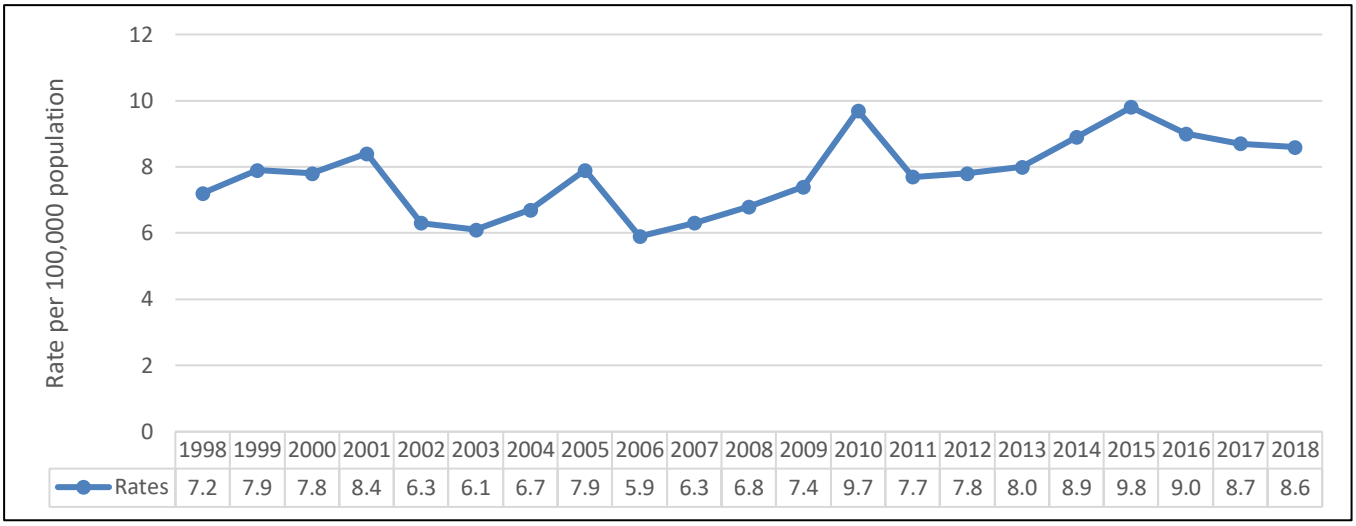


	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
Rates	43.8	41.7	41.0	39.9	36.1	30.5	24.3	24.5	20.1	19.1	18.6	16.0	15.0	12.9	11.4	12.5	10.4	9.5	9.7	9.2	8.2

Figure T1.2.4.1 Rates of psychiatric first admission of cases with a diagnosis of an alcohol disorder per 100,000 population in Ireland, 1998–2018

Source: Daly and Craig (2019)

In 2018, some 995 cases were admitted to psychiatric facilities with a drug disorder. Of these cases, 408 were treated for the first time. Figure T1.2.4.2 presents the rates of first admission between 1998 and 2018 of cases with a diagnosis of a drug disorder. Although the rate decreased slightly in 2018, there has been an overall increase in the rate of first admission with a drug disorder since 2011. It should be noted that the report does not present data on drug use and psychiatric comorbidity; therefore, it is not possible to determine whether or not these admissions were appropriate.



T1.2.4.2 Rates of psychiatric first admission of cases with a diagnosis of a drug disorder per 100,000 population in Ireland, 1998–2018

Source: Daly and Craig (2019)

Other notable statistics on admissions for a drug disorder in 2018 include the following:

- Less than one-half of cases hospitalised for a drug disorder stayed under one week (48%), while 99% were discharged within 3 months. It should be noted that admissions and discharges represent episodes or events and not persons.
- 17% of first-time admissions were involuntary.
- Similar to previous years, the rate of first-time admissions was higher for men (13.8 per 100,000) than for women (3.5 per 100,000).

T1.3 Drug-related infectious diseases

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

HIV notifications, 2019

According to data compiled by the HPSC, at the end of 2019, some 535 people were newly diagnosed with HIV in Ireland, a notification rate of 11.2 per 100,000 population. This marks an increase of 2.3% compared with 2018 (n=523) (see Figure T1.3.1.1).

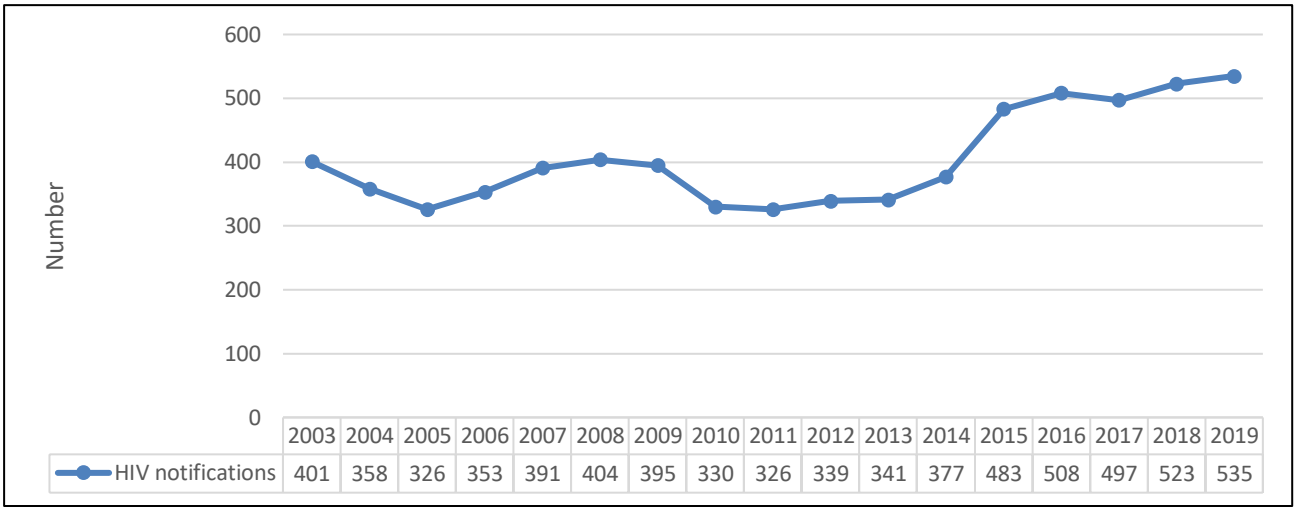


Figure T1.3.1.1 Number of new HIV notifications reported in Ireland, by year of notification, 2003–2019

Source: HSE and HPSC (2020)

Of HIV notifications in 2019:

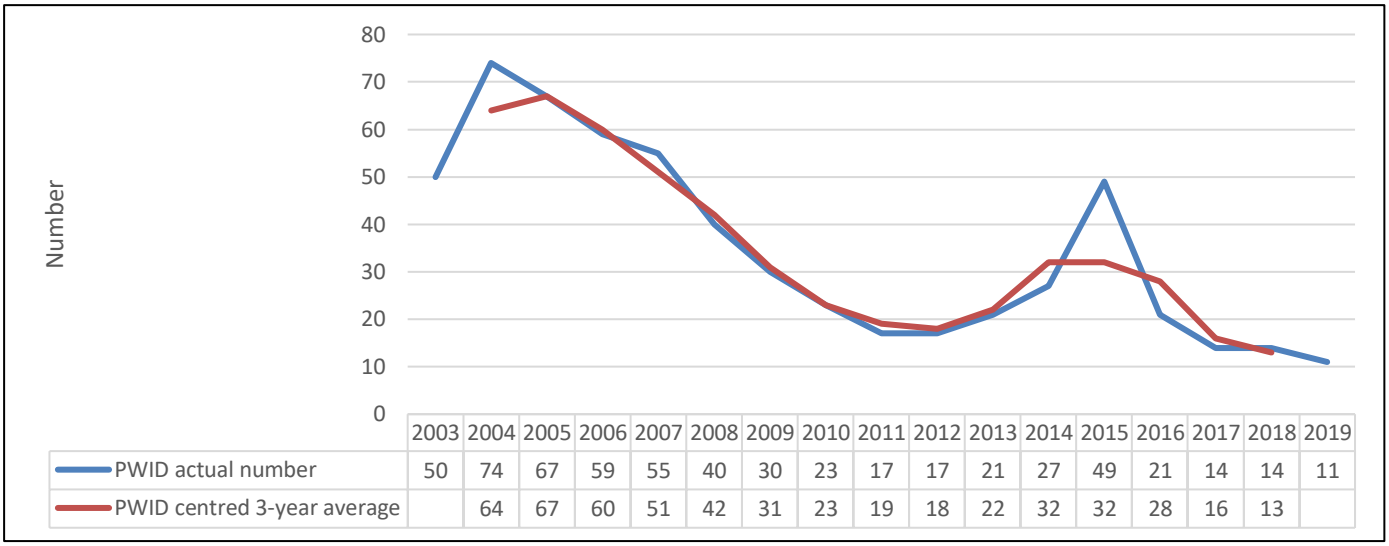
- 176 were male and 77 were female.
- 132 were men who have sex with men.
- For 51.8% (277) of HIV notifications in 2019, there was no reported risk factor, although this is likely to change as more data become available.

In 2019, some 11 HIV notifications were PWID; the comparable figure in 2018 was 14 (see Table T1.3.1.1). The figure for 2019 is the lowest number of PWID among HIV notifications since data have been routinely collected (see Figure T1.3.1.2).

Table T1.3.1.1 New HIV notifications reported to the HPSC by risk factor status, 2019

Risk factor status	n (%)
Total number of cases	535
Cases *with* reported risk factor data	253 (47.3)
Of which:	
Male	176 (69.5)
Female	77 (30.4)
Sex unknown	0 (0)
Injecting drug users	11 (4.3)
Men who have sex with men	132 (52.2)
Recipient blood/blood products	0 (0)
Other risk factors	110 (43.4)
No known risk factor identified	5 (2.0)
Cases *without* reported risk factor data	277 (51.8)

Source: HSE and HPSC (2020)



	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
PWID actual number	50	74	67	59	55	40	30	23	17	17	21	27	49	21	14	14	11
PWID centred 3-year average		64	67	60	51	42	31	23	19	18	22	32	32	28	16	13	

Figure T1.3.1.2 Number and rolling average number of PWID among HIV notifications reported in Ireland, by year of notification, 2003–2019

Source: HSE and HPSC (2020)

Of the 11 PWID among HIV notifications in 2019, 10 were male, with a median age of 36. No subjects were under 25 years of age. Just over one-third (36.4%) resided in Dublin, Kildare or Wicklow (see Table T1.3.1.2).

Table T1.3.1.2 Characteristics of new HIV notifications who reported injecting drug use as a risk factor, 2019

Risk factor status	n (%)
Total number of cases	11
Of which:	
Male	10 (91)
Female	1 (0.1)
Sex unknown	0 (0)
Mean age	36.3
Median age	36
Under 25 years	0 (0)
25–34 years	5
Age unknown	0 (0)
Place of residence	
Dublin, Kildare or Wicklow	4 (36.4)

Source: HSE and HPSC (2020)

The increased number of PWID among HIV notifications in 2014–2015 was due to an outbreak of HIV among homeless drug users in Dublin (See 2016 Harms and harm reduction workbook, Section T1.3.6). The outbreak was declared over in February 2016. Key control measures 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 settings in Dublin where patients/clients attended.

HBV notifications, 2019

There were 526 notifications of HBV in 2019, an increase of 6% on 2018, when there were 496 notifications. The notification rate for 2019 was 11.0 per 100,000 population. HBV notifications halved between 2008 (n=897, 21.2/100,000 population) and 2014 (n=442, 9.3/100,000 population), but recent trends suggest that the number of cases diagnosed and notified is stabilising rather than continuing to decline (see Figure T1.3.1.3).

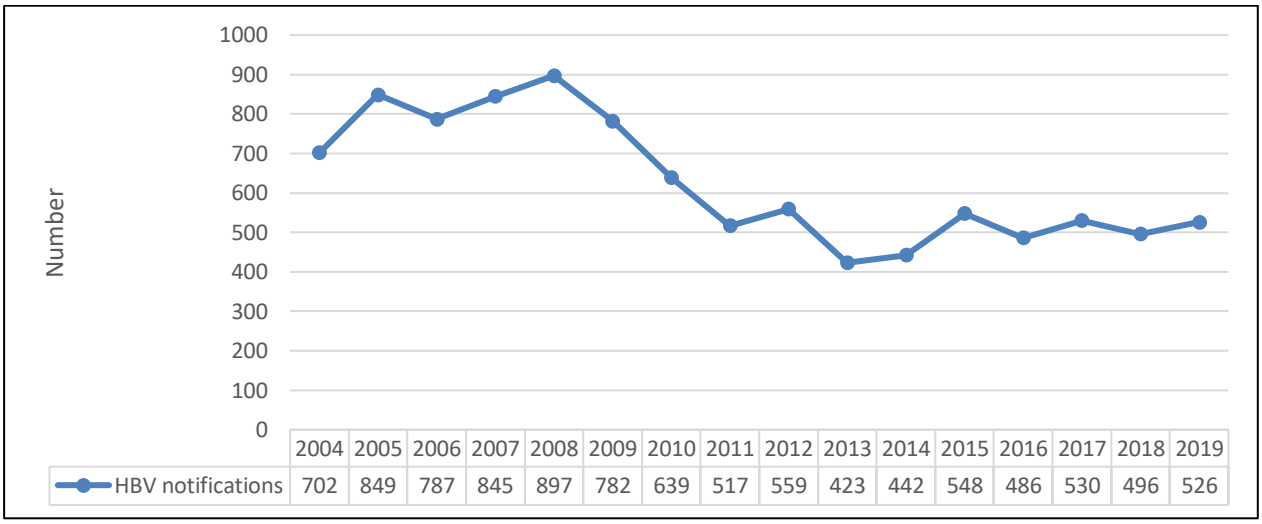


Figure T1.3.1.3 Number of HBV notifications reported in Ireland, by year of notification, 2004–2019

Source: HSE and HPSC (2020)

Eighty-eight per cent (n=461) of the 526 HBV notifications in 2019 contained information on acute/chronic status. Of these, 95% (n=438) were chronically infected (long-term infection) and 5% (n=23) were acutely infected (recent infection).

