Office for National Statistics

Statistical bulletin

Deaths related to drug poisoning in England and Wales: 2022 registrations

Deaths related to drug poisoning in England and Wales from 1993 to 2022, by cause of death, sex, age and substances involved in the death.

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To be announced

Table of contents

1 . Main points

- In England and Wales, 4,907 deaths related to drug poisoning were registered in 2022, equivalent to a rate of 84.4 deaths per million people, this is similar to the rate recorded in 2021 (84.0 deaths per million, 4,859 deaths); the age-standardised mortality rate for deaths related to drug poisoning has risen every year since 2012.

- Among males, there were 114.3 drug-poisoning deaths registered per million in 2022 (3,240 deaths), compared with 55.8 deaths per million among females (1,667 deaths).

- Of drug-poisoning deaths registered in 2022, 3,127 were identified as drug misuse, accounting for 53.9 deaths per million people.

- Rates of drug misuse deaths continue to be elevated among those born in the 1970s, often referred to as "Generation X", with the highest rate in those aged 40 to 49 years.

- Just under half of all drug-poisoning deaths registered in 2022 involved an opiate (46.1%; 2,261 deaths), while 857 deaths involved cocaine, which is 2.0% more than 2021 and represents the 11th consecutive annual rise.

- The North East continues to have the highest rates of deaths relating to drug poisoning and drug misuse (133.9 deaths per million people and 81.7 per million, respectively); London had the lowest rate for drug poisonings (56.6 deaths per million people), and the East of England had the lowest rate for drug misuse (37.2 per million).

For 2012 to 2021, revisions have been made to mortality rates because of rebasing of official population estimates (see Section 10: Strengths and limitations). As a result, figures for those years, published as part of this release, are not directly comparable with previously published figures .

2 . Drug poisonings in England and Wales

The rate of drug-poisoning deaths continues to increase

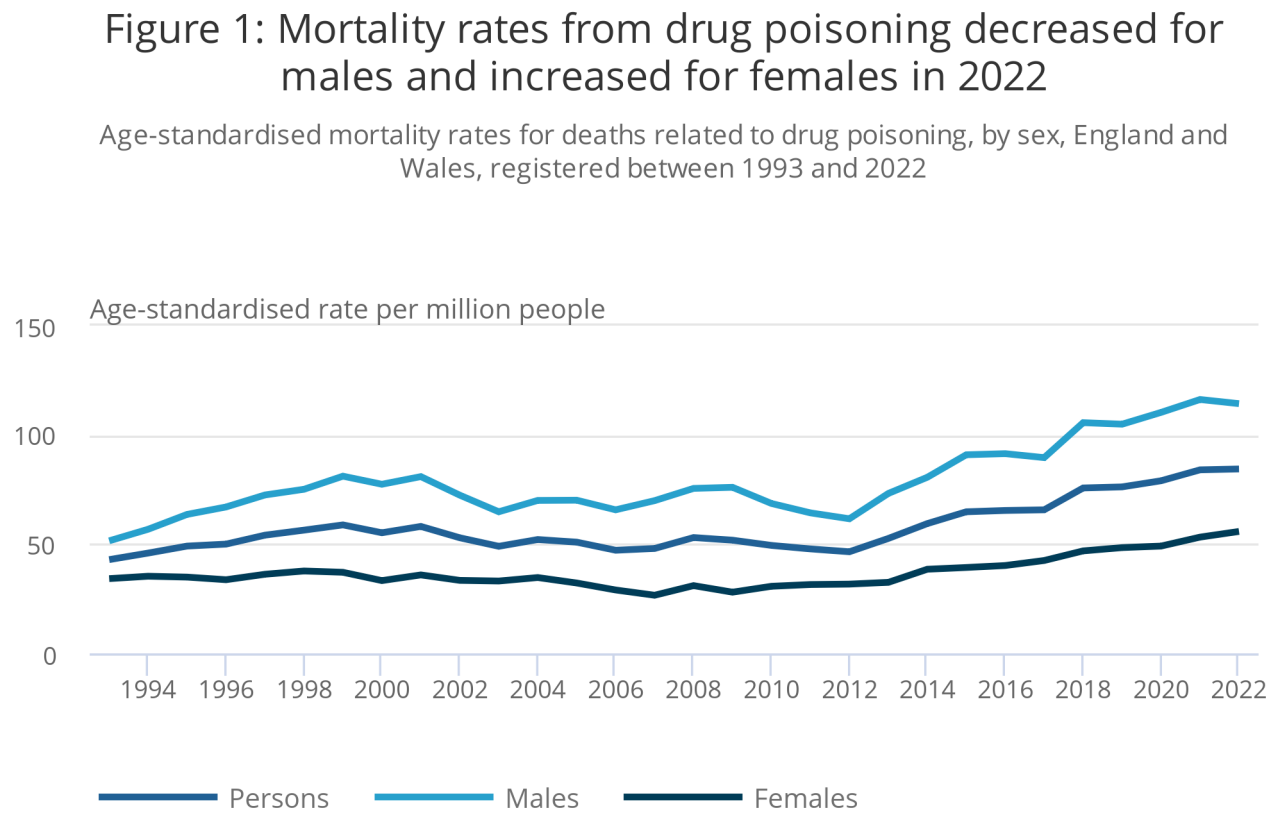
There were 4,907 deaths related to drug poisoning registered in England and Wales in 2022; this is the highest number since records began in 1993 and 1.0% higher than in 2021 (4,859 registered deaths). The rate of drug-poisoning deaths registered in 2022 (84.4 deaths per million) is statistically similar to the rate in 2021 (84.0 deaths per million).

