

Drug-related deaths in Scotland in 2023



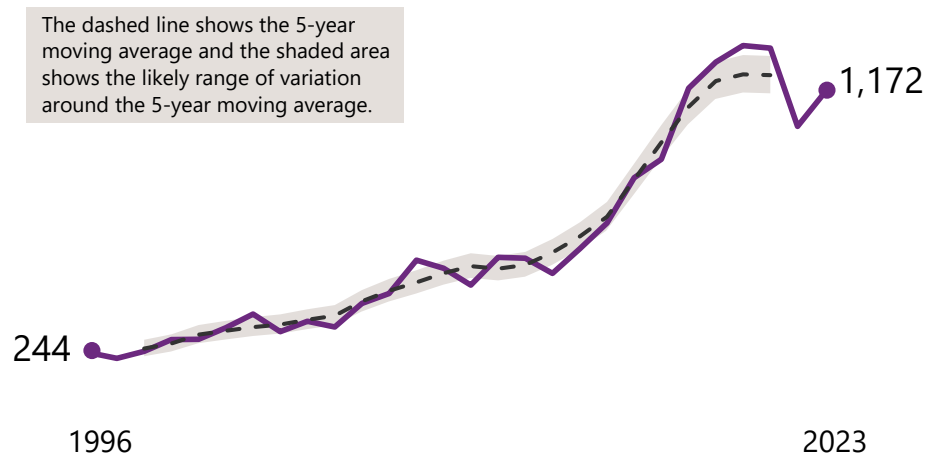
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Statistics of drug-related deaths in 2023 and earlier years. Includes break downs by age, sex, substance, cause and geography.

In 2023 there were 1,172 deaths due to drug misuse in Scotland

This is 121 more deaths than in 2022 and the second lowest number of drug misuse deaths since 2017. The rate of drug misuse deaths is still much higher than at the beginning of the series in 1996.

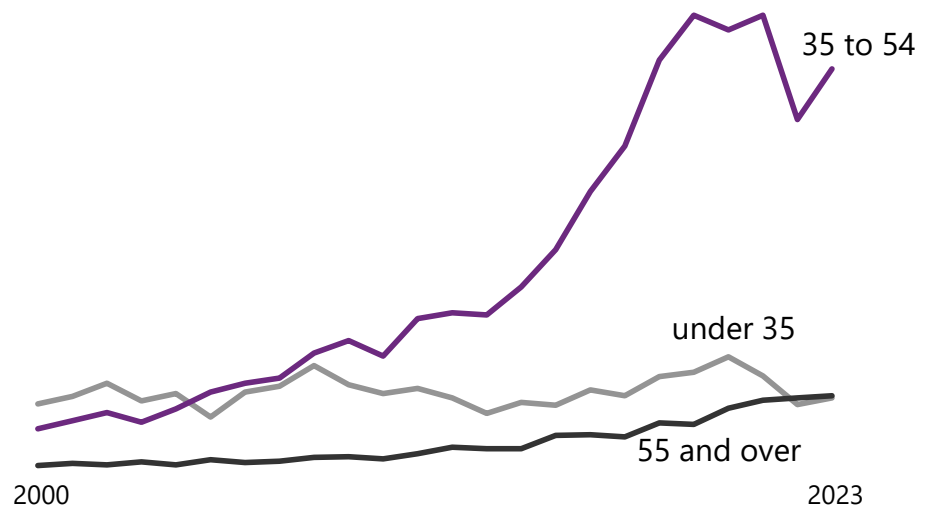
Drug misuse deaths, 1996 to 2023



People aged 35-54 were most likely to die from drug misuse

The age that people die from drug misuse deaths has increased over the past two decades. In 2000, the highest rate of drug misuse deaths was in those under 35. In 2023 the highest rate was in those aged 35 to 54.

Drug misuse death rates* by age group, 2000 to 2023

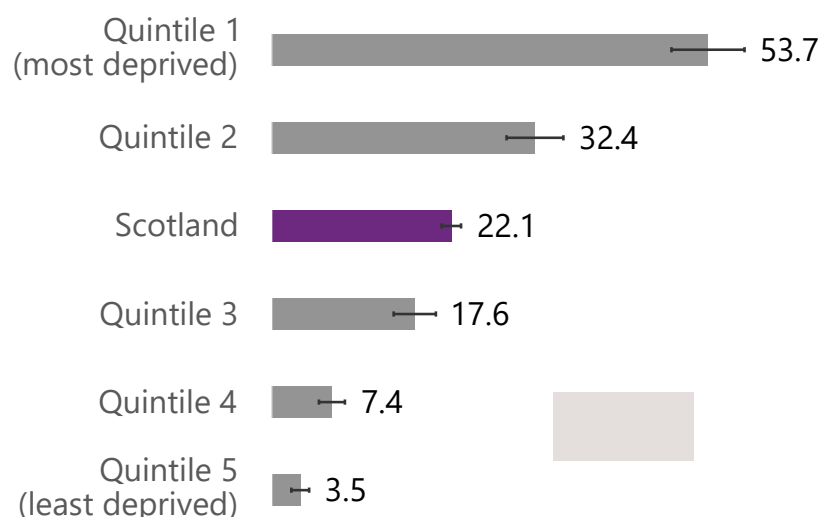


* age standardised death rates per 100,000 people

Death rates* are linked to deprivation

In 2023, people living in the most deprived areas of Scotland were more than 15 times as likely to die from drug misuse than in the least deprived areas.

Drug misuse death rates* by SIMD quintile, 2023



* age standardised death rates per 100,000 population.

Key points

- In 2023, there were 1,172 drug misuse deaths registered in Scotland, an increase of 12% (121 deaths) compared with 2022.
- Whilst drug misuse deaths in Scotland have generally been increasing over the last two decades, this is the second lowest number in the last six years
- Drug misuse deaths are still much more common than they were in 2000. After adjusting for age, the rate of drug misuse deaths were 4.2 times as high in 2023 than 2000.
- In 2023, males were twice as likely to have a drug misuse death as females. Most of the increase in the past year was due to male deaths.
- Since 2000, the average age of drug misuse deaths has increased from 32 to 45.
- People in the most deprived areas of Scotland are more than 15 times as likely to die from drug misuse compared to people in the least deprived areas. The association of deprivation with drug misuse deaths is much greater than with other causes of death.
- After adjusting for age, Glasgow City and Dundee City had the highest rates of drug misuse deaths while East Renfrewshire and East Dunbartonshire had the lowest.
- The most common type of drugs implicated in drug misuse deaths in 2023 were opiates/opioids which were implicated in 80% of all deaths.
- The majority (88%) of drug misuse deaths were classified as accidental poisonings, with only 7% classed as intentional self-poisonings.