Risk factor data were available for 87% (n=20) of the acute cases notified in 2019. 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, 2019

HBV status	Acute	Chronic	Unknown
Total number of cases	23	438	65
Percentage of cases by status	4.4	83.3	12.4
Cases *with* reported risk factor	20	87	7
Percentage of cases with risk factor data	87	19.9	10.8
Of which:			
Injecting drug users	0	1	0
Cases *without* reported risk factor data	3	351	58

Source: HSE and HPSC (2020)

Note on acute cases: Enhanced data collection is mostly carried out for acute cases, most of whom acquired HBV by sexual contact.

Note on chronic cases: Most chronic cases are from endemic countries and were likely to have been infected in their countries of birth.

HCV notifications, 2019

There were 474 HCV notifications in the Republic of Ireland in 2019, a decrease of 19.5% on 2018, when there were 589 notifications. The notification rate for 2019 was 10 per 100,000 population. There has been a downward trend in HCV notifications since peak numbers (n=1,538) were recorded in 2007, although recent trends indicate that the rate of decline is slowing (see Figure T1.3.1.4). While notifications continued to decline in 2019, 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.

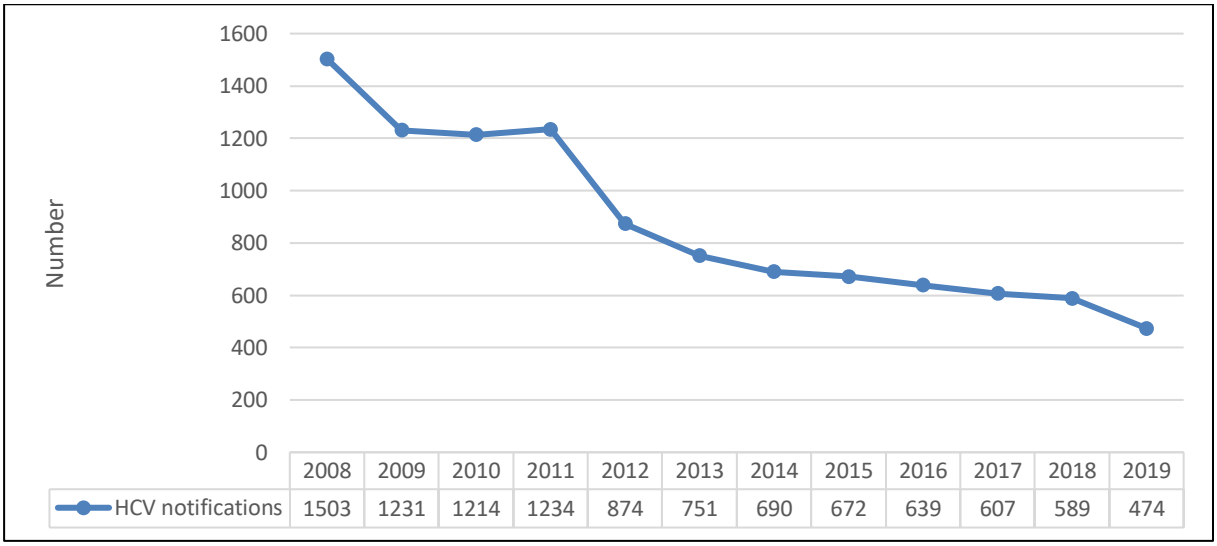


Figure T1.3.1.4 Number of HCV notifications reported in Ireland, by year of notification, 2008–2019

Source: HSE and HPSC (2020)

Information on the most likely risk factor was available for 47% (n=224) of cases in 2019 (see Table T1.3.1.4). One hundred and forty-nine cases with risk factor data were PWID and 11 were infected through contaminated blood products. No risk factors were identified for 18 cases for whom risk factor data were available, despite public health follow-up.

Table T1.3.1.4 New HCV cases reported to the HPSC, by risk factor status, 2019

Risk factor status	n (%)
Total number of cases	474
Cases *with* reported risk factor data	224 (47.3)
Of which:	
Injecting drug users	149 (66.5)
Recipient blood/blood products	11 (4.9)
Other risk factors	46 (20.5)
No known risk factor identified	18 (8.0)

Risk factor status	n (%)
Cases *without* reported risk factor data	250 (52.7)

Source: HSE and HPSC (2020)

The proportion of cases attributed to injecting drug use has decreased from 88% in 2011 to 67% in 2019, but risk factor data were not available for a significant number of cases. Therefore, this finding is difficult to interpret. Data for 2019 will improve as further validation work is carried out.

Of the PWID among HCV notifications in 2019, some 116 were male and 33 were female, with a median age of 40. Four subjects were under 25 years of age. The majority (94%) resided in Dublin, Kildare or Wicklow (see Table T1.3.1.5).

Table T1.3.1.5 Characteristics of new HCV notifications who reported injecting drug use as a risk factor, 2019

Known injector cases	n (%)
Total number of known injector cases	149
Sex	
Male	116 (77.8)
Female	33 (22.1)
Sex not known	0 (0)
Age	
Mean age	40.8
Median age	40
Under 25 years	4 (2.6)
25–34 years	36 (24.2)
Over 34 years	108 (72.4)
Age not known	1 (0.7)
Place of residence	
Dublin, Kildare or Wicklow	94 (56.4)
Elsewhere in Ireland	55 (36.9)

Source: HSE and HPSC (2020)

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 HSE, the Irish national focal point and other experts examined HIV prevalence studies that have been carried out among PWID living in Ireland over a 20-year period from 1997 to 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 indicated a prevalence rate of 8% (Murtagh, R*, 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 recent and nationally representative data.

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

Results from studies in the inner-city areas of Dublin indicated a high prevalence of HBV in early heroin injectors. A small cohort (n=82) of inner-city heroin injectors in Dublin was recruited for a study in 1985 and followed for 25 years (O'Kelly, Fergus Desmond and O'Kelly 2012). Over 70% ultimately tested positive for HBV antibodies (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, FD*, 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 between 14% and 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 high prevalence of chronic infection. Where markers of current infection (HBV surface antigen or DNA results) were reported, the prevalence ranged from 1% to 5% (Health Protection Surveillance Centre 2018). The low prevalence of chronic HBV 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%, and increasing HCV diagnoses from 20% to 90% and 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 population represent a priority population for HCV elimination, given the high prevalence and incidence 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 (published and unpublished) on HCV infection in Irish PWID and prisoners (Crowley*, et al.* 2019).

In this research, published in the journal *BMC Infectious Diseases*, a scoping review was carried out, 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 attending 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 Dublin inner-city 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 in PWID attending OST in general practice in Ireland reported an anti-HCV prevalence of 77.2% (Murtagh, Ross*, et al.* 2018).

With regard to the prison population, a 2014 study conducted in 13 of the 15 prisons in the Republic of Ireland reported an anti-HCV prevalence of 13% (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% in those with a history of injecting heroin (Drummond*, et al.* 2014). Another prison study from 2014 (single site) reported an HCV prevalence of 37% among prisoners on MMT (Galander*, et al.* 2014).

Conclusions

The authors 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 the prevalence studies were over a decade old and only reported on anti-HCV prevalence and not on HCV-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 review 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 Clinic, Rotunda Maternity Hospital annual report, 2018

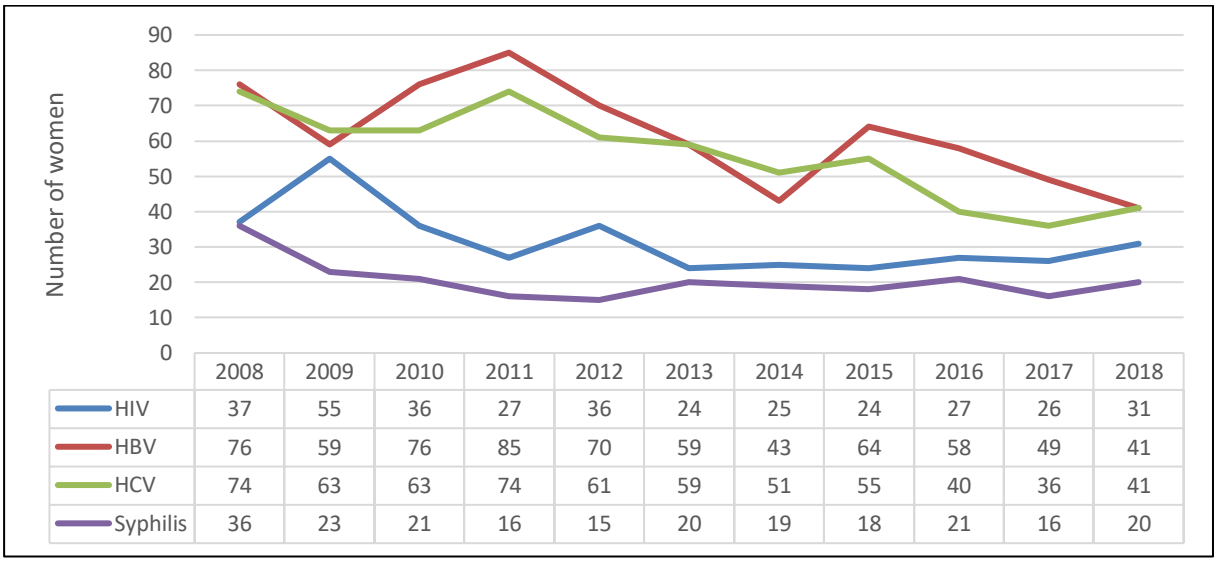
The Danger of Viral Exposure (DOVE) Clinic in the Rotunda Hospital, Dublin was established to meet the specific needs of pregnant women who have, or are at risk of, blood-borne or sexually transmitted bacterial or viral infections in pregnancy. Exposure may also occur through illicit drug use. Figures from the service for 2018 were published in the hospital's annual report in 2019 (The Rotunda Hospital 2019).

Figure T1.3.6.1 shows the number of women who booked into the DOVE Clinic for antenatal care each year during the period 2008–2018. It also shows the diagnosis for these women.

During 2018, some 128 women booked into the DOVE Clinic for antenatal care. Of these:

- 31 (24%) women were positive for HIV infection.

- 41 (32%) women were positive for HBV surface antigen.
- 41 (32%) women were positive for HCV antibody.
- 20 (16%) women had positive treponemal serology (syphilis).



	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
HIV	37	55	36	27	36	24	25	24	27	26	31
HBV	76	59	76	85	70	59	43	64	58	49	41
HCV	74	63	63	74	61	59	51	55	40	36	41
Syphilis	36	23	21	16	15	20	19	18	21	16	20

Figure T1.3.6.1 DOVE Clinic bookings by year, 2008–2018

Source: The Rotunda Hospital (2019)

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

It should be noted that these numbers refer to patients who booked for care during 2018. Table T1.3.6.1 summarises the outcome of patients who actually delivered during 2018. Of these patients, 30 were HIV positive, 48 were HBV positive, and 42 were HCV positive. During 2018, some 106 women were referred to the Drug Liaison Midwife (DLM) service, including 39 women who had a history of opiate addiction and were engaged in a methadone maintenance programme. There was a total of 61 deliveries to mothers under the DLM service in 2018.

Table T1.3.6.1 Deliveries to mothers attending the DOVE Clinic who were positive for HIV, HBV, HCV or syphilis, or who were attending the Drug Liaison Midwife service, 2018

Mother's status		HIV positive	HBV positive	HCV positive	Syphilis positive	DLM
Total mothers delivered		30	48	42	16	61
Total mothers delivered <500 g (including miscarriage)		0	0	1	0	0
Total mothers delivered ≥500 g		30	48	41	16	61
Live infants		31*	48	43***	16	63***
Miscarriage		0	0	1	0	0
Stillbirth		0	0	0	0	0

Mother's status		HIV positive	HBV positive	HCV positive	Syphilis positive	DLM
Infants <37 weeks' gestation		8	1	10	1	7
Infants ≥37 weeks' gestation		23	47	33	15	56
Caesarean section		15	17	15	5	15
HIV, HBV, HCV or syphilis-positive infants		0	0**	0**	0	–
Maternal median age		34	31	32	34	–

Source: The Rotunda Hospital (2019)

* One set of twins.

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

*** Two sets of twins.

DLM = drug liaison midwife.

