NISRA
Northern Ireland Statistics and Research Agency
Gníomhaireacht Thuaisceart Éireann um Staitistící agus Taighde

Final statistics | Statistical bulletin

Drug-Related and drug-misuse deaths in Northern Ireland, 2020

Frequency: Annual

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This report presents statistics on Northern Ireland (NI) drug-related mortality in 2020. Figures are based on deaths registered in NI that are known to be drug-related or a direct consequence of drug misuse.

Key points

- The number of drug-related deaths registered in Northern Ireland in 2020 (218) was the highest on record and continued the upwards trend from 191 deaths in 2019. The same was true for drug-misuse deaths, increasing from 165 in 2019 to 182 in 2020.
- Over half (55.5%) of drug related deaths were of men aged 25-44. Drug-related death rates were highest among the 25-34 age group (27.2 deaths per 100,000 people).
- Opioids were the most commonly mentioned type of drugs on death certificates. However, the number of drug-related deaths involving psychoactive substances increased notably from 11 in 2019 to 51 in 2020.
- The proportion of Drug-related deaths where alcohol was mentioned continued to fall in 2020.
- Two-thirds (66.1%) of drug-related deaths in 2020 involved two or more drugs. In contrast in 2010, 55.4% of drug-related deaths involved two or more drugs
- Belfast HSCT and LGD had the highest age-standardised rate of drug-related deaths per 100,000 population – 19.8 and 21.2 respectively. Drug-related and drug-misuse deaths were higher in areas of highest deprivation.

Contents

What you need to know

The Northern Ireland Statistics and Research Agency (NISRA) produces data on births, deaths, marriages, civil partnerships and adoptions from civil registration events which are registered with the General Register Office (GRO). Drug-Related and Drug-Misuse deaths statistics are derived from cause of death recorded when a death is registered in Northern Ireland. Drug-misuse deaths are a sub-set of drug-related deaths, more information including the definitions can be found in Annex A. Statistics are published annually and include counts and death rates for all drug related deaths registered in Northern Ireland.

The annual **Drug-Related and Drug-Misuse Deaths, Northern Ireland** release presents statistics on the most recent, official death registration data available on drug-related mortality across Northern Ireland (NI). These figures were first published in 2001.

This release includes a slightly revised definition for drug-misuse deaths in order to fully align with the definition used by the Office for National Statistics (ONS). See the '*Definitions and further information section*' in this report, and the Drug-related deaths Information paper for more details of the change and impact.

While drug-related deaths account for less than 1 per cent of all deaths in NI, there has been a general upward trend in the number of such deaths. With this known effect on premature mortality, there is considerable political, media and public interest in these figures which are used by a range of public bodies In addition, drug-related information is used by academia to investigate trends in drug-related deaths and the effectiveness of public interventions.

The Department of Health, NI (DoH) use drug-related death statistics to inform policy and monitor the strategy: New Strategic Direction for Alcohol and Drugs - Phase 2, the aim of which is to reduce the level of alcohol and drug-related harm in Northern Ireland.

NISRA's annual release presents figures on drug-related and drug-misuse deaths in NI on a 10-year rolling basis, broken down by cause of death, sex and geographic indicators relating to the usual residence of the deceased, and the substances involved.

Section 1: Sex and Age

There has been a general increase in the number of both drug-related deaths and drug-misuse deaths over the last 10 years. Drug-related deaths have increased from 92 deaths in 2010 to 191 in 2019 and 218 deaths in 2020. Likewise, the number of drug-misuse deaths have increased from 64 to 182 between 2010 and 2020.

Both series' totals for 2020 are the highest in the series with drug-related deaths more than doubling over the period 2010-2020, and drug–misuse deaths almost tripling over the same time period. The proportion of drug-related deaths due to drug misuse was 83.5 in 2020, a decrease from the 2019 peak of 86.4%.

Sex

Figures 1 and 2 show the number of drug-related and drug-misuse deaths by year of registration and sex between 2010 and 2020. Males have consistently accounted for more deaths than females, around 70% of all drug-related deaths for the last 3 years. Additionally more drug-related deaths in males are accounted for by drug-misuse (87.6%), compared with females (73.8%).

