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Drug Poisoning Deaths in Ireland in 2022: Data from the National Drug-Related Deaths Index (NDRDI)

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Glossary of Terms

Drug	Examples
Antipsychotic drugs are used to treat conditions involving psychosis, confused thoughts, or mania, such as schizophrenia, bipolar depression, and dementia.	Olanzapine, quetiapine
Antidepressants are drugs used to alleviate depression. They may also be used to treat other conditions including generalised anxiety disorder, post-traumatic stress disorder, and chronic pain.	Amitriptyline, mirtazapine, sertraline, venlafaxine
Antihistamines are drugs mainly used to treat allergy symptoms but sometimes prescribed for motion sickness and short-term sleeping issues.	Promethazine, diphenhydramine
Benzodiazepines are mainly used to treat anxiety. Benzodiazepines may also be used to treat seizures and alcohol withdrawal.	Alprazolam, diazepam, flurazepam
Cocaine is an illicit stimulant drug, available in a powder form ("coke") that is typically snorted, or in a smokable crystal or "rock" form known as "crack".	Cocaine powder or crack cocaine
Gabapentinoids are used to treat nerve pain and epilepsy. They have relaxant and sedative effects and may be misused alone or with other drugs to produce desired effects. Pregabalin is sometimes used to treat generalised anxiety disorder.	Pregabalin, gabapentin
Non-opioid analgesics are pain relief drugs that are not opioids.	Paracetamol, ibuprofen
New psychoactive substances (NPS) are narcotic or psychotropic drugs that are not controlled by the United Nations Drug Control Conventions. Sometimes called "designer drugs", NPS are often designed to mimic the effects of illegal drugs like cocaine, cannabis, and ecstasy.	Etizolam, adinazolam (NPS benzodiazepines)
Nitazenes are highly potent synthetic opioid drugs sometimes mixed into illicit drugs like heroin or counterfeit benzodiazepines.	N-pyrrolidino protonitazene
Opioids are drugs that help relieve pain. Opioids include illicit drugs such as **heroin**, and prescribable drugs such as **codeine**.	Heroin, methadone, tramadol, codeine, oxycodone
Street drugs, where used in this report, refers to a prescribable drug obtained illegally or shared without a prescription and used recreationally or to self-medicate.	Street methadone
Z drugs are non-benzodiazepine hypnotic drugs that have a sedating effect and are used to treat insomnia.	Zopiclone, zolpidem

Introduction

This bulletin describes drug poisoning deaths in 2022 using data from Ireland's National Drug- Related Death Index (NDRDI). Trends in drug poisoning deaths for the years 2013 to 2022 are also described.[1]

Data in this bulletin supersede all data previously published by the NDRDI.

Background

The NDRDI was established in 2005 in response to the *National Drugs Strategy 2001-2008*[2]; specifically, Action 67 - 'to develop an accurate mechanism for recording the number of drug-related deaths in Ireland'. The NDRDI enables Ireland to meet its mandatory reporting requirements to the European Union and United Nations, as well as being widely used to provide evidence for national policy and planning.

The NDRDI is jointly funded by the Department of Health and Department of Justice and is maintained by the National Health Information Systems Unit of the Health Research Board (HRB).

NDRDI data sources

The primary source of NDRDI data is coroner files. The NDRDI also includes data from the Hospital Inpatient Enquiry (HIPE) system, the Central Treatment List (CTL), the General Mortality Register (GMR) via the Central Statistics Office (CSO), and the Primary Care Reimbursement Service (PCRS) via the Health Service Executive (HSE).[3]

Annual NDRDI data are routinely updated when new coronial information becomes available following the completion of inquests. Therefore, previously published figures may have changed.[4]

Data published by the CSO and Eurostat were used in calculating mortality rates.[5, 6] Data on deaths among people who were experiencing homelessness are validated with the Dublin Region Homeless Executive (DRHE).

Policy context

Reducing drug-related deaths and other drug-related harms is a strategic focus of the current National Drug and Alcohol Strategy *Reducing Harm, Supporting Recovery: A Health Led Response to Drug and Alcohol Use in Ireland 2017–2025* (Strategic Action 2.2.30),[7] and a key initiative within Priority 1 of the Department of Health's *Statement of Strategy 2023-2025*.[8] The data published in this bulletin span the implementation periods of both the previous (2009 to 2016)[9] and current (2017 to 2025)[7] national drugs strategies and will inform the new strategy.

Methodology

Inclusion criteria

Poisoning (overdose) deaths are deaths due to the toxic effects of one or more substances. Included in this bulletin are poisoning deaths due to illicit drugs and poisoning deaths due to the use or misuse of prescribable drugs.

Exclusion criteria

Alcohol poisoning deaths where no other substance was implicated (referred to as *alcohol-only poisoning deaths),* are not included within the figures for *drug poisoning deaths* in this bulletin. The number of *alcohol-only* poisoning deaths and key characteristics of these deaths are presented separately in E-Appendix E. Deaths where alcohol is implicated as part of a polysubstance poisoning death are included in the main body of the report. In E-Appendix F, all poisoning deaths with alcohol implicated are described.

Non-poisoning deaths

Non-poisoning deaths are deaths among people with a history of drug dependency or non-dependent problematic use of drugs, regardless of whether the use of the drug had a direct impact on the cause of death. Data on non-poisoning deaths (2013 to 2022) will be presented in a separate HRB publication.

Completeness of data

Information in coronial files is not originally generated for research purposes, and so the data are not complete for some NDRDI variables (e.g. ethnicity and mental health history). Where relevant in this bulletin, variables with incomplete data are highlighted, with language such as “where known” and “at least” used to describe the findings. For some variables, it may be that positive instances are indicated in files (e.g. the deceased was once imprisoned), while the opposite is less likely to be stated (i.e. the deceased was never imprisoned).

Summary

This bulletin presents NDRDI data on drug poisoning deaths in 2022, with key trends over the period 2013 to 2022. Additional data tables are presented separately in online E-appendices.[1]

1. Number of deaths

NDRDI recorded **343 drug poisoning deaths** in Ireland for 2022. This equates to seven (6.6) deaths per 100,000 of the population in that year.[10] Males accounted for 67.6% (232) of deaths and females for 32.4% (111) of deaths.

2. Drugs implicated in drug poisoning deaths in 2022

Opioids (65.0%), **benzodiazepines** (48.1%), and **cocaine** (33.5%) were the three most common ***drug groups*** implicated in poisoning deaths overall (Table 1). The main ***specific drugs*** implicated were methadone (35.9%), cocaine (33.5%), diazepam (29.2%), alprazolam (28.0%), heroin (22.7%), alcohol (19.0%), and pregabalin (18.4%) (Table 2). The majority of deaths (81.0%) involved **prescribable drugs**.

- **Methadone** was the most common opioid, implicated in more than 1 in 3 (35.9%) deaths overall and in a greater proportion of deaths among males (38.8%) than among females (29.7%) (Table 2).
- **Cocaine** was implicated in 1 in 3 (33.5%) deaths overall (Tables 1 and 2) and 8 in 10 (80.9%) of these were among males. Cocaine was implicated in 40.1% of deaths among males compared to 19.8% of deaths among females (Tables 1 and 2).
- **Diazepam** (29.2%) and **alprazolam** (28.0%) were the most common benzodiazepines; each was implicated in almost 3 in 10 deaths overall (Table 2).
- **Heroin** was implicated in 1 in 4 (22.7%) deaths; these were mostly among males (82.1%) (Table 2).
- **Gabapentinoid/antiepileptic** drugs were implicated in more than 1 in 5 (22.4%) deaths and in a greater proportion of deaths among females (29.7%) than among males (19.0%) (Table 1).
- **Pregabalin** was the most common gabapentinoid/antiepileptic drug implicated. Pregabalin was implicated in almost 1 in 5 (18.4%) deaths overall and in a greater proportion of deaths among females (25.2%) than among males (15.1%) (Table 2).
- **Antidepressants** were implicated in a greater proportion of deaths among females (37.8%) than among males (21.6%) (Table 1).

- **Mirtazapine** was the most common antidepressant (11.4%); it was implicated in a higher proportion of deaths among females (14.4%) than among males (9.9%) (Table 2).
- Seven **novel psychoactive substances** (NPS) were implicated in poisoning deaths in 2022 (Table 1), and all were NPS benzodiazepines.
- No **nitazenes** were implicated in deaths in 2022.
- 1 in 5 (19.0%) deaths overall had **alcohol** implicated along with other drugs, and proportions were similar for males (19.0%) and females (18.9%) (Table 1 and E-Appendix F). In addition, 67 alcohol-only poisonings were recorded (E-Appendix E).
- In 2022, almost 4 in 5 (77.8%, 267) drug poisoning deaths were **polysubstance poisonings** (more than one drug was implicated) (Table 3).
- **Methadone** (42.3%), **diazepam** (37.5%), **alprazolam** (36.0%), **cocaine** (34.1%), **alcohol** (24.3%), **heroin** (27.0%), **pregabalin** (23.6%), and **zopiclone** (19.9%) were the most common drugs in polysubstance poisonings (Table 3).
- In 2022, 6 in 10 (58.0%, 199/343) deaths overall were polysubstance poisonings where opioids were implicated along with other non-opioid drugs.[11]
- Almost 1 in 4 (22.5%) polysubstance poisoning deaths had **more than one opioid** implicated, while 3 in 10 (30.3%) had **more than one benzodiazepine** implicated. A small proportion (7.5%) of polysubstance poisoning deaths had **more than one antidepressant drug** implicated, and the proportion was slightly higher for females (14.0%) than for males (4.4%).
- Most deaths with **methadone** implicated were polysubstance poisonings (91.9%, 113) (Table 4). The most common drugs implicated with methadone were alprazolam (64), diazepam (58), cocaine (45), and pregabalin (38) (Table 4).
- The majority of deaths with **cocaine** implicated were polysubstance poisonings (79.1%, 91). Heroin (50), methadone (45), alprazolam (37), and diazepam (35) were the most common substances implicated with cocaine.