T1.4 Other drug-related health harms

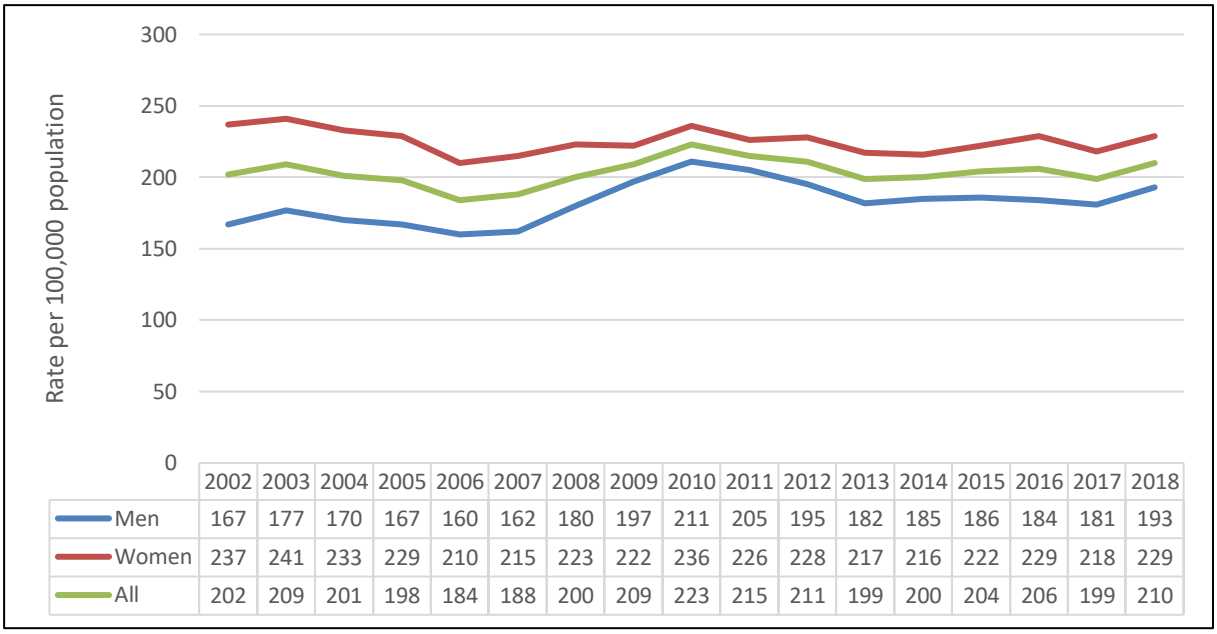
T1.4.1 Other drug-related health harms

National Self-Harm Registry Ireland Annual Report 2018

The 17th annual report from National Self-Harm Registry Ireland was published in 2019 (Griffin*, et al.* 2019). The report contains information relating to every recorded presentation of deliberate self-harm to acute hospital emergency departments in Ireland in 2018 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

There were 12,588 recorded presentations of deliberate self-harm in 2018, involving 9,785 individuals. Taking the population into account, the age-standardised rate of individuals presenting to hospital in the Republic of Ireland following self-harm was 210 per 100,000 population. This was a significant increase of 6% compared with the rate recorded in 2017 (199 per 100,000 population). The rate in 2018 was 12% higher than in 2007, the year before the economic recession (see Figure T1.4.1.1).



	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
Men	167	177	170	167	160	162	180	197	211	205	195	182	185	186	184	181	193
Women	237	241	233	229	210	215	223	222	236	226	228	217	216	222	229	218	229
All	202	209	201	198	184	188	200	209	223	215	211	199	200	204	206	199	210

Figure T1.4.1.1 Person-based rate of deliberate self-harm from 2002 to 2018 by gender

Source: National Suicide Research Foundation (2019)

'All' in the legend refers to the rate for both men and women per 100,000 population.

In 2018, the national male rate of self-harm was 193 per 100,000 population, 7% higher than in 2017. The female rate was 229 per 100,000 population, which was 5% higher than in 2017. With regard to age, the peak rate for men occurred in the 20–24-year-old age group, at 543 per 100,000 population. The peak rate for women occurred among 15–19-year-olds, at 766 per 100,000 population.

Self-harm and drug and alcohol use

Intentional drug overdose was the most common form of deliberate self-harm reported in 2017, occurring in 7,792 (61.9%) of episodes. As observed in 2017, overdose rates were higher among women (66.9%) than among men (55.8%). Minor tranquillisers and major tranquilisers were involved in 35% and 10% of drug overdose acts, respectively. In total, 34% of male and 48% of female overdose cases involved analgesic drugs, most commonly paracetamol, which was involved in 30% of all drug overdose acts. In 69% of cases, the total number of tablets taken was known, with an average of 29 tablets taken in episodes of self-harm that involved a drug overdose.

In 2018, there was a 27% increase in the number of self-harm presentations to hospital involving street drugs (i.e. from 583 self-harm presentations to 742). Since 2007, the rate per 100,000 population of intentional drug overdose involving street drugs has increased by 54% (from 9.9 to 15.3 per 100,000 population). Cocaine and cannabis were the most common street drugs recorded by the Registry in 2018, present in 5% and 3% of overdose acts, respectively. Cocaine was most common among men, involved in 15% of overdose acts by 25–34-year-olds. Cannabis was most common among men aged 15–24 years old, and was present in 8% of overdose acts. Alcohol was involved in 30% of all self-harm presentations in 2018, and was significantly more often involved in male episodes of self-harm than in female episodes (34% versus 27%, respectively).

Street drugs and self-harm

The sharp increase in the use of street drugs involved in self-harm presentations in 2018 – in particular, cannabis – was discussed. A recent systematic review and meta-analysis found that cannabis consumption in adolescence was associated with increased risk of developing major depression in young adulthood, and an increased risk of suicidal ideation and suicide attempts in young adulthood (Gobbi*, et al.* 2019). The report authors suggest that public health policies to address the use of illegal substances should be further developed.

Adolescent Addiction Service report, 2020

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 2020, the AAS published a report detailing referrals for 2019 (Adolescent Addiction Service 2020).

Referrals

In 2019, the AAS worked with 49 young people and their families, with a mean age of 15.3 years (range: 13–18 years). This figure includes new referrals, re-referrals, and continuances. The majority (90%) were male and 12% were non-Irish nationals. In terms of referral areas, the greatest numbers of referrals were from Clondalkin, followed by Lucan, Ballyfermot, Palmerstown, and Inchicore.

Drug and alcohol use

Cannabis (weed) continued to be the main substance used by clients, at 96%, while alcohol use was at 67% (see Figure T1.4.1.2). Other substances of use included cocaine (29%), benzodiazepines (28%), amphetamines (22%), and opiates (2%). Solvents and head shop-type products did not feature among young people's substance use in 2019. The report noted that the biggest change concerning secondary drug use related to increases in benzodiazepine use (by 16%), as well as the introduction of 'eatables', i.e. edibles. There were decreases in amphetamine use (by 8%) and cocaine use (by 7%), compared with 2018.

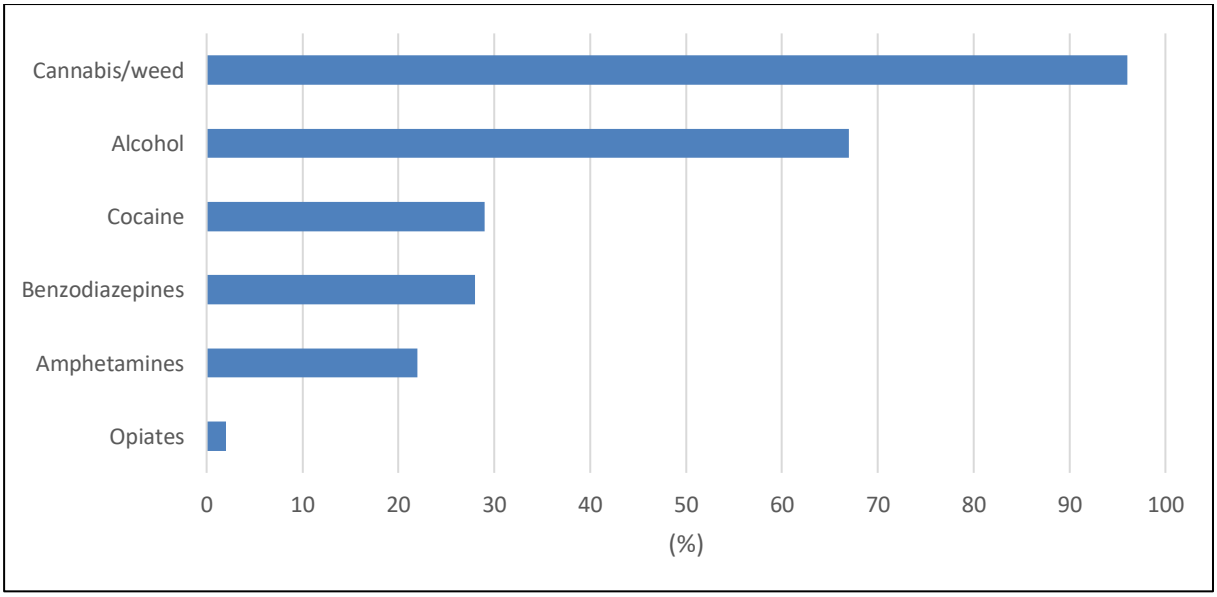


Figure T1.4.1.2 Main substances used by AAS clients, 2019

Source: HSE AAS (2020)

Other issues

Other issues that presented related to absconding; indebtedness; and holding, distributing or dealing drugs. The service submitted child protection notifications and also held interagency meetings in relation to 10 young people. Of those who exited treatment, 62% had a planned discharge, 33% declined further treatment, and 5% moved out of the community or returned to the community of origin. The majority of young people (94%) were seen by a family therapist only, with 6% having a psychiatric assessment and 4% having prescribed medication.

Conclusions

The report authors noted that, as in previous years, most young people had established patterns of substance use prior to referral and, as a consequence, some struggle to maintain a drug-free status. Nevertheless, most achieve stability and several remain abstinent. They concluded that there is a need for parents and non-parental adults to identify young people within risk groups at an early stage and to elevate concern for them.

Street tablet use in Ireland – results from a Trendspotter study on use, markets, and harms

The non-medical use of prescription drugs has become a global health concern. Non-medical usage is defined as the taking of prescription drugs, whether obtained by prescription or otherwise, except in the manner or for the reasons or time period prescribed, or by a person for whom the drug was not prescribed (United Nations Office on Drugs and Crime 2011). The non-medical use of pharmaceuticals is a unique category of substance misuse in a number of ways, as the scale of the problem is largely unknown owing to lack of data. This is partly due to the existence of many gaps in the monitoring of their legal use for medical purposes. In addition, most studies on, and monitoring instruments for, substance abuse pertain to the use of illegal drugs or alcohol and tobacco.

In the Republic of Ireland, converging signals of the ongoing non-medical use of pharmaceuticals ('street tablets') among clients of community-based, drug harm reduction service agencies in Dublin were noted in 2018. These included significant levels of street tablet use among service clients, an increase in the prevalence of pregabalin in drug-related deaths data since 2015, and reports of online purchasing of tablets for the Irish market. In order to better understand these converging signals, the Ana Liffey Drug Project (ALDP), the School of Public Health at University College Cork, and the HRB, with the support of the European Monitoring Centre for Drugs and Drug Addiction (EMCDDA), conducted a Trendspotter study to examine patterns of use, markets, and harms related to street tablets in Ireland (Duffin*, et al.* 2020).

Trendspotter study

A Trendspotter study is a rapid information assessment that uses multiple social research methods to explore a topic of interest or concern. The approach was developed and has been used by the EMCDDA since 2011 as a tool to complement other routine drug-monitoring methodologies (European Monitoring Centre for Drugs and Drug Addiction 2018). It has generally been utilised to explore emerging phenomena and new trends that are in their infancy and/or not covered by existing datasets. Undertaken between May and September 2019, the study commenced with a phase of data collection and a literature review, culminating in a 1.5-day expert presentation and facilitated groups meeting. The meeting consisted of a group of 11 experts from the ALDP, the University of Limerick, Forensic Science Ireland, the Health Products Regulatory Authority, HSE

Addiction Services, MQI, An Garda Síochána (AGS), and addiction/homelessness specialist general practitioners. Key findings from the report are discussed below.

Street tablet use

Experts provided data on use, changing consumption patterns, and availability, with a majority indicating that there has been an increase in the use and availability of street tablets in Ireland between 2016 and 2019. Drugs which are commonly misused in tablet or capsule form include benzodiazepines, Z-drugs, and gabapentinoids. The user groups identified included high-risk opioid users, prison populations, people with complex and multiple needs, and young people. Among these groups, the motivations for using street tablets included their intoxicating effects, to enhance desired effects from illicit substances, to help withdrawal symptoms, to improve sleep, and to reduce stress. Other potential reasons for use are that tablets are cheap to purchase and are easily available. Feedback from recent research as well as experts in this study highlighted the importance that culture plays in the availability and use of street tablets among communities. On a cultural level, there is an acceptance of the misuse of street tablets as part of normal life and behaviour. Doctors have the legal ability to prescribe these medications on a wide scale, which strengthens the idea that they are safe to use for long periods of time. Also, in addition to affecting local cultures, street tablet supply, trade, and distribution have become embedded in local economies, as people are selling, sharing, and swapping street tablets as a form of currency.

Street tablet markets

In terms of the importation of ready tableted products, the main sources appear to originate from the Indian subcontinent. However, as Ireland is not a transit country, identifying the origin of drugs being transported to Ireland can be difficult. Another possible avenue of availability cited was the healthcare system, with overprescribing resulting in the ability for individuals to sell unused tablets on the street. Online sources were also identified as a source of street tablet availability and that, through the Internet and social media, distribution of benzodiazepines, Z-drugs, and pregabalin is much easier and wider-reaching. Insofar as routes to markets for tablets in Ireland are concerned, all of these sources are likely to play a part.

