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Trends in
**OVERDOSE
AND OTHER
DRUG-INDUCED
DEATHS**
in Australia, 2005-2024

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Louisa Degenhardt and Amy Peacock



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Please note that as with all statistical reports, there is the potential for minor revisions to data in this report. Please refer to the online version at [Drug Trends](#).

Please contact the Drug Trends team with any queries regarding this publication: drugtrends@unsw.edu.au.

Please be advised that this report discusses overdose and other drug-induced deaths. This topic can cause distress. If you would like support, we encourage contacting the following helplines: [National Alcohol and Other Drug Hotline](#) (1800 250 015) or [Lifeline Australia](#) (13 11 14). When reporting on drug and alcohol issues, we encourage consultation of the Mindframe guidelines on '[Communicating about alcohol and other drugs](#)'.

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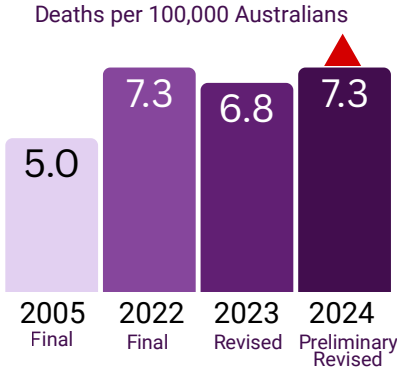
Overdose and Other Drug-Induced Deaths Australia, 2024



Preliminary estimates indicate that there were 2,005 overdose and other drug-induced deaths in 2024 (excluding deaths caused by alcohol and tobacco).



This equates to about 5.5 deaths per day among Australians, which is around 1.1% of all registered deaths in Australia in 2024.

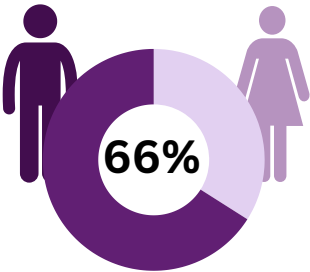


The preliminary rate of overdose and other drug-induced deaths in 2024 was higher than observed in 2023; both rates are likely to further increase with data revisions.



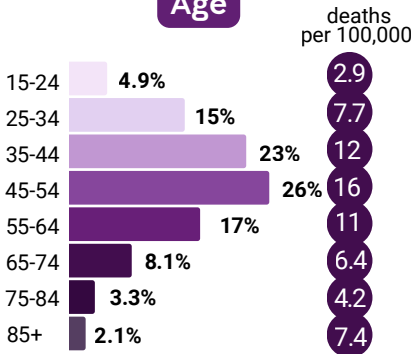
Preliminary data indicate 1,781 alcohol-induced deaths in 2024, equating to a rate of 6.0 deaths per 100,000 people.

Sex



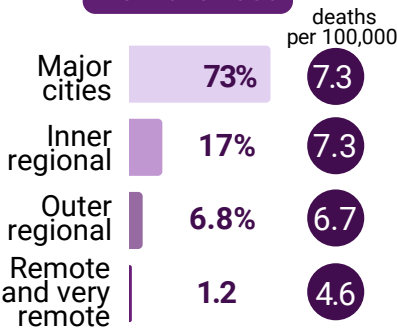
Males accounted for around two-thirds of overdose and other drug-induced deaths, with a rate of 9.9 per 100,000 compared to 4.7 for females.

Age



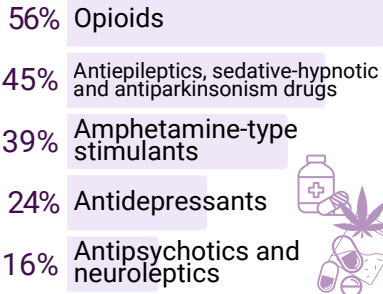
Overdose and other drug-induced deaths were most common among those aged 45-54, followed by those aged 35-44 years.

Remoteness



The majority of overdose and other drug-induced deaths occurred in major city areas, however, the rate was equally high in inner regional areas.