Statistics on drug-related deaths are based on the date of death registration – because of registration delays, 64.0% of deaths registered in 2022 occurred in previous years.

The rate of drug-poisoning deaths was 81.5% higher in 2022 (84.4 deaths per million) than it was in 2012 (46.5 per million people). The rate has increased every year since 2012 after remaining relatively stable over the preceding two decades.

Figure 1: Mortality rates from drug poisoning decreased for males and increased for females in 2022

Age-standardised mortality rates for deaths related to drug poisoning, by sex, England and Wales, registered between 1993 and 2022



Source: Deaths related to drug poisoning in England and Wales from the Office for National Statistics

Notes:

1. Age-standardised mortality rates per million people, standardised to the 2013 European Standard Population.

2. Cause of death was defined using the International Classification of Diseases, Ninth Revision (ICD-9) for the years 1993 to 2000 and Tenth Revision (ICD-10) from 2001 onwards. More details can be found in our Deaths related to drug poisoning in England and Wales Quality and Methodology Information (QMI).

3. Figures are for deaths registered, rather than deaths occurring in each calendar year.

4. Figures for England and Wales include deaths of non-residents.

Males accounted for close to two-thirds of registered drug poisonings in 2022 (3,240 male deaths compared with 1,667 female deaths), which is consistent with previous years.

The government has set a target, as part of their 10-year drugs plan for England (explained in the policy paper published on GOV.UK), to have "prevented nearly 1,000 deaths, reversing the upward trend in drug deaths for the first time in a decade" by the end of 2024 to 2025.

3 . Drug misuse in England and Wales

Rates of drug misuse deaths have continued to increase

Deaths classified as drug misuse must meet either one (or both) of the following conditions: the underlying cause is drug abuse or drug dependence, or any of the substances involved are controlled under the Misuse of Drugs Act 1971. Information on the specific drugs involved in a death is not always available, therefore figures on drug misuse are underestimates.