It is interesting to note that in terms of online purchasing, as far as prescription medications are concerned, the study noted that there are adequate sources available on the surface web to suggest that purchasers do not have to be sophisticated web users capable of operating on the dark web in order to purchase tablets online. There are many ‘online pharmacies’ where medications may be purchased without a prescription. As these sites do not have to be registered in Ireland, or store their stock here, it can be difficult for Irish regulators to assert authority over such enterprises. Concerningly, the study noted that the laboratory analysis of detained products demonstrated that medicines purchased online often contain too little or too much of the active ingredient. They have also been found to contain harmful or undeclared substances.

Street tablet harms

Data from the Irish Healthcare Pricing Office demonstrate an increase in the number of non-fatal self-poisoning cases involving benzodiazepines and antiepileptic and sedative-hypnotic drugs between 2015 and 2018. Statistics from the NDRDI also indicate an overall increase in the number of deaths involving alprazolam, zopiclone, and pregabalin. In particular, pregabalin-related deaths have risen year on year between 2012 and 2016, with an increase of 33% between 2015 and 2016 and an

overall increase of 364% between 2013 and 2016 (see Figure T1.4.1.3). Concurrent with an increase in the number of drug-related deaths in Ireland involving benzodiazepines and antiepileptic and sedative-hypnotic drugs, data from the NDRDI also show an increase in the number of poisoning deaths involving a combination of substances between 2004 and 2016 (see Figure T1.4.1.4). Experts who took part in the study indicated that polydrug use remains a consistent factor in the harms related to street tablet use and that the combined use of controlled substances and street tablets has contributed to an increase in drug-related deaths. In addition, the study found that reports by Irish drug harm reduction services and external studies indicate that individuals who misuse pharmaceuticals are taking (often much) higher than recommended doses and that a vast majority have a history of misuse or dependence on other drugs.

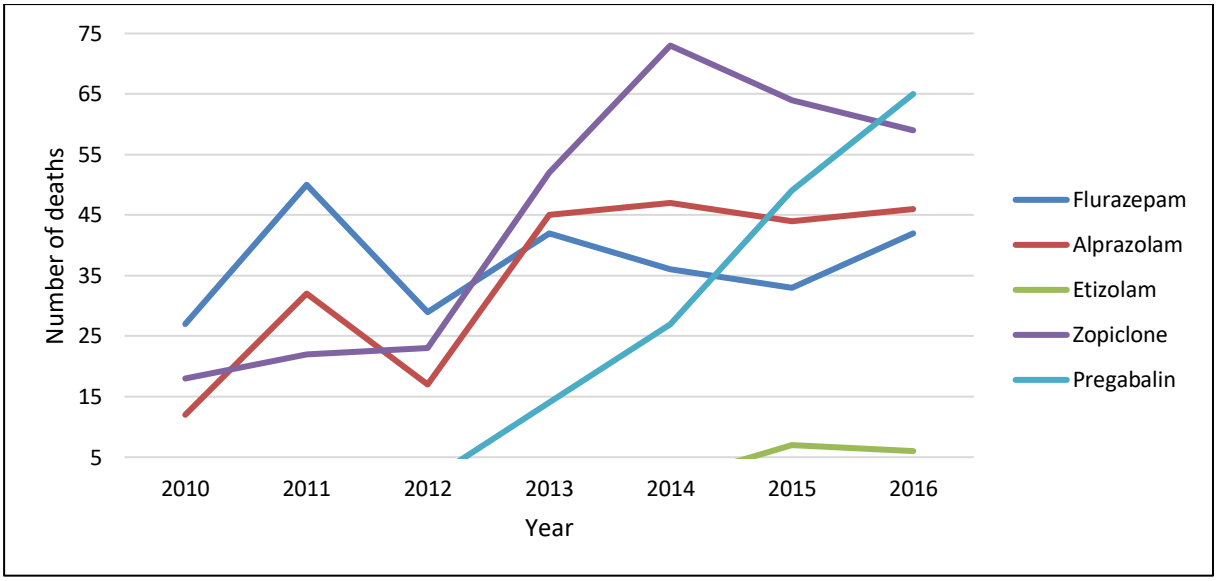


Figure T1.4.1.3 Poisoning deaths in Ireland involving benzodiazepines and antiepileptic and sedative-hypnotic drugs: main specific drugs implicated, 2010–2016

Source: Duffin, Keane and Millar (2020)

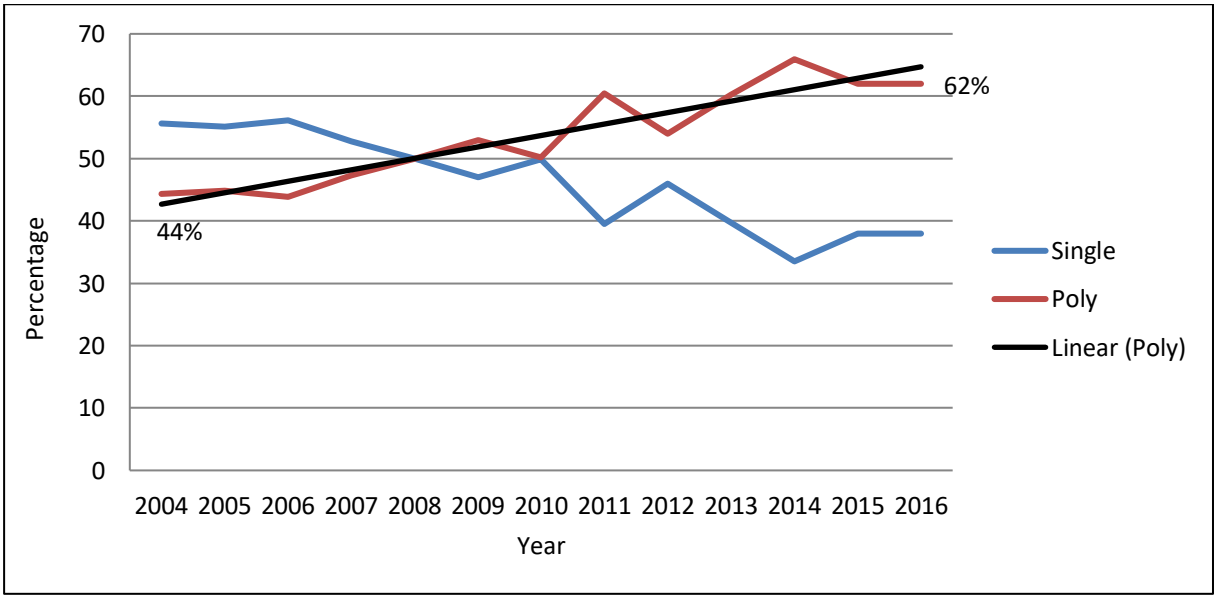


Figure T1.4.1.4 Poisoning deaths in Ireland, by single/poly drugs involved, 2004–2016

Source: Duffin, Keane and Millar (2020)

Conclusions

The study identified a number of issues which could help to manage the street tablet market. In terms of preventing leakage from the legitimate sources, a robust electronic prescribing system could help to achieve better control access, and might help prevent 'doctor shopping'. However, it was also noted that care is needed not to inadvertently divert people to the street market to seek access to tablets. There is also a need to understand and be effective in addressing why individuals are using tablets in the first place, and therefore be able to address the reasons why people have to access the tablet market. In this context, supporting medical professionals to better understand and be equipped to address the demand encountered is important, as is the need to get existing public health and harm reduction messaging into novel market spaces, such as the online environment.

T1.5 Harm reduction interventions

T1.5.1 Drug policy and main harm reduction objectives

Strategic aims and objectives of the current national drugs strategy with regard to harm reduction interventions are to (Department of Community 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, with the aim of reducing dependency and improving overall health and social well-being, with the ultimate aim of leading a drug-free lifestyle
- 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, see Section T1.1 of 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 MQI and the 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 regional Drug and Alcohol Task Force (RDATF) area within Ireland.

T1.5.3 Provision of harm reduction services

Table T1.5.3.1 Equipment and paraphernalia available for drug users in Ireland, 2019

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.
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, STI 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 were published in 2017 (Health Service Executive 2016). These recommend that all patients attending OST services be screened for hepatitis A, HBV, HCV and HIV, even if they are not injecting drug users, and that all patients be vaccinated against hepatitis A 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 replaced the Irish College of General Practitioners (ICGP) guidelines (Irish College of General Practitioners 2003), the earlier guidelines also recommended testing for blood-borne viruses and hepatitis A and HBV vaccination, and this has

always been common practice in addiction services. The *Immunisation Guidelines for Ireland* also recommend vaccination against hepatitis A 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 2017a), 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, if there is a possibility of transmission of HCV by the route of administration, and offering testing to all prison inmates on entry to prison or on request.

The Healthcare Standards for Irish Prisons recommend screening for HIV and hepatitis for all inmates who volunteer a background history of risk factors for these diseases (Irish Prison Service 2011). Immunisation against hepatitis A 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 hepatitis A 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, testing for blood-borne viruses, particularly HCV, has been reported to be high (93–95%) for patients in OST in studies published in recent years (Keegan*, et al.* 2017) (Murtagh, R*, 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 are not computerised. Even in some that are, 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 dose of HBV vaccine in a 2011 prison study. However, prisoners with a history of injecting drug use were more likely to have been vaccinated, with more than 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 general practitioners (GPs) (GPs with training in substance misuse who can prescribe OST), with just under half (49%) of patients having received at least one dose of HBV vaccine and only 23% being fully immunised (Cullen*, et al.* 2007).

Immunisation levels may be higher in patients attending 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 dose of vaccine 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 Sexual Health and Crisis Pregnancy Programme (SHCPP) has established a working group to develop these guidelines. They 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 EMCDDA 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 – 97 sites in regions outside Dublin, Kildare and Wicklow
- Static – 24 sites, mainly in Dublin city
- Outreach – 14 sites, mainly in counties Dublin, Kildare, Laois, Offaly, Waterford and Wicklow.

Information on the number of syringes exchanged in Ireland in 2019 is discussed in the following sections.

Pharmacy-based needle exchange: Overview and syringes exchanged

Pharmacy-based needle exchange: Overview

The current national drugs strategy 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 (Department of Community 2009).

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 a needle exchange service in each RDATF area, apart from those covering counties Dublin, Kildare and Wicklow, which are served by a mix of static and outreach needle exchange programmes. At the end of 2019, there were 97 pharmacies providing a needle exchange service in the Republic of Ireland (Table T1.5.3.2).

Table T1.5.3.2 Number of pharmacies providing needle exchange in Ireland by RDATF area, 2011–2019

RDTF area	2011	2012	2013	2014	2015	2016	2017	2018	2019
Midland (Longford, Laois, Offaly, Westmeath)	5	13	15	16	17	18	18	17	17
North Eastern (Meath, Louth, Cavan, Monaghan)	3	9	16	21	22	21	21	16	16
North-West (Sligo, Leitrim, West Cavan, Donegal)	3	4	7	6	6	6	6	5	5

RDTF area	2011	2012	2013	2014	2015	2016	2017	2018	2019
Southern (Cork and Kerry)	8	10	16	21	19	21	21	17	16
South-East (Carlow, Kilkenny, Waterford, Wexford, South Tipperary)	13	21	22	24	17	17	16	14	14
Western (Galway, Mayo, Roscommon)	5	2	10	13	11	12	13	10	10
Mid-West (Clare, Limerick, North Tipperary)	5	8	13	14	15	16	16	19	19
Total	**42**	**67**	**99**	**115**	**107**	**111**	**111**	**98**	**97**

Source: Unpublished data from HSE (2020)

Pharmacy-based needle exchange: Number of syringes exchanged

Pharmacy-based needle exchange: Overview

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North-West (Sligo, Leitrim, West Cavan, Donegal)	3	4	7	6	6	6	6	5	5
Southern (Cork and Kerry)	8	10	16	21	19	21	21	17	16
South-East (Carlow, Kilkenny, Waterford, Wexford, South Tipperary)	13	21	22	24	17	17	16	14	14
Western (Galway, Mayo, Roscommon)	5	2	10	13	11	12	13	10	10
Mid-West (Clare, Limerick, North Tipperary)	5	8	13	14	15	16	16	19	19
Total	**42**	**67**	**99**	**115**	**107**	**111**	**111**	**98**	**97**

Source: Unpublished data from HSE (2020)

Pharmacy-based needle exchange: Number of syringes exchanged

Figure T1.5.3.1 shows the number of individual syringes provided, from pharmacy-based sites for the year 2018, by month. There was a total of 306,208 individual syringes exchanged in 2019. The average number of syringes provided each month was 25,517.