3. Location, place, and context of drug poisoning deaths in 2022

- The largest proportion of poisonings occurred in HSE Dublin and North East (29.7%) **Health Region (HR)**[12], followed by HSE Dublin and Midlands HR (18.4%), and HSE South West HR (14.9%) (E-Appendix B).
- 7 in 10 (70.3%) poisonings occurred in a **private dwelling**, while a small proportion (7.9%) of poisonings occurred in a **public place**. Almost 1 in 10 (8.5%) poisonings occurred in **accommodation for people who are homeless** (E-Appendix A).

- Almost 1 in 2 (46.6%) of the deceased were **alone** when the incident occurred (E-Appendix A).
- Almost 1 in 10 (9.3%) people were **injecting at the time of death** (Appendix B).

4. Characteristics of the deceased in 2022

Sociodemographic profile

- The **median age** of the deceased was 45 years (45 years for males and 46 years for females) (Appendix B).
- At least 2 in 5 (44.9%) of the deceased were **not in employment** (E-Appendix A).
- Most (69.1%) of the deceased were living in **stable accommodation** (E-Appendix A).
- More than 1 in 10 (12.5%) of the deceased were experiencing **homelessness** (Appendix B).
- Most of the deceased were residing in the HSE Dublin and North East HR, (29.2%), followed by HSE Dublin and Midlands HR (23.3%), and HSE Dublin and South East HR (16.9%) (E-Appendix C).

Health and health risk behaviours 2022 (Table 5)

- The majority (77.8%, 267) of the deceased had a **history of substance misuse or dependency**. Among this group:
- **Cocaine** (56.0%) was the most common drug used. A history of cocaine use was recorded for 62.7% of males and 38.2% of females.
- A history of **opioid** use was recorded for 70.4% of the deceased.
  - **Heroin** (49.2%) was the most common opioid and the second most common drug used overall. A history of heroin use was recorded for 55.4% of males and 32.9% of females.
  - A history of **street methadone** use was recorded for 18.4% (20.2% of males and 13.5% of females).
- A history of misusing **benzodiazepines** was recorded for 28.2% (30.1% of males and 23.2% of females).
- A history of **polysubstance use** (the use of more than one drug) was recorded for 54.5% (64.7% of males and 33.3% of females).
- Almost 1 in 4 (23.3%, 80) of the deceased were known to have **ever injected** drugs.
  - Of those, 2 in 5 (40.0%) were **injecting at the time of death**.

Other health issues:

- At least 15.3% of the deceased had a history of a **blood borne virus**.
- Almost 1 in 2 (44.3%) of the deceased had a recorded history of **mental health issues** (52.0% of females and 45.8% of males).
- At least 1 in 4 (26.5%) of the deceased were in **opioid agonist treatment (OAT)** at the time of death (27.2% of males and 25.2% of females).

5. Trends in drug poisoning deaths 2013 to 2022

Number of deaths and mortality rates

- The number of poisoning deaths increased from 324 in 2013 to a peak of 446 in 2020 and then decreased to 343 deaths in 2022 (Figure 6 & Table 7). The highest number of poisoning deaths ever recorded by NDRDI was in 2020. Trends for the period must be interpreted in the context of COVID-19 and related public health measures from March 2020.
- The number of drug poisoning deaths **increased** 5.9% from 2013 to 2022 (Figure 3). Between 2021 and 2022, the number of deaths **decreased** by 8.0%. Between 2020 and 2022, the number of deaths **decreased** by 23.1%.
- **Moving average trend** data show that, having increased from 2017 to 2020, the number of deaths plateaued before decreasing slightly in 2022 (Figure 3), even when population structure and changes over the period are considered (Figure 5).
- Despite a reduction in the number of deaths in 2022, overall **mortality rates** have changed little from 2017 and appear consistent with a return in 2022 to pre-pandemic levels (Figure 5).
- **Males** are continually in the majority, accounting for at least 3 in 5 deaths in every year (Table 6).

Drugs implicated in drug poisoning deaths 2013 to 2022

- Between 2021 and 2022, the number of deaths decreased for the main drug groups **except cocaine** (Table 7). Among the five main drug groups, the largest ten-year increase was for **cocaine** (a 259.4% increase).
- **Methadone** increased 30.9% over the ten-year period but decreased 18.5% between 2020 and 2022 (Appendix C).
- **Heroin** decreased 11.4% over the period but decreased 36.1% between 2020 and 2022 from a peak in 2020 (Appendix C).
- **Other opioids** (oxycodone hydrochloride, codeine, and morphine) increased over ten years.

- **Alprazolam** increased by 100.0% between 2013 and 2022, while **diazepam** and **flurazepam** decreased by 11.5% and 48.9% respectively (Appendix C).
- The second largest ten-year increase was **gabapentinoids/antiepileptics** (a 250.0% increase) (Figure 6), mainly attributable to a 350.0% increase in pregabalin; pregabalin decreased 33.7% between 2020 and 2022, from a peak in 2020 (Appendix C).
- The main antipsychotic drugs implicated were **olanzapine** and **quetiapine**, which both increased over the ten-year period (by 21.4% and 23.1% respectively) (Appendix C).
- There was a 110.5% increase in the number of deaths with **other medications** (e.g., antihistamines) implicated from 2013 to 2022 and a 11.1% decrease between 2021 and 2022 (Table 7).
- **Alcohol** as part of polysubstance poisoning decreased by 21.7% over ten years, and 27.0% between 2020 and 2022 (Table 7).

Characteristics of the deceased and circumstances of death 2013 to 2022 (Appendix B)

Between 2013 and 2022:

- The **median age** at death increased from 38.5 years to 45 years, mainly due to an increase in the median age for males (Appendix B).
- A history of **substance misuse or dependency** increased from 74.1% to 77.8% (Appendix B).
- The proportion of people with a **lifetime history of injecting** was similar in 2013 (24.4%) and 2022 (23.3%) (Appendix B). Among *those who had ever injected*, **injecting at the time of death** decreased from 59.5% in 2013 to 40.0% in 2022 (Appendix B).
- Being **alone at the time of the incident** leading to death increased from 39.2% in 2013 to 46.6% in 2022 (E-Appendix A).

1. The number of drug poisoning deaths in 2022

NDRDI recorded 343 drug poisoning deaths in Ireland for 2022. This equates to seven (6.6) deaths per 100,000 of the population in that year.[10] The deceased were 232 (67.6%) males and 111 (32.4%) females.

Number of deaths & breakdown by sex

2. Drugs implicated in drug poisoning deaths in 2022

In 2022, opioids (65.0%), benzodiazepines (48.1%), and cocaine (33.5%) were the three most common ***drug groups*** implicated in poisoning deaths overall, and among males (Table 1). Among females, the three most common drugs groups implicated were opioids (60.4%), benzodiazepines (45.9%), antidepressants (37.8%).

Table 1 Number of drug poisoning deaths by drug group and sex, NDRDI 2022

	All		Males		Females	
	n	%	n	%	n	%
Number of deaths[a]	**343**	**100**	**232**	**67.6**	**111**	**32.4**
Opioids	223	65.0	156	67.2	67	60.4
Benzodiazepines	165	48.1	114	49.1	51	45.9
Cocaine	115	33.5	93	40.1	22	19.8
Antidepressants	92	26.8	50	21.6	42	37.8
Gabapentinoids/ antiepileptics	77	22.4	44	19.0	33	29.7
Alcohol[b]	65	19.0	44	19.0	21	18.9
Z drugs	60	17.5	38	16.4	22	19.8
Antipsychotics	48	14.0	30	12.9	18	16.2
Other medications[c]	40	11.7	21	9.1	19	17.1
Non-opioid analgesics	38	11.1	16	6.9	22	19.8
Novel psychoactive substances	7	2.0	7	3.0	0	0
Other amphetamine/ stimulant[d]	7	2.0	~	~	~	~
Other drugs[e]	31	9.0	23	9.9	8	7.2

a An individual death may have more than one drug implicated

b Alcohol as part of a polysubstance poisoning

c For example, antihistamines

d For example, MDMA (ecstasy)

e For example, hallucinogens and volatile inhalants

~ Five deaths or fewer

The main ***specific drugs*** implicated in drug poisoning deaths in 2022 were methadone (35.9%), cocaine (33.5%), diazepam (29.2%), alprazolam (28.0%), heroin (22.7%), alcohol (19.0%), and pregabalin (18.4%) (Table 2). This pattern varied by sex (Table 2).