Substance involvement



Opioids were the most commonly identified substances involved in drug overdose deaths.



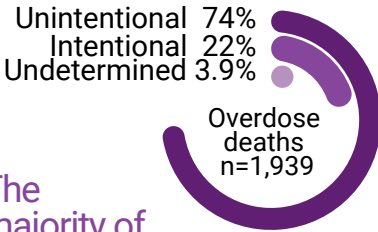
Most common psychosocial risk factor in drug-induced deaths was **PERSONAL HISTORY OF SELF HARM (12%)**



The majority of all drug overdose deaths occurred at **HOME (72%)**

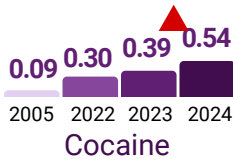
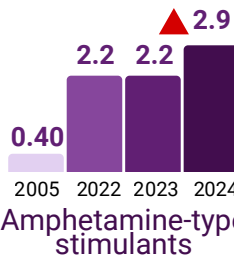
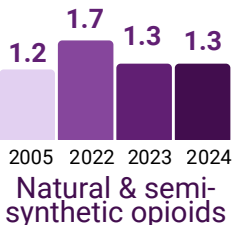
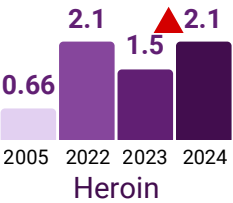
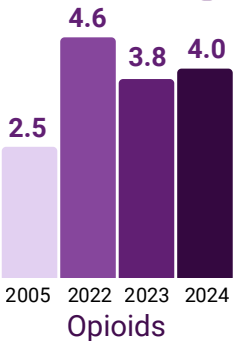


The largest proportion of drug-induced deaths occurred in residents of **THE MOST DISADVANTAGED AREAS (30%)**



The majority of drug overdose deaths were **UNINTENTIONAL (74%)**

Rate of drug overdose deaths involving selected drug types per 100,000 people



Since 2005, drug overdose death rates have increased across all drug types, generally peaking in 2017 or 2018, and declining thereafter. However, rates for cocaine and amphetamine-type stimulants continued to increase, reaching their highest levels in 2024.

Executive Summary



Drug-induced deaths

- Australia recorded 2,005 drug-induced deaths in 2024, equivalent to 7.3 deaths per 100,000 Australians. This is the highest number of deaths observed during the 20-year monitoring period, although the mortality rate is below that observed between 2014 and 2020.
- Preliminary revised data indicate a 7.4% increase in the national age-standardised rate of drug-induced deaths in Australia between 2023 and 2024, reversing the downward trend observed since the 2017 peak.



Populations most affected

- Drug-induced mortality continued to disproportionately affect males, with the highest mortality rates observed among people aged 45-54 years, followed by those aged 35-44 years and 55-64 years. Most deaths occurred among residents of major cities, although mortality rates were similarly high in major cities and inner regional areas.
- The increase between 2023 and 2024 was driven primarily by males aged 25-34 years, whose mortality rate increased by 37%, together with increases in mortality among residents of major cities and unintentional overdose deaths.



Drug types driving trends

- Opioids remained the leading drug class involved in overdose deaths; however, recent changes in mortality were characterised by marked increases in deaths involving amphetamine-type stimulants and cocaine. These findings indicate that recent changes in Australia's overdose profile have been driven increasingly by stimulant-related harms, rather than broad increases across all drug classes.



Data revision

- Although 2024 estimates are preliminary and may increase with future ABS revisions, they already exceed the revised estimates for 2023, suggesting that the decline observed since 2017 may have stalled.

This report presents national trends in overdose and other drug-induced deaths in Australia between 2005 and 2024 using Cause of Death Unit Record File data provided by the Australian Bureau of Statistics (ABS). It examines long-term changes in mortality together with demographic, geographic and drug-specific patterns. As almost all drug-induced deaths (97%) are certified by coroners, the 2023 (revised) and 2024 (preliminary revised) estimates remain subject to further ABS revisions and should be interpreted accordingly.

