Drug Overdoses and Drug-Related Deaths: A Synthesis of NISRA, ED Admissions and Ambulance Service Data

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Northern Ireland Alcohol & Drug Alliance

Drug Overdoses and Drug Related Deaths in NI:

A Synthesis of NISRA, ED admissions & Ambulance Service Data

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Introduction

The United Kingdom has one of the highest rates of drug-related deaths in Europe. The rate of drug deaths in Scotland is the highest among European countries, second only to the overdose rates in North America. The significant number of deaths in the UK can be attributed to a longstanding trend of increase, which is influenced by demographic factors such as the aging population of opioid users.

Additionally, until recently there has been inadequate investment in drug treatment and harm reduction measures (Dame Carol Black 2021, NRS 2022).

Drug and alcohol related deaths in Northern Ireland have more than doubled over the last ten years, reaching the second highest rate of drug deaths, (11 per 100,000 in 2021), in the UK after Scotland. Drug related deaths were highest in 2020 with 218 deaths recorded (decreasing slightly to 213 in 2021), over half (55.5%) of which were men aged between 25-44 years old (NISRA 2022).

The prevention of each of these deaths is possible, making it essential for the Department of Health, the NI Executive, and society to prioritise this issue.

Aside from the human cost, both alcohol and drug use place a significant burden of additional expenditure on public services such as health care, public safety, criminal justice system, and social work. Substance use and related harm cost hundreds of millions of pounds every year in Northern Ireland. In fact, the most recent figures suggest that combined drug and alcohol use cost the society approximately £1billion every year (NIAO, 2021).

This financial burden is a result of various factors. Firstly, the healthcare system bears the cost of treating individuals with substance use disorders, including emergency room visits, hospitalisations, and rehabilitation services. Additionally, substance use can lead to a range of health issues, such as liver disease, mental health disorders, and infectious diseases, further increasing healthcare costs.

In summary, the financial burden of drug use in Northern Ireland is substantial and encompasses healthcare expenses, public safety costs, criminal justice system expenditures, and social work services. Addressing substance use and its associated harms requires a comprehensive approach that considers both human and economic costs.

The Preventing *Harm, Empowering Recovery Strategy (2021-2031)* (Department of Health 2021) was prioritised by the Department of Health in response to a specific commitment arising from the *New Decade New Approach Agreement* (UK Government and Irish Government 2021) and in response to the Executive's overarching Programme for Government (NI Executive Office 2021). It also directly links in with the new *Mental Health Strategy, 2021-2031*(Department of Health 2021). It adopted a co-production approach that encompassed a full review of the previous strategy, a consultation exercise, and a major public consultation exercise.

The new *NI Drugs Strategy* (DOH 2021) outlines five major areas of focus over the next 6 years:

- **Outcome A** – Through Prevention and Reduced Availability of Substances, fewer people are at Risk of Harm from the Use of Alcohol & Other Drugs across the Life Course.
- **Outcome B** – Reduction in the Harms Caused by Substance Use.
- **Outcome C** – People have Access to High Quality Treatment and Support Services.
- **Outcome D** – People Are Empowered & Supported on their Recovery Journey.
- **Outcome E** – Effective Implementation & Governance, Workforce Development, and Evaluation & Research Supports the Reduction of Substance Use Related Harm.

Each of the above outcomes is aligned to several workable actions and a range of indicators to allow for assessment of progress. In total, there are 57 actions to help achieve the above five strategic outcomes.

Due to the rapidly changing nature of substance use, there will be a review conducted in 5 years to revise the action points if necessary and provide the opportunity for emerging evidence to be considered.

The current budget for England and Wales stands at £780 million (over the next 10 years) and the Scottish budget at £250 million (over 5 years) Northern Ireland's budget for implementing the new strategy is £6.2 million per annum over the course of the 10-year plan (£62 million over 10 years). When we consider that drug-related deaths in Scotland have recently been reported at 27 per 100,000 across all age groups and at 25 per 100,000 for people aged 24-25 in Northern Ireland, there are some clear reasons as to why funding should be increased to meet the needs of the population in Northern Ireland.

1.1 Report Aim

This report presents data from multiple sources, including NISRA, The Northern Ireland Ambulance Service (NIAS), National Programme on Substance Abuse Deaths (NPSAD), emergency admissions data from all Trusts in NI and PSNI drug death data. All data has been anonymised at the source, and the providers primarily analysed the largest portion of the data. This is the first time we have analysed data from different sectors to provide an overview of overdoses and drug-related deaths in Northern Ireland. However, there are some limitations in the report. Firstly, there is no linkage between the datasets, preventing more detailed statistical analysis of the comprehensive information provided by the partners. Secondly, the organisations involved used different drug classifications, making comparisons challenging but manageable. Finally, the data collection periods varied among the partners, causing difficulties in merging the data.

However, the siloed data does permit us to observe demographics, drug trends, individual risk factors, and behaviours prior to death. Therefore, it is a useful first foray into research on drug overdoses and related deaths in NI.

1.2 Drug use in Northern Ireland

The last drug prevalence survey was carried out in 2014/15 for all Ireland (Department of Health 2017). These figures are now out of date, and we expect the results of a new survey to be published in the next year. According to the 2014/15 drug prevalence survey, the most common drug of choice was cannabis with a quarter (24.6%) of adults reporting having used it during their lifetime. Almost a tenth (9.6%) of adults had used Ecstasy, around 7% had used poppers, cocaine powder (7.2%), while just over 6% had used Amphetamine. Almost 6% had tried hallucinogens, such as magic mushrooms (5.7%) and LSD (5.7%). Approximately 3%

had used solvents and 2% had tried new psychoactive substances (NPS). Less than 1% of the adult population had used crack cocaine or heroin (0.4%).

1.3 Presentation to Drug Treatment Services

In 2021/22, a total of 3,092 clients in Northern Ireland sought services for substance misuse and were recorded in the Substance Misuse Database. Recent data from the Northern Ireland Substance Misuse Database for 2020-2021 (Department of Health 2022) shows that more than one-third of these clients (37.0%, 1,143) presented with alcohol misuse only. Additionally, one-third of clients (32.5%, 1,004) presented with problem drug use only, while 30.6% (945 clients) presented with both drug and alcohol misuse.

Most clients seeking treatment for either drug use alone or drug and alcohol use were male, with just under three-quarters of clients being male (72.3% and 72.6% respectively) (DOH 2022).

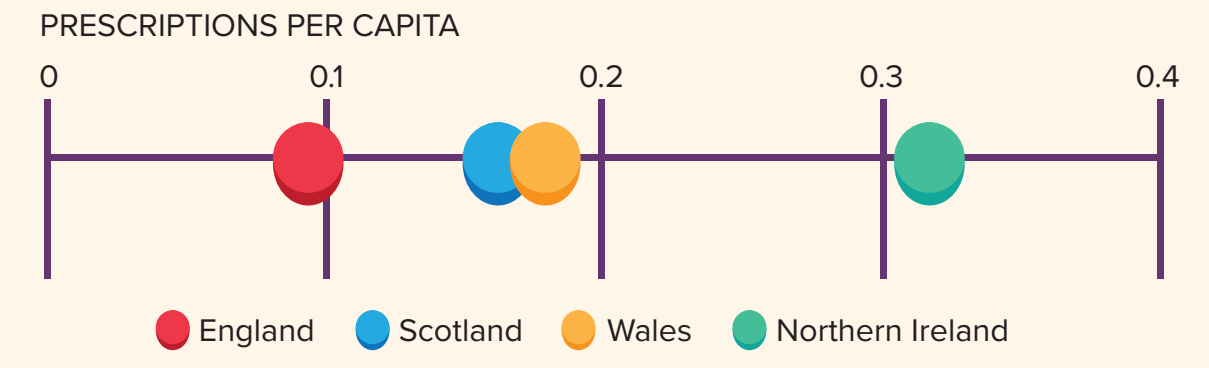
Approximately 40% of clients seeking treatment were between the ages of 26 and 39, regardless of whether they were seeking help for drug misuse alone (43.6%) or drug and alcohol misuse (40.4%). The most commonly used drug among clients was cannabis, with 62% of drug users reporting its use. Cocaine was the second most used drug at 49.4%, followed by benzodiazepines at 23.9% and pregabalin at 16.7%. Eleven per cent of drug users reported ever injecting drugs, and of those who had injected, 24% reported sharing injecting equipment at some point (DOH 2022).

In addition, Northern Ireland prescribes more diazepam per capita than anywhere else in the UK (Northern Ireland Audit Office data, June 2020). In fact, there are three and a half times as many prescriptions of diazepam per capita in Northern Ireland as in England (see figure 1).

1.4 Waiting Lists

In 2020, concerning statistics were released regarding the wait times for opioid substitute treatment (OST). There were reports of a wait time of up to 29 weeks in the Belfast Trust for either methadone or buprenorphine, opioid substitute medications. The figures

Figure 1: Prescriptions per capita across UK



Source NIAO 2020

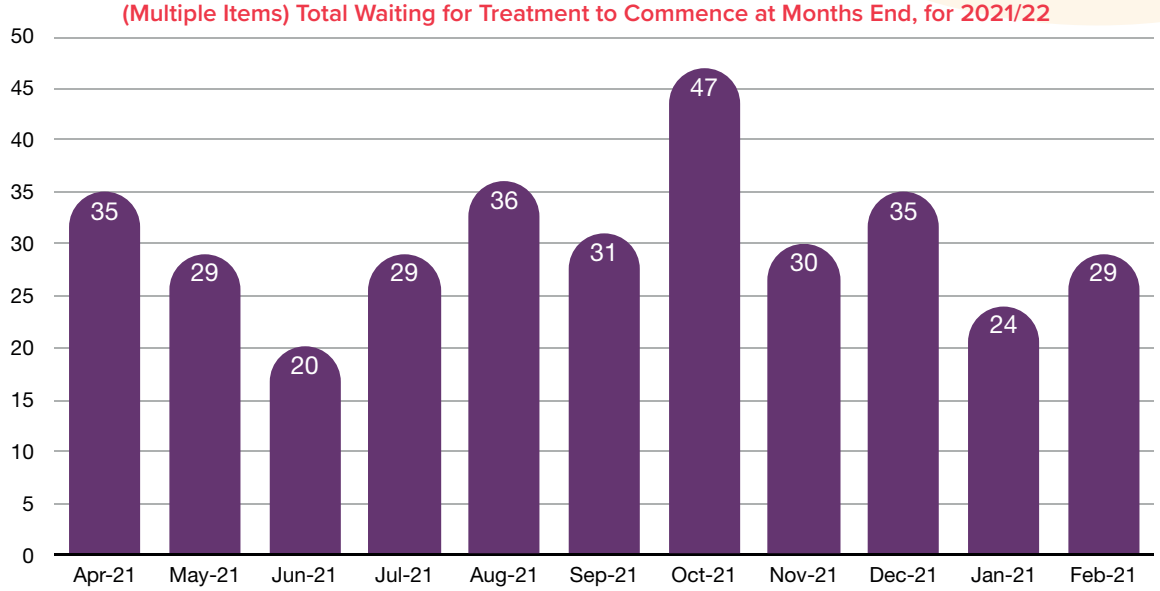
for September of that year showed that there were 76 individuals waiting to start treatment. However, since September 2020, the wait times have consistently decreased, as indicated by the most recent data in table 1. According to the available information, 22 individuals began treatment within a three-week period, and 7 individuals began treatment within a six-week period by the end of February 2022.

