Drug-related deaths in Scotland in 2022

Statistics of drug-related deaths in 2022 and earlier years. Includes break downs by age, sex, substance, cause and geography.
In 2022 there were 1,051 deaths due to drug misuse in Scotland

This is 279 deaths fewer than in 2021 and the 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.

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 2022 the highest rate was in those aged 35 to 54.

Death rates* are linked to deprivation

In 2022, people living in the most deprived areas of Scotland were almost 16 times as likely to die from drug misuse than in the least deprived areas.

* age standardised death rates per 100,000 people
Key points

- In 2022, there were 1,051 drug misuse deaths registered in Scotland. This was a decrease of 21% (279 deaths) compared with 2021. This is the lowest number of drug misuse deaths since 2017.

- The change between 2021 and 2022 is the largest year on year decrease on record.

- Despite this recent fall, drug misuse deaths are still much more common than they were in 2000. After adjusting for age, there were 3.7 times as many drug misuse deaths in 2022 as in 2000.

- In 2022, males were twice as likely to have a drug misuse death as females. Most of the decrease in the past year was in males.

- Since 2000, the average age of drug misuse deaths has increased from 32 to 45.

- People in the most deprived areas of Scotland are almost 16 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 Aberdeenshire had the lowest.

- The most common types of drug implicated in drug misuse deaths in 2022 were opiates/opioids which were implicated in 82% of all deaths.

- The majority (89%) 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.
1. Drug misuse deaths in Scotland

In 2022, there were 1,051 drug misuse deaths registered in Scotland, a decrease of 21% (279 deaths) compared with 2021. This is the lowest number of drug deaths since 2017 and the largest year on year fall since the start of the time series. After controlling for age, there were 19.8 drug misuse deaths for every 100,000 people in Scotland in 2022, down from 25.0 in 2021.

Figure 1: Drug misuse deaths fell in 2022

Over the last two decades, drug misuse deaths have increased most years in Scotland. The largest increase was in 2018 where there were 253 more deaths than the previous year. The highest number of drug misuse deaths on record happened in 2020 where there were 1,339 deaths (25.2 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 recent blog post.
2. Drug misuse deaths by sex

Although there are still many more drug misuse deaths amongst males compared with females, the decrease in 2022 has been far greater in males. In 2022, there were 359 female drug misuse deaths, a decrease of 10% (38 deaths) from 2021. There were 692 male drug misuse deaths, a decrease of 26% (241 deaths.) After adjusting for age, there were 13.3 deaths per 100,000 females and 26.6 deaths per 100,000 males in 2022. This means that males were twice as likely to have a drug misuse death as females. This gap has narrowed in recent years, in the early 2000s, males were four or five times as likely to have a drug misuse death as females.

Figure 2: Male drug misuse deaths saw a large decrease in 2022

3. Drug misuse deaths by age

In 2022, the age group with the most drug misuse deaths was 45-49 (191 deaths) closely followed by those age 40-44 (183 deaths). The age profile of drug misuse deaths has become older over time. In 2000, 68% of all drug misuse deaths were of people under 35, 29% in those aged 35-54 and just 3% in people aged 55+. By contrast, in 2022, 19% of all drug misuse deaths were in people aged under 35, 63% in those aged 35-54 and 18% in those aged 55 and over. The average age of people who died from drug misuse deaths has increased from 32 in 2000 to 45 in 2022. The greatest fall in number of drug misuse deaths was in those aged 35-39 where there were 72 fewer deaths than in 2021.
Figure 3: Rates of drug misuse deaths have fallen in almost all age groups

Figure 4: Drug misuse death rates are almost 16 times as high in the most deprived areas

4. Drug misuse deaths by deprivation

Figure 4: Drug misuse death rates are almost 16 times as high in the most deprived areas

1. Deprivation quintiles are based on the Scottish Index of Multiple Deprivation
In 2022 after adjusting for age, people in the most deprived areas of Scotland were 15.9 times more likely to have a drug misuse death than people in the least deprived areas. This is a much larger deprivation ratio than for deaths from all causes where people in the most deprived areas are around twice as likely to die as those in the least deprived areas. Over time, the ratio of drug misuse deaths in the most and least deprived quintiles has changed. The lowest ratio was 8.4 in 2011 and the highest was 19.6 in 2019.

While the rate of drug misuse deaths was largest in quintile one, it also fell by the largest amount from 64.3 deaths per 100,000 people in 2021 to 52.4 deaths per 100,000 people in 2022.

5. Drug misuse deaths across areas in Scotland

After adjusting for age, Greater Glasgow and Clyde health board had the highest rate of drug misuse deaths with 34 deaths per 100,000 people over the period 2018-2022. Shetland had the lowest rate of drug misuse deaths with 11.7 per 100,000 people. The lowest rate of drug misuse deaths on the mainland of Scotland was 15.8 in Grampian health board. Orkney and Western Isles both had fewer than 10 deaths over the time period so no rates were calculated. Because relatively few people die of drug misuse, when we calculate rates in areas of Scotland it is more appropriate to group five years of data together when we want 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 34.0 per 100,000 people in 2018-2022.