Further information is available here:

- [Tables and Figures](#)
- [Annexes](#) – providing further background and methodological information.
- [Additional Tables](#)

A note on the term 'drug misuse death'

Throughout this report the term 'drug misuse death' is used. This refers to a specific definition of drug death defined by the Advisory Council on the Misuse of Drugs (ACMD) cross UK working group in 2000. The term drug misuse is used to be consistent with other UK statistics producers and differentiate from other definitions of drug death (e.g. drug poisoning deaths and drug induced deaths) and also to be clear that the death involves drugs defined under the [Misuse of Drugs Act 1971](#).

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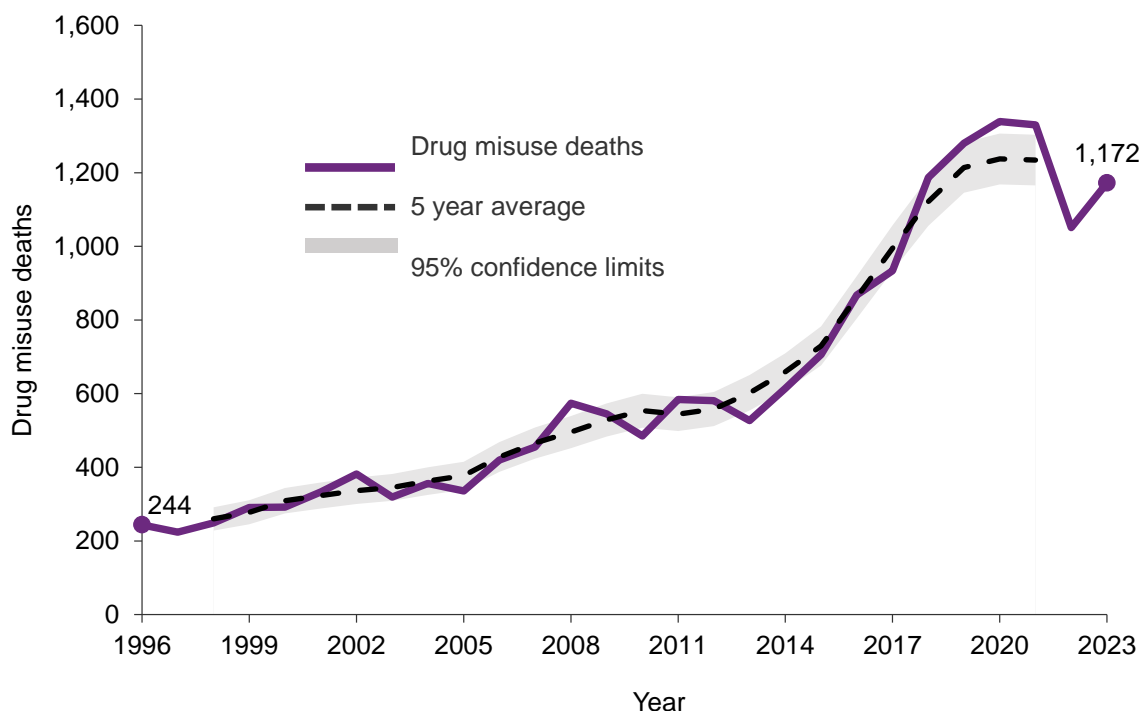
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1. Drug misuse deaths in Scotland

In 2023, there were 1,172 drug misuse deaths registered in Scotland, an increase of 12% (121 deaths) compared with 2022 (Figure 1). This follows a large decrease in the number of drug misuse deaths in the previous year.

After controlling for age, there were 22.4 drug misuse deaths for every 100,000 people in Scotland in 2023, up from 20.0 in 2022.

Figure 1: Drug misuse deaths increased in 2023



Drug misuse deaths in Scotland have generally been increasing over the last two decades. After adjusting for age, the rate of drug misuse deaths were 4.2 times as high in 2023 than 2000.

The highest number of drug misuse deaths on record happened in 2020 where there were 1,339 deaths (25.6 per 100,000 people).

What are drug misuse deaths?

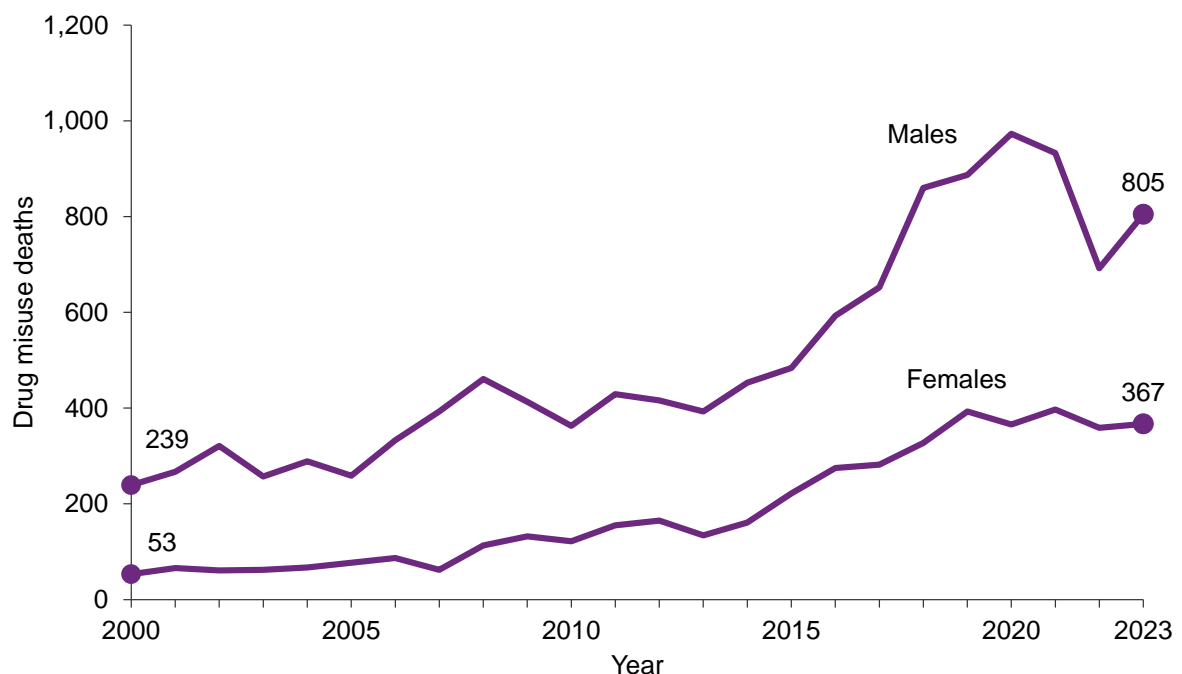
The definition of drug-deaths used in Scotland is called drug misuse. This includes all deaths where the underlying cause was drug abuse OR where the underlying cause was poisoning AND there was a controlled substance in the body. This definition excludes cases where drug use indirectly led to the death or where chronic health conditions caused by drug use caused the death. You can read more detail about how we define drug misuse deaths in our [blog post](#).