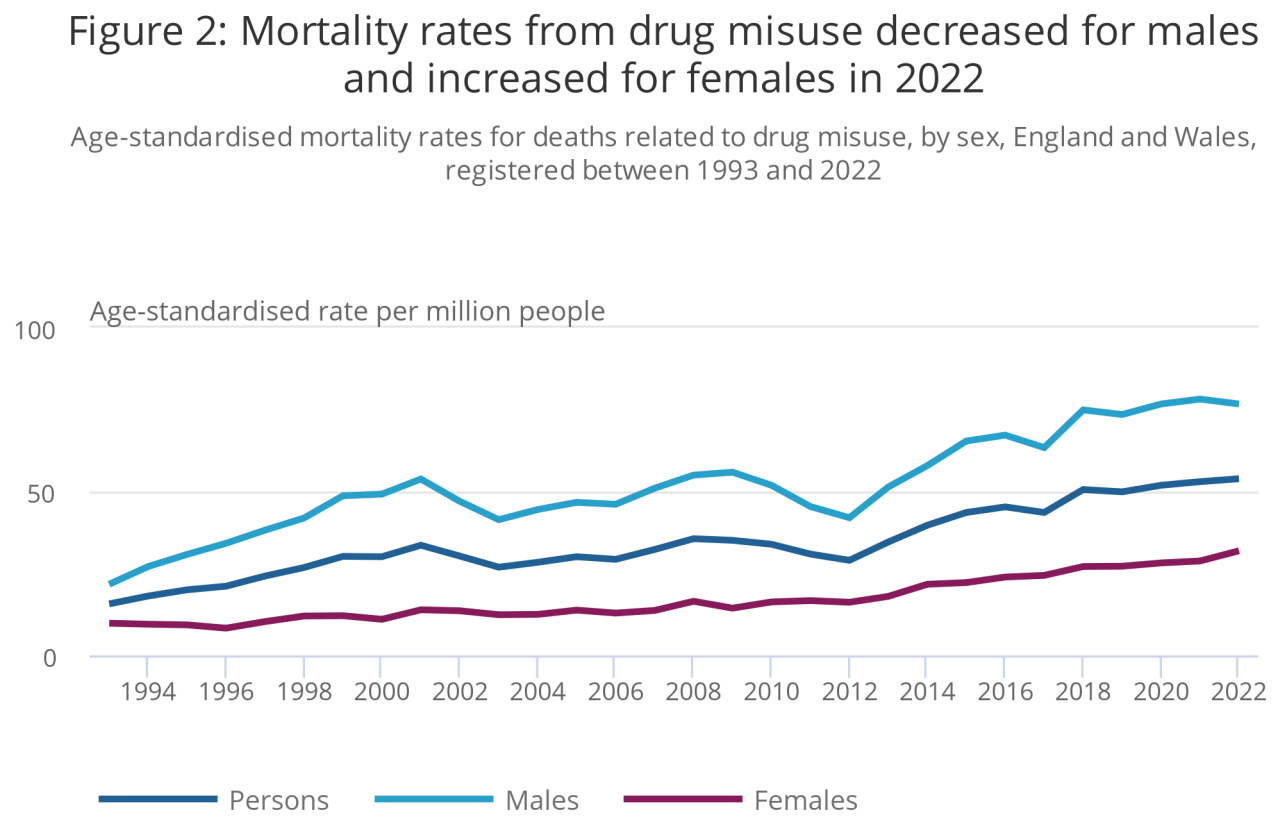
The proportion of drug-related deaths about which no information is held by the Office for National Statistics (ONS) on the specific substances involved has been increasing over time, so caution is advised in the interpretation of these statistics. For more information on the issue of missing data please see our blog post on the comparability of UK drug-related death statistics.

Of the 4,907 registered drug-poisoning deaths in 2022, 3,127 were identified as drug misuse. This represents 63.7% of drug poisonings. If we exclude deaths where no information was available on the drug(s) involved (1,240 deaths), then 85.3% of drug-poisoning deaths were drug misuse.

The rate of death relating to drug misuse in 2022 was 53.9 deaths per million people. The male rate of drug misuse deaths was 76.7 deaths per million in 2022 (2,178 registered deaths) and the female rate was 31.9 deaths per million (949 deaths).

Figure 2: Mortality rates from drug misuse decreased for males and increased for females in 2022

Age-standardised mortality rates for deaths related to drug misuse, by sex, England and Wales, registered between 1993 and 2022



Source: Drug poisoning in England and Wales from the Office for National Statistics

Notes:

1. Age-standardised mortality rates per million people, standardised to the 2013 European Standard Population.

2. Cause of death was defined using the International Classification of Diseases, Ninth Revision (ICD-9) for the years 1993 to 2000 and Tenth Revision (ICD-10) from 2001 onwards. More details can be found in our Deaths related to drug poisoning in England and Wales Quality and Methodology Information (QMI).