Figure 5: Drug misuse deaths for selected NHS health board areas, age standardised death rates 2018-2022

1. Error bars represent 95% confidence intervals
2. Areas with fewer than 10 deaths are excluded
Of all the local authority areas, Glasgow City had the highest rate of drug misuse death (44.4 deaths per 100,000 people) closely followed by Dundee City (43.1) for the period 2018-2022. The lowest rates over the same period were in East Renfrewshire (9.5) and Aberdeenshire (11.1). Orkney Islands and Na h-Eileanan Siar both 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 2018-2022**

1. Error bars represent 95% confidence intervals
2. Areas with fewer than 10 deaths are excluded

6. **Drug misuse deaths by substances implicated**

In 79% of all drug misuse deaths in 2022, more than one drug was implicated in the death.

Of all drug misuse deaths in 2022, the following substances were implicated:

- opiates/opioids (such as heroin/morphine and methadone) – 867 deaths (82% of the total)
- benzodiazepines (such as diazepam and etizolam) – 601 (57%)
- gabapentin and/or pregabalin – 367 (35%)
- cocaine – 371 (35%)
Since 2008, opiates and opioids have been the drugs most commonly implicated in drug misuse deaths in Scotland. The proportion of drug misuse deaths implicating benzodiazepines has increased from 26% in 2008 to 57% in 2022.
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 7c: Drug misuse deaths in Scotland by drugs implicated, benzodiazepines**

In recent years, the number of deaths where street benzodiazepines (for example, etizolam) were implicated has increased rapidly from one death in 2008 to 842 in 2021, although this then fell to 505 in 2022. These street benzodiazepines account for the vast majority of drug misuse deaths where benzodiazepines were implicated. The number of drug misuse deaths where prescribable benzodiazepines were implicated has increased slightly with 148 deaths in 2008 and 190 in 2022. Prescribable benzodiazepines are often medications for anxiety or insomnia.
The proportion of drug misuse deaths where gabapentin and/or pregabalin were implicated has increased from <1% in 2008 to 35% in 2022. These are drugs used to treat epilepsy and nerve pain. The proportion where cocaine was implicated has also increased from 6% in 2008 to 35% in 2022. 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 11% in 2021.

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 2022, there were 476 drug misuse deaths where controlled NPSs were implicated. The majority of NPSs involved were benzodiazepines, for example, etizolam. There is more information about NPSs in Annex E (ADD LINK).

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 are some extra table based on which drugs were present in the additional analyses document 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 2022, the vast majority (89%) of drug misuse deaths were classified as accidental poisonings. This proportion has increased in recent years. Seven per cent of deaths were due to intentional self-poisoning, and one per cent were poisonings of undetermined intent. In three per cent 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 with the UK

The rate of drug poisoning deaths in Scotland was 2.7 times as high as the UK average in 2021 (the most recent year that data is available for the UK). In 2021, there were 1,444 drug poisoning deaths in Scotland, a rate of 27.1 deaths per 100,000 people. For the UK as a whole there were 6,511 drug poisoning deaths, equivalent to 10.0 deaths per 100,000 people. The UK region with the next highest rate of drug poisoning deaths was the North East of England with a rate of 16.3. The region with the lowest rate was London, with 4.8 deaths per 100,000 people.
Figure 9 is based on the drug poisoning definition of drug deaths. This is a slightly different measure than we use 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 recently published blog posts explaining why this is.

9. 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.
10. Notes on statistical publications

National Records of Scotland

We, the National Records of Scotland, are a non-ministerial department of the devolved Scottish Administration. Our aim is to provide relevant and reliable information, analysis and advice that meets the needs of government, business and the people of Scotland. We do this as follows:

- Preserving the past – We look after Scotland’s national archives so that they are available for current and future generations, and we make available important information for family history.
- Recording the present – At our network of local offices, we register births, marriages, civil partnerships, deaths, divorces and adoptions in Scotland.
- Informing the future – We are responsible for the Census of Population in Scotland which we use, with other sources of information, to produce statistics on the population and households.

You can get other detailed statistics that we have produced from the Statistics section of our website. Scottish Census statistics are available on the Scotland’s Census website.

We also provide information about future publications on our website. If you would like us to tell you about future statistical publications, you can register your interest on the Scottish Government ScotStat website.

You can also follow us on twitter @NatRecordsScot.

Enquiries and suggestions

Please contact our Statistics Customer Services if you need any further information or if you have comments or suggestions that would help us improve our standards of service.

Email: statisticscustomerservices@nrscotland.gov.uk