Figure 1: Drug-related deaths by registration year and sex

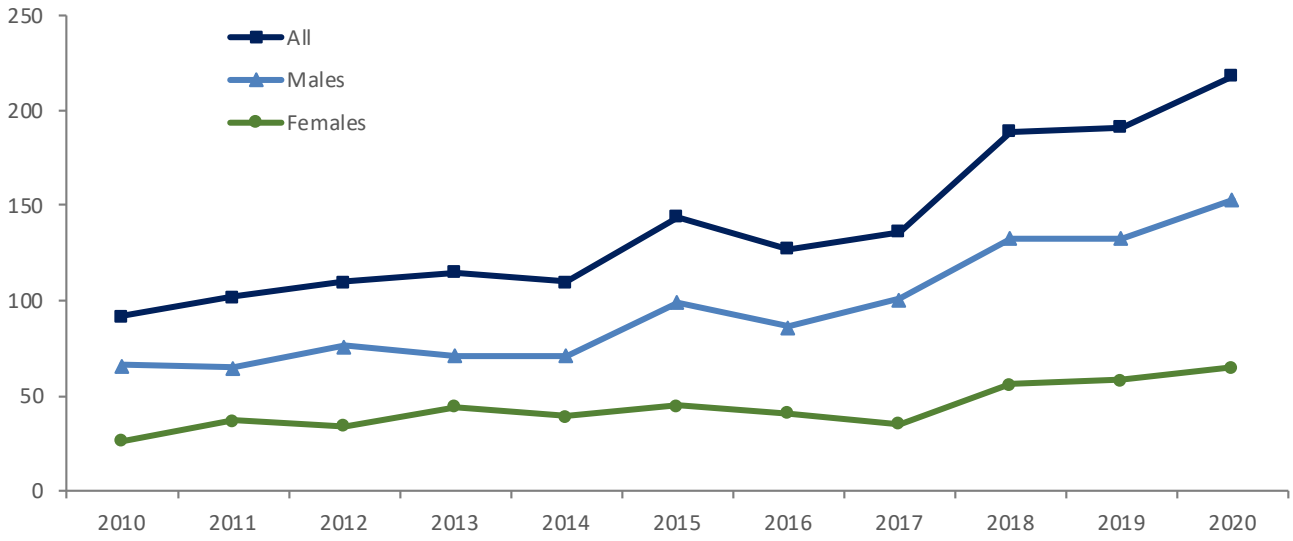
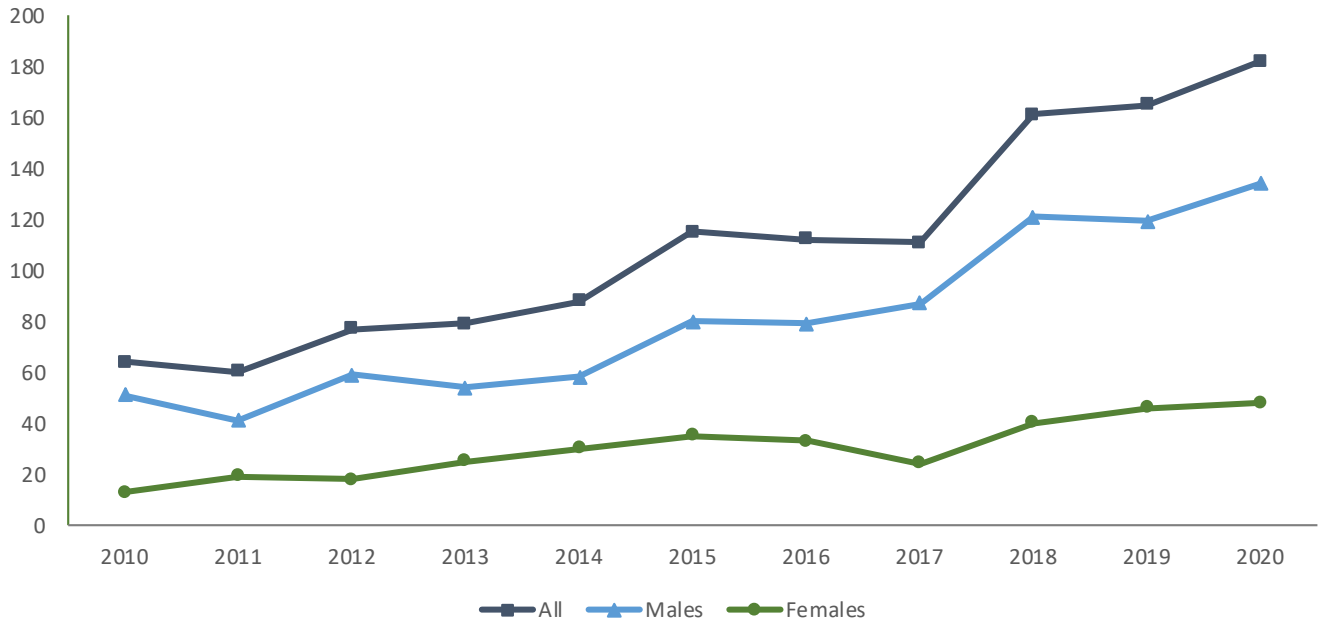


Figure 2: Drug-misuse deaths by registration year and sex



Age

Looking at the number of deaths by age, the 25-34 and 35-44 age groups together consistently account for the majority of drug-related and drug-misuse deaths annually (between 50% and 65%). Figures 3 and 4 illustrate the distribution of drug-related deaths and drug-misuse deaths (respectively) across age groups in Northern Ireland for 2020.

In 2020, the 25-34 and 35-44 age groups together accounted for 55.5% of all drug-related deaths, which is equal to the average across 2010-2020. The 25-34 age group also had the highest rate of drug-related deaths in 2020, at 17.3 per 100,000 population (see table 2 in the accompanying spreadsheet). Similarly, 56.6% of drug-misuse deaths involved 25-44 year olds, however, the highest crude death rate was among 25-34 year olds at 23.1 per 100,000 population.

Figure 3: Proportion of drug-related deaths by age, 2020

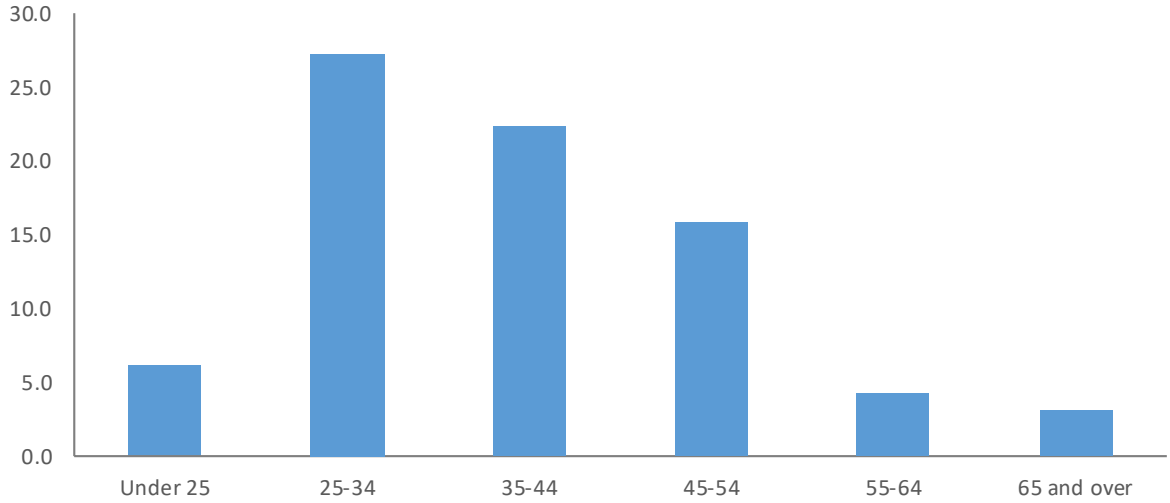
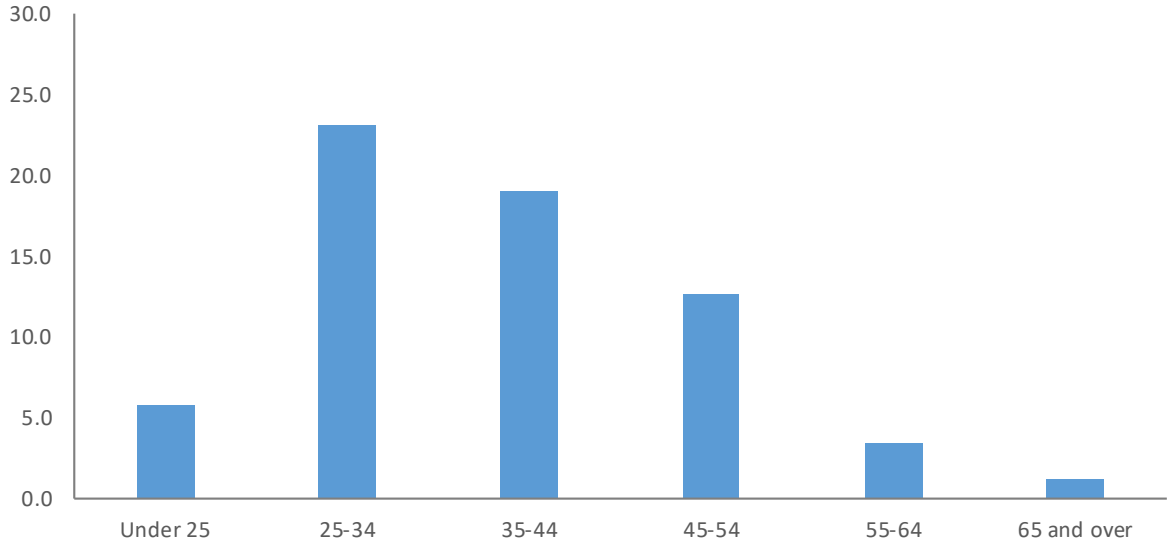