3. Figures are for deaths registered, rather than deaths occurring in each calendar year.

4. Figures for England and Wales include deaths of non-residents.

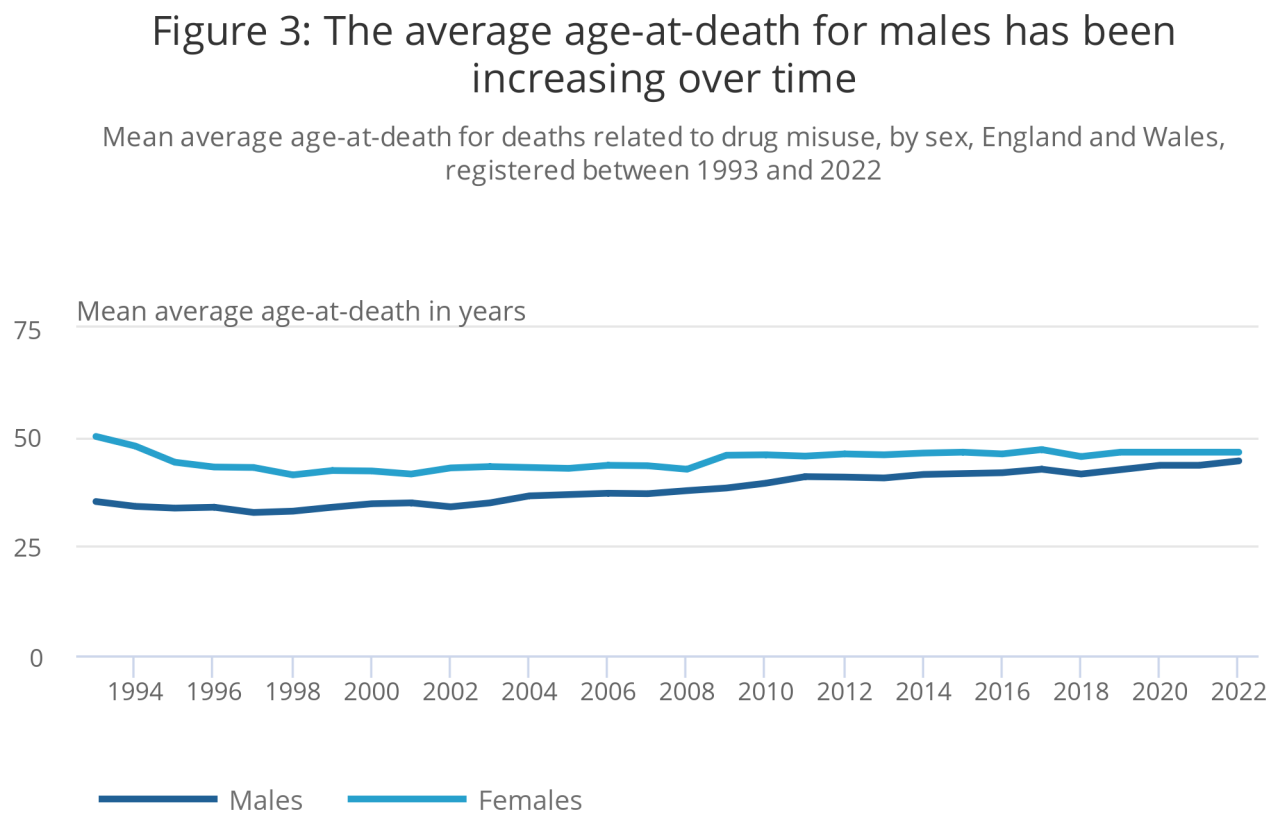
People born in the 1970s continue to have the highest rates of drug misuse deaths

In 2022, the highest rate of drug misuse deaths was found in those aged 40 to 49 years (130.8 deaths per million people). They are part of the age cohort often referred to as "Generation X"', born between the late 1960s and early 1980s, who have consistently had the highest rates of drug misuse deaths for the past 25 years, as explained in our 2019 article.

The average age at death for drug misuse deaths in 2022 was 44.5 years for males and 46.5 for females. The average for males has been steadily increasing since the late 1990s while for females the average has been relatively consistent over the period from 1993 to 2022 (Figure 3).