It's difficult to make a comparison with opioid substitution waiting times in England but there is a crude similarly, as most people receive opioid substitution within a three-week period (see table 2).

Table 1: Wating Times in NI (Opioid Substitution)

OPIATE SUBSTITUTION TREATMENT SERVICE WAITING LIST DASHBOARD

(Multiple Items) Total Waiting for Treatment to Commence at Months End, for 2021/22



Breakdown of Service Users in (Multiple Items) Waiting by Timeband as at end February 2022

Number Waiting in Timebands	0-3 Weeks	3-6 Weeks	6-9 Weeks	9+ Weeks
Number of Service Users	22	7	0	0

Longest Wait (in Days) in each Trust as at end February 2022

Belfast Trust	Southern Trust	Northern Trust	Western Trust	South Eastern Trust
18	32	10	38	38

(Source: Health Development Policy Branch – February 2022)

Table 2: Waiting Times in England (Opioids Substitution)

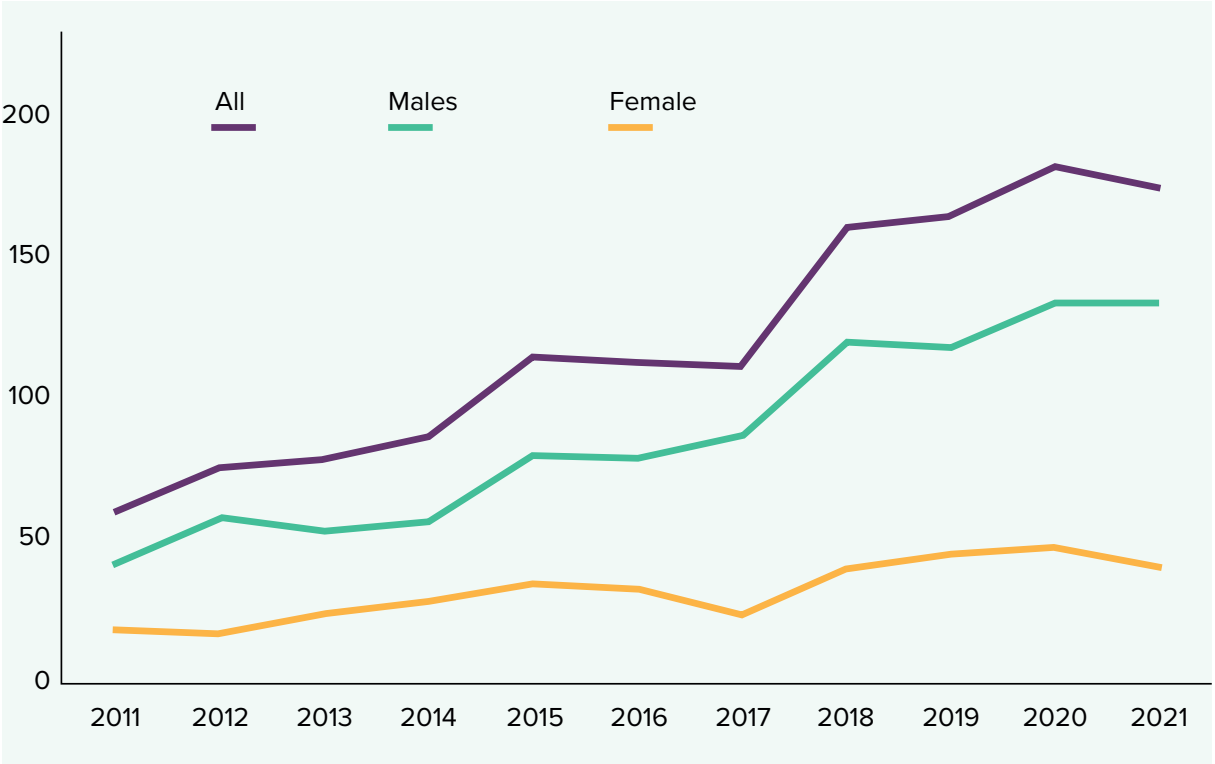
Waiting Times	2009/10	2010/11	2011/12	2012/13	2013/14	2014/15	2015/16	2016/17	2017/18	2018/19	2019/20	2020/21
Under 3 Weeks	57911	53848	51018	54812	63994	64152	62784	63548	61147	62029	61820	56407
Between 3 & 6 Weeks	2289	1681	1103	832	784	956	738	564	537	534	536	312
Over 6 Weeks	1136	539	360	338	342	356	358	187	228	247	232	198

2. Drug Related Deaths Statistics

The information in the following section was sourced from the Northern Ireland Research and Statistics Agency (NISRA) and includes important data, which is readily available for public reference. The NI government data is presented as an official baseline for analysis in other subsequent sections of the report.

Drug related deaths were at the highest level in 2020 with 218 related deaths recorded, moving to a lower but similar level in 2021 (n=213) (NISRA 2022). The trend is similar for the definition of drug misuse deaths, which involves illicit substances only. Figure 2 shows how the number of drug misuse deaths has almost trebled in the last decade, from 61 in 2011 to 175 in 2021.

Figure 2: Drug Misuse Deaths by Registration, Year and Gender 2011-2021



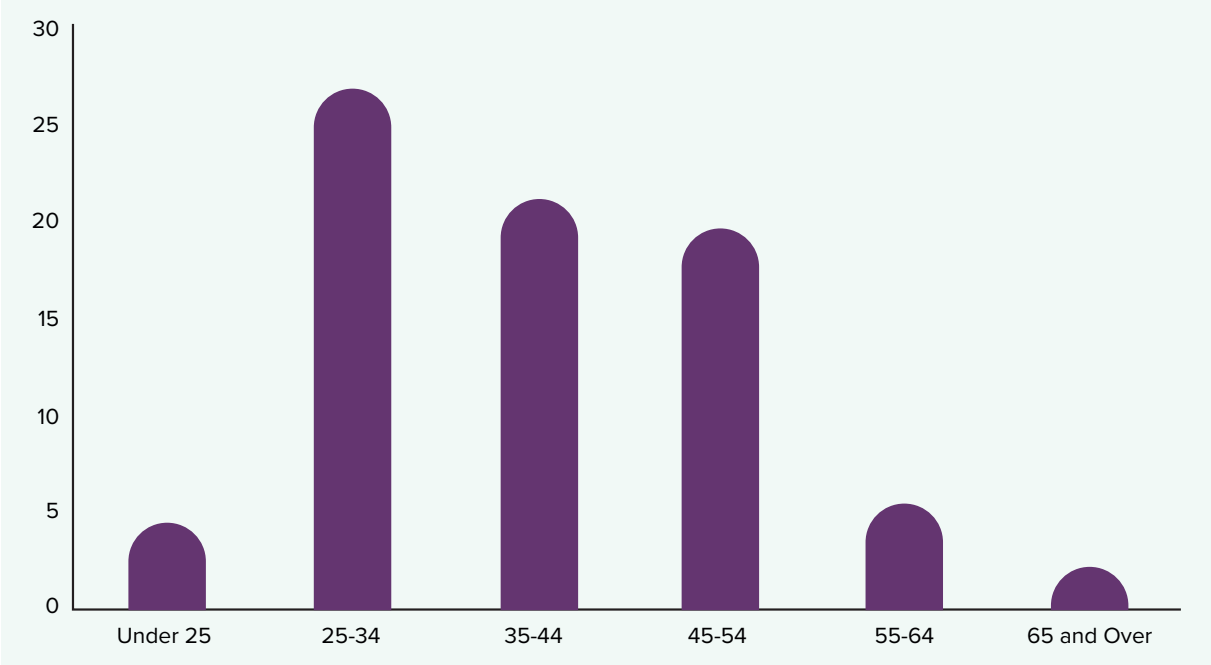
Source: NISRA 2022

A consideration of drug related deaths by age indicates that the greatest number of deaths occurred in the 25 – 34 age group. This figure had increased from 33 deaths in 2011 to 66 in 2021 accounting for a rate of 27 deaths per 100,000 (see figure 3).

In comparison, the rate per 100,000 for the 55 – 64 years is 5.4 per 100, 000 (NISRA 2022).