2. Drug misuse deaths by sex

The latest increase in drug misuse deaths was driven by male deaths (Figure 2). In 2023, there were 805 male drug misuse deaths, an increase of 16% (113 deaths) from 2022. There were 367 female drug misuse deaths, an increase of 2% (8 deaths).

After adjusting for age, there were 31.7 deaths per 100,000 males and 13.6 deaths per 100,000 females in 2023. This means that males were twice as likely to have a drug misuse death as females. This gap between sexes has narrowed over time. In the early 2000s, males were four or five times as likely to have a drug misuse death as females.

Figure 2: Male deaths driving increase in drug misuse deaths in 2023



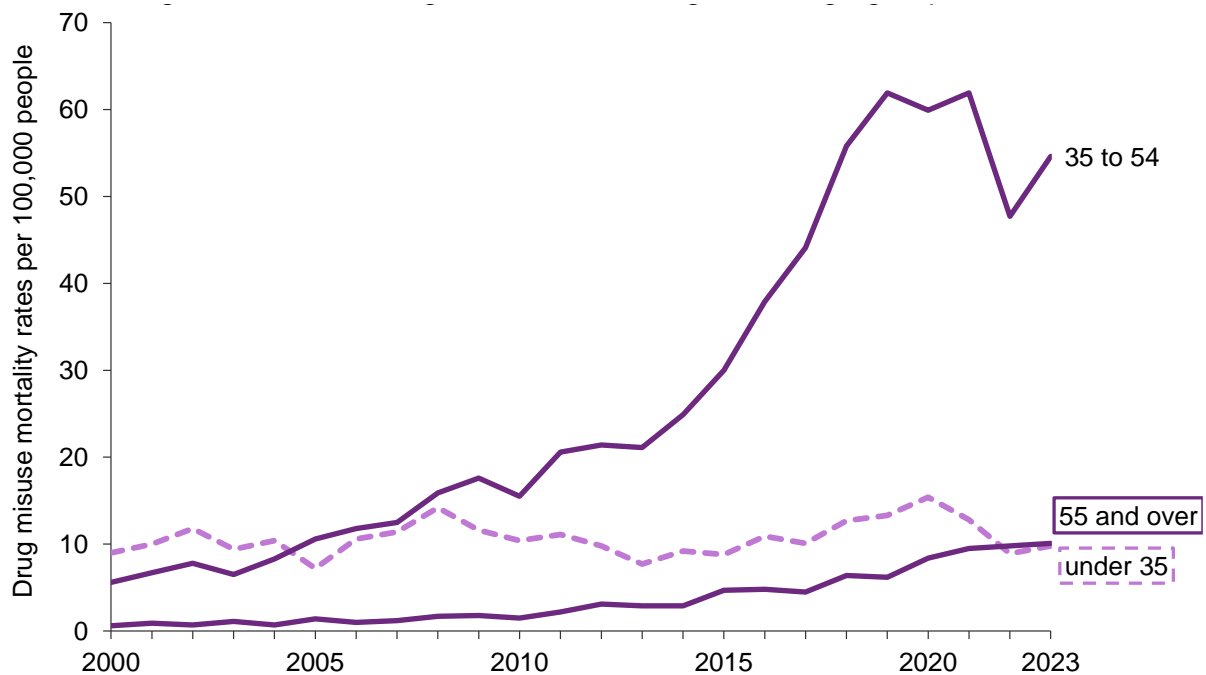
3. Drug misuse deaths by age

The age profile of drug misuse deaths has become older over time, with the average age increasing from 32 in 2000 to 45 in 2023.

In 2000, most drug misuse deaths were in those aged under 35 (68%) with 29% in those aged 35 to 54. In the latest year, most deaths were in those aged 35 to 54 (65%) followed by those aged under 35 (19%). The proportion of drug misuse deaths which are aged 55 and over has been increasing over time, from 3% in 2000 to 17% in 2023.

The rate of drug misuse deaths is highest in those aged 35 to 54 and has been increasing over the last two decades (Figure 3). The rate of drug misuse deaths in those aged 35 to 54 is more than five times higher than the rate of those aged under 35 and 55 and over.