Figure 3: The average age-at-death for males has been increasing over time

Mean average age-at-death for deaths related to drug misuse, by sex, England and Wales, registered between 1993 and 2022



Source: Drug poisoning in England and Wales from the Office for National Statistics

Notes:

1. Cause of death was defined using the International Classification of Diseases, Ninth Revision (ICD-9) for the years 1993 to 2000 and Tenth Revision (ICD-10) from 2001 onwards. More details can be found in our Deaths related to drug poisoning in England and Wales Quality and Methodology Information (QMI).

2. Figures for England and Wales include deaths of non-residents.

3. Figures are for deaths registered, rather than deaths occurring in each calendar year.

4 . Drug-poisoning deaths by English region and in Wales

The North East has had the highest rate of drug-poisoning deaths of any English region for 10 consecutive years

In 2022, the highest rate of drug-poisoning deaths was observed in the North East (133.9 deaths per million; 332 registered deaths), while the lowest rate was in London (56.6 deaths per million; 477 deaths). The North East has had the highest rate of drug-poisoning deaths for the past 10 years.

In Wales, the rate of drug-poisoning deaths fell to 109.6 deaths per million from 111.8 deaths per million in 2021.

Figure 4: Rates of drug poisoning deaths have a marked North-South divide

Age-standardised mortality rate for deaths related to drug poisoning, by sex, for countries and regions of England and Wales, registered between 1993 and 2022

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5 . Drug poisonings from selected substances

Figures in this section are based on analysis of text that appears on the death certificate that is usually written by the Coroner.

The Office for National Statistics (ONS) does not have access to post-mortem reports or toxicology results, so the accuracy of figures depends on the information provided by the coroner on the death certificate; because of incomplete information, figures for drug misuse and for specific substances are underestimates.

Of the drug-poisoning deaths registered in 2021, 25.3% (1,240) had no drug type recorded on the coroner's death certificate (for example, records only mention "drug overdose" or "multiple drug toxicity"). The proportion of deaths where no information on the specific substances involved was recorded has been increasing over time, so caution is advised in the interpretation of these statistics.

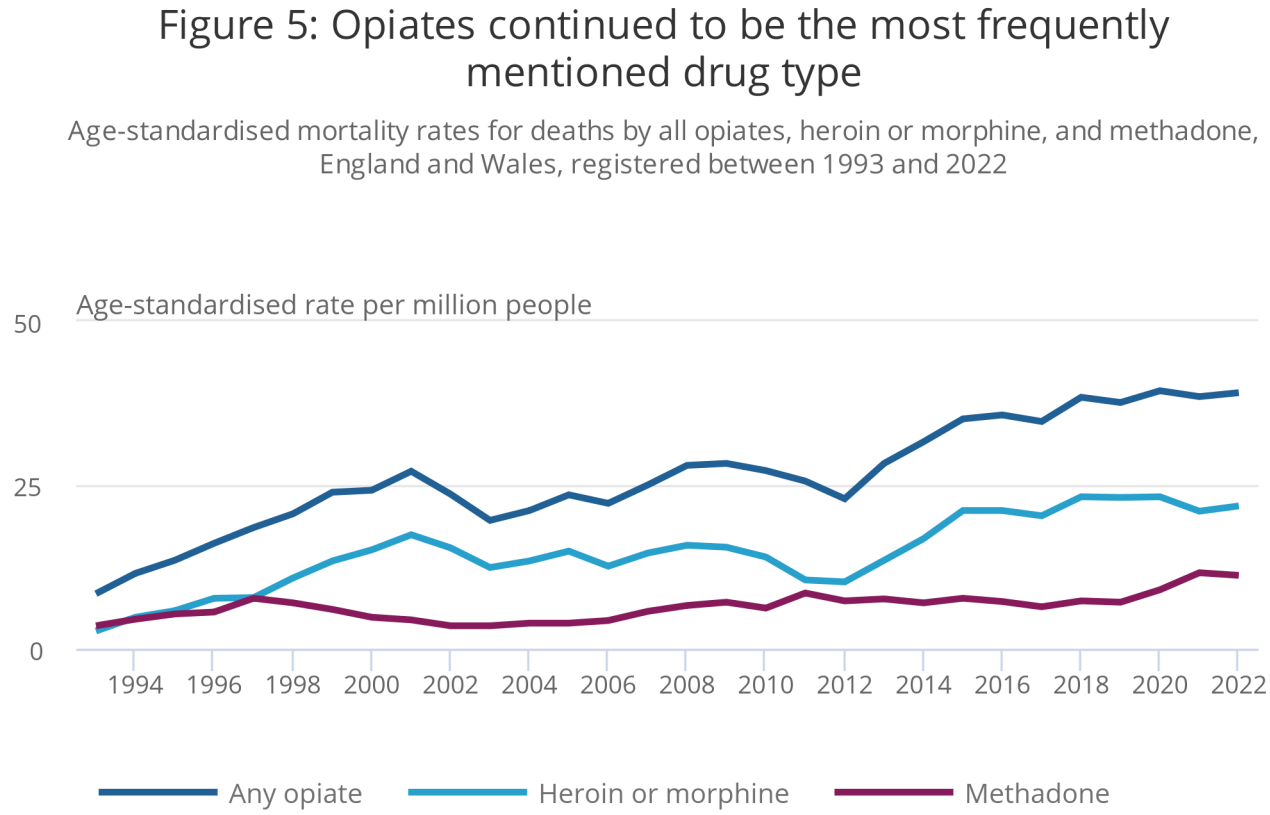
Over half of all drug-poisoning deaths involve more than one drug, and it is not possible in those cases to tell which substance was primarily responsible for the death.