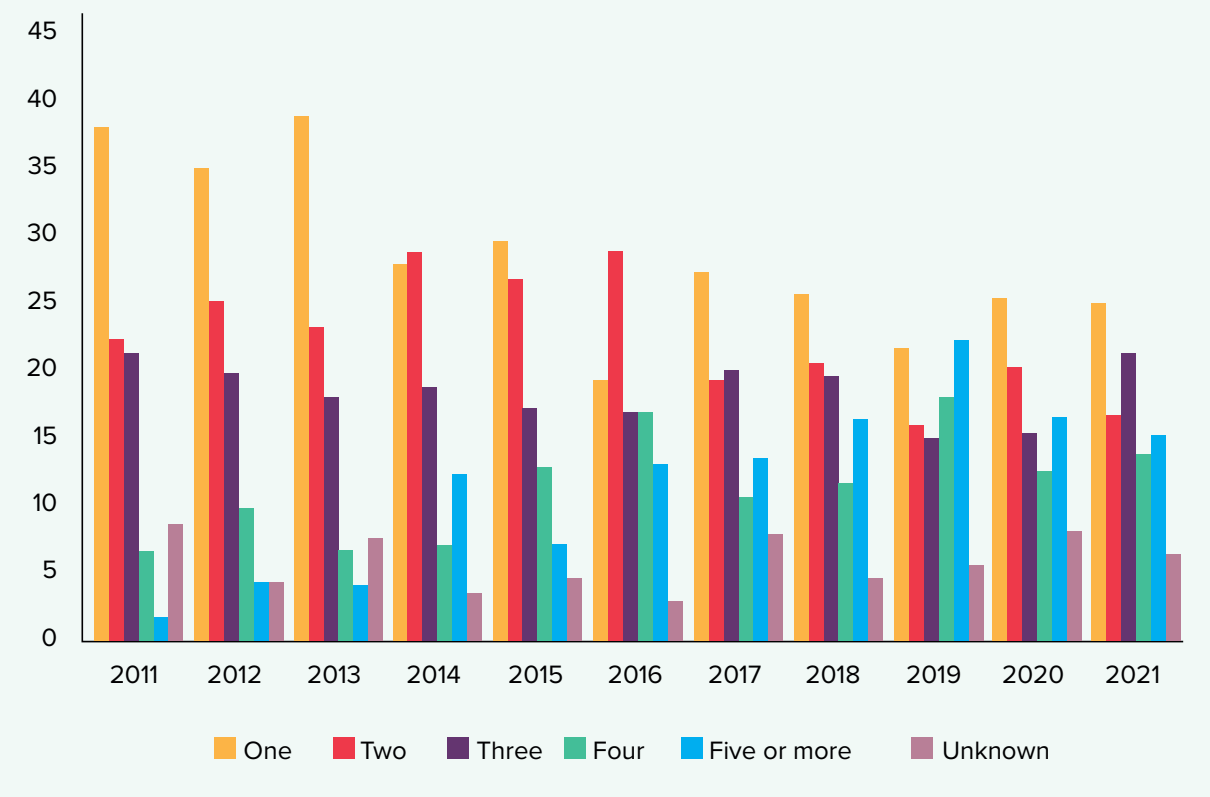
Over the last ten years, the numbers of deaths reporting polydrug use have also increased. For example, deaths where five or more drugs were recorded have risen from 2% of reported drug-related deaths in 2011 to 15.5% in 2021 (NISRA, 2022). Compared with 2011, drug-related deaths in more recent years were more likely to be caused by several drugs, rather than one specific drug (see figure 4).

Figure 3: Drug Deaths by Age Category



(Source: NISRA 2022)

Figure 4: Proportion of Drug related Deaths by the Number of Drugs Mentioned on the Death Certificate by Registration Year, 2011-2021



(Source NISRA 2022)

It is difficult to compare the drug related death rates across the UK, as there are subtle differences in the definition of drug related deaths across the four nations. However, we can make a basic comparison between Northern Ireland and Scotland in relation to the age standardised death rate. Scotland shows a higher age standardised death rate at 25.0 per 100, 000 in 2022 (NRS 2023), while Northern Ireland stands at 11.5 per 100, 000 (NISRA 2022) and England and Wales had a rate of 5.3 deaths per 100,000 population in 2021 (ONS 2022). Compared with the European Union, the rate of drug related deaths in Northern Ireland is more than five times that of the European average, which was1.8 per 100,000 in 2021 (EMCDDA 2023).

2.1 Drug related deaths in NI by drug type

Opioids were mentioned most often on the death certificates of drug related deaths in 2021 (126 of the 213 drug-related deaths). This was a slight decrease from 2020

(135). Despite a decrease from 55 in 2020 to 39 in 2021, heroin/morphine was the opioid most recurrently reported. However, other drugs have been increasingly noted in drug related deaths in NI. Benzodiazepines were involved in 111 drug deaths in 2021, which was the highest number recorded since reporting commenced in NI. Drug related deaths involving pregabalin have also risen consistently since its first appearance in the regional statistics, from 9 in 2016 to a peak of 77 in 2019, reducing slightly to 71 in 2021 (NISRA 2022).

The last two years have seen a sharp increase in the number of drug-related deaths where a (new) psychoactive substance[1] (NPS) was mentioned on the death certificate, from 11 in 2019 to 73 in 2021 (NISRA 2022) The list of NPS included in the information by NISRA does refer to a list of designer benzodiazepines and two specific nitazenes (see appendix A), although it does not refer to the presence of these drugs in the analysis. However, there is reference to fentanyl within the NISRA drug-related deaths data with a total of 102 detections between 2011 and 2021. It is anticipated that these are largely in relation to prescribed fentanyl patches, rather than illicit fentanyl powders (see pg.20) for addendum reporting on nitazenes for 2022- 2023).

3. Northern Ireland Ambulance Service Responses to Drug Overdose Calls, 2017/18 - 2021/22

Ambulance data is taken from the Ambulance Medical Priority Dispatch (AMPDS) Command- and -Control system. There are three indicators used in the analysis:

a. 999 call data volume,

b. response at the scene, and

c. arrival at hospital.

'999 call data volume' is based on the information obtained at the time of the 999 (emergency services helpline in the United Kingdom) call. This means that, since the caller may not know all the relevant details, this data may be underreporting. The data is for the financial year, taken to be 1st April of one year until the 31st of March of the next, going from 2017/18 to 2021/22.

Where possible, incidents involving alcohol only have not been included. Furthermore, there may be manual data entry errors contained within. 'Responses at scene' are the number of resources, such as vehicles, arriving at scene. An incident can, and often does, have multiple resources attending for several varied reasons.

For example, a call may involve more than one patient, thus requiring a number of different resources or vehicles to attend, or a solo responder may arrive in a rapid response vehicle (RRV), followed by a Double Crewed Ambulance (DCA) that will be sent as a conveying resource once it has been decided that a patient needs to travel to hospital. A crew may also request a second resource to assist with a clinical need or with the lifting of a patient, for example. 'Arrivals at hospital' are the number of resources or vehicles arriving at hospital. Not every patient that is treated by an ambulance crew at the scene of an incident will be transported to hospital.

Depending on the patient's clinical condition, some patients may be referred to alternative care pathways or in the case of 'Recognition of Life Extinct' (ROLE), left at the scene (Northern Ireland Ambulance Service NIAS, 2023).

1 Psychoactive substances as defined by NISRA include all substances that have been controlled under the Psychoactive Substance Act 2016, including drugs that have subsequently been classed under the Misuse of Drugs Act. Please note, psychoactive drugs in this report also appear in the relevant class of drug, i.e. a drug may be classed as New Psychoactive Substance (NPS) and an opioid, amphetamine, benzodiazepine or anti- depressant.

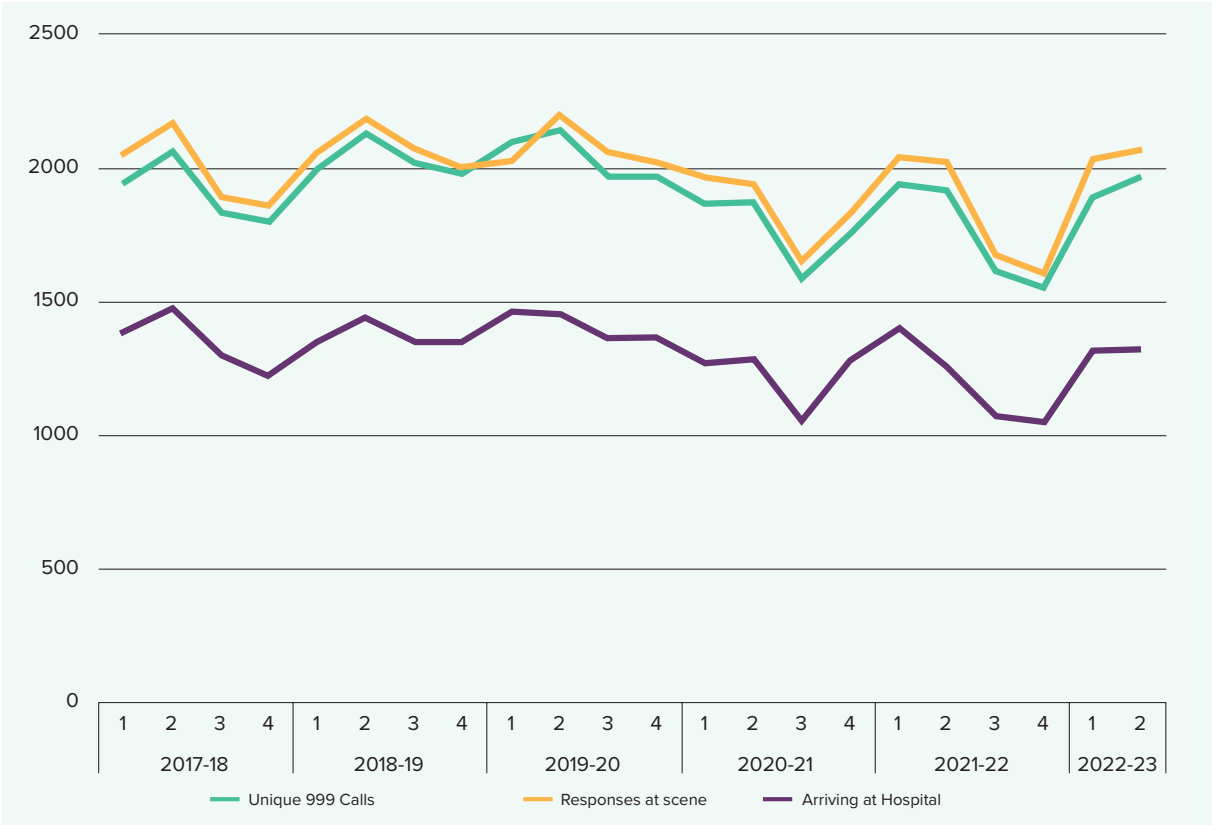
3.1 Overdose Incidents- Calls, Responses and Arrivals at Hospital – April 2017- August 2022

Data from NIAS calls and responses for drug overdose are more reflective of the NISRA (2022) report. Except for two periods that coincide with periods of limited capacity of ambulance services due to the COVID 19 pandemic, the number of overdose calls attended at scene remained just above or almost at 2,000 per quarter. The marked decrease seen in admittance to hospital emergency services data (see pg. 15) is not seen either in cases responded to at the scene by NIAS or in those arriving at hospital by ambulance. The calls taken to the hospital equate to, on average, two-thirds of those attended at the scene by NIAS (see Figure 5).