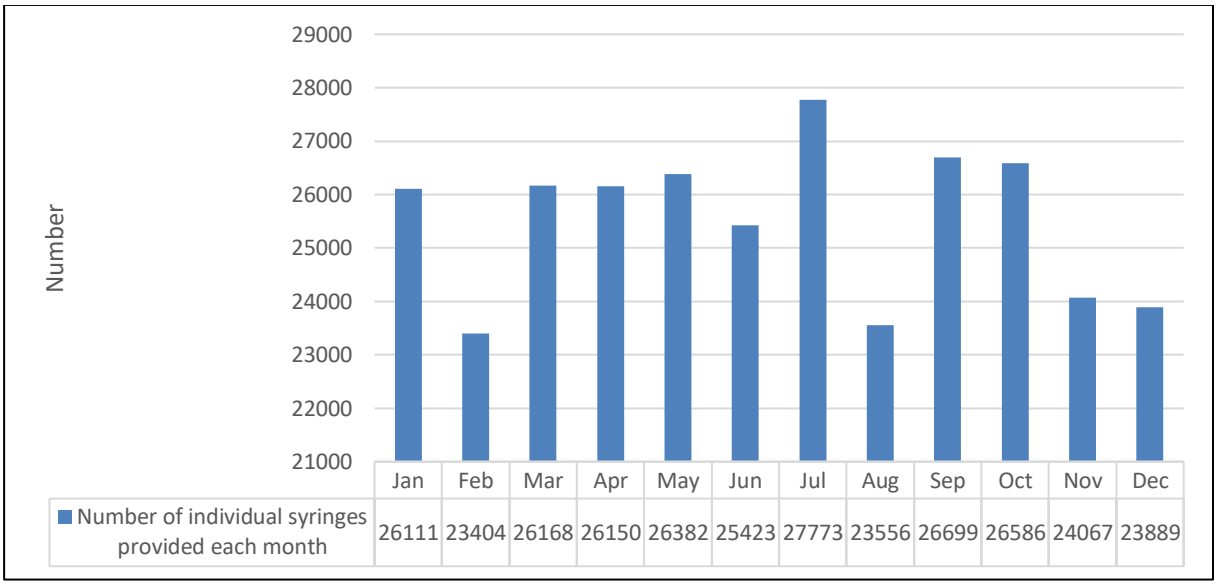

Figure T1.5.3.1 Number of individual syringes provided from pharmacy-based sites by month, 2019

Source: Unpublished data from HSE (2020)

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

Figure T1.5.3.2 shows the number of individual syringes provided by static and outreach sites in Dublin areas 6 and 7, by location, for the year 2019. There were 67,810 individual syringes in total exchanged in 2019.

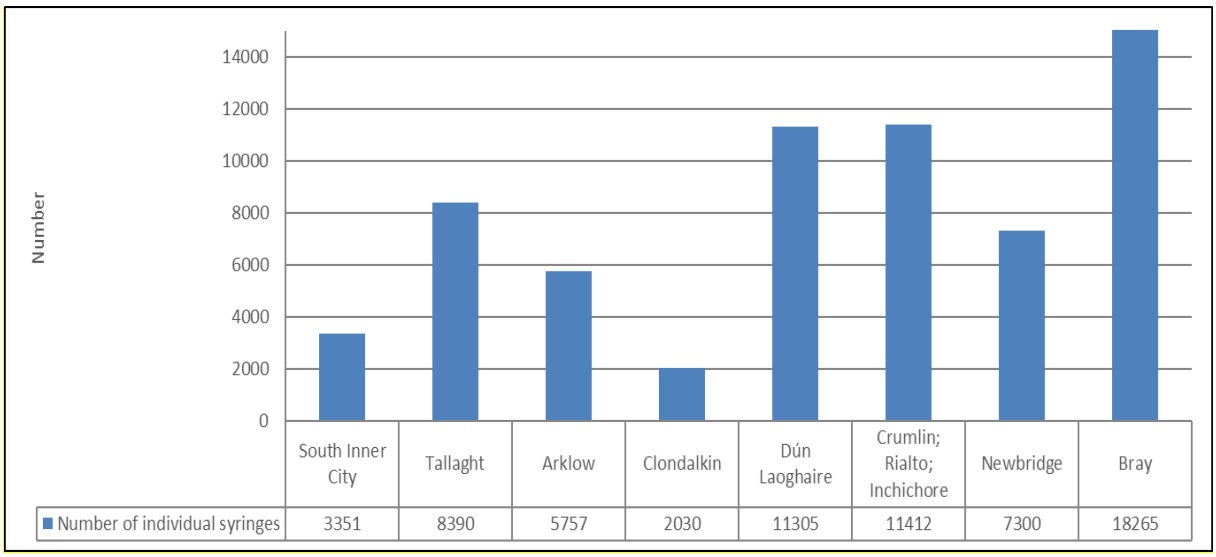

Figure T1.5.3.2 Number of individual syringes provided from static and outreach sites in Dublin areas 6 and 7, by location, 2019

Source: Unpublished data from HSE (2020)

Ana Liffey Drug Project (ALDP) needle exchange: Number of syringes exchanged

The ALDP provides needle exchange services in Limerick city and three counties to people affected by problem substance use. Figure T1.5.3.4 shows the number of individual syringes provided by the ALDP, by month, for the year 2019. A total of 28,167 individual syringes were provided by the ALDP in 2019.

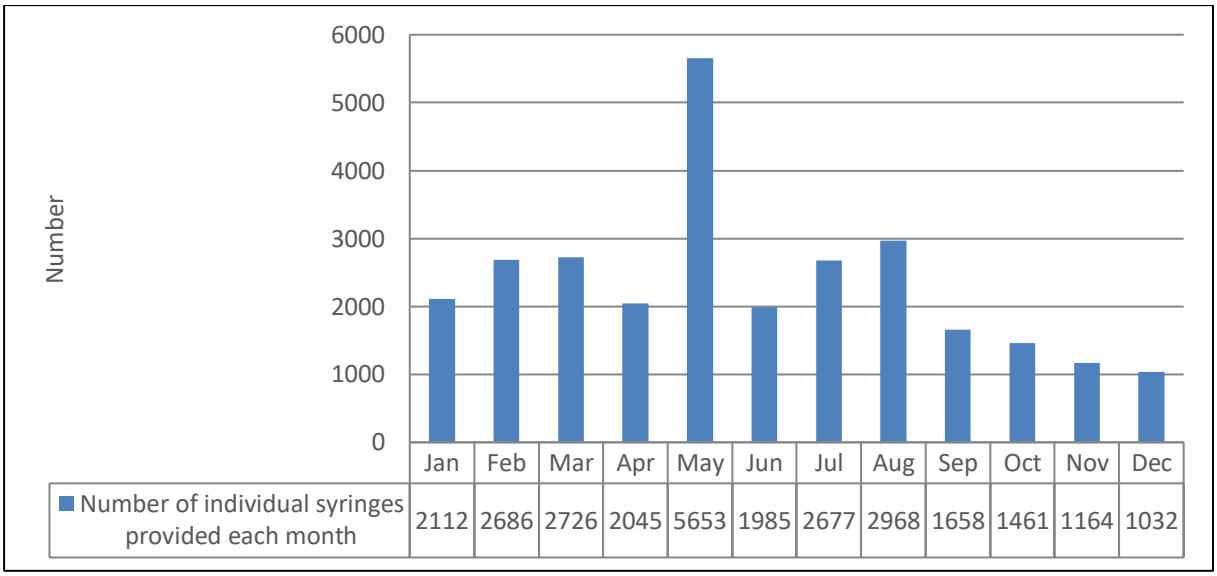

Figure T1.5.3.4 Number of individual syringes provided by the ALDP by month, 2019

Source: Unpublished data from ALDP (2020)

MQI needle exchange: Number of syringes exchanged

MQI is a national voluntary agency providing services for homeless people and for drug users. Its Dublin 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). The number of syringes provided by the unit for each month in 2019 is shown in Figure T1.5.3.5. A total of 130,576 syringes were provided by the MQI Dublin Health Promotion Unit in 2019.

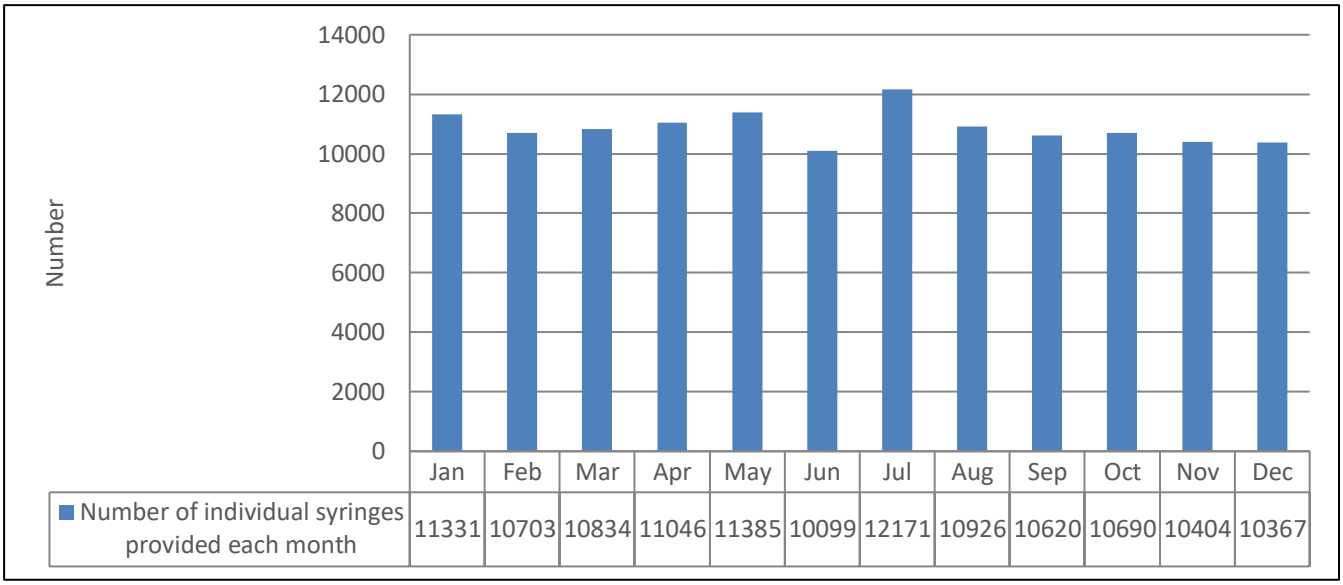

Figure T1.5.3.5 Number of individual syringes provided by MQI by month, 2019

Source: Unpublished data from MQI (2020)

Figure T1.5.3.6 shows the number of unique individuals who attended MQI needle exchange services in 2019. There was a total of 30,025 needle exchange visits in 2019. The average of number of visits each month in 2019 was 2,502.

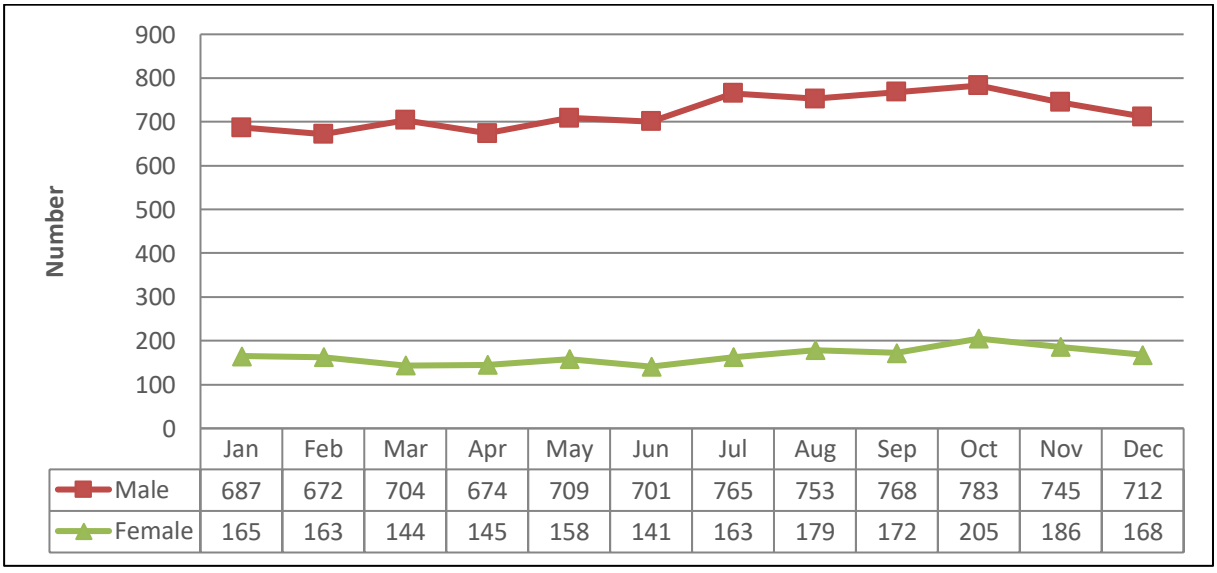

Figure T1.5.3.6 Number of unique individuals attending by month, MQI needle exchange, 2019

Source: Unpublished data from MQI (2020)

Needle exchange in Ireland: Total number of syringes exchanged

Table T1.5.3.3 shows the number of individual syringes exchanged from pharmacy, static, outreach and CBO sites in 2019. Using the most recent available data, there was a total of 532,761 individual syringes exchanged in the Republic of Ireland in 2019.

Table T1.5.3.3 Total number of individual syringes exchanged from pharmacy, static, outreach and CBO sites in 2019

Provider	Pharmacy	Dublin (static & outreach)	ALDP	MQI	Total
Number of individual syringes	306 208	67 810	28 167	130 576	532 761

Source: Unpublished data from the HSE, ALDP and MQI (2020)

Needle exchange provision during the COVID-19 pandemic

Background and concerns

As previously discussed, the current national drugs strategy 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 (Department of Health 2017b). In Ireland, this service is delivered in a number of ways, including fixed-site locations, such as clinics or community pharmacies, and novel interventions, such as Backpacking Outreach programmes.

In Ireland, the HSE has noted that just as the sharing of injecting material increases the risk of infection with blood-borne viruses, such as HIV and HBV and HCV, the sharing of injecting equipment contaminated with COVID-19 may also increase the risk of infection and play a role in the spread of the virus. In addition, the COVID-19 outbreak may present additional risks currently not widely recognised. These may include the sharing of cannabis joints, cigarettes, vaping or inhalation devices, or drug paraphernalia.