Almost half of all drug-poisoning deaths continue to involve an opiate.

For deaths registered in 2022, a total of 2,261 drug-poisoning deaths involved opiates; this was 1.9% higher than in 2021 (2,219 deaths). Opiates were involved in just under half (46.1%) of drug-poisoning deaths registered in 2022, increasing to 61.7% when we exclude deaths that had no drug type recorded on the death certificate. Heroin and morphine (often indistinguishable in toxicology testing) continued to be the most frequently mentioned opiates with 1,256 drug-poisoning deaths mentioning either one of these substances in 2022 (21.8 deaths per million people).

Figure 5: Opiates continued to be the most frequently mentioned drug type

Age-standardised mortality rates for deaths by all opiates, heroin or morphine, and methadone, England and Wales, registered between 1993 and 2022



Source: Deaths related to drug poisoning in England and Wales from the Office for National Statistics

Notes:

1. Age-standardised mortality rates per million people, standardised to the 2013 European Standard Population.
2. Cause of death was defined using the International Classification of Diseases, Ninth Revision (ICD-9) for the years 1993 to 2000 and Tenth Revision (ICD-10) from 2001 onwards. More details can be found in our Deaths related to drug poisoning in England and Wales Quality and Methodology Information (QMI).
3. Figures are for deaths registered, rather than deaths occurring in each calendar year.
4. Figures for England and Wales include deaths of non-residents.

Cocaine deaths rise for the 11th consecutive year

There were 857 deaths involving cocaine registered in 2022, which was 2.0% higher than the previous year (840 deaths) and more than seven times higher than in 2011 (112 deaths). In 2022, males accounted for 78.4% of the deaths involving cocaine (672 males compared with 185 females). Cocaine has consistently been the second most-used drug, after cannabis, in England and Wales over the past decade, as shown in our Drug misuse in England and Wales: year ending March 2023 release.

Figure 6: Drug poisonings involving cocaine continued to increase in 2022

Age-standardised mortality rates for selected substances, by sex, England and Wales, deaths registered between 1993 to 2022

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Increase in polydrug use

There has been an increase in the number of drugs typically recorded on the death certificate. The average number of drugs (where this information was available) has been gradually increasing since 2010, after being relatively stable for the preceding two decades. For each year from 1993 to 2011, the average had been either 1.4 or 1.5 drugs per death. For deaths registered in 2022, the average had risen to 2.0 drugs mentioned per death.

Drugs such as benzodiazepines and gabapentinoids are increasingly seen alongside heroin and other opiates. Polydrug use increases the risk of serious complications, including overdoses. Increasing polydrug use may have contributed to the rise in drug-related deaths over the past decade, with similar trends seen in other European countries, where data are available, as shown in the European Drug Report 2023.

6 . Death registration delays

Death registration delays in 2022 were the highest on record

Most deaths related to drug poisoning in England and Wales are certified by coroners. The length of time it takes to hold an inquest results in a delay between the date a death occurred and the date of registration. This means that more than half of the deaths reported in this bulletin will have occurred in previous years.