Table 2 Number of drug poisoning deaths by most common specific drug implicated and sex, NDRDI 2022*

	All		Males		Females	
	n	%	n	%	n	%
Number of deaths[a]	**343**	**100**	**232**	**67.6**	**111**	**32.4**
Methadone	123	35.9	90	38.8	33	29.7
Cocaine	115	33.5	93	40.1	22	19.8
Diazepam	100	29.2	69	29.7	31	27.9
Alprazolam	96	28.0	71	30.6	25	22.5
Heroin	78	22.7	64	27.6	14	12.6
Alcohol[b]	65	19.0	44	19.0	21	18.9
Pregabalin	63	18.4	35	15.1	28	25.2
Zopiclone	55	16.0	36	15.5	19	17.1
Mirtazapine	39	11.4	23	9.9	16	14.4
Olanzapine	34	9.9	25	10.8	9	8.1
Paracetamol	32	9.3	11	4.7	21	18.9
Flurazepam	24	7.0	15	6.5	9	8.1
Codeine	22	6.4	12	5.2	10	9.0
Tramadol hydrochloride	19	5.5	8	3.4	11	9.9
Morphine	18	5.2	11	4.7	7	6.3
Amitriptyline	17	5.0	~	~	~	~
Quetiapine	16	4.7	~	~	~	~
Venlafaxine	14	4.1	8	3.4	6	5.4
Oxycodone hydrochloride	13	3.8	~	~	~	~
Sertraline	11	3.2	~	~	~	~
Promethazine	11	3.2	~	~	~	~
Fluoxetine	8	2.3	~	~	~	~

* Specific drugs for which there were fewer than 8 deaths are not listed

a An individual death may have more than one drug implicated

b Alcohol as part of a polysubstance poisoning

~ Five deaths or fewer

Polysubstance poisoning deaths

In 2022, almost 4 in 5 (77.8%, 267) drug poisoning deaths were **polysubstance poisonings** (poisoning by more than one drug) (Table 3). The most common polysubstance poisoning drugs were methadone (42.3%), diazepam (37.5%), and alprazolam (36.0%). Among males, the most common polysubstance poisoning drugs were methadone (45.9%), cocaine (39.8%), and alprazolam (39.2%), whereas among females, diazepam (36.0%), methadone (34.9%), and pregabalin (32.6%) were most common.

Table 3 Most common specific drugs implicated in polysubstance poisoning deaths and the number of deaths by sex, NDRDI 2022*

	All deaths		Males		Females	
	n	%	n	%	n	%
Number of poisoning deaths[a]	**343**	**100**	**232**	**67.6**	**111**	**32.4**
Number of polysubstance deaths	**267**	**77.8**	**181**	**68.0**	**86**	**32.0**
Methadone	113	42.3	83	45.9	30	34.9
Diazepam	100	37.5	69	38.1	31	36.0
Alprazolam	96	36.0	71	39.2	25	29.1
Cocaine	91	34.1	72	39.8	19	22.1
Heroin	72	27.0	58	32.0	14	16.3
Alcohol[b]	65	24.3	44	24.3	21	24.4
Pregabalin	63	23.6	35	19.3	28	32.6
Zopiclone	53	19.9	34	18.8	19	22.1
Mirtazapine	39	14.6	23	12.7	16	18.6
Olanzapine	32	12.0	23	12.7	9	10.5
Paracetamol	26	9.7	10	5.5	16	18.6
Flurazepam	23	8.6	15	8.3	8	9.3
Codeine	21	7.9	12	6.6	9	10.5
Tramadol hydrochloride	19	7.1	8	4.4	11	12.8
Morphine	18	6.7	11	6.1	7	8.1
Quetiapine	16	6.0	~	~	~	~
Benzodiazepines (unspecified)	15	5.6	9	5.0	6	7.0
Venlafaxine	13	4.9	~	~	~	~
Amitriptyline	12	4.5	~	~	~	~
Oxycodone hydrochloride	11	4.1	~	~	~	~

* Specific drugs for which there were a small number of deaths are not listed

a An individual death may have more than one drug implicated

b Alcohol as part of a polysubstance poisoning

Polysubstance combinations

Table 4 presents the most common **additional drugs** implicated in polysubstance poisoning deaths for the six most common poisoning drugs (excluding alcohol) in 2022, along with the number of deaths for each combination.

- The majority of deaths with **methadone** implicated were polysubstance poisonings (91.1%, 113). The most common drugs implicated with methadone were alprazolam (64), diazepam (58), cocaine (45), and pregabalin (38).
- All deaths with **diazepam** (100) implicated were polysubstance poisonings.
- The majority of deaths with **cocaine** implicated were polysubstance poisonings (91, 79.1%). Heroin (50), methadone (45), alprazolam (37), and diazepam (35) were the most common substances implicated with cocaine.
- The majority of deaths with **heroin** implicated (92.3%, 72) were polysubstance poisonings. Cocaine (50), alprazolam (37), and diazepam (34) were the most common drugs implicated with heroin in polysubstance poisonings.
- Deaths with **pregabalin** (63) implicated were all polysubstance poisonings, the most common additional drugs implicated being diazepam (43), methadone (38), and alprazolam (33).
- In 2022, the majority (58.0%, 199/343) of deaths overall were polysubstance poisonings where opioids were implicated along with other non-opioid drugs.[11]

Table 4 Main polysubstance combinations and number of deaths for the six most common poisoning drugs (excluding alcohol)* implicated in polysubstance poisoning deaths, NDRDI 2022

	Methadone	Diazepam	Alprazolam	Cocaine	Heroin	Pregabalin
Additional poisoning drug	**n=113**	**n=100**	**n=96**	**n=91**	**n=72**	**n=63**
Methadone		58	64	45	30	38
Diazepam	58		53	35	34	43
Alprazolam	64	53		37	37	33
Cocaine	45	35	37		50	22
Pregabalin	38	43	33	22	20	
Heroin	30	34	37	50		20
Zopiclone	30	31	27	18	15	19
Paracetamol	8	14	10	6	~	10
Mirtazapine	26	25	21	19	10	22
Sertraline	~	~	~	~	~	~
Tramadol hydrochloride	~	8	~	~	~	6
Flurazepam	13	16	7	7	6	11
Codeine	6	9	6	~	~	6
Olanzapine	20	22	14	14	7	12
Oxycodone hydrochloride	~	~	~	0	~	6
Quetiapine	~	6	7	7	~	6
Alcohol	13	26	19	14	11	7

* All deaths with alcohol implicated are presented in E-Appendix G

~ Five deaths or fewer

Profile of cocaine poisoning deaths in 2022

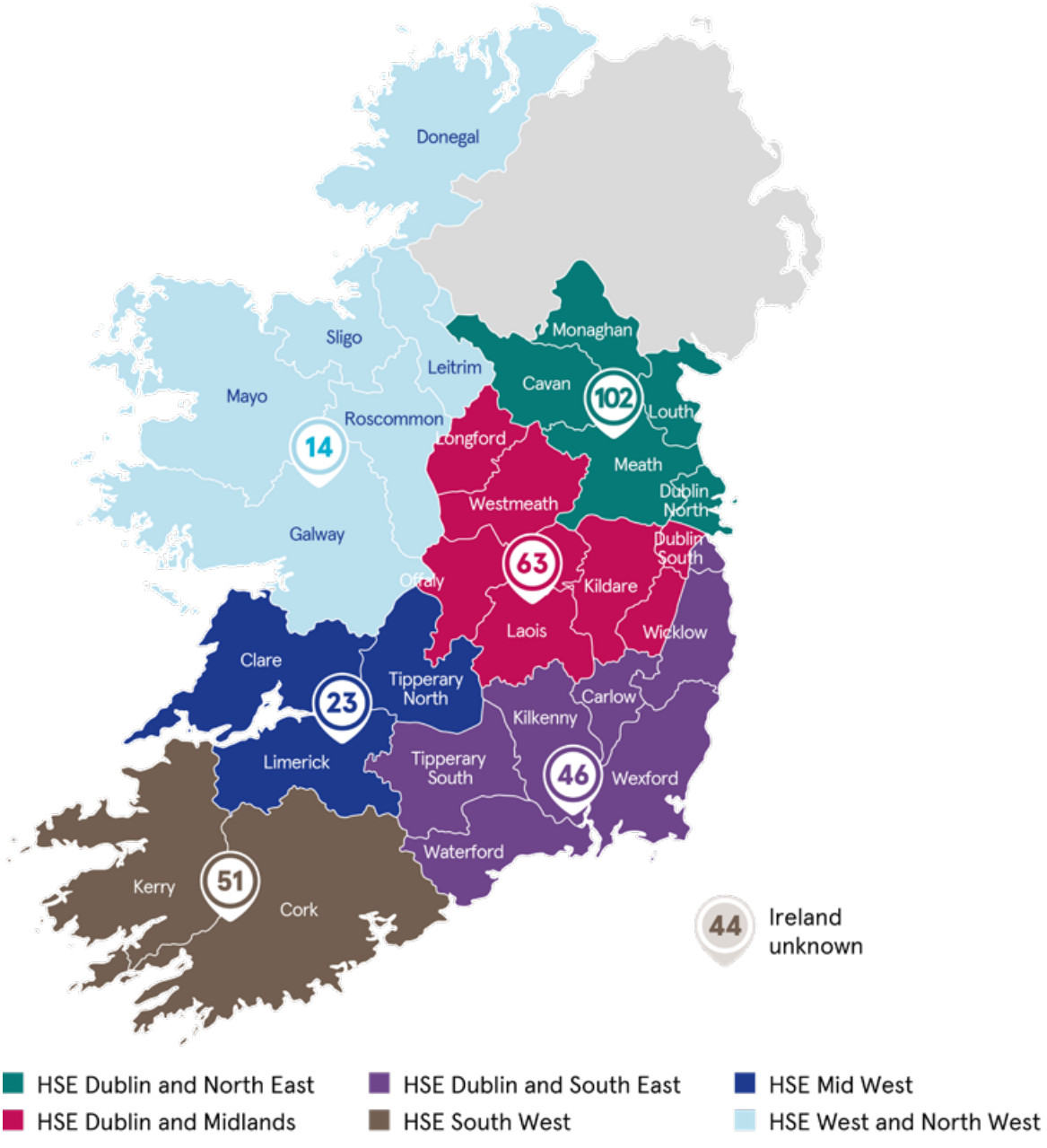
- Cocaine was implicated in one third (33.5%) of deaths
- 8 in 10 (80.9%) of the deceased were **males**
- The median **age** was 39 years for males and 41.5 years for females
- Almost 3 in 10 (28.7%) had **ever injected**
- Almost 1 in 5 (18.3%) were **injecting at the time of death**
- Over half of (54.5%) females and almost half (48.4%) of males had ever received **substance use treatment**
- 1 in 6 (16.5%) had history of **previous drug overdose**
- 8 in 10 (83.5%) had a **history of polysubstance use**
- 8 in 10 (79.1%) were **polysubstance poisonings**
- Opioids (78), benzodiazepines (59), antidepressants (31) and gabapentinoids/ antiepileptics (26), were the main drug groups implicated with cocaine[a]
- 24 were single drug **(cocaine only)** poisonings
- 4 in 10 (41.7%) were **alone** at the time of incident leading to death
- 7 in 10 (68.7%) were in a **private dwelling**
- For 3 in 5 (62.6%), the incident occurred in **Dublin** (city and county)