With regard to needle exchange provision in Ireland, the HSE notes that disruption to the supply of, and access to, equipment is likely to occur for a number of reasons. These may include staff shortages, service disruption and closure, self-isolation, and restrictions placed on free movement.

Recommendations and processes

With these concerns in mind, the HSE has made a number of recommendations (HSE National Social Inclusion Office 2020). These include:

- A broader harm reduction approach in the current COVID-19 pandemic should be considered by services when they deliver interventions.
- Harm reduction advice should include information on the risk of COVID-19 transmission through all forms of intake, including sharing of cannabis joints, cigarettes, vaping, and injecting equipment.
- Contingency plans should be developed to ensure continuity of provision of drug use paraphernalia. Scaling up the level of equipment provision for individuals in self-isolation is likely to be necessary.
- The utilisation and training of additional staff from Section 39 agencies who are involved in the provision of care for PWID should be considered to deal with staff shortages in community healthcare organisation areas. The phone number of the harm reduction service

should be available and circulated widely among the community targeted for injecting equipment.

- If an individual is in self-isolation and requires needle exchange, requests for equipment should be made by phone and amounts and equipment should be prepacked and then delivered to the specific location.
- Staff members should ensure that the intended target is in receipt of the package and that the package is not left unattended.
- At fixed-site location services, requests should be made by phone and equipment should be prepacked and handed out at the front door.
- All HSE staff and allied professionals delivering harm reduction services and injecting equipment should be provided with clear guidelines in relation to minimising contact with individuals, dealing with issues over the phone, and maintaining personal safety.

Harm reduction services: Naloxone provision

Along with partners in the HSE, the National Family Support Network and the ALDP, MQI was involved in the national roll-out of the Naloxone Demonstration Project in 2015 (Merchants Quay Ireland 2017). Naloxone is an antidote for opioid overdose that reverses the depressant effects of opiates such as heroin.

The project has seen more than 1,600 kits issued, with 600 PWID and their family members, and another 800 community workers, trained on how administer it. To date, more than 400 drug users have been prescribed naloxone, and an external evaluation concluded that the scheme was a success. However, currently, only persons at risk of overdose (the patient) can be prescribed naloxone, and it has been suggested that training should be rolled out across all addiction service and homeless service providers in Ireland, and that naloxone should be available to staff in these projects and to outreach workers.

Work on this initiative is ongoing, and MQI hopes that eventually, all opiate drug users in Ireland will have access to naloxone provision.

Harm reduction services: Supervised injecting facilities

As reported on 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. However, after a successful appeal, on 24 December 2019 An Bord Pleanála granted MQI permission to build the facility by the Riverbank Centre on Merchant's Quay. The facility will have seven injecting booths, an aftercare area, ancillary bathrooms, a clinical area, a plant space and circulation areas.

Harm reduction services: Vaccination

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

Harm reduction services: Community-based organisations (CBOs)

MQI annual review, 2018

MQI is a national voluntary agency providing services for homeless people and drug users. There are 22 MQI locations in 12 counties in the Republic of Ireland (see Figure T1.5.3.7). In October 2019, MQI published its annual review for 2018 (Merchants Quay Ireland 2019). MQI aims to offer accessible, high-quality and effective services to people dealing with homelessness and addiction in order to meet their complex needs in a non-judgemental and compassionate way. This section highlights services provided by MQI to drug users in Ireland in 2018.

Figure T1.5.3.7 MQI county locations in Ireland

Source: *MQI annual review* (2019)

(1) Dublin; (2) Co Wicklow; (3) St Francis Farm, Co Carlow; (4) Cork Prison; (5) Limerick Prison; (6) Co Offaly; (7) Co Westmeath; (8) Portlaoise, Co Laois; (9) Co Longford; (10) Castlerea Prison, Co Roscommon; (11) Loughran House, Co Cavan; (12) Leixlip, Co Kildare.

Addiction services

Health Promotion Unit

This unit provides drug users with information about the risks associated with drug use and the means to minimise such risks. MQI offers drug users a pathway into treatment and the possibility of living a life without drugs. The main focus is on reducing the harms associated with injecting drug use; fostering the motivation to become abstinent; and giving advice on HIV, HBV and HCV infection prevention. In 2018, some 2,742 individuals used the service, an increase of 6% compared with 2017.

In 2018, there were 30,068 visits to the MQI needle exchange service in Dublin, a 31% increase over the past 5 years. For those using the service, heroin continued to be the most commonly used drug. Of concern, MQI noted that 2018 saw a rise in individuals reporting crack cocaine as their primary drug.

Community Engagement Team

The Community Engagement Team works to cultivate and strengthen relationships between MQI and the local community. The team picks up and safely disposes of drug-related litter as well as offering some of the most vulnerable people (those rough sleeping or reluctant to engage with services) street-based advice and referral into the services they need. In 2018, the team, which operates in the area immediately around Merchant's Quay, conducted over 1,700 patrols.

Family Support Group

MQI offers one-to-one advice and support to family members on the realities of drug use and how they can best cope and provide optimum support to drug users. MQI also runs a Family Support Group (FSG), which meets every week and provides a forum where parents, as well as other close relatives and friends of drug users, are offered support and advice on a range of issues. Participants provide support for each other, and the group is continually open to new members. The weekly FSG is linked to the National Family Support Network, which offers an opportunity to raise issues at a national level. MQI's FSG in Dublin worked with over 60 individuals throughout 2018.

East Coast Community Recovery and Integration Supports

In November 2018, the East Coast Community Recovery and Integration Supports (CRIS) service was formally launched by the then Minister for Health Simon Harris, TD. This service is provided by MQI and the East Coast Drug and Alcohol Task Force. CRIS delivers supports, including key working sessions, and it also provides case management, and links with external support, for people experiencing alcohol and/or drug addictions. Demand for this service was immediate after it commenced in September 2018, and by year end MQI had engaged with 44 clients.

Midlands services

Drug and Alcohol Treatment Supports Project

MQI's Drug and Alcohol Treatment Supports (DATS) team provides a community-based drug and alcohol treatment support service for individuals over 18 years of age and their families in the Midlands area (counties Longford, Westmeath, Laois, and Offaly). Each county has a dedicated drug and alcohol worker to coordinate the care of individuals and families experiencing problems due to drug and/or alcohol use.

In this region, MQI saw a total of 706 clients in 2018, a 53% increase on 2017. This increase was represented across all age groups, but was particularly evident among the younger cohort aged under 30, where there was a 47% increase. MQI also experienced a 47% increase in the number of women accessing Midlands services in 2018.

In terms of drug use in the Midlands, MQI noted that heroin was by far the most commonly consumed drug among clients accessing services, being used by 47% of clients. Within MQI's Midlands needle exchange service, the total number of sessions increased by 16% in 2018, with a 50% increase in clients who are homeless accessing the needle exchange service compared with 2017.

Rehabilitation and detoxification treatment services

St Francis Farm Residential Rehabilitation Programme and Detoxification Services

St Francis Farm (SFF) offers a 13-bed therapeutic facility with a 14-week rehabilitation programme set on a working farm in 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, and make positive choices about their future.

The 10-bed residential detoxification service at SFF delivers methadone and combined methadone/benzodiazepine detoxes for both men and women. The detoxification activity programme includes individual care planning, therapeutic group work, psychoeducational workshops, fitness training, and farmwork activities.

At High Park, Drumcondra, Co 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 2018, the total number of admissions across High Park and SFF was 169, with 110 completing 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 (ACS) 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.

A total of 2,149 unique clients were seen in 2018. Of particular concern, MQI observed a drop in residential admissions from prison to treatment from 83 in 2017 to 53 in 2018, which is a reflection of the increasing difficulty in accessing treatment beds across the country.

Ana Liffey Drug Project (ALDP)

The 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 offer pathways for drug users out of their current circumstance, including addiction and homelessness.

The services offered in Dublin are:

- 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 sessions and case management
- Prison in-reach.

Nursing services

In Dublin, nursing services are provided on a drop-in basis. Services offered include blood-borne virus testing, wound care, and compression bandaging. The ALDP also provides an in-reach nursing service to the residents of Crosscare Cedar House every Tuesday from 3.00pm to 4.30pm. In addition to providing nursing services on a daily basis, the ALDP works in partnership with Safetynet Primary Care to provide a GP clinic every Friday between 11.30am and 1.30pm.

Mid-West region

The ALDP Mid-West region provides harm reduction services in Limerick city and three counties to people affected by problem 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 drug users, as well as to other agencies that work with problem drug users.

Annual report

The ALDP annual report was published in 2019 (Ana Liffey Drug Project 2019). It noted that in 2018 Dublin open access services provided help to 982 individuals; the majority of these were homeless and many were polydrug users with mental and physical health problems; 151 individuals received key working sessions and case management; 437 individuals attended treatment groups; and 538 individuals used the needle and syringe programme. The ALDP also provided in-reach services to Mountjoy Prison, where 54 individuals attended groups run in this setting.

In the Mid-West, the ALDP served a similar cohort: 281 individuals were registered with the service in 2018. Of these, 75 individuals accessed case management services and 129 individuals accessed the ALDP needle and syringe programme.

September 2018 saw the winding down of the Online and Digital Services team at the ALDP. The team managed the drugs.ie website, which had 1,754,779 visits from its inception to September 2018. During this period, the team also received 809 calls through the Live Helper chat service.

Coolmine Therapeutic Community (CTC)

Coolmine Therapeutic Community (CTC) 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, CTC was founded on the philosophies of the therapeutic community (TC) approach to addiction treatment. The TC approach is primarily a self-help approach in which residents are responsible for their own recovery, with peers and staff acting as facilitators of change. Hence there is a deep commitment to 'community as method', where the primary therapy and the main agent for change is the community itself. The most common features of TCs include that they are operated by residents, they are based on a hierarchical structure according to seniority (length of time in the programme), and abstinence is the ultimate goal. 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.

CTC: Drop-in facility

Coolmine House, Lord Edward Street, Dublin is open Monday to Friday, 9.00am to 5.00pm, with a drop-in service for treatment options, advice and practical support every Thursday morning. The outreach staff facilitate assessments, weekly groups offering ongoing assessment and support to those awaiting a place on a treatment programme, and pre-entry groups which familiarise clients with working in the group environment on which their treatment will be based.

Coolmine's Community Outreach Service works with community drug teams across Dublin to complete holistic assessments and identify treatment options. It also works closely with drug treatment centres, providing a community detoxification service with Trinity Court (National Drug Advisory and Treatment Centre) and carrying out on-site assessments for Cuan Dara (Cherry Orchard Hospital), St Michael's Ward (Beaumont Hospital) and the Lantern Project (Peter McVerry Trust), preparing clients to engage with a primary treatment programme once they have completed their detoxification.

CTC: Day services

Welcome Stabilisation Programme

The Welcome Stabilisation Programme is for people who are not yet drug free and are looking for support to address their substance use. The programme runs from 10.30am to 3.30pm Monday to Friday, and finishes at 1.00pm on Wednesdays. Clients engage in self-development workshops, one-to-one key working sessions, relapse prevention groups and various other therapeutic/educational programmes.

CTC: Drug-free Day Programme (DFDP)

The DFDP provides a supportive setting for clients to build self-confidence and the skills to maintain a drug-free life. It is a minimum of 10 months in duration: 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.

CTC: Contingency Management (CM) Programme

The Contingency Management (CM) Programme consists of the reinforcement of desired behaviours. These are rewarded in the form of vouchers received for a combination of group attendance and drug-free urines. The programme is 12 weeks long, with participants attending three times per week. The content of the programme is three supervised urines per week, with a brief intervention at every meeting and a weekly facilitated support group.

CTC: Family support

There is weekly support group for family members and loved ones of those struggling with addiction. The group meeting takes place in Coolmine House, 19 Lord Edward Street, on Thursdays from 6.45pm to 8.30pm. CTC also offers Community Reinforcement Approach Family Therapy (CRAFT) support groups. This programme provides tools to concerned significant others (i.e. family members, partners, etc.) to help motivate their loved ones with problematic substance use to access treatment.

CTC: Cannabis/Mental Health Programme

This programme supports clients to reduce or cease their cannabis use. The 12-week programme runs on Tuesdays and Thursdays from 9.30am to 1.00pm. The groups participate in the Reduce the Use Programme and relaxation sessions. The programme also offers one-to-one key working sessions.

CTC: Community Addiction Team Dublin 15 (D15 CAT)

The new 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
- Mindfulness-based stress reduction programme, and
- Support for all problematic substance use.

CTC: Coolmine Lodge – men's residential

Coolmine Lodge is a therapeutic community which hosts a 5-month residential treatment programme for men who are working towards an independent life free from addiction. Coolmine Lodge 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.

CTC: Ashleigh House – women and chldren's residential

Ashleigh House 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.

CTC: Nursing services

Medical support services at CTC include access to a nurse and visiting medical officer for:

- Primary care
- Referral and screening
- Advice and support with:
    - Medication
    - Dual diagnosis
    - Contraception
    - Blood-borne viruses (HBV, HCV and HIV)
    - Sexually transmitted diseases
    - Contraception
    - Pregnancy
- Medical supervision and support
- Residential methadone detoxification, and
- Community alcohol detoxification.

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

Availability and access of harm reductions 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 or harm reduction services within Irish prisons, see the Prison workbook Section T1.3.3.

T1.5.5 Additional information on harm reduction activities

No new information.