In 2022, the median registration delay for drug poisonings was 219 days (215 days for misuse) in England, up from 205 days in 2021. In Wales in 2022, the delay was 328 days (316 days for misuse), up from 315.5 in the previous year. Registration delays have been gradually increasing over time, and 2022 saw the longest delays since the time series began in 1993.

7 . Deaths related to drug poisoning in England and Wales data

Deaths related to drug poisoning, England and Wales
Dataset | Released 19 December 2023
Annual number of deaths registered related to drug poisoning and median registration delays, in England and Wales. Data presented by cause of death, sex, age, substance(s) involved in the death, country and region, and areas of deprivation.

Deaths related to drug poisoning by selected substances, England and Wales
Dataset | Released 19 December 2023
Annual number of deaths registered related to drug poisoning in England and Wales by sex, region and whether selected substances were mentioned anywhere on the death certificate, with or without other drugs or alcohol, and involvement in suicides.

Deaths related to drug poisoning by local authority, England and Wales
Dataset | Released 19 December 2023
Annual number of deaths registered related to drug poisoning, by local authority, England and Wales.

Deaths related to drug poisoning by date of occurrence, England and Wales
Dataset | Released 19 December 2023
Annual number of deaths occurring related to drug poisoning in England and Wales. Data presented by cause of death, sex, age, substance(s) involved in the death, and country and region. View all data used in this statistical bulletin on the Related data page.

8 . Glossary

Drug poisoning

Deaths classified as a drug poisoning must have an applicable International Classification of Diseases (ICD) code assigned as the underlying cause of death; this is determined by international coding rules from the condition or conditions reported by the certifier, as recorded on the certificate. Further information on the definition can be found in Section 9: Measuring the data.

Drug misuse

Death 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
- or any of the substances controlled under the Misuse of Drugs Act 1971 are involved

Further information on this definition can be found in Section 9: Measuring the data.

Age-standardised mortality rate

Age-standardised mortality rate in this bulletin refers to a weighted average of the age-specific mortality rates per million people that is standardised to the 2013 European Standard Population. Age-standardised mortality rates allow for differences in the age structure of populations and therefore allow valid comparisons to be made between geographical areas, the sexes and over time.

Age-specific mortality rate

Age-specific mortality rate is the total number of deaths per million people of a particular age group, used to allow comparisons between specified age groups.

9 . Measuring the data

Statistics on mortality are derived from the information provided when deaths are certified and registered. Quality and methodology information (QMI) is available in our Mortality statistics in England and Wales QMI, Deaths related to drug poisoning in England and Wales QMI and our User guide to mortality statistics.

Drug-poisoning deaths involve a broad spectrum of substances, including controlled and non-controlled drugs, prescription medicines (either prescribed to the individual or obtained by other means) and over-the-counter medications. As well as deaths from drug abuse and dependence, figures include accidents and suicides involving drug poisonings and complications of drug abuse such as deep vein thrombosis or septicaemia from intravenous drug use. They do not include other adverse effects of drugs, for example, anaphylactic shock or accidents caused by an individual being under the influence of drugs. More details of the drug poisoning definition, including International Classification of Diseases (ICD) codes used, can be found in our Deaths related to drug poisoning in England and Wales QMI.

A death classified as drug misuse must be a drug poisoning and meet at least one of the following conditions. The first condition is that the underlying cause is drug abuse or drug dependence, defined by ICD-10 as mental and behavioural disorders as a result of use of:

- opioids (F11)
- cannabinoids (F12)
- sedatives or hypnotics (F13)
- cocaine (F14)
- other stimulants, including caffeine (F15)
- hallucinogens (F16)
- multiple drug use and use of other psychoactive substances (F19)

The second condition is if any of the substances controlled under the Misuse of Drugs Act 1971 are involved – this includes class A, B and C drugs.

Populations

Figures are based on 2021 census-based population estimates. Figures for the period 2012 to 2021 have been revised and use the rebased population estimates for this time period.

Comparing with other statistics

Scotland and Northern Ireland each produce their own statistics for deaths related to drug poisoning. These statistics are compiled by National Records of Scotland (NRS) and the Northern Ireland Statistics and Research Agency (NISRA).