Age and Gender of Patients where Problem Involves Drugs or Overdose

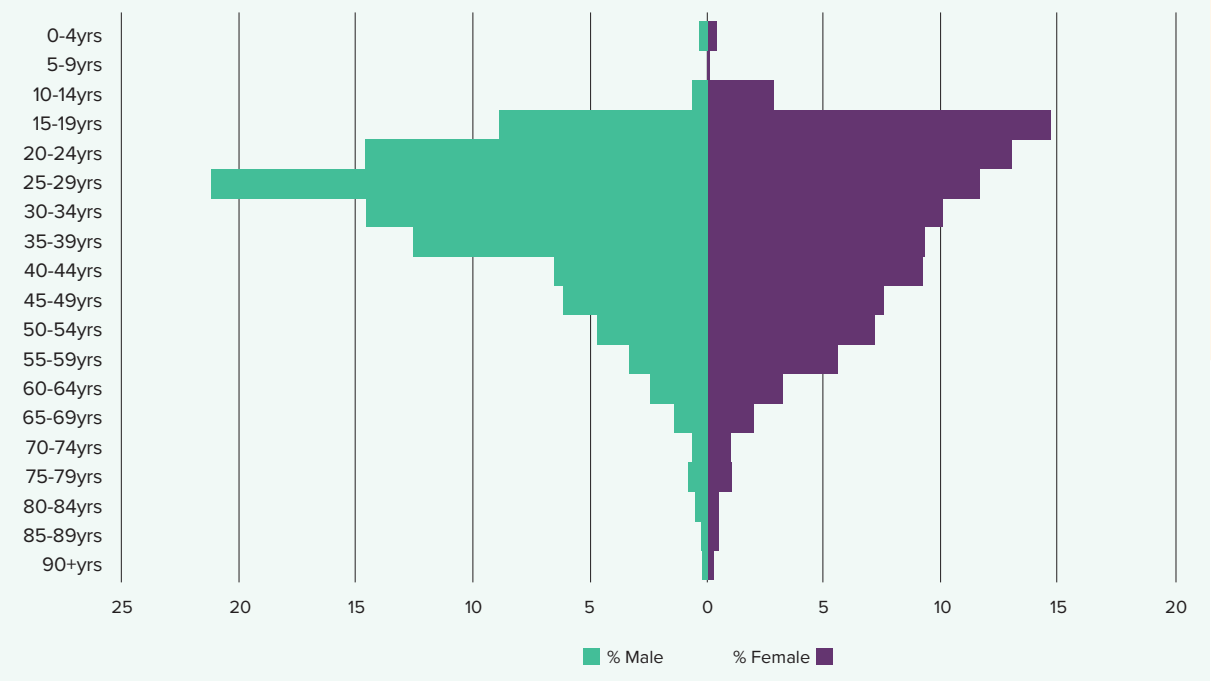
The age distribution of drug overdose responses differed according to gender. The age range that accounted for the greatest number of responses for females in 2021/22 was the 15-19 group (n=475) and 20 –24 group (n=422), while for males it was the 25-29 group (n=799) followed by the 20-24 grouping at (n=550) (see figure 6). The age distribution for NIAS overdose responses is generally in line with the NISRA report, where the 25-34 range is the category with the highest number of deaths (see figure 9). This age distribution however is quite different than what is observed in the rest of the UK, where it is the 45-49 age range that is most prevalent (ONS, 2022).

Figure 5: Overdose Calls, Responses and Arrivals at Hospital per Quarter



(Source NIAS 2023)

Figure 6: Age and Gender of Patients where Problem Involves Drugs



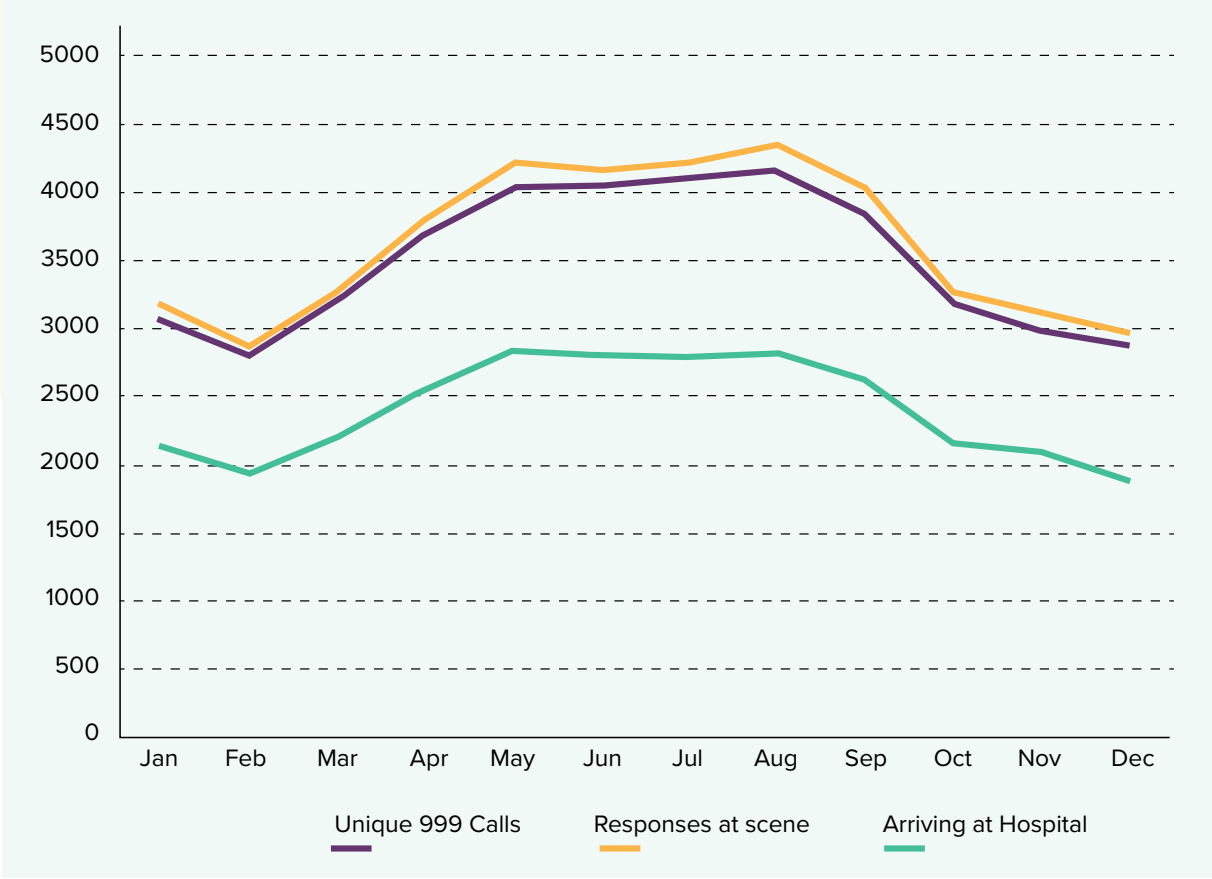
*Please note: Not all records contain Patient Gender or Patient Age, as these are not always recorded at the time of 999 calls. The values below are a count of those records where both Patient Gender and Patient Age were recorded.

Age may not be accurate, as the person making 999 calls may not know the patient and can only guess at their age and the patients themselves may not be able to confirm any personal details.

(Source NIAS 2023)

When looking at seasonality, we can observe a clear effect of the warmer months on overdose incidents, with the months between May and August being the ones with the highest number of overdoses, rising above 4,000 NIAS responses at the scene and the numbers rising and falling during the previous and subsequent months, respectively *(see figure 7)*.

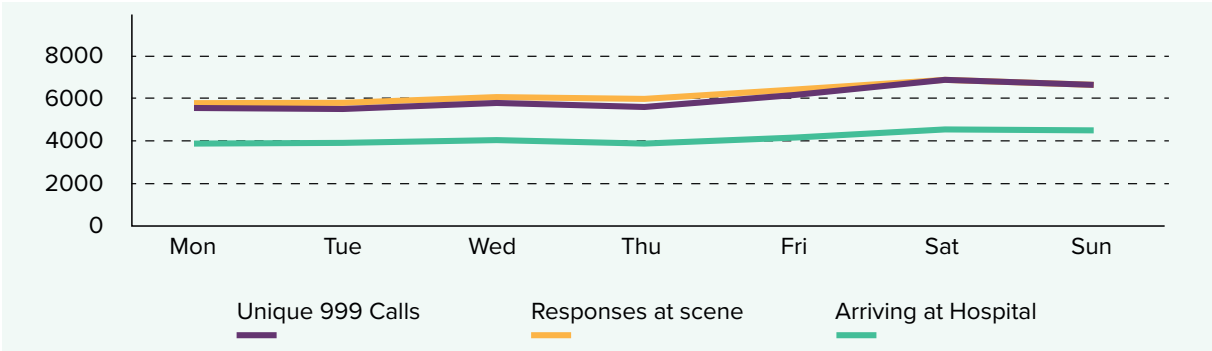
Figure 7: Overdose Calls, Responses and Arrivals at Hospital per Calendar Month



(Source NIAS 2023)

Regarding overdoses during the week, days of the weekend account for a larger number of overdoses with approximately 20% more cases on Saturdays and Sundays. This has been consistent over the five-year period (see figure 8).