Figure 3: Rate of drug misuse deaths highest in age group 35 to 54



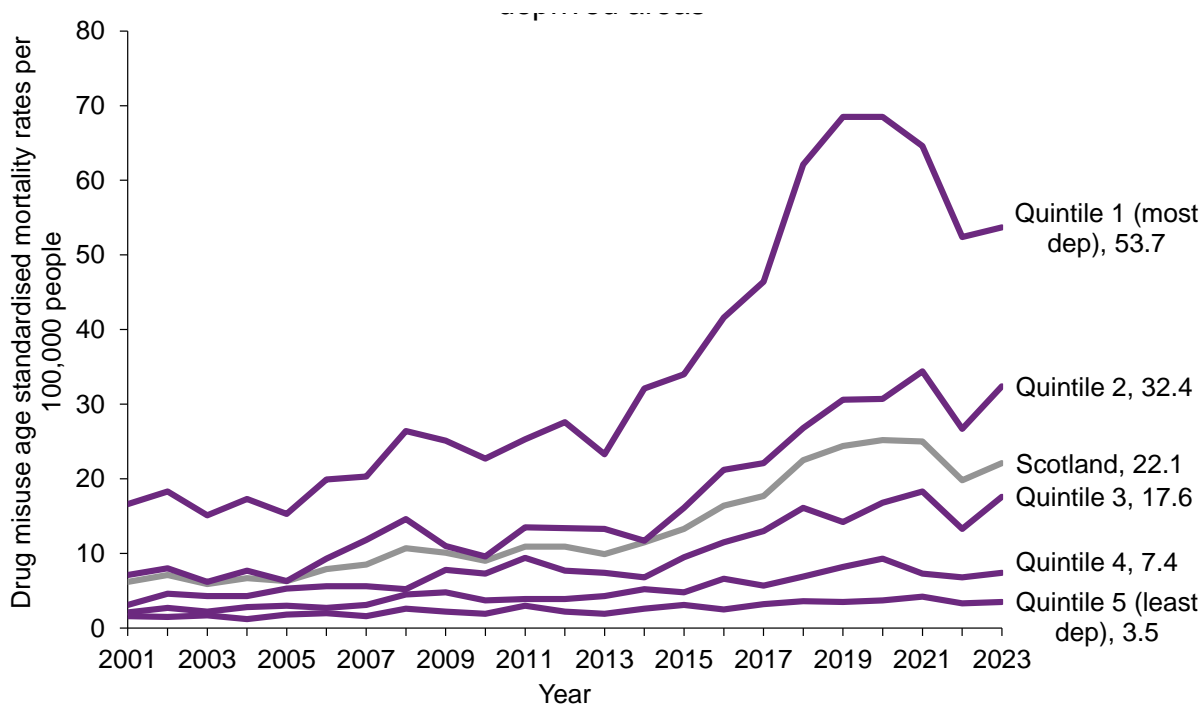
4. Drug misuse deaths by deprivation

People in the most deprived areas of Scotland were 15.3 times more likely to have a drug misuse death than people in the least deprived areas in 2023, after adjusting for age. For deaths of all causes, people in the most deprived areas are around twice as likely to die as those in the least deprived areas.

The ratio of drug misuse deaths in the most and least deprived quintiles has changed over time (Figure 4). The lowest ratio was 8.4 in 2011 and the highest was 19.6 in 2019.

The rate of drug misuse deaths increased for all quintiles in 2023 after decreases the previous year.

Figure 4: Drug misuse death rates are 15 times as high in the most deprived areas [note 1]



Note 1: Deprivation quintiles are based on the Scottish Index of Multiple Deprivation

5. Drug misuse deaths across areas in Scotland

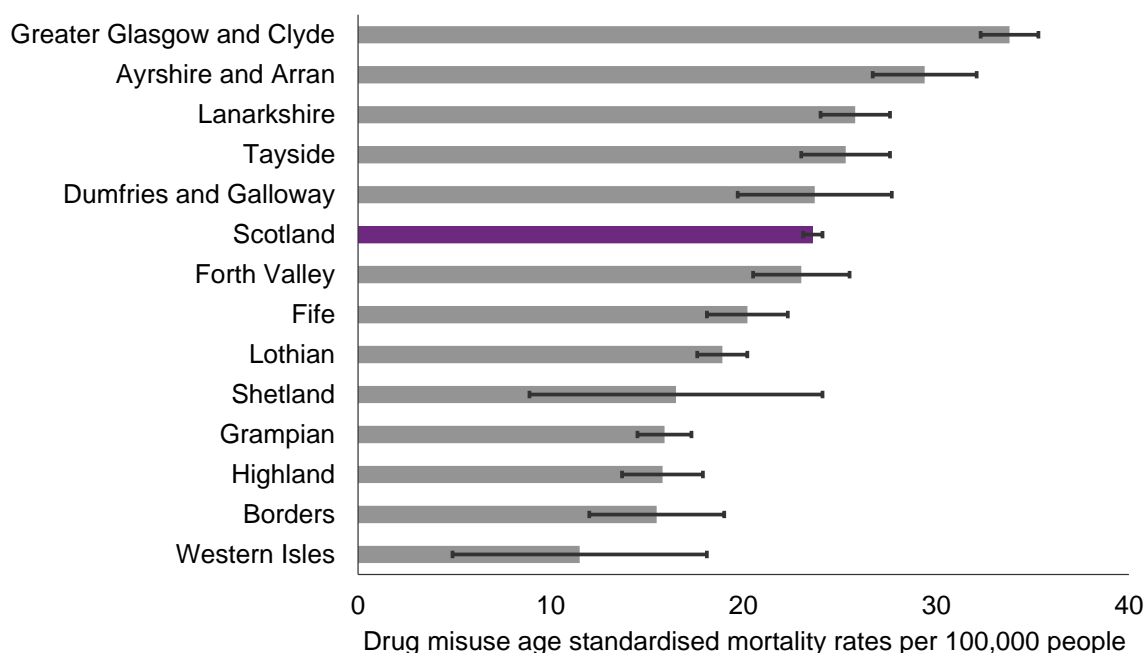
Greater Glasgow and Clyde health board had the highest rate of drug misuse deaths with 33.8 deaths per 100,000 people over the period 2019-2023, after adjusting for age. Both Greater Glasgow and Clyde, and Ayrshire and Arran health boards had higher rates of drug misuse deaths than Scotland average (Figure 5).

Western Isles had the lowest rate of drug misuse deaths with 11.5 per 100,000 people.

Orkney had fewer than 10 deaths over the time period, so no rates were calculated. Since relatively few people die of drug misuse, we calculate rates for areas across Scotland by grouping five years of data together to compare areas.

The greatest increase in drug misuse rate over time was in Greater Glasgow and Clyde, up from 8.9 in 2000-2004 to 33.8 per 100,000 people in 2019-2023.

Figure 5: Drug misuse deaths for selected NHS health board areas, age standardised death rates 2019-2023 [Note 1][Note 2]