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

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

No new information

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

No new information.

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

T3. New developments

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

Fatality study of drugs taken in intentional overdose in Ireland

Intentional drug overdose (IDO) is the most common method of hospital-presenting, non-fatal self-harm (Perry*, et al.* 2012) and has been linked with an increase in premature mortality risk due to suicides, accidents, and other causes (Finkelstein*, et al.* 2015b). Importantly, the risk of mortality due to suicide is increased among persons who have engaged in IDO and in 2018 IDOs resulted in 7,792 presentations to Irish hospitals (Griffin*, et al.* 2019). Multiple drugs are present in between 26% and 41% of non-fatal IDOs, increasing to 64% in fatal overdoses (Daly, Caroline*, et al.* 2018) (Finkelstein*, et al.* 2015a) (Health Research Board 2017). Nevertheless, despite the involvement of multiple drugs in IDO, the case fatality of drugs taken in multiple drug overdoses remains under-researched and little is known about how case fatality risk varies according to the type of drug(s) taken.

A recent Irish study aimed to examine the incidence of IDO in Ireland, to identify the predictors of fatal IDO, and to establish which drugs are linked with greater risk of a fatal outcome (Daly, Caroline*, et al.* 2020). In this research, published in the *International Journal of Drug Policy*, data from the National Self-Harm Registry Ireland and the NDRDI, 2007–2014, were used to calculate incidence, to examine overdose characteristics, and to estimate case fatality risk ratios.

There were 63,831 non-fatal and 364 fatal IDOs during this period (incidence: 148.8 and 1.01 per 100,000 population, respectively). Compared with non-fatal IDOs, fatal cases were more likely to be male (55.2% versus 42%), were older in age (median 44 versus 35 years), and more frequently involved multiple drugs (78.3% versus 48.5%). The study found that tricyclic antidepressants were associated with a 15-fold increased risk of death, while opioids were associated with a 12-fold increased risk, relative to the reference category (non-opioid analgesics). While the risk of fatal outcome was higher for males than females, the elevation in risk was greater in females when tricyclic antidepressants or opioids were taken.

As tricyclic antidepressants and opioids were found to be associated with a significantly increased risk of death, the authors concluded that these results add to the current evidence regarding the risk and potential adverse outcomes associated with these drugs. Findings may help inform safe and appropriate prescribing, where clinicians consider the fatality risk of drugs when determining treatment for patients at risk of self-harm, or who have previously harmed themselves.

T3.2 New developments in drug-related infectious diseases

No new information.

T3.3 New developments in harm reduction interventions

Blanchardstown Drug and Alcohol Trends Monitoring System

The Blanchardstown Local Drug and Alcohol Task Force (BLDATF) is one of 14 local drug and alcohol task forces (LDATFs) established in 1997 in response to high levels of drug misuse within Irish communities. BLDATF is responsible for implementing the National Substance Misuse Strategy (Steering Group on a national substance misuse strategy 2012) and facilitating a more coordinated response in tackling drug and alcohol use and misuse in Dublin 15. In order to adapt and change services in a thorough and comprehensive manner, the Blanchardstown Drug and Alcohol Trend Monitoring System (DATMS) was established in 2015 to provide a better knowledge of drug-related harms in the area. The specific objective of the DATMS is to establish an evidence base for drug use in Dublin 15 and to use these data to inform local service provision.

A recent report documents Year 4 of the DATMS (Blanchardstown Local Drug and Alcohol Task Force 2019). The Year 1 reporting period began in June 2014; Year 2 began in June 2015; Year 3 relates to 2017; and Year 4 to 2018. The DATMS report employs a mixed-methods design comprising primary and secondary data sources. Key findings from the report are discussed below.

Treated drug use

Treated cases aged 18 years and under increased from 51 in Year 1 to 97 in Year 4, with 1% of the Dublin 15 population aged 12–17 years having attended treatment for drug and/or alcohol use. From Year 1 to Year 4, the profile of treated cases has remained similar, with a majority being Irish and male. Cannabis herb was found to be the most commonly used drug among this age group, followed by alcohol, with a majority of cases being polydrug users.

Among subjects aged 18 years and over, there was an increase in the number of treated cases from 292 in 2016 to 348 in 2018. The majority of treated cases were Irish, male, and aged 35–44 years. One-third of cases were in treatment for drugs for the first time and the three main problem drugs reported were alcohol, heroin, and cocaine. Changes in the profile of treated drug users included an increase in the use of cannabis herb, alcohol, powder and crack cocaine, benzodiazepines, and Z-drugs. Year 4 also reported an increase in the use of pregabalin, heroin, and cannabis oil.

Untreated drug use

All four years of the DATMS reported similar profiles of untreated drug use by young people and adults, with alcohol, cannabis herb, ecstasy, and cocaine powder being the main drugs used and polydrug use being the norm. Changes in the profile of untreated drug users included an increase in the use of alcohol, cannabis herb and oil, powder and crack cocaine, benzodiazepines, and Z-drugs and that untreated drug users were getting younger.

Normalisation of drug use

The report notes that there are two recurring themes emerging from the different data sources over four years. First, that drug use in Dublin 15 is a community-wide issue that crosses all socioeconomic boundaries, as treated drug users were from every community in Dublin 15, from the affluent to the deprived. Second, that drug use in Dublin 15 has become normalised. The common perception among study participants was that alcohol and drugs are widely used, risk free, and socially acceptable. Alcohol was found to be the most normalised drug in Dublin 15, followed by cannabis, cocaine powder, benzodiazepines, and Z-drugs. Importantly, all four years of the DATMS reported the family context as a risk factor for the normalisation of drug and alcohol use and the development of intergenerational drug and alcohol dependence. The majority of treated drug users who

participated in Years 3 and 4 reported having family members who also had issues with drugs and/or alcohol.

Recommendations for service provision

The report notes the gaps in service provision identified by study participants and makes a number of recommendations. These include the following:

- Improve drug prevention programmes for people under 18 years of age.
- Increase access to skills-based mental health well-being programmes for young people and adults.
- Provide education and information for family members about the latest drug trends.
- Improve treatment programmes for under 18s and young people.
- Improve access to naloxone, the antidote to opioid overdoses.
- Develop a stabilisation programme for non-opioid polydrug users.
- Increase access to mental health services for children, young people, and adults.
- Improve access to aftercare services, training, employment, and housing.

T4. Additional information

T4.1 Additional sources of information

Irish drug use findings from the European Men-Who-Have-Sex-With-Men Internet Survey

Background

Most men who have sex with men (MSM) and who use recreational drugs do so on a sporadic basis, for specific purposes such as partying, socialising, or having sex. However, evidence suggests that among MSM who use drugs, there is a preference for 'sex drugs', including alkyl nitrites ('poppers'), crystal methamphetamine ('crystal meth'), club drugs (including ketamine and ecstasy), and new psychoactive substances (McCarthy-Caplan*, et al.* 2014). Use of these drugs is associated with higher-risk sexual behaviours and sexually transmitted disease acquisition (Tomkins*, et al.* 2018). Little is known about the prevalence and determinants of drug use among MSM in Ireland. However, the number of HIV diagnoses has been increasing among MSM in Ireland in recent years and drug use among this population may be a contributory factor.

European Men-Who-Have-Sex-With-Men Internet Survey-2017

The European Men-Who-Have-Sex-With-Men Internet Survey-2017 (EMIS-2017) was part of ESTICOM (European Surveys and Training to Improve MSM Community Health) and funded by the European Commission Health Programme 2014–2020. The overall aim of EMIS-2017 was to generate data useful for the planning of HIV and sexually transmitted infection (STI) prevention and care programmes. EMIS-2017 was an online, behavioural surveillance survey designed to collect data from MSM living in 50 countries and included all 28 member states of the European Union. The EMIS-2017 study coordinators commissioned advertising on several dating platform apps that were used by MSM in each country. In Ireland, the EMIS-2017 survey was advertised on: PlanetRomeo, Grindr, Hornet, RECON, Scruff, Gaydar, Manhunt/Jack'd and GROWLr. Overall, 2,083 qualifying

respondents were included in the Irish dataset and the results were recently published (Casey*, et al.* 2019). The main findings regarding drug use among survey respondents are discussed below.

Results

Type of drug consumed

Participants were asked: "When was the last time you consumed: cannabis (hashish, marijuana); synthetic cannabinoids; ecstasy; amphetamines; crystal meth; heroin or related drugs; mephedrone; synthetic stimulants other than mephedrone; ketamine; LSD; cocaine or crack cocaine?" Overall, 41% of respondents used drugs in the last 12 months and 26% had used drugs in the last 4 weeks. The most commonly used drugs in the last 12 months were cannabis (34%), cocaine (20%), ecstasy pills (19%), and ecstasy powder (15%). In the last 4 weeks, cannabis and cocaine were used by 17% and 9% of respondents, respectively. Fewer than 1% of respondents indicated that they had injected any drug to get high in the last 12 months and just over 1% of respondents had injected anabolic steroids in the last 12 months.

Injecting drugs

Of men who indicated that they injected drugs to get high in the last 12 months (n=17), 59% had done so three times or less and three-quarters of men had done it five times or less. Crystal meth was used by 83% of men who injected drugs, followed by ketamine (18%). Among men who had injected to get high in the last 12 months (n=17), 29% had injected with a used needle or syringe.

Combining sex, drugs and alcohol

Men who had sex with men in the last 12 months (n=1,930) were asked: "In the last 12 months, how much of the sex you've had with men has been under the influence of alcohol or any other drug?" Over 45% indicated that they had some sex under the influence of alcohol or any other drug, while 12% said almost all or all sex was under the influence. Twenty per cent of all respondents had ever used stimulant drugs to make sex more intense or last longer and 14% had done so in the last 12 months. Stimulant drugs included in this definition were: ecstasy/MDMA, cocaine, amphetamine, crystal meth, mephedrone, and ketamine. Overall, 75% of men who had used stimulant drugs during sex in the last 12 months had experience of doing so with more than one partner at once, with 61% doing so in the last 12 months.

Conclusions

The authors noted that the prevalence of stimulant drug use among MSM during or before sex (ever) was higher in Ireland compared with the overall European prevalence (15%). Additionally, 72% of men who used stimulant drugs to make sex more intense or last longer had done so with more than one partner and this was also higher than the overall European proportion (66%). As chemsex has been associated with increased HIV and STI transmission, additional work is required in order to better understand chemsex and how best to mitigate the negative outcomes associated with it.

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

Health in Ireland: Key Trends 2019

The Department of Health has published the 12th edition of *Health in Ireland: Key Trends 2019* (Department of Health 2019). Using data from newly available sources, the report highlights selected

trends in drug, alcohol, and tobacco consumption as well as the number of individuals entering treatment in Ireland for problem drug and alcohol use between 2009 and 2018.

Smoking, alcohol, and cannabis use

Figure T4.2.1 shows the percentage of Irish children, aged 11–17 years, who engaged in risky health behaviours for the years 2010, 2014 and 2018. Findings demonstrate that there has been a constant downward trend in the percentage of children who smoked cigarettes monthly or frequently, who had ever used alcohol, and who had used cannabis in the last year. Similarly, there has been a downward trend in alcohol and cigarette consumption among adults aged 15 years and over between 1998 and 2018 (see Figure T4.2.2).

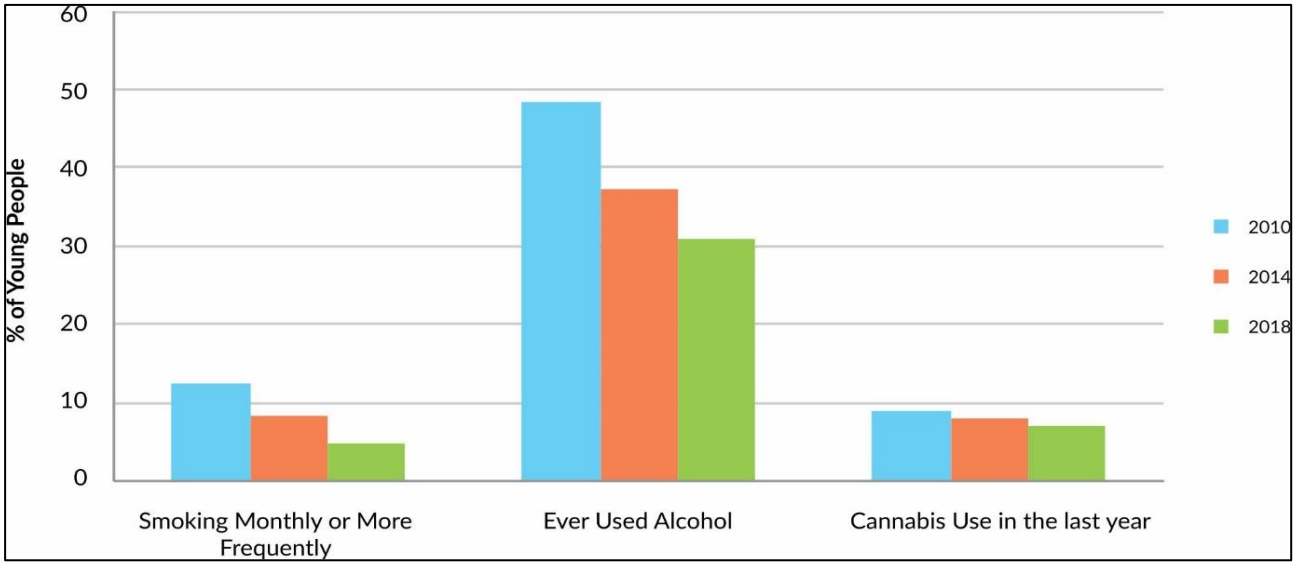

Figure T4.2.1 Percentage of children, aged 11–17 years, engaged in risky health behaviours in Ireland, 2010, 2014, and 2018