Figure 4: Drug-misuse deaths by age, 2010-2020



Adjusting for Age

Trends in drug-related deaths by sex can be compared by removing the potential impact of the age profile of each sex through standardising for age (see definition for age standardised mortality rate on page 17).

Figures 5 and 6 shows the age-standardised mortality rates (ASMRs) by sex for drug-related deaths and drug-misuse deaths from 2010 to 2020. The age-standardised mortality rate of drug-related deaths for males in 2020 was 16.7, higher than the rate for females at 7.0 deaths per 100,000 population.

Similar to drug-related deaths, the trend of drug-misuse deaths shows that ASMRs for males have consistently been much higher than the rate for females. In 2020, the death rate due to drug-misuse for males was almost 3 times the rate for females (14.5 and 5.1 respectively).

In the context of the UK in 2020, Scotland had the highest rate of drug-misuse deaths at 25.2, Northern Ireland had the second highest rate at 11.8, and England and Wales had a rate of 5.2 deaths per 100,000 population.

Figure 5: Age-Standardised Mortality Rate (ASMR) of drug-related deaths by sex, 2010-2020

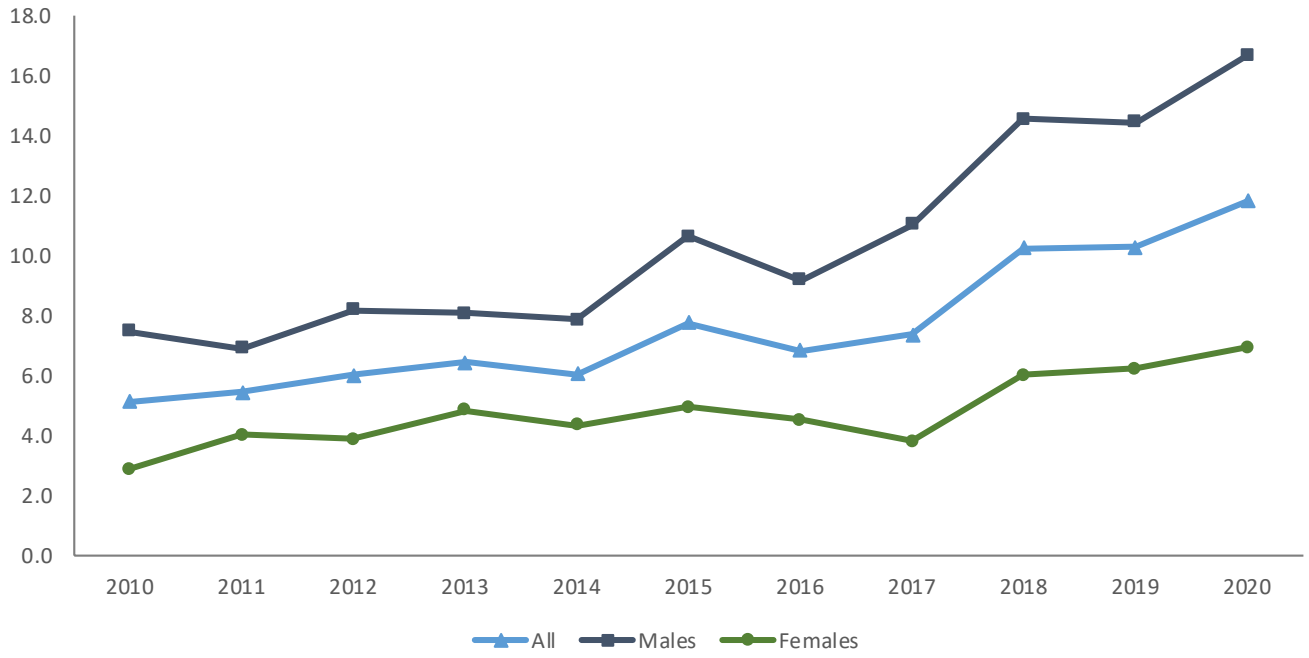
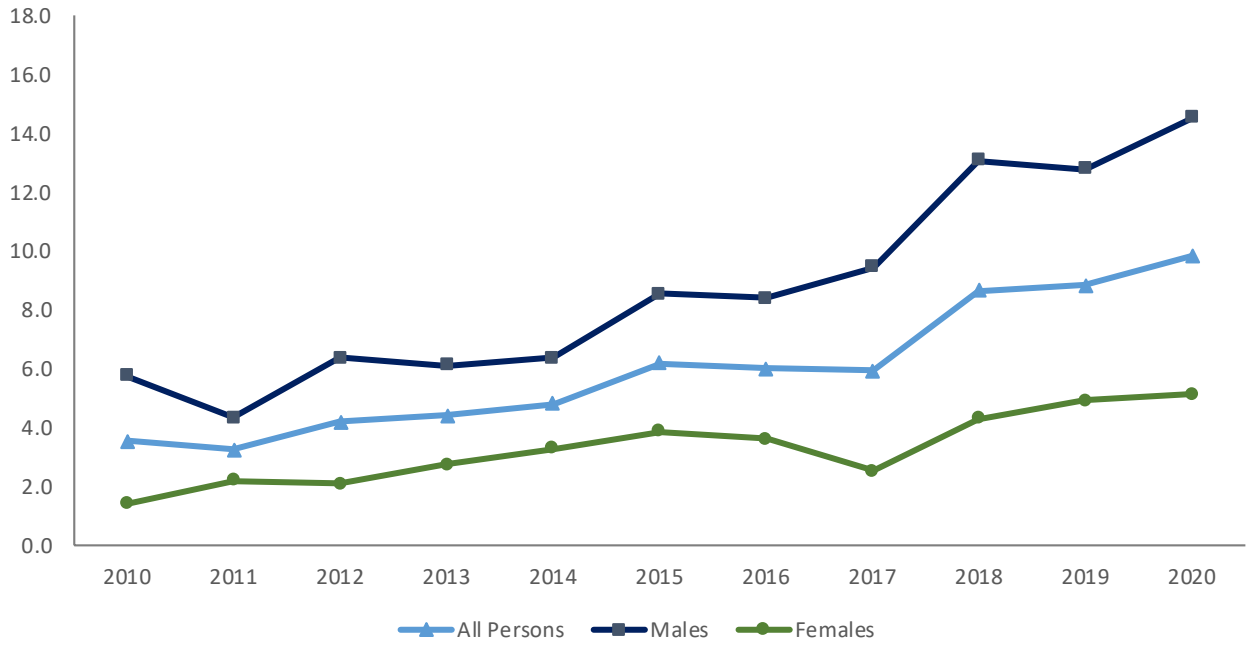