a An individual death may have more than one specific drug implicated

3. Location, place, and context of drug poisoning deaths in 2022

The largest proportion of poisonings occurred in HSE Dublin and North East HR (29.7%)[12] followed by HSE Dublin and Midlands HR (18.4%), and HSE South West HR (14.9%) (Figure 1).

Figure 1: Number of deaths by HSE Health Region where the poisoning occurred, NDRDI 2022



In 2022, 7 in 10 (70.3%) poisonings occurred in a **private dwelling**. A small proportion (7.9%) of poisonings occurred in a **public place** such as a car park, street, or derelict building. Almost 1 in 10 (8.5%) poisonings occurred in **accommodation for people who are homeless** (E-Appendix A).

Almost half (46.6%) of the deceased were **alone** when the incident occurred, 49.1% of males and 41.4% of females.

Information on whether the deceased was administered **naloxone** at the time of death was available for 148 (53.1%) poisoning deaths. Of these, 16 (10.8%) received naloxone, 39 (26.4%) did not receive naloxone, and 93 (62.8%) people were classified as not having received naloxone because it was not medically indicated. This means that the individual was already deceased when discovered, and therefore any form of treatment would not be of any benefit.

Overall, 9.3% (32) of people were **injecting at the time of death** (mostly males). The majority (90.6%) of these deaths were polysubstance poisonings. For more than 1 in 2 (56.3%) people injecting at the time of death, the incident occurred in Dublin city and county.

Of *those who were alone at time of incident* (160), 1 in 10 (10.0%) were also **injecting at the time of death** (mostly males).

Ever injected

At least
23%
(80 people)
ever injected

Injecting at the time of death

9%
32 people

→

91%
were
polysubstance poisonings

50%
were
alone

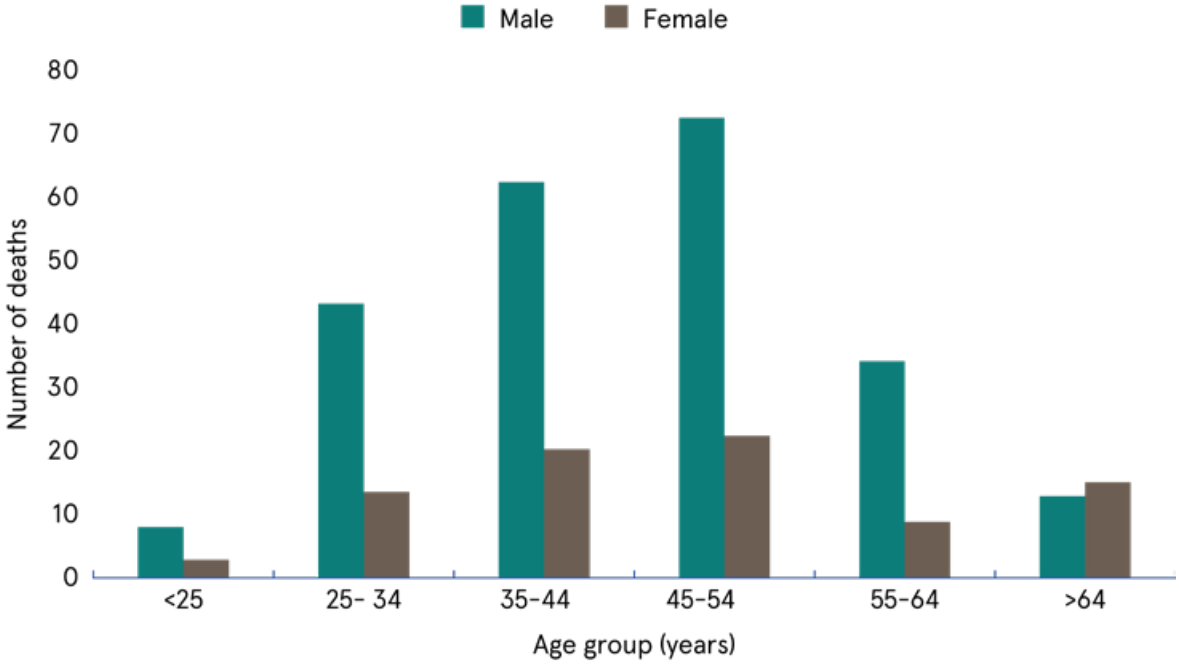
4. Characteristics of the deceased in 2022

4.1 Sociodemographic profile

Age at the time of death

- The median age at death was 45 years (45 years for males and 46 years for females) (Appendix B).
- Males outnumbered females in all age categories, except age 65 years and over (Figure 2).

Figure 2 Number of drug poisoning deaths by age group and sex, NDRDI 2022



Employment

- At least 2 in 5 (44.9%) of the deceased were not in employment (i.e. unemployed, retired, or unable to work due to disability) at the time of death.

Accommodation

- The majority (69.1%) of the deceased (67.7% of males and 72.1% of females) were living in stable accommodation at the time of death (E-Appendix A).
- Among the deceased, 43 (12.5%) people were experiencing homelessness at the time of death (Appendix B).[13, 14] The majority (67.6%) were males.

Relationships

- For most (68.8%) of the deceased, relationship status was described as single (single, separated, divorced, or widowed) at the time of death (E-Appendix A). Single status was more common among males (74.1%) than among females (57.7%).

History of imprisonment

- A small proportion of deaths in 2022 (7.0%) were among people known to have ever been in prison, and these deaths were mostly among males.

County of residence

- The deceased were mostly residing in Dublin (city and county) (44.0%), followed by Cork (city and county) (12.2%), and Limerick (city and county) (4.1%) prior to death. The county where the incident occurred is presented in Appendix A.

HSE Health Region of residence

- The deceased were mostly residing in the HSE Dublin and North East HR (29.2%), followed by HSE Dublin and Midlands HR (23.3%), and HSE Dublin and South East HR (16.9%) (E-Appendix C). Others were residing in HSE South West HR (15.5%), HSE Mid West HR (7.3%), and HSE West and North West HR (6.1%).

Country of birth

- At least 7.6% of deaths were among people born outside Ireland, and these were mostly among males. Around 2 in 5 people born outside Ireland were born in the United Kingdom. Other countries represented in the data are not reported here due to the small number of deaths recorded for individual countries.

- While the NDRDI has the capacity to record **ethnicity**, this information is usually not known for the majority of the deceased.

4.2 Health and health risk behaviours

Substance use history

- Almost four in five (77.8%) of the deceased (267 people) had a **history of substance misuse or dependency** (Table 5). This was more common among males (83.2%) than among females (66.7%).

- Opioids (mainly heroin) were used by 7 in 10 (70.4%, 188) of those with a history of substance misuse or dependency (Table 5). **Cocaine** (56.0%) was the most common drug (excluding alcohol) used overall and among both males (62.7%) and females (38.2%).

- **Alcohol dependency** was recorded for 1 in 3 (33.4%) and for a greater proportion of females (37.8%) than males (31.6%) (Table 5).