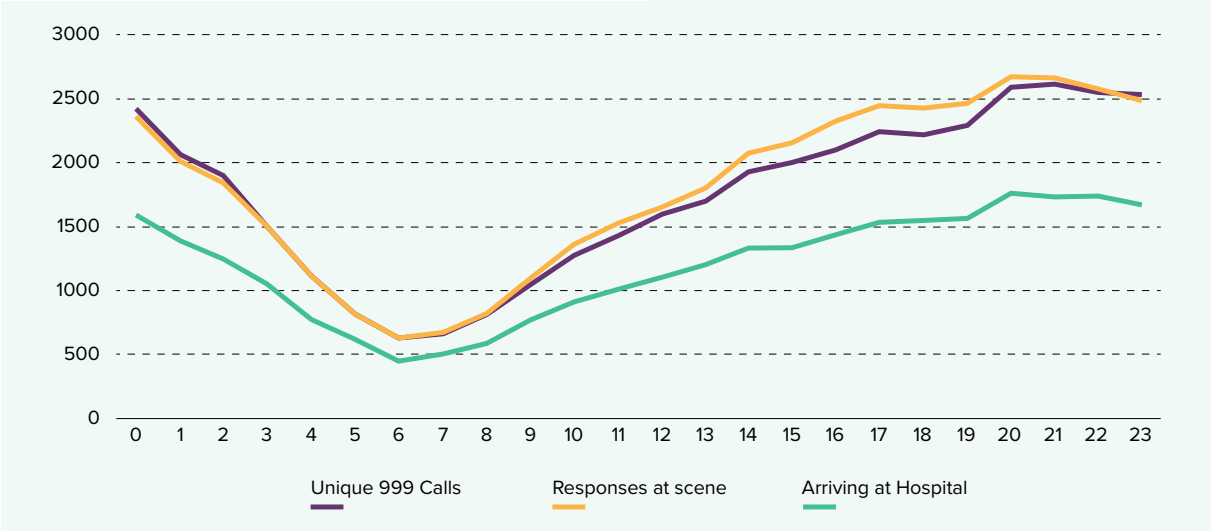
Figure 8: Overdose Incidents- Total Count of Unique 999 Calls, Resources arriving at Scene and Hospital



(Source NIAS 2023)

When we consider the pattern of overdose responses throughout the day, we observe an increasing frequency of overdoses from the early hours of the morning until the night, peaking during 8 or 9 pm and then decreasing back through the late- night hours until the early morning hours (see figure 9).

Figure 9: Overdose Calls, Responses and Arrivals by Hour of Day

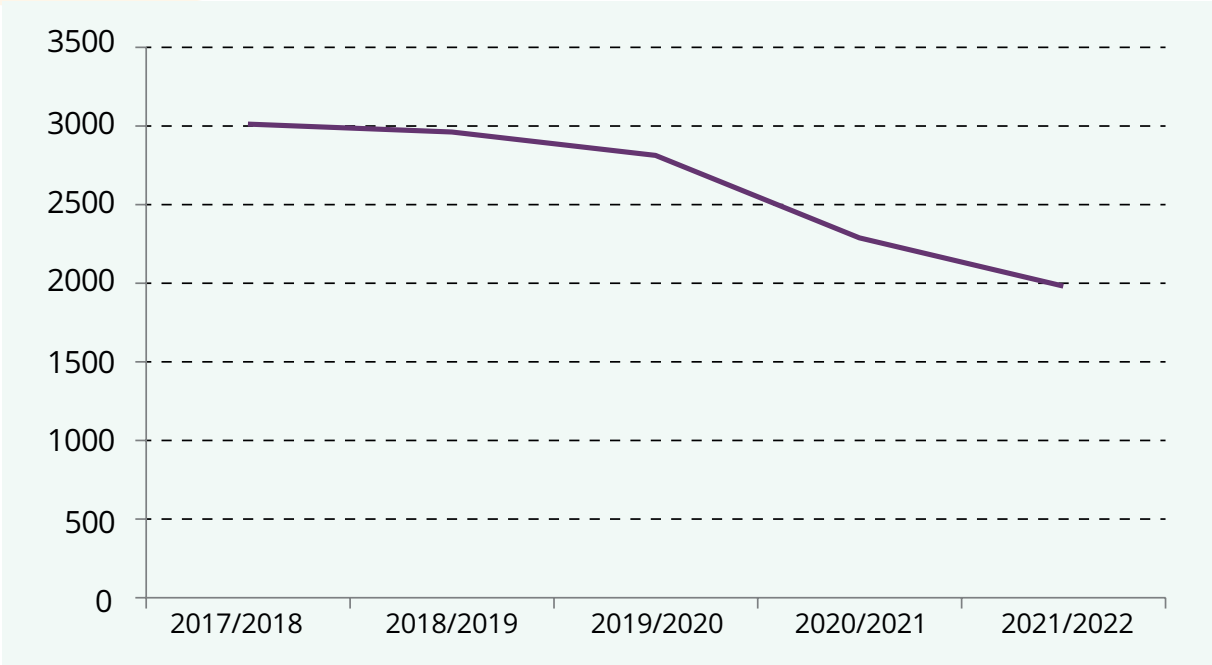


(Source NIAS 2023)

4. Emergency Department admissions due to Overdose in Northern Ireland 01/04/17- 31/03/22

In contrast with the most recent NISRA figures, emergency admissions data show a decrease in admittance due to overdoses in the last five years from just over 3,000 admissions in 2017/18 to just under 2,000 in 2020/21. This is a decrease of 34% that became more pronounced from 2019/20. There is a clear effect of the COVID-19 pandemic, with the level of admissions going down during the pandemic and not recovering to previous levels. (See figure 10).

Figure 10: Hospital Admissions due to Overdose 1/4/17 - 31/03/22



4.1 Emergency Admissions due to Overdose by Trust

Two trust areas, Western Trust and Northern Trust, have seen a decrease in emergency admissions due to overdose between 2019/20 and 2021/22. However, Belfast Trust has seen a slight increase in emergency admission numbers (473 to 482), SE Trust (401 to 420) and Southern Trust (272 to 317) between 2020/21 and 2021/22 (see figure 11).

4.2 Emergency Admissions and Age

The age group that accounted for most hospital admissions each year was the 20–29-year-old group. This is in line with the NISRA report, where the 25–34-year-old range is the most prevalent. Notably, the total number of hospital admissions is the lowest for the 2021/22 period. However, the proportion of young people aged 10–19 years attended by emergency services for overdose (n=466) was just slightly lower than recorded for the 20 –29 -year-old group (n=477) and higher than all other age groupings (see figure 12).

Figure 11: Total Emergency Admissions by Trust Due to Overdose

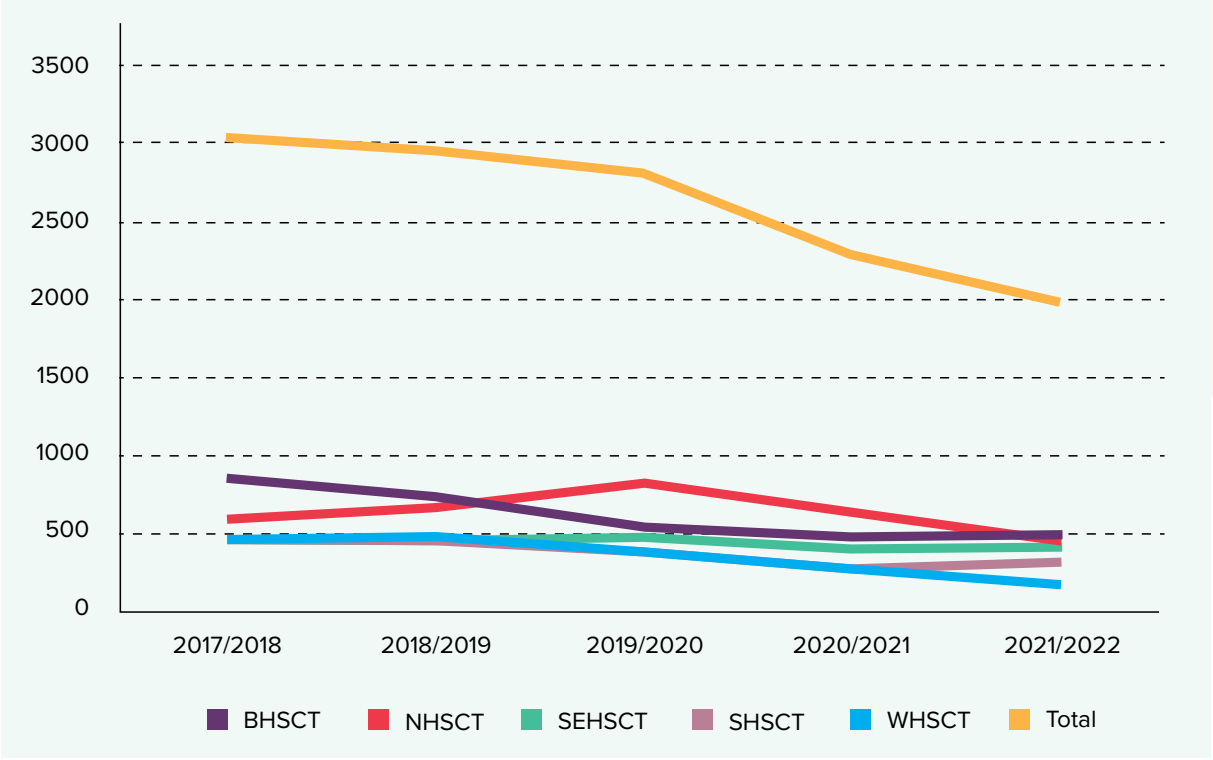
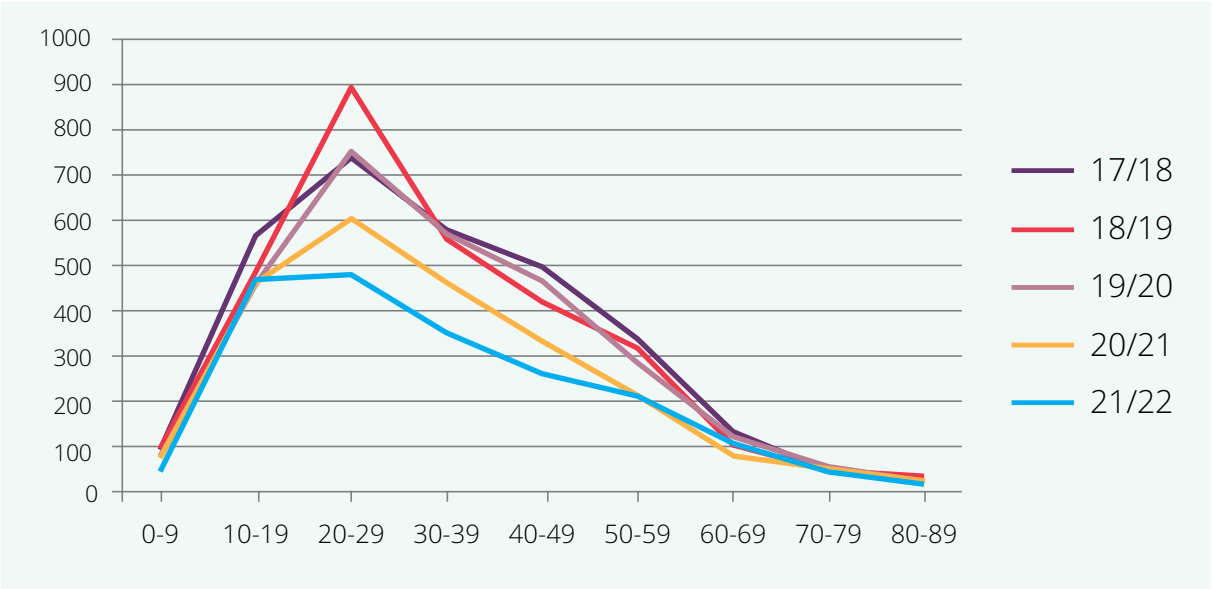