Figure 6: Age-Standardised Mortality Rate (ASMR) of drug-misuse deaths by sex, 2010-2020



Section 2: Drug-related deaths by type of drug

Opioids were mentioned most often on the death certificates of drug-related deaths, featuring in 133 cases of the 218 drug-related deaths registered in 2020 (61.0%). This is the highest in the period 2010 to 2020 following a general upwards trend. Heroin/morphine was the opioid recurrently mentioned, appearing on 55 death certificates in 2020, a series high.

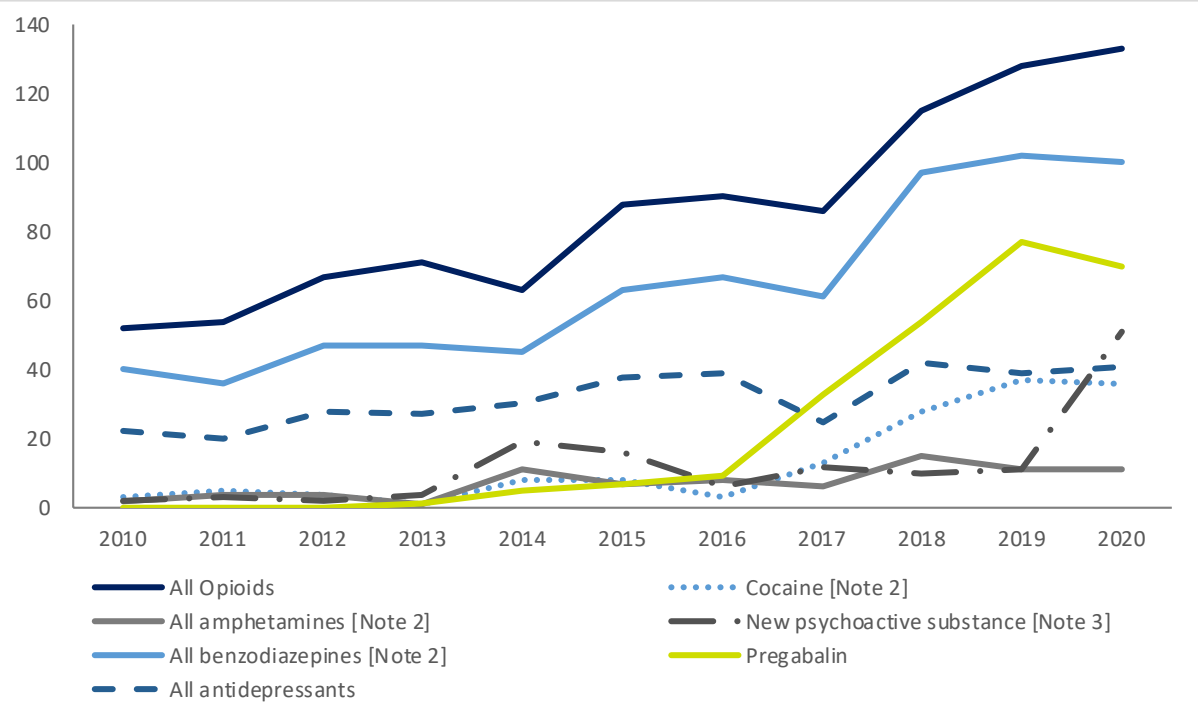
The next most commonly mentioned type of drug was benzodiazepines, appearing on 100 death certificates. This is a small fall from the 2019 peak of 102 drug-related deaths involving a benzodiazepine.

Drug-related deaths involving pregabalin have risen consistently since its first appearance in these statistics in 2013. The annual number of deaths involving this controlled substance rose from 9 in 2016, to a peak of 77 in 2019, but reduced slightly to 70 in 2020.

2020 has seen a large increase in the number of drug-related deaths where a psychoactive substance[1] has been mentioned on the death certificate, from 11 in 2019 (similar to previous years) to 51 in 2020. Further analysis showed that this increase is primarily driven by mentions of flualzaprolam and etizloam on death certificates.