Source: Department of Health (2019)

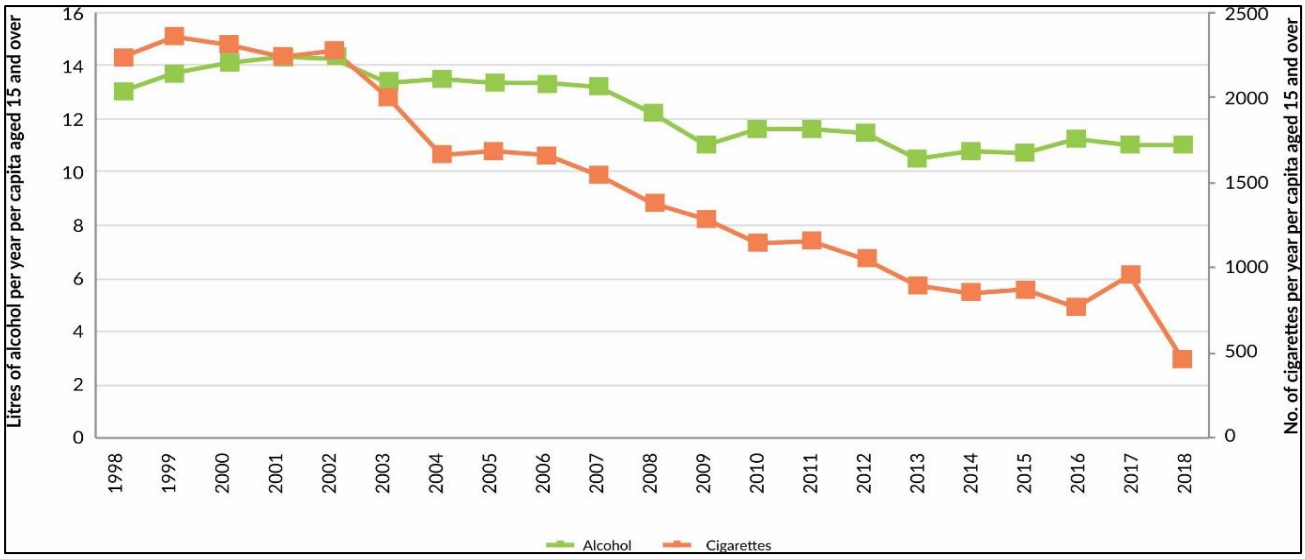

Figure T4.2.2 Alcohol and cigarette consumption per annum, per capita aged 15 years and over, 1998–2018

Source: Department of Health (2019)

Treatment for problem drug and alcohol use

Table T4.2.1 shows the number of individuals entering treatment for problem alcohol or drug use between 2009 and 2018. There were 17,093 cases treated in 2018, representing a rate of 217 people per 100,000 population aged 15–64 years. This is an increase of 8.6% compared with 2017, when there were 15,742 individuals in treatment. However, figures show that this rate peaked in 2011 at 251.7 per 100,000 population aged 15–64 years and has been slowly decreasing ever since.

Table T4.2.1 Number of cases in treatment for problem drug and alcohol use and rate per 100,000 population aged 15–64 years in Ireland, 2009–2018

												% change
	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2009–2018	2017–2018
Drugs including alcohol												
All cases in treatment	15 092	16 422	16 827	16 126	16 312	17 077	16 933	16 325	15 742	17 093	13.3	8.6
New entries into treatment each year	7517	7738	7719	7114	6899	7237	7007	6922	6482	6889	–8.4	6.3
Rate per 100 000 (15–64-year-olds)	242.6	250.9	251.7	232.9	226.1	236.5	227.8	223.0	206.7	216.9	–10.6	4.9
Drugs excluding alcohol												
All cases in treatment	7389	8699	8283	7903	8894	9672	9711	9097	8772	10,113	36.9	15.3
New entries into treatment each year	3359	3657	3265	3191	3389	3648	3651	3446	3168	3859	14.9	21.8
Rate per 100 000 (15–64-year-olds)	108.4	118.6	106.5	104.4	111.1	119.2	118.7	111.0	101.0	121.5	12.1	20.3

Source: Department of Health (2019)

Crack cocaine use in Ballymun, Dublin

Background

Crack cocaine has become increasingly problematic for some marginalised communities. The recent identification of particular sites in Ballymun, Dublin associated with crack cocaine use has raised serious concerns about an emerging crack cocaine problem in the local area, similar to other communities. Despite the increase in levels of use and treatment-seeking for crack cocaine use, there is limited national and international research available on the nature and extent of crack cocaine use. Local anecdotal evidence in Ballymun suggests that the problem is widespread and is having a

detrimental impact on the health and well-being of users, their families, and the wider community. While drug issues and related harms are not a new phenomenon in this community, this is the first time that Ballymun has faced a crack cocaine issue of such proportions. In light of these developments, a recent study explored crack cocaine use experiences in the Ballymun community with a view to informing the establishment of a local policy and practice/intervention evidence base for crack cocaine in Ballymun (O'Reilly and Mac Cionnaith 2019).

Methodology

The research used a qualitative study design and data were collected through 22 semi-structured interviews and four focus groups during the period September 2018 to February 2019. Data collection consisted of individual semi-structured interviews with former and current users of crack cocaine, family support members, local community representatives, AGS, and local treatment and rehabilitation service providers.

Findings

The main findings are discussed below.

Crack cocaine use and motivations for use

Among current crack users, 17 interviewees were polydrug users, and identified the use of heroin, alcohol, benzodiazepines and pregabalin along with their use of crack cocaine. The most widely used substance alongside crack cocaine was methadone. Thirteen (76.5%) of those interviewed were prescribed methadone and two (11.8%) had previously been prescribed methadone. Interviewees described several reasons for their use of crack cocaine. These reasons ranged from being introduced to it through their drug-using peer networks to a more deliberate decision-making process to help them forget about and escape other difficult life issues, and to enhance self-confidence.

Availability and accessibility

Research participants expressed their concerns in terms of the availability and visibility of both crack cocaine usage and dealing; the accessibility of crack through aggressive targeting and overt dealing; young people's involvement in the crack cocaine market, and the role of environmental factors influencing the local crack cocaine market. In particular, the perceived increased availability of crack cocaine in the community was also identified by local service providers, encountering and working with individuals who are using crack cocaine; by those engaged in broader community work; and by AGS. The current availability of crack in the community was believed to have increased over the previous 2 years.

Physical and mental health

The two main physical health issues associated with crack cocaine use and experienced by interviewees were breathing problems and weight loss due to decreased appetite and desire to eat. Interviewees described the mental health consequences they experienced in connection with their crack cocaine use as being far greater than and more consequential than the physical health consequences experienced. Interviewees stated that they experienced confusion, depression, paranoia, and anxiety while using crack cocaine. They also discussed the self-harm and suicidal thoughts they experienced and which they directly attributed to their use of crack cocaine. Some interviewees described periods of time spent in mental health facilities as a direct consequence of the mental health issues they attributed to their use of crack cocaine.

Family and community impacts

Family members described being frightened in their homes as they experienced aggression and intimidation from their adult children. This aggression and intimidation were attributed to their adult children's use of crack cocaine and their seeking of money for crack. The stigma associated with the use of cocaine was also experienced by family members of those using crack. Family members described their difficulty in accepting and acknowledging that a family member was using crack cocaine, as they perceived this substance and its usage to be far worse than any other substance and its usage.

Community representatives and local service providers described the community's concerns in relation to crack cocaine use. Participants described feeling frightened and intimidated by gangs, by the visible drug market, and by the evident crime and violence in the community. Overall, a sense of feeling unsafe within the community was expressed by many interviewees and research participants along with a heightened sense of risk to personal safety.

Responses and interventions

Service providers described the responses available within current service provision along with the prevailing challenges encountered in working with, and providing a service to, individuals who are using crack cocaine. Drop-in services, outreach – including street work and home visits – advocacy, one-to-one key working, and the distribution of food parcels were identified as core interventions and responses currently provided.

Crack pipe distribution was identified as a key intervention as both a tool for engagement and a harm reduction response. This intervention was implemented on foot of interagency discussions and the agreed need for an interagency approach to crack cocaine use in the community. Crack pipes are distributed on site in the Ballymun Youth Action Project and by the HSE Addiction Service.

Conclusions

In light of the study findings, the report authors made a number of recommendations to support local crack cocaine policy and practice development. In particular, they recommended the establishment of a multiagency working group, including community representation, to develop and implement an action plan, and they also recommended that prioritisation be given to the following actions at both a local and national level:

- **Accessible interventions:** The lack of accessible crack cocaine-specific interventions emerged in the research. The need for early access to adequate crack cocaine services, including the provision of residential respite and stabilisation beds, is recommended.
- **Mental health:** Given the mental health consequences experienced by individuals using crack cocaine in this study and evidenced in previous studies, the need for improved cooperation between drug services and mental health services is required. A local strategy responding to the dual diagnosis needs of individuals using crack cocaine is recommended.
- **Outreach:** Due to the chaotic nature of some crack cocaine use, the importance of outreach to individuals using crack cocaine is reinforced in this research. Building on existing local outreach services, the need for a more targeted and crack cocaine-specific outreach is recommended. This would include out-of-hours outreach and signposting to existing services.

- **Basic needs:** Given the personal adverse consequences experienced with crack cocaine use, the provision of services and interventions that respond to the physical and psychological well-being of individuals using crack cocaine, thus ensuring that basic needs such as food, light, heat, and primary healthcare needs are being met, is recommended. The potential role of contingency management should be considered further.
- **Accommodation:** Housing issues and hostile takeovers emerged as a key issue for individuals using crack cocaine. Building further on the existing interagency work that has taken place with regard to accommodation-related issues is recommended.
- **Policing:** Given the issues of fear, safety, and security which emerged in the research along with the increased availability of crack cocaine in the community, continued cross-agency and community engagement with AGS is recommended.

London School of Economics report on the Irish response to COVID-19

In July 2020, the London School of Economics and Political Science (LSE) published a report on Ireland's response to COVID-19 in relation to people who are homeless and use drugs, entitled *Saving lives in the time of COVID-19: case study of harm reduction, homelessness and drug use in Dublin, Ireland* (O'Carroll*, et al.* 2020)*.*The report is a policy briefing that outlines the policy changes made in Ireland to harm reduction services in response to COVID-19.

Housing response

People experiencing homelessness were identified as a vulnerable group when the COVID-19 pandemic reached Dublin. Accommodation was provided to allow suspected and positive cases to isolate; it was also provided for those deemed vulnerable due to age or medical condition. The report argues that this resulted in much lower than expected COVID-19 infection and mortality rates. Seven hundred and fifty clients were tested, of whom 63 tested positive. One person died. The report indicates that the policy response, combined with the quick and dedicated response of services and their staff, contributed to a much lower than expected mortality figure.

Opioid substitution treatment (OST): There were two key changes in the area of OST – one related to accessing a programme, the other to the dispensing of methadone. National contingency guidelines were issued, allowing for reduced waiting times and removal of caps on recruitment to OST at the two clinics that provide treatment for this group (Health Service Executive 2020a). These new guidelines resulted in the waiting times for treatment at one service provider (GMQ Medical) being reduced from 12–14 weeks to 2–3 days. Access was further improved by other treatment clinics agreeing to take on homeless patients who were resident in their catchment areas. Supervision guidelines were also amended. Staff at relevant agencies were allowed to collect clients' OST medications and deliver them to the client's accommodation.

Naloxone: Access pathways to the opioid antagonist naloxone were relaxed in response to the COVID-19 crisis through the national contingency guidelines group (Health Service Executive 2020a). The new guidelines recommend that everyone in receipt of OST should be offered and encouraged to take a supply of naloxone. It was to be administered by a person trained in its use and the injectable product was to be used instead of the intranasal product. Access was then extended to those most at risk of overdose in the evolving situation; in addition, the ALDP distributed packs to those participating in a needle and syringe programme. The requirement for a prescription to be issued by a general practitioner to the client personally could be met retrospectively.

Benzodiazepine maintenance: In Ireland, the focus of national guidelines for the treatment of benzodiazepine use is detoxification, not maintenance (Health Service Executive 2016). However, in response to the pandemic national contingency guidelines were published, which recommended that self-isolating clients of treatment services could be offered up to 30 mg daily in order to prevent withdrawal symptoms during the period of self-isolation. As with OST medications, service providers were able to deliver medications to clients in their accommodation.

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 In-patient 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 to provide the best possible information on infectious diseases. The HPSC has recorded new cases among injecting drug users of HIV since 1982, HBV since 2004, and HCV since 2006.

The **HIPE (Hospital In-Patient Enquiry)** 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. 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 In-Patient 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, entitled *Activities of Irish psychiatric units and hospitals*.

National Self-Harm Registry Ireland is a national system of population monitoring for the occurrence of deliberate self-harm, established 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. an individual who 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 individuals who are dead on arrival at hospital as a result of suicide.

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European Monitoring Centre for Drugs and Drug Addiction

The European Monitoring Centre for Drugs and Drug Addiction (EMCDDA) is a decentralised EU agency based in Lisbon. The EMCDDA provides the European Union (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 member states.

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

The Irish Focal Point to the EMCDDA is based in the Health Research Board (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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