Figure 12: Emergency Admission by Age group

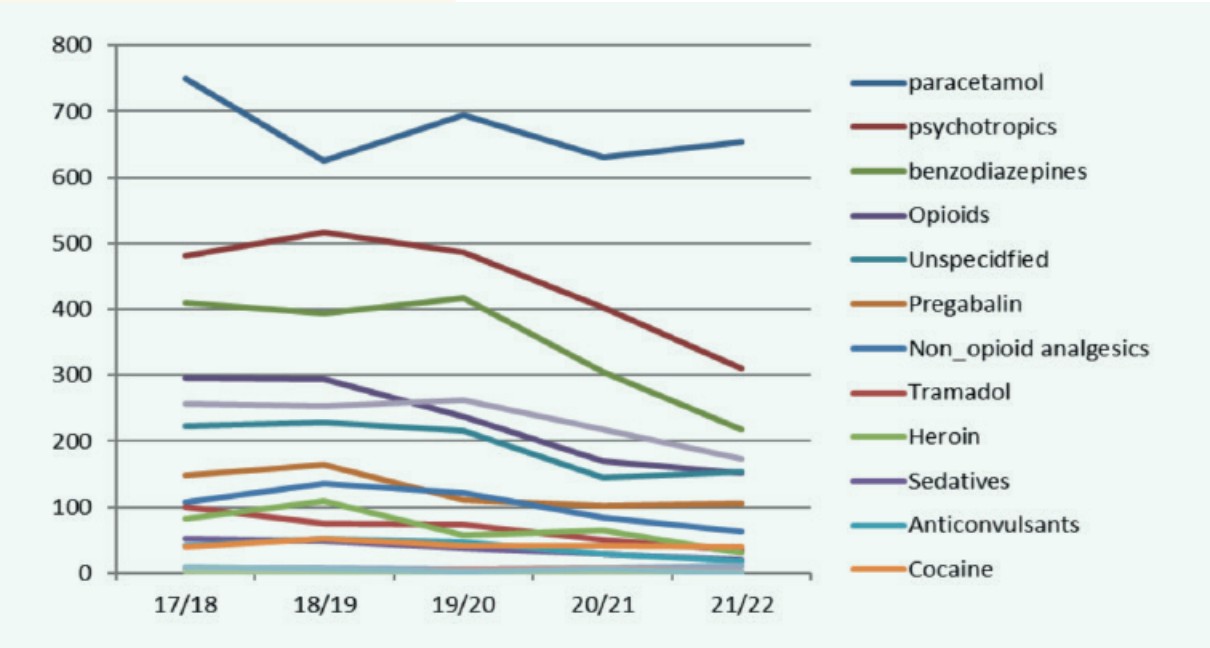


Data provided by Performance Management and Service Improvement, Strategic Planning and Performance Group (2023)

4.3 Emergency Admissions by Drug Types

The substance most implicated in emergency admissions between April 2017 and March 2022 was paracetamol, a substance more often associated with suicide attempts and accidental poisoning than problematic drug use. The second most common category is 'psychotropic drugs'[2] which together with 'unspecified' make up almost a quarter of the drugs recorded. These are followed by benzodiazepines (n=218) and opioids (n=183[3]) (see figure 13).

Figure 13: Emergency Admission by Drug Type (using Trust classification)



Data provided by Performance Management and Service Improvement, Strategic Planning and Performance Group (2023)

The number of intended overdoses with paracetamol has remained stubbornly high, which is likely a result of the incidence of social deprivation, social isolation during the pandemic, and high rates of mental health disorders.

The incidence of overdoses from other drugs, which are commonly used recreationally, has not increased as this may be because of increased provision of naloxone and support in hostels and with drug users in the community. This may also be a result of increasing medical support at concerts, festivals, and other events.

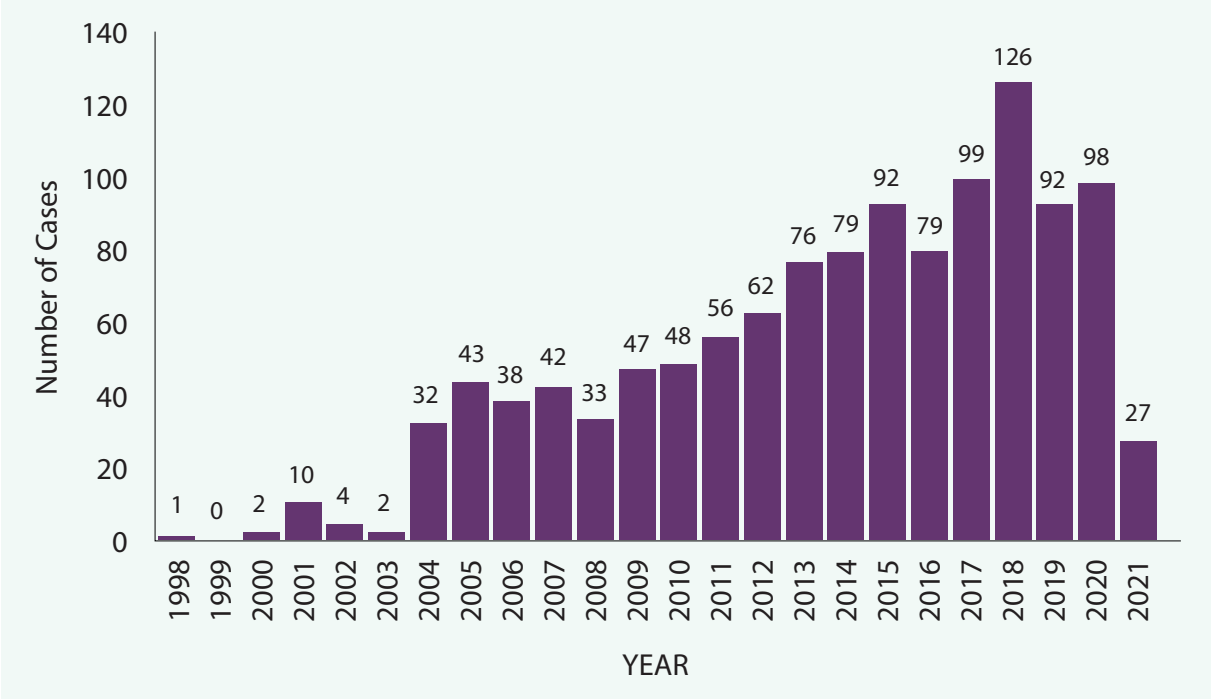
2 It was not clear what was defined as a psychotropic drug
3 Adding Tramadol and heroin (which are opioids) to the total classified by the Trust analysis gives a total of n= 218 for all opioids

5. Drug Categories reported within NPSAD

Data from NI Coroners' reports housed in the NPSAD database for 2008-2021 (n=1,765) cases represents 85% of NI reports returned to NPSAD for that period). As the average period between death and conclusion of coroners' inquests for drug related deaths is 7-10 months, further deaths from 2021 are anticipated to be reported. NI commenced reporting deaths upon inquest completion in 2004 and the few deaths before this are those which occurred in previous years and had longer investigations with inquests concluding in 2004.

The number of cases with opioid detection was the highest for 2018 at 126 and this decreased to 98 in 2020 (see figure 14). This is lower than reported in the official NISRA statistics (see pg. 9) as the NPSAD database relies on Coroners' departments submitting reports to the database and NPSAD does not usually receive all completed reports. However, it is noteworthy that NI has traditionally submitted the highest number and most detailed Coroners' reports in comparison with the rest of the UK (NPSAD 2022).

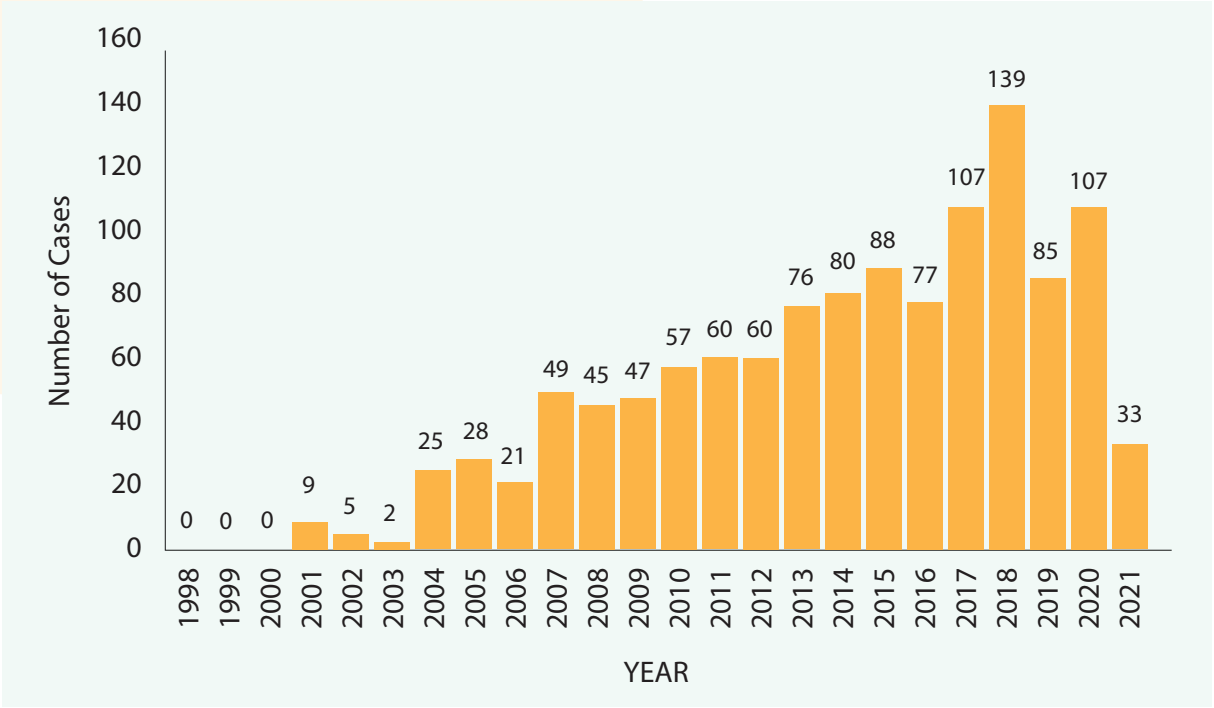
Figure 14. NO. of Cases with Postmortem Opioid Detection per year



Source NPSAD 2022 * 2021 only shows information for 44 Coroner reports received.