Note 1: Error bars represent 95% confidence intervals

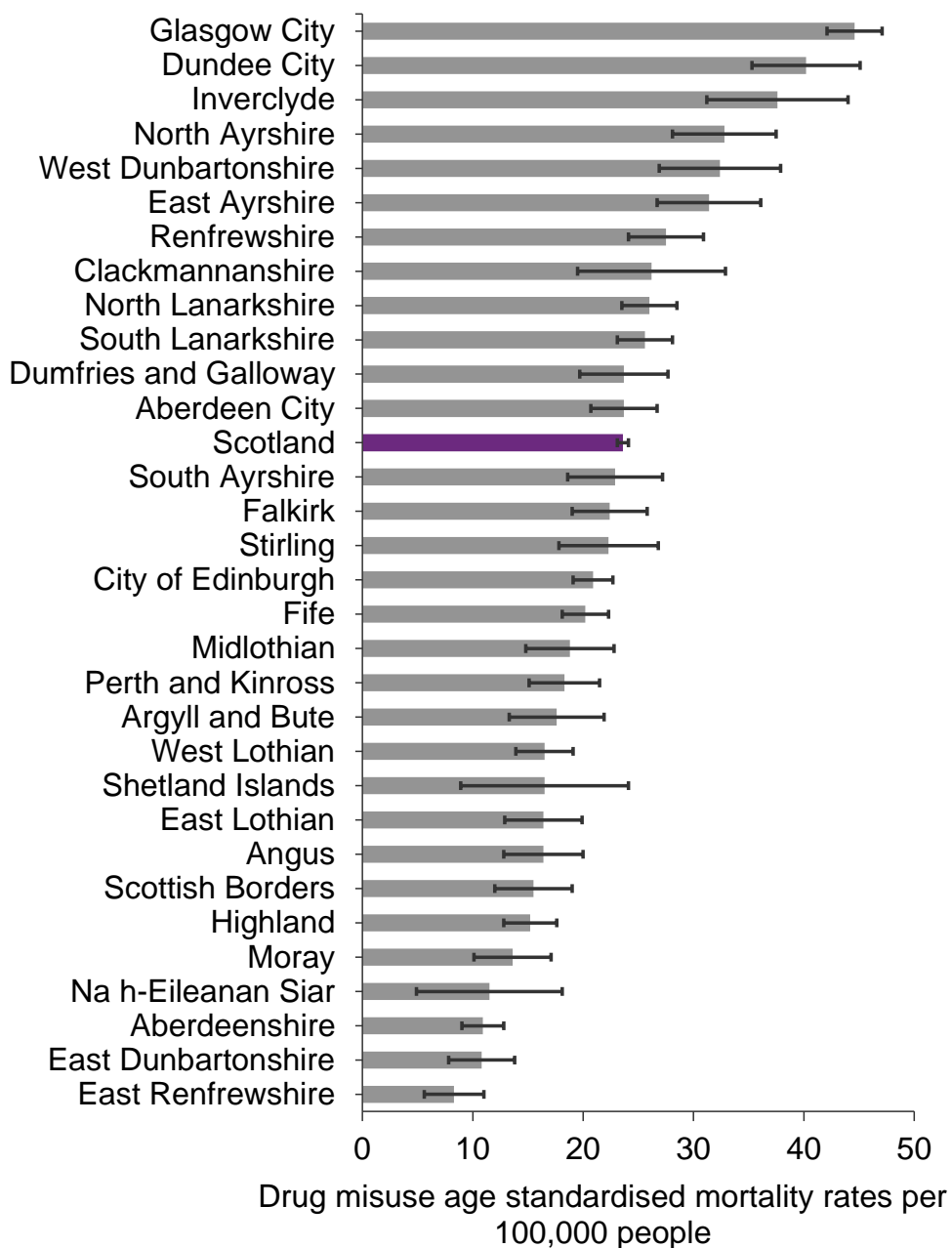
Note 2: Orkney had fewer than 10 deaths, so no rates were calculated

Of all the local authority areas, Glasgow City had the highest rate of drug misuse death with 44.6 deaths per 100,000 people for the period 2019-2023. The rate of drug misuse death was above the Scotland average in: Glasgow City, Dundee City, Inverclyde, North Ayrshire, West Dunbartonshire, East Ayrshire, Renfrewshire, North Lanarkshire.

The lowest rates over the same period were in East Renfrewshire (8.3) and East Dunbartonshire (10.8).

Orkney Islands had fewer than 10 deaths over the time period, so no rates were calculated.

Figure 6: Drug misuse deaths for selected council areas, age standardised death rate 2019-2023 [Note 1][Note 2]



Note 1: Error bars represent 95% confidence intervals

Note 2: Orkney Islands had fewer than 10 deaths, so no rates were calculated

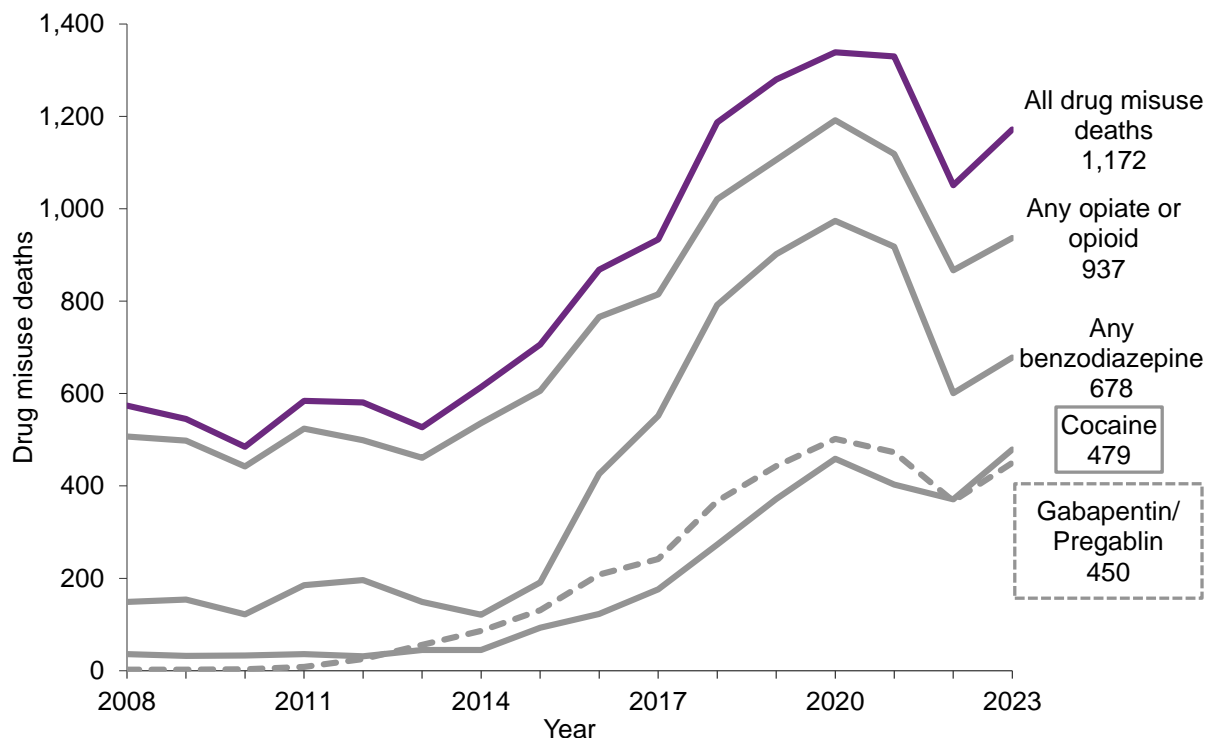
6. Drug misuse deaths by substances implicated

In 81% of all drug misuse deaths in 2023, more than one drug was implicated in the death.