- Over half (54.5%) of the deceased had **a history of polysubstance use** (the use of more than one drug), and polysubstance use was more common among males (64.7%) than among females (33.3%) (Table 5). Among those with a history of polysubstance use (187 people), cocaine (65.0%) was the most common drug used, followed by heroin (59.9%).

Injecting history

- Where known, almost 1 in 4 (23.3%) of the deceased had **ever injected drugs**, 65 (28.0%) males and 15 (13.5%) females (Table 5). Of those who had ever injected (80), 2 in 5 (32, 40.0%) were injecting at the time of death.

History of previous overdose

- Information about **overdose history** was known for 59 of the deceased. Of these, 45 (13.1% of all people) had experienced a previous overdose (36 males and 9 females) (Table 5).

- Although the NDRDI has the capacity to record information about **naloxone**[15] administration associated with a previous overdose, this information is rarely provided in the available information sources. For 2022 deaths, this information was known for 11 people who had a previous overdose, and for eight, naloxone was administered.

History of blood borne viruses

- Among the deceased were 56 (15.3%) people known to have a **history of blood borne virus** (Hepatitis B, Hepatitis C, or HIV) (Table 8). The proportion was slightly higher among males (17.2%) than among females (14.4%).

History of epilepsy

- At least 6.7% (23) of the deceased had a **diagnosis of epilepsy**, 16 males and 7 females (Table 5). Seven of these people had a history of alcohol dependence.

Mental health history

- Information about a deceased person's **mental health history** comes from medical professionals or depositions from family members or others at inquest and is not always recorded in the death investigation file. At least 44.3% (152) of the deceased had experienced mental health issues (other than a substance use disorder), with a greater proportion of females (50.5%) than males (41.4%) in this group (Table 5).

Substance use treatment history

- At least 2 in 5 (41.4%) of the deceased had received **substance use treatment** at some point in their lifetime (Table 5). A greater proportion of males (44.4%) than females (35.1%) had ever received substance use treatment.
- Information about **current substance use treatment** (at the time of death) was recorded for 60.6% (208) of deaths. Three in ten (30.6%) of the deceased were in treatment for substance use at the time of death (Table 5). Males (31.9%) were more likely than females (27.9%) to have been receiving treatment.
- The majority of those who were in substance use treatment at the time of death were receiving **opioid agonist treatment** (OAT) (86.7%, 91), which was mainly treatment with methadone. Overall, more than 1 in 4 (26.5%) of the deceased were known to be in OAT at the time of death, 27.2% of males and 25.2% of females (Table 5).

Prescribed medications

- At least 3 in 5 (60.3%, 207) of the deceased were receiving **prescribed medications** at the time of death (Table 5). These medications were not necessarily related to the drugs implicated in the deaths.

Table 5 Number of drug poisoning deaths by health status, health risk behaviours, and sex of the deceased, NDRDI 2022

	All deaths		Males		Females	
	n	%	n	%	n	%
Number of deaths	**343**	**100**	**232**	**67.6**	**111**	**32.4**
Substance use history	**267**	**77.8**	**193**	**83.2**	**74**	**66.7**
Drug use only	178	66.7	132	68.4	46	62.2
Drug use and alcohol dependency	60	22.5	51	26.4	9	12.2
Alcohol dependency only	29	10.9	10	5.2	19	25.7
Substances used[a]	**267**	**77.8**	**193**	**83.2**	**74**	**66.7**
Any opioid	188	70.4	146	75.6	42	56.8
Heroin	131	49.1	107	55.4	24	32.4
Methadone (street)	49	18.4	39	20.2	10	13.5
Cocaine	149	55.8	121	62.7	28	37.8
Any benzodiazepine	75	28.1	58	30.1	17	23.0
Alcohol	89	33.3	61	31.6	28	37.8
Use within one month of death	221	82.8	168	87.0	53	71.6
Number of deaths	**343**	**100**	**232**	**67.6**	**111**	**32.4**
History of polysubstance use	187	54.5	150	64.7	37	33.3
Ever injected	80	23.3	65	28.0	15	13.5
Injecting at the time of death (% of ever injected)	32	40.0	~	~	~	~
History of previous overdose	45	13.1	36	15.5	9	8.1
History of blood borne virus	56	16.3	40	17.2	16	14.4
History of epilepsy	23	6.7	16	6.9	7	6.3
History of mental health issues	152	44.3	96	41.4	56	50.5
Treatment history	**343**	**100**	**232**	**67.6**	**111**	**32.4**
Ever treated for substance use	142	41.4	103	44.4	39	35.1
Current substance use treatment	105	30.6	74	31.9	31	27.9
Current OAT	91	26.5	63	27.2	28	25.2
Prescribed medications	207	60.3	133	57.3	74	66.7

a Of those with a history of substance use (n = 267)

~ Five deaths or fewer

5. Trends in drug poisoning deaths 2013 to 2022

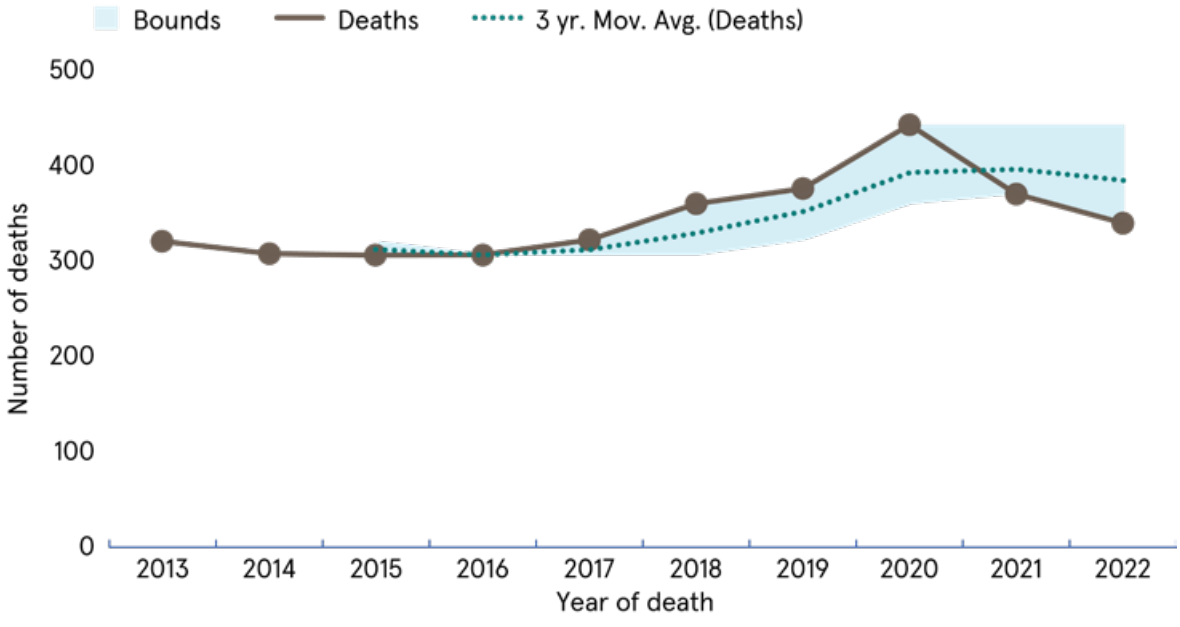
5.1 Number of drug poisoning deaths 2013 to 2022

The number of drug poisoning deaths increased 5.9% from 324 in 2013 to 343 in 2022 (Figure 3). The highest number of poisoning deaths ever recorded by NDRDI was in 2020. The number of deaths peaked at 446 in 2020, before decreasing 16.4% to 373 in 2021.[16] Between 2021 and 2022, an 8.0% decrease in the number of deaths was observed.

The peak in 2020 followed by the decrease in deaths across 2021 to 2022 is a pattern also observed in some other countries (e.g., Scotland and Northern Ireland)[17, 18, 19] and is likely a phenomenon of the COVID-19 pandemic. The pattern may reflect an acceleration of deaths among especially vulnerable people during 2020; in Ireland, there was a large increase in deaths among females in 2020 (Table 6).

Where there are annual fluctuations and extremes of numbers, moving averages can provide a better indication of long-term trends than can be gained from examining differences between two individual years (Figure 3). The moving averages show that, having increased from 2017 to 2020, the number of deaths plateaued before decreasing slightly in 2022. Overall, the pattern appears consistent with a return to pre-pandemic levels. Figures for 2022 will be revised upward in future publications as inquests are completed and these data are included.

Figure 3 Three-year moving average number of drug poisoning deaths, NDRDI 2013 to 2022



While the sex distribution of deaths has fluctuated over the period, males are continually in the majority, accounting for at least 3 in 5 deaths in every year (Table 6).