The number of deaths where cocaine is mentioned on the death certificate has remained relatively unchanged at 36, compared with 37 in 2019. Likewise, the number of deaths where any antidepressant has been mentioned, has remained generally stable since 2018.

Figure 7: Number of drug-related deaths where selected substances were mentioned on the death certificate by registration year, 2010-2020

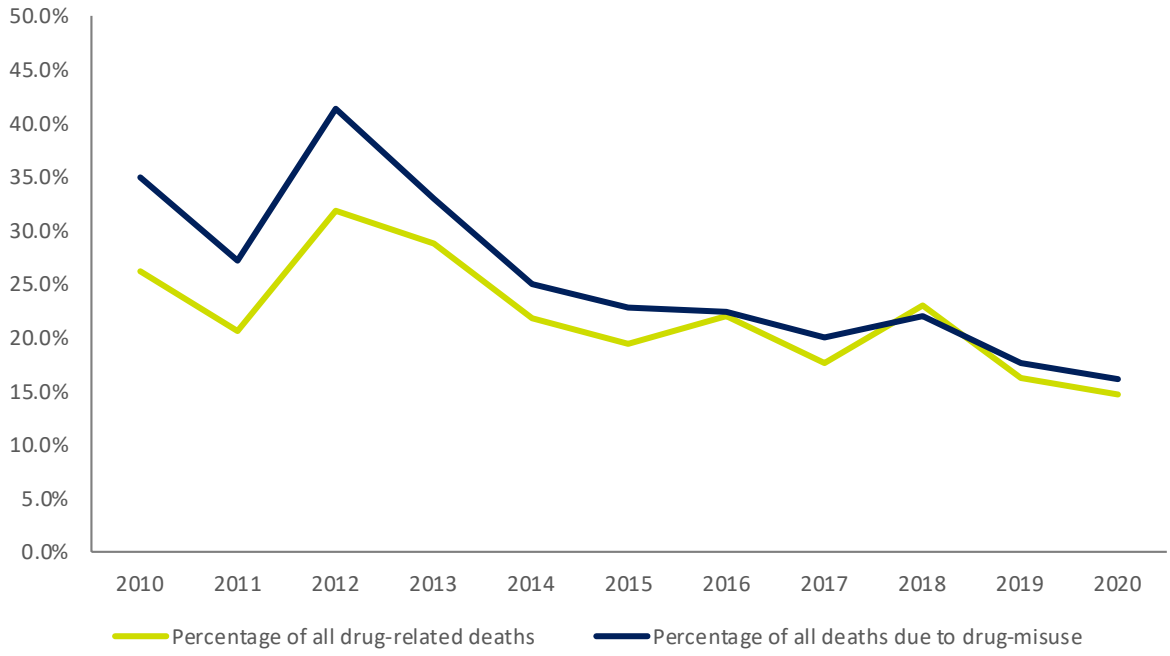


[1] Psychoactive substances include all substances that have been controlled under the Psychoactive Substance Act 2016, including drugs that have subsequently been classed under the Misuse of Drugs Act. Please note, psychoactive drugs in this report also appear in the relevant class of drug, i.e. a drug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

Section 3: Drug-related deaths and mention of alcohol

The proportion of drug-related deaths where alcohol is also mentioned on the death certificate has continued to fall since 2018. In 2020, 14.7% of drug-related deaths mentioned alcohol as a cause of death, a decrease from 16.2% in 2019 and 23.0% in 2018, and over 17 percentage points down from the peak in 2012 (31.8%).

Figure 8: Proportion of drug-related deaths and deaths due to drug-misuse where alcohol was also mentioned on the death certificate by registration year, 2010-2020

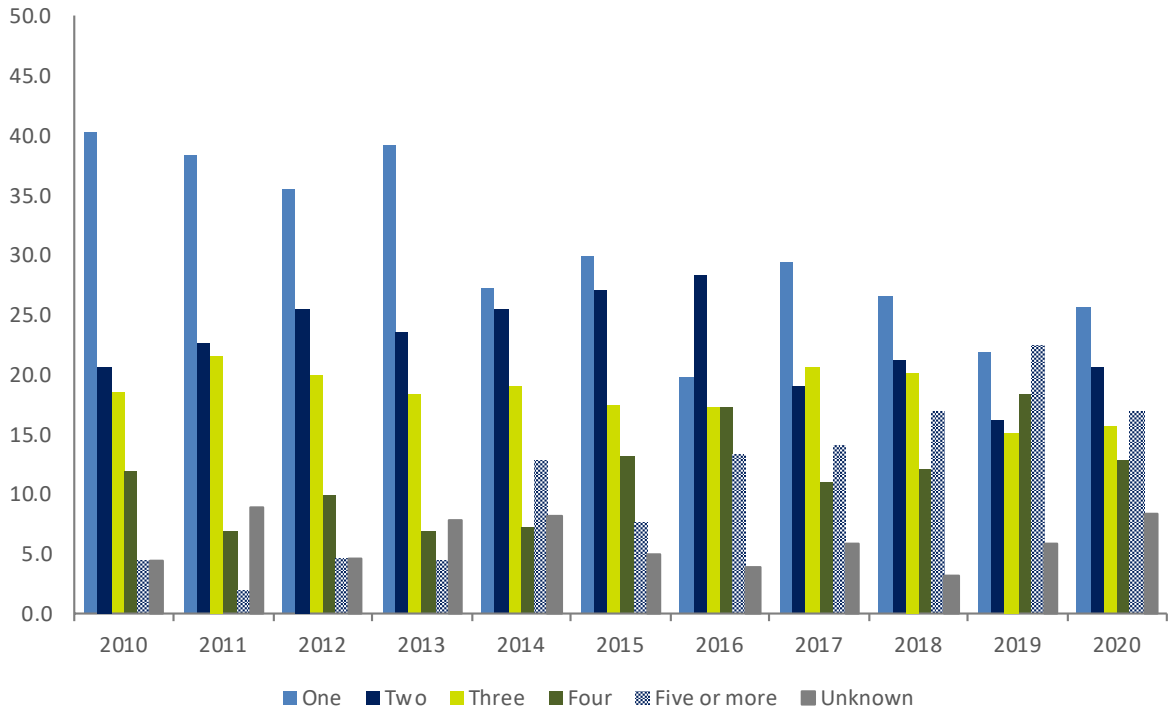


Section 4: Drug-related deaths by number of drugs mentioned

Compared with 2010, drug-related deaths in more recent years are more likely to be caused by a number of drugs, rather than one specific drug. In 2020, two thirds of drug-related deaths had two or more drugs listed on the death certificate, and in 2019 it was 72.3%.