Figures for drug poisoning can be used for comparisons between UK countries as this measure offers complete population coverage. Figures for drug misuse and individual substances are not comparable because of differences in data collection methods and in the death registration system. For more information, please see our blog post on the Comparability of UK drug-related death statistics.

User-requested data

Special extracts and tabulations of drug-related deaths data (and other causes of mortality) are available to order for a charge (subject to legal frameworks, disclosure control, and resources and agreement of costs, where appropriate). You can enquire by sending an email to health.data@ons.gov.uk. You can also view our charging policy.

10 . Strengths and limitations

Strengths

- Deaths related to drug poisonings are compiled using information supplied when deaths are registered, which gives complete population coverage.
- Age-standardised rates allow for differences in the age structure of populations and therefore allow valid comparisons to be made between geographical areas, the sexes and over time.
- Quality-assurance procedures have been undertaken throughout all stages of the analysis to minimise the risk of error; in particular, researchers quality-assure the automated coding of the coroner's text for each individual record.

Limitations

- Statistics are based on the year of death registration; because of death registration delays, around half of these deaths will have occurred in previous years.
- The Office for National Statistics (ONS) does not have access to post-mortem reports or toxicology results, so the accuracy of figures depends on the information provided by the coroner on the death certificate; because of incomplete information, figures for drug misuse and for specific substances are underestimates.
- More than half of all drug-poisoning deaths involve more than one drug, and it is not possible in those cases to tell which substance was primarily responsible for the death.
- There is no internationally agreed definition of what constitutes a drug-related death; figures cannot be compared with those produced by other organisations.
- The number of deaths involving new psychoactive substances (NPSs) should be treated with caution because these types of drugs are constantly evolving, and it may not always be possible to identify new substances during post-mortem investigations.
- Local-authority-level rates are aggregated to rolling three-year periods in line with disclosure control principles and to ensure the robustness of estimates; further information on some of the strengths and limitations can be found in our Deaths related to drug poisoning in England and Wales QMI.
- For 2012 to 2021, revisions have been made to mortality rates because of rebasing of official population estimates, as reported in our Rebasing of mid-year population estimates following Census 2021 bulletin; as a result, figures for those years, published as part of this release, are not directly comparable with previously published figures.

11 . Related links

Drug-related deaths in Scotland
Web page | Updated 22 August 2023
Scotland's most recent official statistics on drug-related deaths in 2022 and earlier years, broken down by age, sex, substances implicated in the death, underlying cause of death, and NHS Board and Council areas.

Drug-related and drug-misuse deaths in Northern Ireland
Web page | Updated 30 June 2022
Northern Ireland's most recent official statistics on drug-related deaths in 2020 and earlier years, broken down by cause of death, selected drugs reported, age and sex.

United Kingdom drug situation: Focal Point annual report
Web page | Updated 31 March 2021
Annual report and data tables from the UK Focal Point on Drugs on the national prevalence, impact, prevention and treatment of drug use.

Drug-related deaths and suicide in prison custody in England and Wales: 2008 to 2019
Article | Released 26 January 2023
The risk of suicide and drug-related deaths among prisoners, based on confidential matching of data from HM Prison and Probation Service and Office for National Statistics (ONS) mortality records.

Drug-related deaths "deep dive" into coroners' records
Article | Released 6 August 2018
An experimental "deep dive" study investigating deaths related to drug misuse in 2014 and 2015 using available coroners' records.

More than half of heroin or morphine misuse death hotspots in England and Wales are seaside locations
Web page | Released 4 April 2018
Some of England and Wales's favourite seaside resort areas are now among the towns with the highest rates of deaths from the misuse of heroin or morphine.

Deaths related to volatile substances, helium and nitrogen in England and Wales: 2001 to 2020 registrations
Article | Released 28 February 2022
Deaths related to volatile substances, helium and nitrogen in England and Wales from 2001 to 2020, by cause of death, sex, age, region and substances involved in the death.

12 . Cite this statistical bulletin

Office for National Statistics (ONS), released 19 December 2023, ONS website, statistical bulletin, Deaths related to drug poisoning in England and Wales: 2022 registrations