Table 6 Number of drug poisoning deaths by sex, NDRDI 2013 to 2022*

		2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
Total		**324**	**311**	**309**	**309**	**326**	**363**	**379**	**446**	**373**	**343**
Male	n	208	221	201	202	222	231	263	274	240	232
	%	64.2	71.1	65.0	65.4	68.1	63.6	69.4	61.4	64.3	67.6
Female	n	116	90	108	107	104	132	116	172	133	111
	%	35.8	28.9	35.0	34.6	31.9	36.4	30.6	38.6	35.7	32.4

* Data presented in this bulletin supersede all previously published NDRDI data

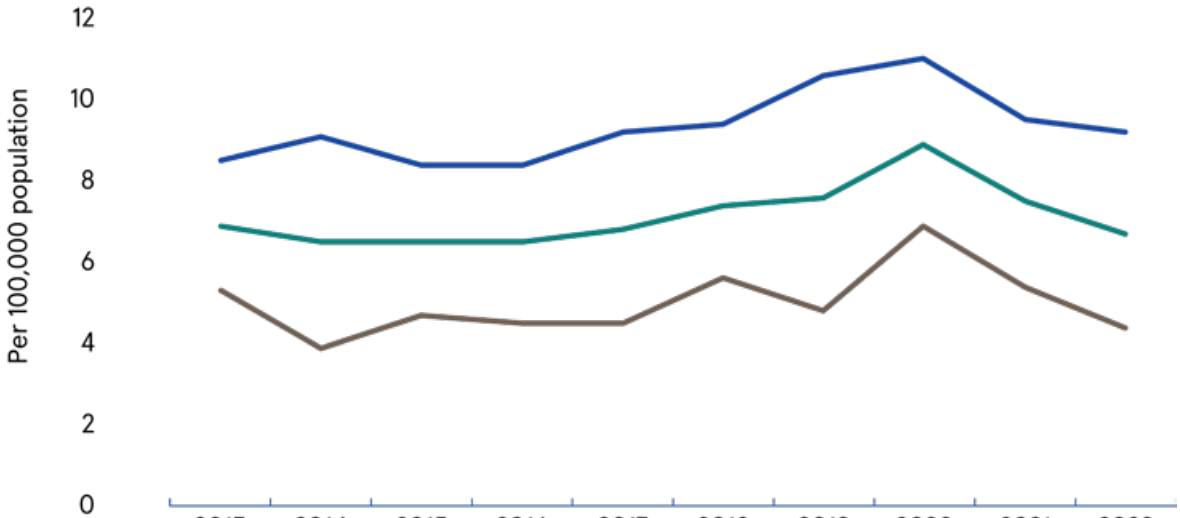
5.2 Age standardised mortality rates 2013 to 2022

The age standardised mortality rate (ASMR) enables mortality rates to be compared by year while accounting for differences in population age and structure.[20] ASMRs are presented below per 100,000 of the population standardised to the 2013 European Standard Population.[6]

When changes in population age and structure are considered, the mortality rate for drug poisoning deaths decreased very slightly between 2013 to 2022 (Figure 4). In 2022, the ASMR for drug poisoning deaths was 6.7 deaths per 100,000 standard population, compared to 6.9 deaths per 100,000 standard population in 2013 (Figure 4). Three-year moving average ASMRs for drug poisoning deaths show an upward trend from 2015-2017 (6.6) to 2020-2022 (7.7), with a negligible decrease between 2019-2021 (8.0) and 2020-2022 (7.7) (Figure 5). The figures demonstrate that, despite a reduction in the number of deaths, overall rates have changed little from 2017 and appear consistent with a return in 2022 to pre-pandemic levels.

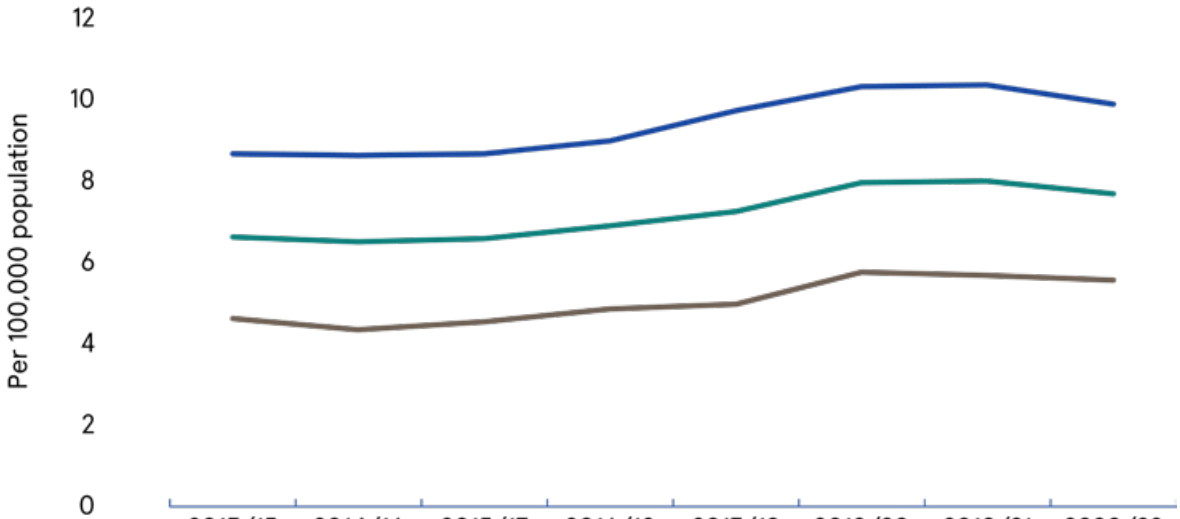
The ASMR for males increased between 2013 (8.5) and 2022 (9.2), while the ASMR for females decreased from 5.3 in 2013 to 4.4 in 2022 (Figure 4). Overall, there was an increase in ASMR from 2016 onwards, peaking in 2020, before decreasing in subsequent years. This decrease was greater among females than among males. However, the three-year moving average ASMRs show an increase for males and females over the period 2015-2017 to 2020-2022, which was slightly greater for males.

Figure 4 Age standardised mortality rates (ASMR) for drug poisoning deaths, by sex, NDRDI 2013 to 2022



	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
All	6.9	6.5	6.5	6.5	6.8	7.4	7.6	8.9	7.5	6.7
Male	8.5	9.1	8.4	8.4	9.2	9.4	10.6	11.0	9.5	9.2
Female	5.3	3.9	4.7	4.5	4.5	5.6	4.8	6.9	5.4	4.4

Figure 5 Three-year moving average age standardised mortality rates (ASMR) for drug poisoning deaths, by sex, NDRDI 2013 to 2022



	2013/15	2014/16	2015/17	2016/18	2017/19	2018/20	2019/21	2020/22
All	6.6	6.5	6.6	6.9	7.3	8.0	8.0	7.7
Male	8.7	8.6	8.7	9.0	9.7	10.3	10.4	9.9
Female	4.6	4.4	4.6	4.9	5.0	5.8	5.7	5.6

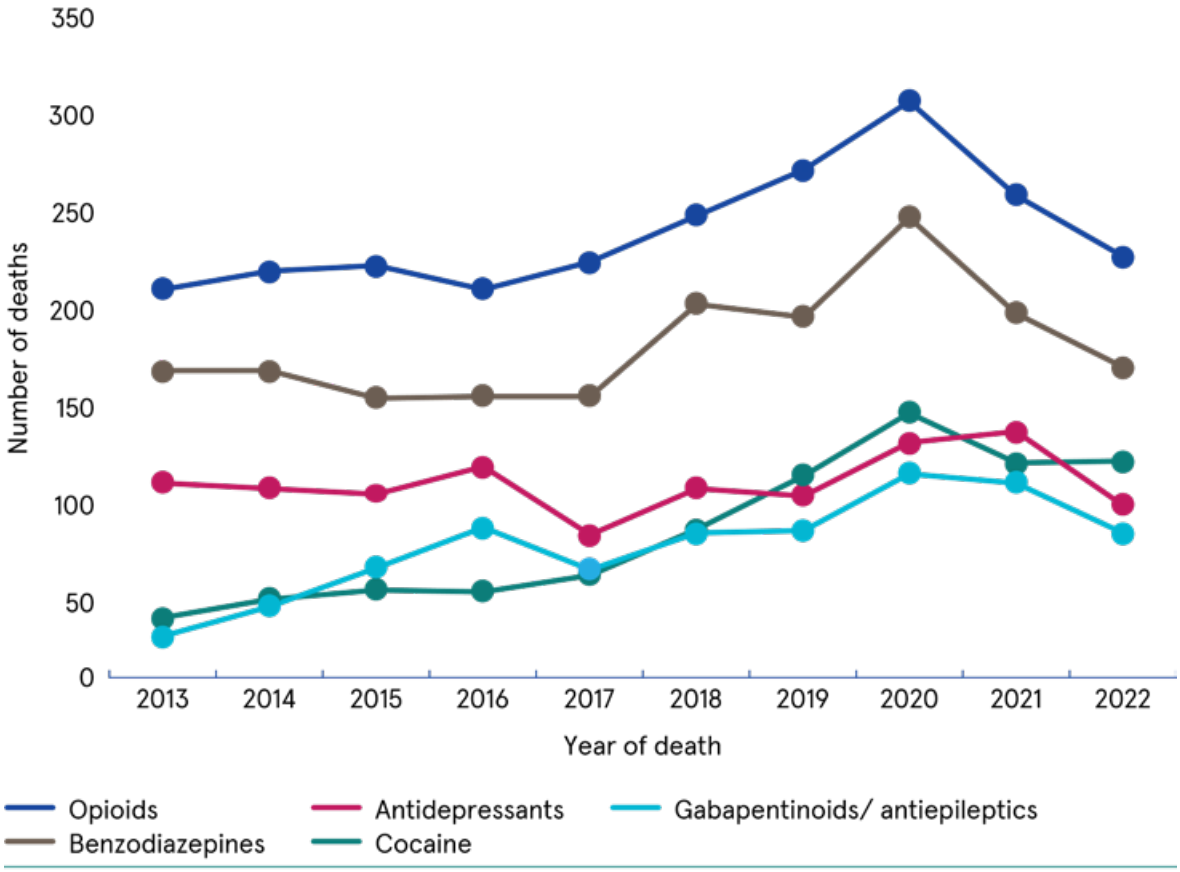
5.3 Drugs implicated in drug poisoning deaths 2013 to 2022

Between 2020 and 2022, decreases were observed for each of the five main drug groups (opioids, benzodiazepines, cocaine, antidepressants, and gabapentinoids/antiepileptics) (Figure 6 and Table 7). Nevertheless, opioids, benzodiazepines, cocaine, and gabapentinoids/antiepileptics were each implicated in more deaths in 2022 than in 2013 (Figure 6 and Table 7). The largest ten-year increase was for **cocaine** (a 259.4% increase), followed by **gabapentinoids/antiepileptics** (a 250.0% increase).