Likewise, the greatest number of cases with a report of benzodiazepines was noted in 2018 (n=139) with a decrease (n= 85 and 107, respectively) reported in 2019 and 2020.

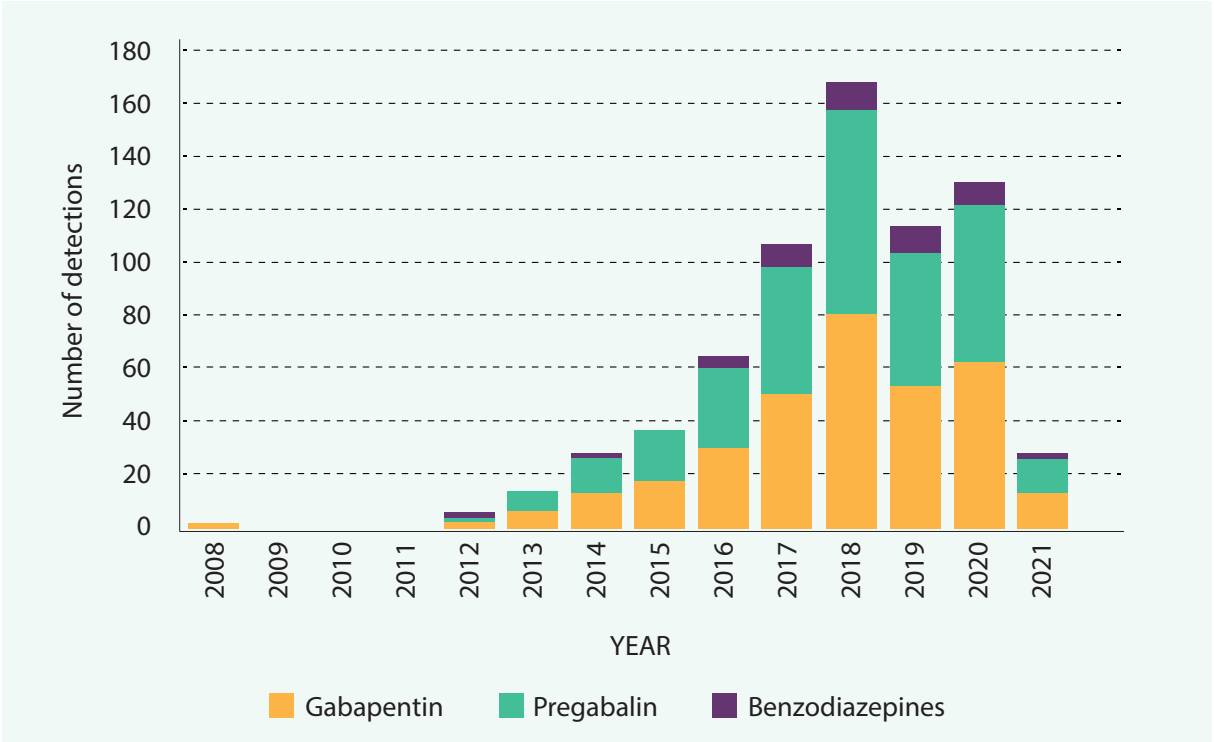
Figure 15. NO. of Cases with Post-Mortem Benzodiazepine Detection per year



Source NPSAD 2022 * 2021 only shows information for 44 Coroner reports received.

Figure 16 indicates co-detection of benzodiazepines and gabapenentoids. As for the results reported from NPSAD cases above, there was a peak in 2018 (n=168), followed by a dip in 2019 (n=114) and an increase (n=130) of co-detection in 2020.

Figure 16 No. of Post-Mortem Detection of Benzodiazepines and Gabapentionoids in cases where both a Benzodiazepine and Gabapentionoid were Co-detected.



Source NPSAD 2022 * 2021 only shows information for 44 Coroner reports received

(Note: a single case can have both pregabalin and gabapentin detected, and therefore the y-axis is the number of detections, not the number of cases

NPSAD data shows that synthetic opioids were detected in 546 coroner reports between 2008 and 2021, although there was no breakdown of specific categories (see table 3).

Table 3. Detection of Post-mortem Drug Categories for the Reporting Period 2008 to 2021

Drug category	No. of cases	Percent
Benzodiazepines	1201	68.0
All opioids	1188	67.3
Synthetic opioids	546	30.9
Antidepressants	880	49.9
Alcohol	626	35.5
Stimulants	436	24.7
Gabapentinoids	387	21.9
Antipsychotics	295	16.7
Synthetic cannabinoids	8	0.5
Volatile substances	5	0.3

(NPSAD 2022)

In addition, results from NPSAD from 2018 to 2022 for all England/Wales/NI show that fentanyl makes up the largest proportion of deaths within the synthetic opioid category. This is valid as for all cases received for the period shown below by 1st May 2023.

Table 4. Synthetic Opioids

Synthetic Opioids	2018	2019	2020	2021	2022
Etodesnitazen e	0	0	0	1	1
Etonitazene	0	0	0	4	3
Fentanyl	63	68	53	43	30
Isotonitazene	0	1	0	13	0

(Source NPSAD 2022)

6. Missed Opportunities for Intervention

Data from Coroner reports housed in the NPSAD database for 2008-2021 (n=1,765 cases representing 85% of NI reports returned to NPSAD for that period) show that in the period accounted for, there were 418 missed opportunities for intervention. The most prevalent indicator was a previous overdose, followed by a previous GP/hospital visit and prior contact with drug and mental health services (see table 5).

Table 5. Missed Opportunities for Intervention

Indicators	Frequency	Percent
Previous overdose(s)	314	75.1
Previous GP or hospital visit	94	22.5
Contact with services	79	18.9
Drug services	28	6.7
Mental health services	36	8.6
Both drug and mental health services	4	1.0
Unspecified services	11	2.6
Prison history (formally/currently incarcerated)	44	10.5

Note: cases could have more than one history indicated

Total number of cases with a missed opportunity for intervention (n=418)

(NPSAD 2022)

7. Conclusions

In recent years, there has been an increase in drug deaths in Northern Ireland. The current rate is the second highest in the UK, following Scotland, and one of the highest compared to other European countries. Reliable reports, based on robust methodology, indicate that the increase in deaths primarily affects younger age groups (NISRA 2022). Additionally, data from the Northern Ireland Ambulance Service (NIAS) reveals that the highest number of drug related/overdose calls for females is in the 15-19 age category, while for males it is in the 25-29 age category. Moreover, information from emergency admissions data indicates that the highest number of hospital admissions for overdose incidents occurred in the 10-19 age group for 2021-2022.

Currently, the rate of deaths per 100,000 for people under 35 years in Northern Ireland is alarmingly high. If this trajectory continues, it is likely that we will see an increase in overdoses and drug-related deaths across all age groups. This trend has already been observed in Scotland, where individuals under 35 accounted for 21% of all drug misuse deaths in 2021, compared to 68% in 2000. Over the past 20 years, the average age of drug misuse deaths in Scotland has risen from 32 in 2000 to 44 in 2021 (NRS 2022).

Opioid deaths are the most common contributing factor to drug misuse deaths in NI. This is in line with the UK and other countries in Europe and North America. Even though synthetic opioids, for example, fentanyl or nitazenes, have not been seen very often, their presence in UK drug deaths has increased in recent years. Recent market indicators, including the ban on opium production in Afghanistan (UNODC 2023), are suggesting a projected increase in synthetic opioids. In 2023, the Afghanistan harvest of opium is predicted to have reduced by 80% after a very lucrative harvest in 2022 (UNODC 2023). With 95% of European heroin supply coming from Afghanistan, this level of reduction is likely to see a major impact on the UK heroin market. There are indicators that the impact of the ban is already experienced across the UK. The wholesale price of heroin has doubled and there is intelligence suggesting the purity level of UK heroin is declining (Transform 2023).

It is widely acknowledged that polysubstance use is an established drug use pattern in the UK and internationally. An increase in polydrug use in NI has also been highlighted regionally in data from NISRA and NPSAD. It has also become increasingly common in NI drug-related deaths over the last number of years. For example, NISRA data indicates that whilst 5 or more drugs were reported in 2% of drug deaths in 2011 this increased to 15.5% in 2021.

Benzodiazepines and gabapentinoids are playing a significant role as contributing factors to opioid-related deaths and as the main causes of death in NI. Recently, we have witnessed an increase in the presence of designer benzodiazepines in official statistics, for example, flualprazolam and bromazolam. While these are referred to in the current NPSAD and NISRA reports, more detail is required as to how these are presented within subcategories rather than aggregated within a ‘psychoactive’ category’ (a term also used in the emergency admissions data cited in the report).

Figures from NPSAD underline that fentanyl has been highlighted in coroners’ reports for a number of years, but it is more than likely that these are patch-based prescribed medications rather than powder fentanyl. Moreover, between 2019 to 2022 NPSAD reported that nitazenes have been cited in the UK, coroners’ reports including etodesnitazene, etonitazene, and isotonitazene.