Over a quarter (25.7%) of all drug-related deaths registered in 2020 had a single drug mentioned on the death certificate, compared with 22.0% in 2019 and 40.2% in 2010.

Figure 9: Proportion of drug-related deaths by the number of drugs mentioned on the death certificate by registration year, 2010-2020

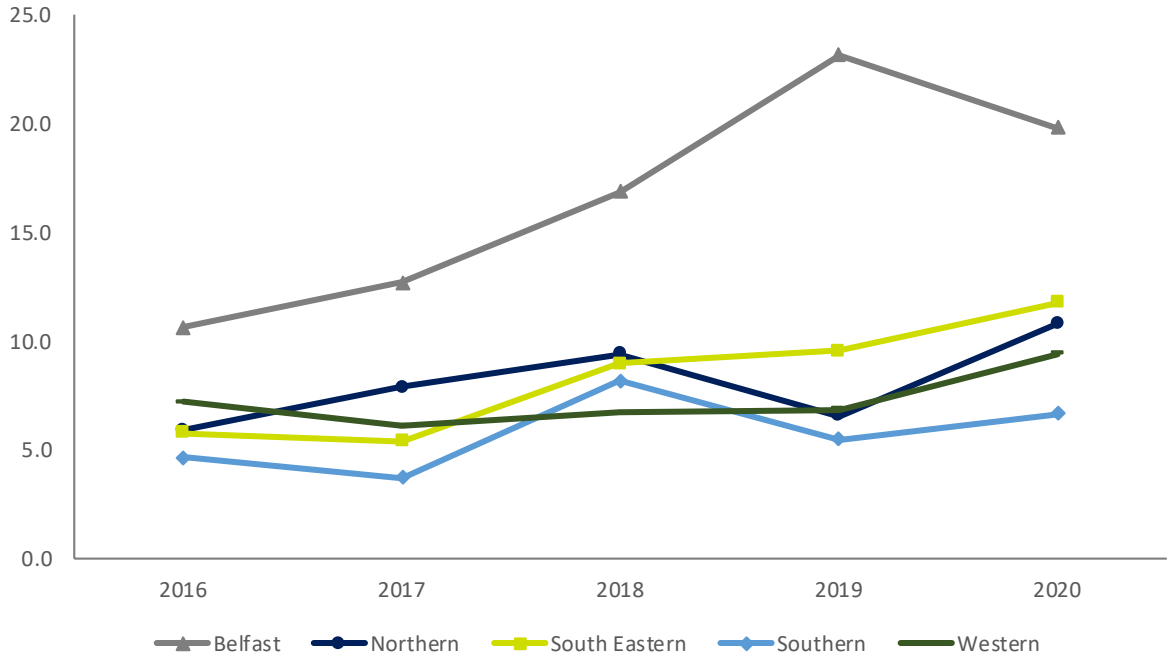


Section 5: Health and Social Care Trust (HSCT)

Belfast HSCT had the highest number and rate of drug-related deaths in Northern Ireland in 2020. Table 8 in the accompanying spreadsheet shows the number of deaths and rate per 100,000 population for Northern Ireland between 2016 and 2020. Belfast HSCT has consistently had the highest number of drug-related deaths.

Figure 10 shows that all HSCTs experienced an increase in age-standardised death rate for drug-related deaths between 2019 and 2020, with the exception of Belfast HSCT. Notably, the South-Eastern HSCT moved from having the second lowest rate in 2016 (5.8) to the second highest in 2020 (11.7 per 100,000 population).

Figure 10: Age-Standardised Mortality Rate (ASMR) of drug-related deaths per 100,000 population by Health and Social Care Trust, 2016-2020