- The number of deaths with **cocaine** implicated increased from 32 in 2013 to 115 in 2022. Between 2021 and 2022, the number of deaths decreased for all the main drug groups **except cocaine**, which remained stable (Figure 6 and Table 7).
- Over the period, **methadone** was the most common **opioid**. The number of deaths with methadone implicated increased 30.9% over the ten-year period. The number decreased by 18.5% between 2020 and 2022 (Appendix C).
- **Heroin** decreased 11.4% over the period and 36.1% between 2020 and 2022 (Appendix C).
- The number of deaths with **oxycodone hydrochloride, codeine, and morphine** implicated increased between 2013 and 2022, while the number of deaths with **tramadol hydrochloride** decreased (Appendix C). Between 2020 and 2022, there were decreases in tramadol hydrochloride, oxycodone hydrochloride, and codeine, but an increase in morphine.
- While there was a small increase (1.2%) in the number of deaths with **benzodiazepines** implicated over the ten-year period (Figure 6 and Table 7), differences were apparent across individual drugs; **alprazolam** increased by 100.0% between 2013 and 2022, while **diazepam** and **flurazepam** decreased by 11.5% and 48.9% respectively (Appendix C). Between 2020 and 2022, there were decreases in the number of deaths with diazepam, alprazolam, and flurazepam.
- Among the antidepressants, **amitriptyline** decreased (29.2%) over the ten-year period, while there were small increases in the numbers of deaths with **mirtazapine, fluoxetine, sertraline**, and **venlafaxine** (Appendix C). Between 2020 and 2022, the number of deaths decreased for all these antidepressant drugs.
- The increase in **gabapentinoids/antiepileptics** between 2013 and 2022 was mainly due to **pregabalin**, which increased from 14 deaths in 2013 to 63 deaths in 2022, an increase of 350.0% (Appendix C). The highest number of deaths with pregabalin implicated was in 2020 (95 deaths). Between 2020 and 2022, the number of deaths with pregabalin implicated decreased.
- The number of deaths with **antipsychotic drugs** implicated increased by 6.7% between 2013 and 2022 (Table 7). The main antipsychotic drugs implicated were **olanzapine** and **quetiapine**, which both increased over the ten-year period (by 21.4% and 23.1% respectively) (Appendix C). Between 2020 and 2022, quetiapine decreased by 36.0%, while olanzapine increased by 13.3%.

- Over the period, there was a 110.5% increase in the number of deaths with **other medications** (e.g. antihistamines) implicated (Table 7). This upward trend continued between 2020 and 2022, with a 14.3% increase in deaths where one or more of these drugs were implicated.
- **Alcohol** as part of polysubstance poisoning decreased by 21.7% over ten years, and 27.0% between 2020 and 2022 (Table 7 and E-Appendix G).
- In 2022, 77.8% of poisoning deaths were **polysubstance poisonings** compared to 75.0% in 2013.

Figure 6 Number of drug poisoning deaths by selected drug groups implicated, NDRDI 2013 to 2022*



* An individual death may have more than one specific drug implicated from a drug group and may have specific drugs from more than one drug group.

Table 7 Number of drug poisoning deaths for each drug group implicated, NDRDI 2013 to 2022*

	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
Number of deaths[a]	**324**	**311**	**309**	**309**	**326**	**363**	**379**	**446**	**373**	**343**
Opioids	207	216	219	207	221	246	270	307	257	223
Benzodiazepines	163	163	149	150	150	199	192	245	194	165
Antidepressants	104	101	98	112	76	101	97	125	131	92
Cocaine	32	42	47	46	55	79	108	141	114	115
Gabapentinoids/ antiepileptics	22	38	59	80	58	78	78	109	104	77
Alcohol[b]	83	71	67	91	72	76	93	89	98	65
Z-drugs	62	81	78	80	53	54	85	82	72	60
Non-opioid analgesics	43	36	40	54	50	39	45	51	53	38
Antipsychotics	45	40	43	48	37	41	39	59	52	48
Other medications[c]	19	36	28	36	29	39	22	35	45	40
Novel psychoactive substances	17	16	16	8	8	8	15	21	25	7
Other amphetamine / stimulant[d]	19	17	10	10	19	22	28	25	17	7
Others[e]	15	20	16	19	20	26	31	16	20	31

* Number of deaths for specific drugs is presented in Appendix C

a An individual death may have more than one drug implicated

b Alcohol as part of a polysubstance poisoning

c For example, antihistamines

d For example, MDMA (ecstasy)

e For example, hallucinogens and volatile inhalants

~ Five deaths or fewer

5.4 Characteristics of the deceased and circumstances of death 2013 to 2022

- Between 2013 and 2022, the median **age at death** increased from 38.5 years to 45 years overall (35 years to 45 years for males and 45 years to 46 years for females) (Appendix B).
- In every year, at least 1 in 10 of the deceased were experiencing **homelessness** at time of death, the highest proportion being in 2020 (14.8%) (Appendix B). Over the period, the proportion of people who were in **stable accommodation** decreased from 72.5% to 69.1%.
- The proportion of poisoning deaths where the deceased had **a history of substance misuse or dependency** increased over time from 74.1% in 2013 to 77.8% in 2022 (Appendix B).
- Of those with a history of substance use, around 2 in 5 (36.8%) were known to have **ever received substance use treatment**. The proportion that received treatment increased from 43.3% in 2013 to 53.2% in 2022 (Appendix B).
- The proportion of deaths that were among people with a **lifetime history of injecting** was similar in 2013 (24.4%) and 2022 (23.3%) (Appendix B).
- Of *those who had ever injected*, **injecting at the time of death** decreased from 59.5% in 2013 to 40.0% in 2022 (Appendix B).
- The proportion of poisonings that occurred in a **private dwelling** increased from 67.9% in 2013 to 70.3% in 2022 (E-Appendix A).
- The proportion of poisonings that occurred in a **public place**, building, or derelict building decreased from 10.5% in 2013 to 7.9% in 2022 (E-Appendix A).
- The proportion of the deceased **who were alone at the time of the poisoning incident** increased from 39.2% in 2013 to 46.6% in 2022 (E-Appendix A).

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Special thanks to Dr Ena Lynn and all our former NDRDI Team members for their invaluable contributions to ensuring NDRDI data are timely, accurate, relevant, and impactful.

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Finally, we would like to acknowledge the families who have lost loved ones due to substances and the many service providers who support all those affected.

Notes

1 To cite this publication: Kelleher C, Riordan F, and Gopalakrishnan A (2025) *Drug poisoning deaths in Ireland in 2022: Data from the National Drug-Related Deaths Index*. HRB StatLink Series 28. Available at https://www.drugsandalcohol.ie/44591. Additional online E-appendices are available at: https://www.hrb.ie/data-collections-evidence/drug-and-alcohol-deaths-ndrdi/

2 Department of Tourism, Sport and Recreation, Ireland (2001) *Building on Experience: National Drugs Strategy 2001 – 2008*. Dublin: Stationery Office.

3 More detailed information on the NDRDI methodology can be found in previously published HRB Trends Series papers: www.hrb.ie/data-collections-evidence/alcohol-and-drug-deaths/publications/publications/3/

4 Figures for 2020 and 2021 were revised upwards as inquests delayed due to COVID-19 restrictions were completed and data included. While data validation processes for previous years may have revised figures (upward or downward), overall trends have not changed.