Anecdotally, these figures have increased in the last year and these reports have been corroborated by the Welsh Emerging Drugs and Identification of Novel Substances project (WEDINOS) data (2023). Since April 2021, WEDINOS has received and analysed 45 samples that were profiled as containing nitazene. To date, WEDINOS has identified five nitazenes in samples submitted to the programme, including etonitazene, isotonitazene, metonitazene, and protonitazene. During the period April 2022 to March 2023, 36 samples were submitted that were profiled as containing nitazene and were submitted in yellow powder form. Samples containing nitazenes were submitted from the UK mainland only.

In Northern Ireland, the drug landscape is also changing, and we are beginning to see evidence of nitazenes in recent drug deaths (n= 6) between June 2022 and April 2023 (Coroner's office 2023). On the 18th Oct 2023, WEDINOS reported a white tablet labelled as DIAZEPAM GALENIKA BENSEDIN from Derry/ Londonderry as containing Metonitazene, Bromazolam. Self-reported effects included, euphoria, memory loss, confusion and loss of consciousness. There were also two deaths where Xylazine were implicated in April 2023. Although nitazenes and fentanyl are both synthetic opioids, they do not share the same chemical structure. Nitazenes have only recently emerged in the last three years and they have not been connected to as many deaths as fentanyl in that period.

However, certain types of nitazenes are believed to be more potent than fentanyl, posing an even greater risk to public health. To provide a comparison, nitazenes are approximately 40 times stronger than fentanyl, which is already 50 times more potent than heroin. Regrettably, it is extremely difficult to determine if a drug contains nitazenes, and many drug screening tests are not equipped to detect this specific opioid (NIHPC 2023). In addition, due to the increased potency of nitazene compared to fentanyl, it may require up to four doses of naloxone to counteract its effects.

In Northern Ireland, the primary location where most individuals who die from a drug overdose are discovered is their own residence. Typically, these individuals are found by a friend, family member, or a staff member in their home. One organisation that provides services to people who are homeless believes that promoting a culture of tolerance and support can minimise the risks associated with substance use, especially in terms of overdoses occurring in hostels (Simon Community 2023). The implementation of harm reduction principles, along with a strong emphasis on training frontline staff in the use of naloxone, may have contributed to a decrease in the number of deaths in homeless hostels in 2022 compared to 2021 in NI.

8. Recommendations

Recommendation One

The Department of Health (DoH) and Public Health Agency (PHA) have emphasised the need for increased resources in the new Northern Ireland Substance Use Strategy, specifically for direct work with young people. It is acknowledged that long- term goals should prioritise prevention and early intervention to address trauma and other risk factors during the formative years. Currently, drug outreach services are facing unprecedented challenges due to staffing shortages, making it difficult to handle the growing pressures associated with young people at elevated risk of problematic drug use in Northern Ireland. In 2021, ten thousand young people sought help from young people services for drug and alcohol issues (NIADA (Northern Ireland Alcohol and Drugs Alliance) 2022). In the short term, it is recommended that immediate resources be allocated to service provision in order to address the escalating crisis of overdoses and overdose deaths among young people and young adults in Northern Ireland.

Recommendation Two

As stated above, more research is required in relation to how designer benzodiazepines are being used concurrently with pregabalin and opioids in NI. In the official NI data (NISRA 2022), these are presented under the general category of psychoactive drugs. Further research is needed to determine the scale and nature of the use of new designer benzodiazepines alongside prescription medications.

Reports from NI forensic toxicology should be made available from drug seizures as soon as possible after testing. In addition, rather than wait until the drug death data is made available, real time testing will make a significant difference in the effort to save lives. This is particularly crucial in the advent of newly discovered synthetic opioids or benzodiazepines, which are governed by fluctuations within UK cross border and international markets.

Recommendation three

According to reports, there has been an increase in the detection of synthetic opioids in the UK over the past five years. Government groups and criminal justice planning departments are considering a situation similar to the US, where synthetic opioids are being imported to replace heroin. It is important for the Department of Health and Public Health Agency in Northern Ireland to monitor the emergence of these synthetic opioids, especially with the restrictions on heroin imports impacting the situation in England and Wales. Additionally, the DAMIS system is a valuable source of information, but it could be enhanced by conducting immediate drug testing on samples submitted for disposal by community and voluntary sector organisations.

DAMIS could also be improved with an online alert system that goes beyond email communication. A basic app could be used to collect data from service providers, PSNI, and community hubs across Northern Ireland and distribute alerts in a more timely and efficient manner using geospatial indicators.

Recommendation Four

There should be an immediate and rigorous cost benefit analysis of the deployment of infra-red testing technology to detect variations in suspected benzo and synthetic opioid compounds for people who are at most risk of drug overdoses. Additionally, in light of some of the statistics that highlight the younger 10–19year age grouping for overdose responder data, there should be front-of-house testing for drugs that young people present with at local festivals and concerts in the 2024 festival season in NI.

Recommendation Five

The findings indicate that more work can be done regarding naloxone deployment and early overdose alarm and response systems. One area that NI is not commensurate with the remainder of the UK is in relation to peer naloxone training (ACMD 2022). We can learn from other jurisdictions, particularly Scotland, in relation to the roll out of peer-to-peer Naloxone programmes.

Recommendation Six

Research should look specifically at the coding of non fatal overdoses presented at emergency departments to standardise recordings, identify trends, improve treatment, and help target future service provision.

REFERENCES

Dame Carol Black (2021). Independent review of drugs part two: prevention, treatment, and recovery. Department of Health and Social Care. https://www.gov.uk/government/publications/review-of-drugs- phase-two-report/review-of-drugs-part-two-prevention-treatment-and-recovery

DOH (2021), Preventing Harm, Empowering Recovery - Substance Use Strategy | Department of Health (health-ni.gov.uk)

DOH (2021) Mental Health Strategy 2021-2031 | Department of Health (health-ni.gov.uk)

European Monitoring Centre for Drugs and Drug Addiction (2023), European Drug Report 2023: Trends and Developments, https://www.emcdda.europa.eu/publications/european-drug- report/2023_en

NACDA - Bulletin 2 - Prevalence of Drug Use and Gambling in Ireland and Drug Use in Northern Ireland 2014/15: Regional Drug and Alcohol Task Force (Ireland) and Health and Social Care Trust (Northern Ireland) Results (health-ni.gov.uk) NACDA - Bulletin 2 - Prevalence of Drug Use and Gambling in Ireland and Drug Use in Northern Ireland 2014/15: Regional Drug and Alcohol Task Force (Ireland) and Health and Social Care Trust (Northern Ireland) Results (health-ni.gov.uk)

NIHPC (Feb 2023 National Public Health Information Coalition (NPHIC) - New Opioid Is Stronger Than Fentanyl

NISRA (November 2022). Drug related and Drug-Misuse Deaths 2011-2021. https://www.nisra.gov.uk/publications/drug related-and-drug-misuse-deaths-2011-2021

(NI Government, The Executive Office 2021) Programme for Government | The Executive Office (executiveoffice-ni.gov.uk)

NI Assembly (2021) Public Accounts Committee Inquiry into Addiction Services in Northern Ireland: Department of Health; Health and Social Care Board 21 October 2021pac_ addiction-services-in-ni- dh-hscb-niao-dof_211021.pdf (niassembly.gov.uk)

NRS (August 2022) Drug related deaths in Scotland in 2021

Drug related deaths in Scotland in 2021 Report (nrscotland.gov.uk)

ONS (August 2022) Deaths related to drug poisoning in England and Wales: 2021 registration

Deaths related to drug poisoning in England and Wales - Office for National Statistics (ons.gov.uk) (Date of Access 13/8/23)

UK & Irish Govt, (2020) 2020-01-08_a_new_decade__a_new_approach.pdf (publishing.service.gov.uk)

United Nations Office on Drugs and Crime - United Nations Office on Drugs and Crime (unodc.org)

Weidnos Annual Report (March 2023**)** Annual-Report-22-23-English.pdf (wedinos.org)

Appendix A NISRA classification of NPS

The drugs included in the new psychoactive substances grouping include all drugs controlled by the Psychoactive Substance Act 2016, included those that have subsequently classified under the Misuse of Drugs Act. The drugs included in the category are listed below. It is important to note that NPS drugs are also categorised by type, i.e. they can be amphetamines, benzodiapines or another type of drug, so they will appear under both the relevant drug type and as an NPS.

1-(benzofuran-5-yl)-N-methylpropan-2-amine
1-(Benzofuran-5-yl)-propan-2-amine
1-(Benzofuran-6-yl)-propan-2-amine
2-(1H-Indol-5-yl)-1-methylethylamine
25B-NBOMe
25C-NBOMe
25I-NBOMe
2-Aminoindane
2-diphenylmethylpyrrolidine
3-FPM
3-Methoxyphencyclidine
4,4'-DMAR
4-Fluoroephedrine
4-Fluoromethcathinone
4-Methoxymethcathinone
4-Methylamphetamine
4-Methylethcathinone
4-Methylpentedrone
4f-mdmb-bica
4f-mdmb-binaca
5-EAPB
5F-ADB
5F-AKB-48
5f-amb
5f-mdmb-pica
5F-PB-22
AB-CHMINACA
ab-fubinaca
Acetylfentanyl
Adb-butinaca
Adb-hexinaca
AH-7921
Alpha-methyltryptamine
Alpha-PHP
Alpha-PVP
APB
APDB
Benzylfentanyl
Butylone
BZP
Cathine
Cathinone
Chloroethcathinone
Chlorophenylpiperazine
Clephedrone
Cyclopropylfentanyl
Desoxypipradrol
Dibutylone
Diclazepam
Diphenidine
EAPB
Ethylphenidate
Etizolam
Etonitazepyne
Eutylone
Flualprazolam
Flubromazepam
Flubromazolam
Fluoromethamphetamine
Fluoromethcathinone

Furanylfentanyl
GHB
Isotonitazene
Khat
Legal high
MDDA
MDMB-4en-pinaca
MDMB-CHMICA
MDPHP
Mephedrone
Methiopropamine
Methoxetamine
Methoxphenidine
Methoxyacetylfentanyl
Methylenedioxypyrovalerone
Methylethcathinone
Methylone
Mexedrone
N-Ethylpentylone
N-Methyl-3-phenyl-norbornan-2-amine
NPS
Pentylone
Ocfentanil
Phenazepam
Piperazine
Pyrazolam
Synthetic cannabinoid
TFMPP
U-47700

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