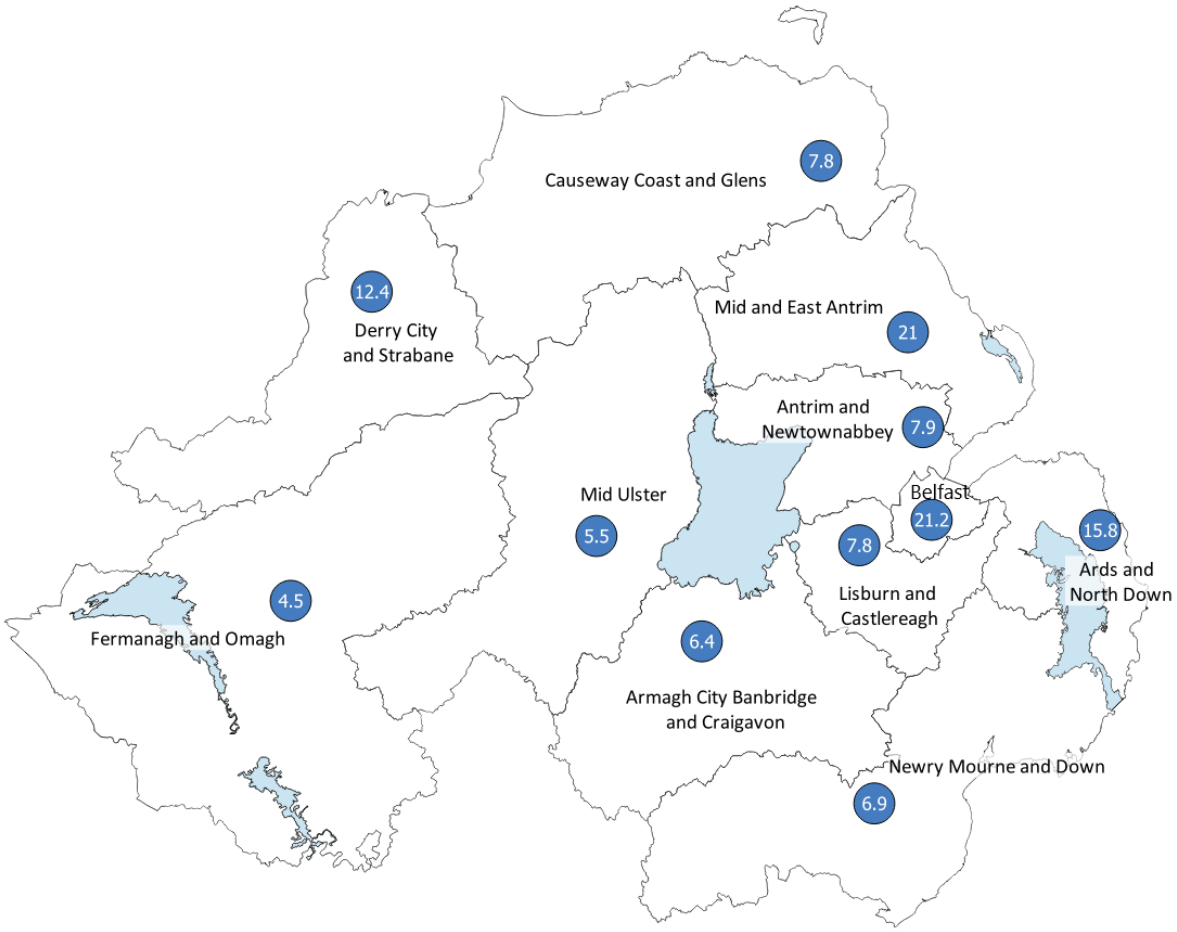


Section 6: Local Government District (LGD)

Belfast LGD had the highest number of drug-related deaths registered in Northern Ireland in 2020, accounting for over a third (35.8%) of the 218 drug-related deaths. Conversely, Fermanagh & Omagh had the lowest number at 5 (2.3%) of the total 218 drug-related deaths (see table 9 in accompanying spreadsheet).

Since 2016, Belfast LGD has consistently had the highest number of drug-related deaths. In terms of age-standardised mortality rates per 100,000 population, Belfast LGD has also had the highest rate (21.2 in 2020, see Figure 11). However, the rate in Mid & East Antrim for 2020 recorded similar results at 21.0 per 100,000 population. This reflects a large increase from 6.1 in 2019.

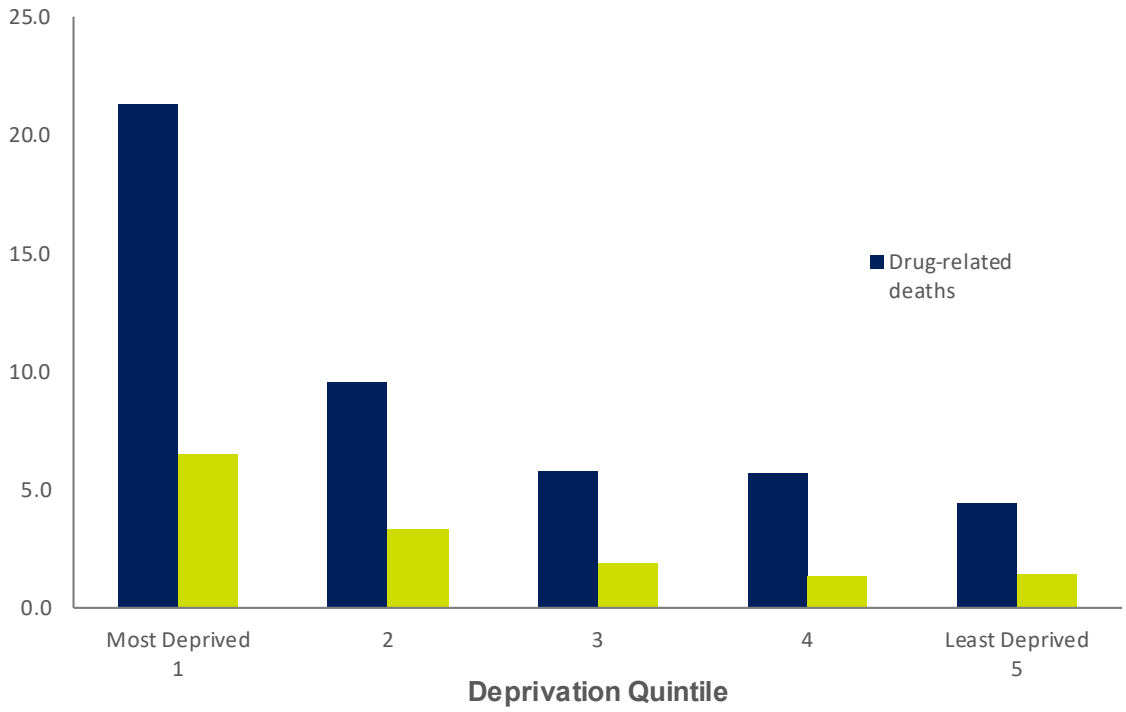
Figure 11: Map of NI showing age-standardised drug-related death rates by Local Government District, 2020



Section 7: Multiple Deprivation Measure (MDM)

The most deprived 20% of areas (quintile) in Northern Ireland experienced the highest (age-standardised) rate of drug-related deaths at 21.3, and drug-misuse deaths at 6.5 per 100,000 population in the last 5 years. This is in comparison with areas in the least deprived quintile showing an ASMR of 4.5 for drug-related deaths, and 1.4 per 100,000 population for drug-misuse deaths. The relationship between deprivation and drug deaths is clear based on the ASMR gradient in Figure 12.

Figure 12: Age-Standardised Mortality Rate (ASMR) of drug-related and drug-misuse deaths per 100,000 population by deprivation quintile (NIMDM17), 2016-2020



The difference in the number of drug deaths (both drug-related and drug misuse) per 100,000 population between quintiles 3 to 5 (the less deprived areas) is much less than the rates seen in quintiles 1 and 2 (the more highly deprived areas).

Annex A
Definitions and further information

Drug Deaths

There are two standard definitions associated with drug-related mortality:

Drug-related deaths

A death is drug-related when the underlying cause of death recorded on the death certificate is drug poisoning, drug abuse or drug dependence. These deaths can be identified solely through the International Classification of Diseases (ICD). The current National Statistics definition and the ICD ninth (ICD-09) and ICD tenth (ICD-10) revision codes used to define drug-related deaths are given in Table 1.