5 Central Statistics Office (CSO) (2025) *Population estimates (Persons in April), PEA01*. Last updated 26 August 2025. Available at https://data.cso.ie/

6 Eurostat (2013) *Revision of the European standard population: Report of the Eurostat's task force*. Luxembourg: European Union. https://ec.europa.eu/eurostat/web/products-manuals-and-guidelines/-/ks-ra-13-028

7 Department of Health (2017) *Reducing harm, supporting recovery. A health-led response to drug and alcohol use in Ireland 2017 - 2025*. Dublin: Department of Health. https://www.drugsandalcohol.ie/27603/

8 Department of Health (2023) *Statement of Strategy 2023-2025*. Dublin: Stationery Office. https://www.gov.ie/en/department-of-health/publications/department-of-health-statement-of-strategy-2023-2025/

9 Department of Community, Rural and Gaeltacht Affairs (2009) *National Drugs Strategy (interim) 2009-2016*. Dublin: Department of Community, Rural and Gaeltacht Affairs. Available at: https://www.drugsandalcohol.ie/12388/

10 In 2022, the crude rate was 6.6 deaths per 100,000 population and the age standardised mortality rate (ASMR) was 6.7 deaths per 100,000 population. ASMRs for 2013 to 2022 are presented in Section 5.2.

11 Based on the European Union Drugs Agency (EUDA) classification of *drug-related deaths* (DRD) as per below:

Poisoning deaths in 2022 by European DRD classification	n	%
All deaths	**343**	**100**
Poisoning by opioids only (excluding methadone)	13	3.8
Poisoning by methadone only	10	2.9
Poisoning by polysubstances including opioids	199	58.0
Poisoning by (poly)substances excluding opioids	40	11.7
Poisoning by unspecified/unknown substances	17	5.0
Others[a]	64	18.7

a Prescribable drugs only or prescribable drugs in conjunction with alcohol. These do not apply to the EU classification.

European Monitoring Centre for Drugs and Drug Addiction (EMCDDA) (2009) *Standard protocol version 3.2 for the EU Member States to collect data and report figures for the key indicator drug-related deaths, EMCDDA project CT.02.P1.05*. Lisbon: European Monitoring Centre for Drugs and Drug Addiction. Available at: https://www.euda.europa.eu/html.cfm/index107404EN.html_en

12 Government of Ireland (2023) *Organisational reform: Health Regions implementation plan*. Available at: https://www.gov.ie/en/department-of-health/publications/hse-health-regions/#hse-health-regions-implementation-plan

13 Homelessness was classified based on the ETHOS Framework: Edgar, B. (2012) The ETHOS definition and classification of homelessness and housing exclusion. *European Journal of Homelessness*, 6(2), 219–25.

14 The HRB will publish 2022 data on deaths among people who were experiencing homelessness, with a trend analysis for 2019 to 2022.

15 Naloxone is potentially life-saving medicine that can temporarily reverse the effects of an opioid overdose.

16 The figure for deaths in 2021 has increased from 354 previously published due to the addition of data from completed inquests.

17 European Union Drugs Agency (EUDA) (2025) *European Drug Report 2025. Drug-induced deaths – the current situation in Europe (European Drug Report 2025)*. Available at www.euda.europa.eu

18 National Records of Scotland. (2025) *Drug-related deaths in Scotland, 2024*. Edinburgh: National Records of Scotland. https://www.nrscotland.gov.uk/publications/drug-related-deaths-in-scotland-2024/

19 Northern Ireland Statistics and Research Agency (2025) *Drug-related and drug misuse deaths in Northern Ireland, 2013-2023*. Belfast: Northern Ireland Statistics and Research Agency. https://www.nisra.gov.uk/publications/drug-related-and-drug-misuse-deaths-2013-2023

20 ASMRs were calculated using the direct method: Statistics Canada (2023) Age-standardized rates. Available at: https://www.statcan.gc.ca/en/dai/btd/asr

Appendix A

Table 8 Number of drug poisoning deaths by county of incident, NDRDI 2013 to 2022

	Year of death									
	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
Number of deaths	**324**	**311**	**309**	**309**	**326**	**363**	**379**	**446**	**373**	**343**
Dublin (city and county)	132	143	140	144	134	137	165	186	161	149
Cork (city and county)	22	27	27	34	39	35	42	52	41	40
Limerick (city and county)	9	15	7	13	10	13	10	17	15	12
Waterford (city and county)	~	10	14	~	10	12	7	13	17	6
Tipperary	7	7	13	7	8	18	14	10	10	13
Louth	12	12	9	7	10	8	11	14	11	10
Kildare	~	8	9	11	~	14	12	19	7	0
Wicklow	~	10	~	10	10	10	11	15	11	7
Meath	10	~	6	6	10	11	~	13	10	~
Galway	8	6	11	7	6	~	13	13	11	~
Kerry	~	7	6	8	~	6	8	6	12	11
Clare	13	~	~	~	8	8	10	~	9	6
Donegal	10	~	~	9	~	9	7	9	~	~
Wexford	~	6	~	~	6	6	9	11	7	11
Westmeath	~	~	~	~	~	8	~	6	~	~
Laois	7	6	6	~	6	6	6	~	~	~
Kilkenny	~	8	~	~	~	7	~	7	~	0
Cavan	~	~	~	7	~	6	~	7	~	~
Carlow	~	~	9	~	~	~	7	~	6	~
Offaly	~	~	~	~	~	~	6	7	~	~
Sligo	~	~	~	~	9	~	~	~	~	~
Mayo	~	0	~	~	~	~	~	~	~	~
Longford	~	~	~	0	~	~	~	~	~	0
Monaghan	~	~	~	~	~	~	~	~	~	~
Roscommon	0	~	~	0	~	~	~	~	~	~
Leitrim	~	0	~	0	~	~	~	~	0	0
Ireland unknown	0	0	0	~	0	23	6	11	13	42

Appendix B

Table 9 Characteristics of the deceased and circumstances of death, NDRDI 2013 to 2022*

		2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
Number of deaths		**324**	**311**	**309**	**309**	**326**	**363**	**379**	**446**	**373**	**343**
Demographics											
Median age (range[a])		38.5 22 - 67	37 (22-65)	39 (23-66)	41 (23-69)	41 (23-67)	41 (25-67)	41 (23-64)	42 (22-70)	42 (25-71)	45 (26-72)
Homelessness[b]	n	36	47	32	44	32	43	42	66	56	43
	%	11.1	15.1	10.4	14.2	9.8	11.8	11.1	14.8	15.0	12.5
Health and health risk behaviours											
History of substance use or dependency	n	240	248	238	243	258	292	314	367	298	267
	%	74.1	79.7	77.0	78.6	79.1	80.4	82.8	82.3	79.9	77.8
Ever treated for substance use	n	104	104	106	126	120	142	134	169	136	142
% of those with a history of substance use or dependency	%	43.3	41.9	44.5	51.9	46.5	48.6	42.7	46.0	45.6	53.2
History of mental health issues	n	151	136	173	152	161	182	190	228	183	152
	%	46.6	43.7	56.0	49.2	49.4	50.1	50.1	51.1	49.1	44.3
Ever injected	n	79	85	77	79	72	87	89	92	67	80
	%	24.4	27.3	24.9	25.6	22.1	24.0	23.5	20.6	18.0	23.3
Injecting at the time of death	n	47	53	49	32	37	48	45	50	24	32
% of those who had ever injected	%	59.5	62.4	63.6	40.5	51.4	55.2	50.6	54.3	35.8	40.0
History of previous overdose	n	53	50	40	46	31	40	60	71	52	45
	%	16.4	16.1	12.9	14.9	9.5	11.0	15.8	15.9	13.9	13.1

a Age range is 5th percentile to 95th percentile (90% of cases are included within this range)

b Homelessness is based on the ETHOS Framework definition[13]

Appendix C

Table 10 Number of drug poisoning deaths by main specific drugs implicated, NDRDI 2013 to 2022*

	Year of death									
	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
Number of deaths[a]	324	311	309	309	326	363	379	446	373	343
Methadone	94	105	91	106	102	125	126	151	136	123
Cocaine	32	42	47	46	55	79	108	141	114	115
Diazepam	113	122	113	101	99	122	106	141	115	100
Alprazolam	48	49	51	54	70	115	101	132	110	96
Heroin	88	97	84	74	90	100	109	122	82	78
Alcohol[b]	83	71	68	91	72	76	93	89	98	65
Pregabalin[c]	14	28	50	68	48	69	65	95	89	63
Zopiclone	57	75	68	68	48	44	75	71	63	55
Mirtazapine	37	41	31	48	26	38	32	52	49	39
Olanzapine	28	18	19	23	18	21	16	30	22	34
Paracetamol	42	33	34	48	49	38	38	45	44	32
Flurazepam	47	38	38	47	36	51	33	32	29	24
Codeine	17	16	22	18	28	29	23	28	33	22
Tramadol hydrochloride	30	19	29	23	26	38	28	45	36	19
Morphine	12	10	14	19	~	8	12	14	15	18
Amitriptyline	24	23	28	31	11	20	20	23	20	17
Quetiapine	13	18	20	20	13	9	14	25	19	16
Venlafaxine	12	12	11	9	9	14	13	18	13	14
Oxycodone hydrochloride	9	14	15	8	8	11	20	22	19	13
Sertraline	6	8	10	8	12	12	14	15	30	11
Promethazine	~	~	6	~	~	~	~	11	17	11
Fluoxetine	7	12	~	6	~	10	8	11	13	8

* Specific drugs for which there were fewer than 8 deaths in 2022 are not listed
a An individual death may have more than one drug implicated
b Alcohol as part of a polysubstance poisoning
c Pregabalin was included in routine postmortem toxicology screening by the State Laboratory from 2013
~ Five deaths or fewer

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