Of all drug misuse deaths in 2023, the following substances were implicated :

- opiates/opioids (such as heroin/morphine and methadone): 937 deaths (80% of the drug misuse deaths)
- benzodiazepines (such as diazepam and bromazolam): 678 (58%)
- cocaine: 479 (41%)
- gabapentin and/or pregabalin – 450 (38%)

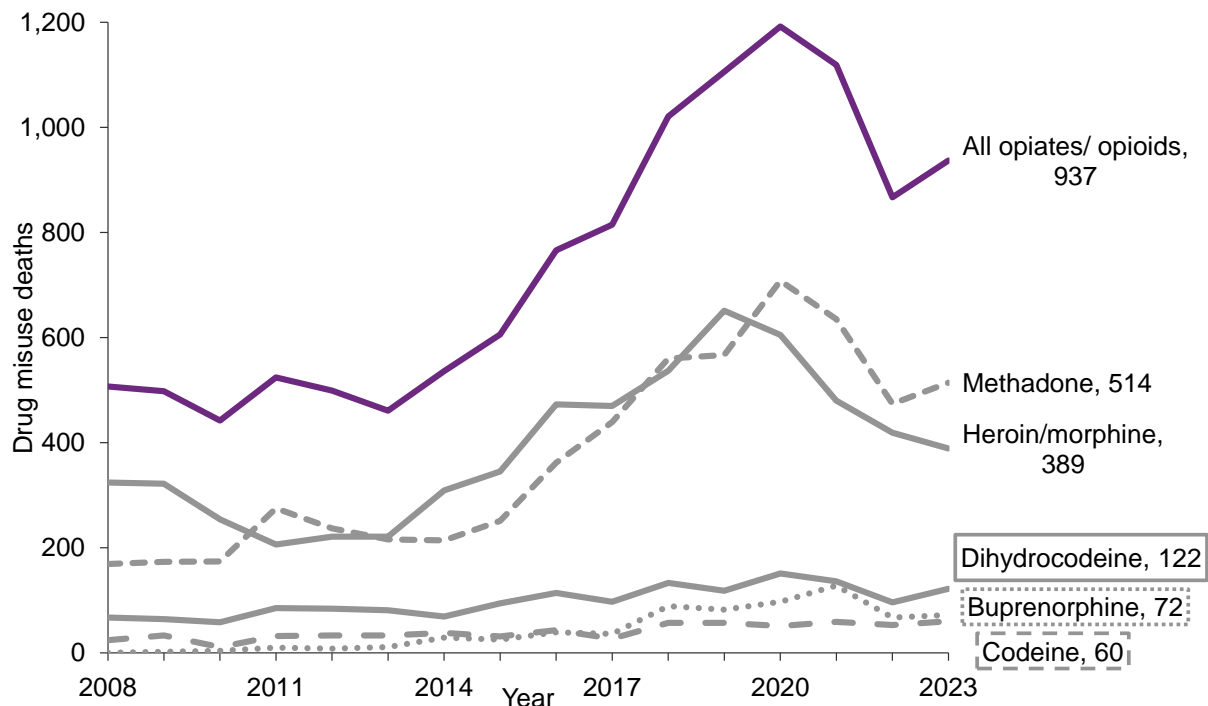
Figure 7a: Drug misuse deaths in Scotland by drugs implicated



Since 2008, opiates and opioids have been the drugs most commonly implicated in drug misuse deaths in Scotland.

The majority of drug misuse deaths implicating opiates/opioids involved heroin/morphine and/or methadone. We report heroin and morphine as one category because it is not possible to tell which form the drug was in from a post-mortem.

Figure 7b: Drug misuse deaths in Scotland by drugs implicated, opiates and opioids



The proportion of drug misuse deaths implicating benzodiazepines increased from 26% in 2008 to 58% in 2023. Street benzodiazepines account for the vast majority of drug misuse deaths where benzodiazepines were implicated (Figure 7c).

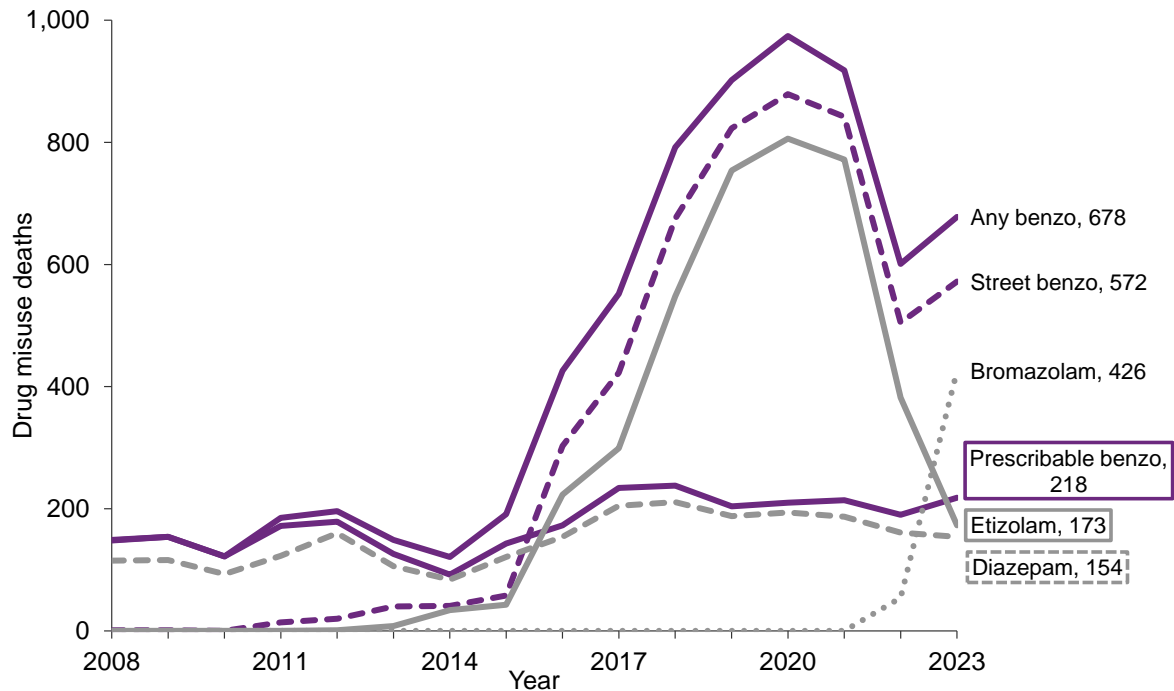
The number of deaths where street benzodiazepines were implicated increased rapidly from one death in 2008 to a peak of 879 deaths in 2020. Street benzodiazepines were implicated in 572 drug misuse deaths in 2023.