Table 1: ICD9 and ICD10 codes relating to Drug-Related Deaths

ICD-10 Underlying Cause Code	ICD-09 Underlying Cause Code	Description
F11–F16, F18–F19	292, 304, 305.2–305.9	Mental and behavioural disorders due to drug use (excluding alcohol and tobacco)
X40–X44	E850–E858	Accidental poisoning by drugs, medicaments and biological substances
X60–X64	E950.0–E950.5	Intentional self-poisoning by drugs, medicaments and biological substances
X85	E962.0	Assault by drugs, medicaments and biological substances
Y10–Y14	E980.0–E980.5	Poisoning by drugs, medicaments and biological substances, undetermined intent

The second definition is a subset of the definition above and relates to deaths due to;

Drug-Misuse – Deaths classified as drug misuse must be a drug poisoning and meet either one (or both) of the following conditions:

- the underlying cause is drug abuse or drug dependence, defined by ICD-10 as mental and behavioural disorders due to use of: opioids (F11), cannabinoids (F12), sedatives or hypnotics (F13), cocaine (F14), other stimulants, including caffeine (F15), hallucinogens (F16) and multiple drug use and use of other psychoactive substances (F19); or
- any of the substances controlled under the Misuse of Drugs Act 1971 are involved, this include class A, B and C drugs.

Table 2: ICD10 codes relating to Drug-Misuse

ICD-10 Underlying Cause Code	Controlled drug mentioned on death record	Description
F11-F16*		Opioids, Cannabinoids, Sedatives or Hypnotics, Cocaine, Other stimulants, including caffeine, Hallucinogens
F19*		Multiple drug use and use of other Psychoactive Substances
X40–X44	✓	Accidental poisoning by drugs, medicaments and biological substances
X60–X64	✓	Intentional self-poisoning by drugs, medicaments and biological substances
Y10–Y14	✓	Poisoning by drugs, medicaments and biological substances, undetermined intent
X85	✓	Assault by drugs, medicaments and biological substances
F18	✓	Mental and behavioural disorders due to use of volatile substances

* excluding alcohol, tobacco and volatile substances

This release is based on an update to the definition of drug-misuse deaths to make Northern Ireland data comparable with England and Wales data. Please see the Drug-related deaths information paper, which contains more details on the change.

It is important to note:

1. This definition does **not** include every death which involved drugs, for example, transport accidents where the driver was under the influence of drugs are excluded.
2. Only deaths related to poisonings by drugs, medicaments and biological substances are included. Poisonings by other types of chemicals are excluded.

A list of controlled drugs mentioned on death certificates in Northern Ireland is available on the NISRA website at: https://www.nisra.gov.uk/statistics/cause-death/drug-related-deaths

Underlying cause: underlying cause of death is the disease or injury that initiated the train of morbid events leading directly to death, or the circumstances of the accident or violence that produced the fatal injury.

MDM: The Measure of Multiple Deprivation in Northern Ireland (MDMNI) for 2017. Northern Ireland is split into 890 spatial areas known as Super Output Areas (SOAs), with an average population of around 2,100 people. Distinct types, or domains, of deprivation are made up from one or more indicators. The 7 domains of deprivation are:

- Income Deprivation Domain
- Employment Deprivation Domain
- Health Deprivation & Disability Domain
- Education, Skills & Training Deprivation Domain
- Access to Services Domain
- Living Environment Domain
- Crime & Disorder Domain

The indicators in each domain were analysed to produce a domain specific deprivation ranking of the 890 SOAs in Northern Ireland, from 1 (most deprived) to 890 (least deprived). The ranks of the 7 domains were weighted and combined, to provide a ranking of multiple deprivation (MDM) for the 890 SOAs.
More information on the 2017 MDMNI is available from the NISRA website.

Quintile: The 890 SOAs have been divided in 5 even groups, or quintiles, according to their MDM ranks, with quintile 1 representing the most deprived areas in Northern Ireland.

Crude Mortality Rate: The crude rate is calculated by dividing the number of deaths by the population and multiplying by 100,000. This is the number of deaths per 100,000 population. This rate has not been adjusted to account for any differences in the age structures of the populations being compared.

Age-standardised mortality rates (ASMRs) Age-standardised mortality rates adjust for differences in the age structure of populations and therefore allow valid comparisons to be made between geographical areas, the sexes and over time. In this bulletin, age-standardised mortality rates are presented per 100,000 people and standardised to the 2013 European Standard Population.

Links to relevant publications

Drug deaths registered in the England and Wales

Drug deaths registered in Scotland

Deaths in Ireland (including cause)

List of Tables

Data accompanying this bulletin are available from the NISRA website in Excel format. The spreadsheet includes the following tables.

Table 1: Number and rate of drug-related deaths and deaths due to drug-misuse by sex and registration year, 2010-2020

Table 2a: Number of drug-related deaths by gender, age and registration year, 2010-2020

Table 2b: Crude rate of drug-related deaths and deaths due to drug misuse by age and registration year, 2010-2020

Table 3a: Number of drug-related deaths by gender, age and registration year, 2010-202

Table 3b Proportion of drug-related deaths in each age group by gender and registration year, 2010-2020

Table 4a: Number of drug-related deaths where selected substances were mentioned on the death certificate by registration year, 2010-2020

Table 4b: Percentage of drug-related deaths where selected substances were mentioned on the death certificate by registration year, 2010-2020

Table 5a: Number of drug-related deaths by underlying cause of death and registration year, 2010-2020

Table 5b: Number of deaths due to drug-misuse by underlying cause of death and registration year, 2010-2020

Table 6: Number of drug-related deaths and deaths due to drug-misuse where alcohol was also mentioned on the death certificate by registration year, 2010-2020

Table 7: Number of drug-related deaths by number of drugs mentioned on the death certificate and registration year, 2010-2020

Table 8: Number and rate of drug-related deaths by Health and Social Care Trust and registration year, 2010-2020

Table 9: Number and rate of drug-related deaths by Local Government District and registration year, 2010-2020

Table 10: Number and rate of drug-related deaths by deprivation quintile NIMDM171, 2016-2020

Table 11: Number and rate of deaths due to drug-misuse by deprivation quintile NIMDM172, 2016-2020

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