The number of deaths where the street benzodiazepine etizolam was implicated have rapidly decreased in recent years. Etizolam was implicated in 173 drug misuse deaths in 2023.

The street benzodiazepine bromazolam was implicated 426 drug misuse deaths, or 36% of all drug misuse deaths in 2023. There was limited testing for bromazolam in post-mortems carried out prior to 2023 so caution is advised when making comparisons over time.

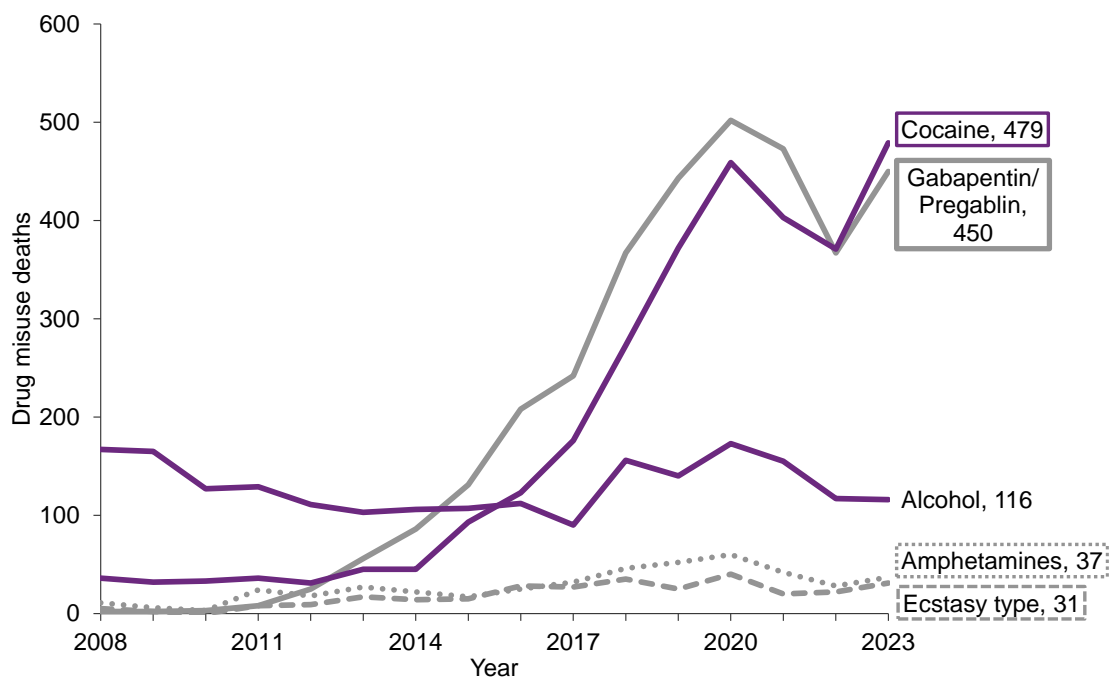
The number of drug misuse deaths where prescribable benzodiazepines were implicated has increased slightly with 148 deaths in 2008 and 218 in 2023. Prescribable benzodiazepines are often medications for anxiety or insomnia.

Figure 7c: Drug misuse deaths in Scotland by drugs implicated, benzodiazepines (benzos) [Note 1]



Note 1: There was limited testing for bromazolam in post-mortems carried out prior to 2023 so caution is advised when making comparisons over time.

Figure 7d: Drug misuse deaths in Scotland by drugs implicated, other significant drugs



The proportion of drug misuse deaths where cocaine was implicated has increased from 6% in 2008 to 41% in 2023 (Figure 7d). The proportion where gabapentin and/or pregabalin were implicated has also increased from less than 1% to 38% over the same period. These are drugs used to treat epilepsy and nerve pain.

The number of drug misuse deaths where alcohol was implicated (in addition to a controlled drug) has remained fairly similar, although the proportion has fallen from 29% in 2008 to 10% in 2023.

New psychoactive substances (NPSs) are drugs which have been made to mimic the effects of illegal substances such as cocaine or ecstasy. These drugs have become more common in recent years, and many have also now become controlled. In 2023, there were 550 drug misuse deaths where controlled NPSs were implicated. The majority of NPSs involved were benzodiazepines, for example, bromazolam. There is more information about NPSs in [Annex E](#).

Most NRS statistics about individual drugs are based on whether the drug was implicated in or contributed to the death. We also record which drugs were present but not thought to have contributed to the death. There is data based on which drugs were present in the [additional tables](#) published alongside this report.

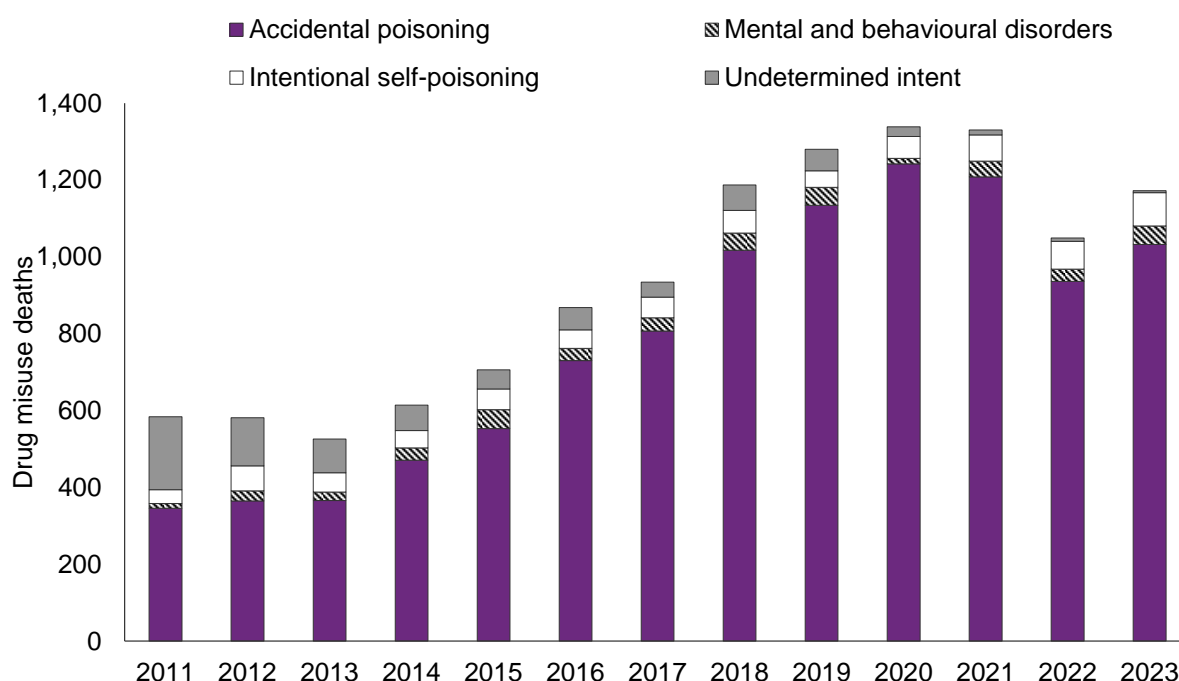
[Annex C](#) includes more details on how drugs are recorded. The distinction between prescribable and street benzodiazepines is explained in [Annex H](#).

7. Drug misuse deaths by cause of death

In 2023, the vast majority (88%) of drug misuse deaths were classified as accidental poisonings. This proportion has increased in recent years.

Of all drug misuse deaths, 7% were due to intentional self-poisoning, and less than 1% were poisonings of undetermined intent. In 4% of drug misuse deaths, the underlying cause of death was classed as mental and behavioural disorders due to psychoactive substance use.

Figure 8: The majority of drug misuse deaths are accidental poisonings



8. Comparisons within the UK

In 2022, the rate of drug poisoning deaths in Scotland was more than double the rates of other UK countries. This is similar to the longer term trend, with Scotland having a higher drug death rate than other parts of the UK for the last decade.

After adjusting for age, the drug poisoning mortality rates in Scotland was 2.7 times as high as the rates in England and Northern Ireland and 2.1 times as high as the rate in Wales. Data for 2022 is the most recent year that data is available across the UK.

There were 1,193 drug poisoning deaths in Scotland, a rate of 22.7 deaths per 100,000 people in 2022. The UK region with the next highest rate of drug poisoning deaths was the North East of England with a rate of 13.4. The region with the lowest rate was London, with 5.7 deaths per 100,000 people.

Figure 9: Drug poisoning deaths, age standardised mortality rates, UK countries and regions, 2022

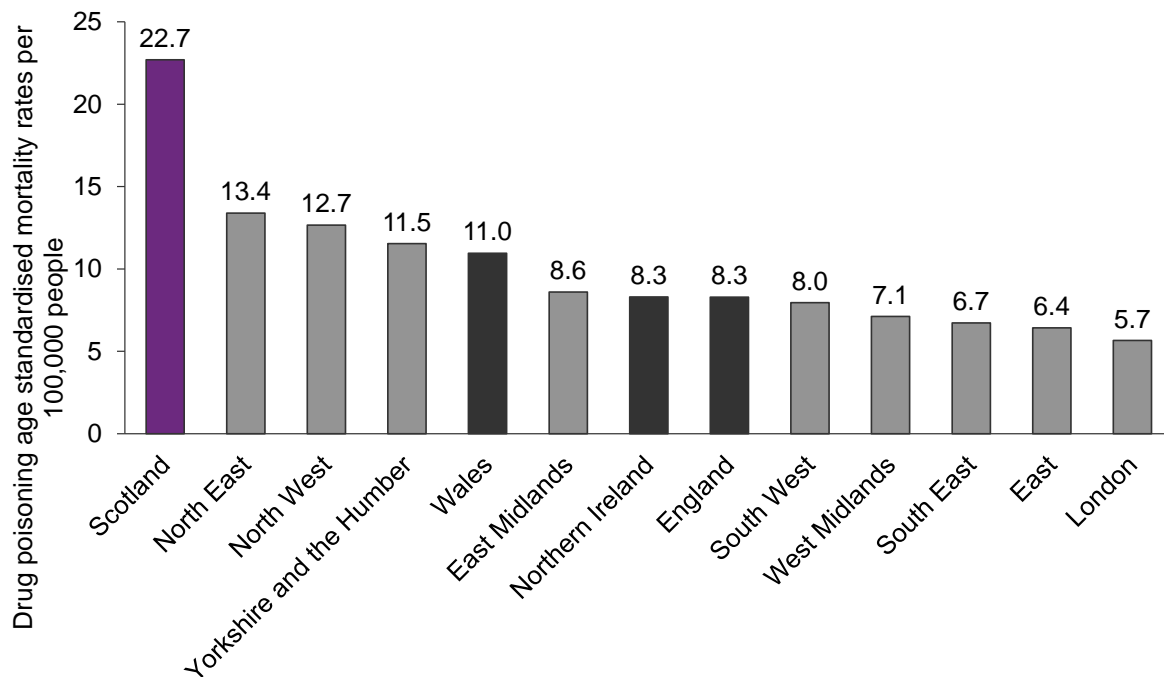


Figure 9 is based on the **drug poisoning** definition of drug deaths. This is a wider definition than drug misuse deaths used in the rest of the report, but it is a more appropriate way to compare drug deaths between UK countries. Both ONS and NRS have published blog posts explaining why this is.

Links to related statistics

- [Deaths related to drug poisoning in England and Wales](#) is published annually by the Office for National Statistics
- [Drug-related and Drug-misuse Deaths, Northern Ireland](#) is published annually by the Northern Ireland Statistics and Research Agency
- NRS publish numbers of deaths due to other causes [including alcohol-specific deaths](#), [probable suicides](#) and [homeless deaths](#) annually
- [Vital Events Reference Tables](#) are published by NRS and contain annual statistics on deaths.

9. Notes on statistical publications

Accredited Official Statistics

The designation of these statistics as Accredited Official Statistics was confirmed in August 2011 following an independent review by the Office for Statistics Regulation. They comply with the standards of trustworthiness, quality and value in the Code of Practice for Statistics and should be labelled 'accredited official statistics'.

In June 2024, the Office for Statistics Regulation introduced the new accredited official statistics badge, to denote official statistics that have been independently reviewed by the Office for Statistics Regulation (OSR) and judged to meet the standards in the Code of Practice for Statistics. The new badge replaces the current National Statistics badge, though the meaning is the same.

Accredited official statistics are called National Statistics in the [Statistics and Registration Service Act 2007](#).

It is National Records of Scotland's responsibility to maintain compliance with the standards expected of accredited official statistics. If we become concerned about whether these statistics are still meeting the appropriate standards, we will discuss any concerns with the Office for Statistics Regulation promptly. Accredited official statistics status can be removed at any point when the highest standards are not maintained, and reinstated when standards are restored.

Information on background and source data

Further details on data source(s), timeframe of data and timeliness, continuity of data, accuracy, etc. can be found in the [methodological annexes](#) that are published alongside this publication on the NRS website.

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