This report excludes deaths where alcohol or tobacco use was the underlying cause, as they fall outside our scope (see methods). Except in **Panel C**, references to alcohol-involved drug overdose deaths refer to cases where another drug was the main cause, but alcohol was also involved.

Our public [online data visualisation](#) allows users to explore the data through a range of interactive filters

and to download customised visualisations for their own use.

What is the overall trend?

In 2024, there were 2,005 drug-induced deaths registered in Australia, equivalent to 7.3 deaths per 100,000 people and more than five deaths each day. Drug-induced deaths accounted for around 1.1% of all registered deaths nationally.

Although the age-standardised mortality rate remained below the historical peak of 8.2 deaths per 100,000 people recorded in 2017, preliminary estimates indicate a significant increase from 6.8 to 7.3 deaths per 100,000 people from 2023 to 2024, contrasting with the broader decline in Australia's all-cause mortality rate during the same period. Together, these findings suggest that the downward trend in drug-induced mortality observed between 2017 and 2023 may have stalled.

Alcohol-Induced Deaths

Alcohol-induced deaths remain a substantial contributor to preventable mortality in Australia. In 2024, there were 1,781 alcohol-induced deaths, equivalent to 6.0 deaths per 100,000 people. Most deaths occurred among males (74%) and middle-aged and older adults, particularly those aged 55-64 years. Alcoholic liver disease remained the leading underlying cause of death, accounting for 60% of all alcohol-induced deaths, followed by mental and behavioural disorders due to alcohol use (25%). As these estimates are preliminary, the 2023 and 2024 figures are expected to increase following future ABS revisions. It should also be noted that these estimates do not include deaths partially attributable to alcohol.

How do drug-induced deaths vary across population groups?

- **Sex:** Drug-induced mortality continued to disproportionately affect males, who accounted for two-thirds of all deaths and experienced a 10% increase in mortality rate between 2023 and 2024, with the rate reaching 9.9 deaths per 100,000 males.
- **Age:** Adults aged **45-54** years accounted for the largest proportion of deaths (26%) and had the highest population rate of 16 deaths per 100,000 people, followed by those aged **35-44** years (23% and 12 deaths per 100,000 people, respectively). The only significant change between 2023 and 2024 occurred among those aged **25-34** years, whose mortality rate increased by 27%, reaching 7.7 deaths per 100,000 people in 2024. Although changes in other age groups were not statistically significant, the mortality rate among people aged **65-74** years reached the highest level recorded during the monitoring period, while the rate among those aged **45-54** years remained among the highest observed over the past two decades.
- **Remoteness Area of Usual Residence:** Most deaths occurred among residents of major cities (73%), with the mortality rate increasing by 9.9% from 2023 to 7.3 deaths per 100,000 people, the same rate as in inner regional areas. The increase observed nationally in 2024 was largely driven by higher mortality among males living in major cities (from 8.8 in 2023 to 10 deaths per 100,000 males in 2024), while rates across regional and remote Australia remained comparatively stable.
- **Socioeconomic Advantage and Disadvantage:** Drug-induced deaths also continued to disproportionately affect people living in the most

socioeconomically disadvantaged communities, with nearly one-third (30%) of all deaths occurring among quintile 1 and nearly one-quarter (23%) among quintile 2 (the two most disadvantaged areas).

What are the underlying cause, intent and psychosocial factors?

Drug overdose accounted for 97% of all drug-induced deaths. The increase observed in 2024 was driven by unintentional overdose deaths, with the mortality rate increasing by 13% compared to 2023, whereas intentional overdose mortality showed little overall change. Most overdose deaths occurred in the person's home, and personal history of self-harm remained the most frequently recorded psychosocial risk factor, highlighting the ongoing importance of mental health support, overdose prevention and timely emergency response.

How did mortality rates differ by drug type?

- **Opioids** remained the most commonly involved drug class, contributing to 1,082 overdose deaths (4.0 deaths per 100,000 people) in 2024. Overdose deaths involving **heroin** increased significantly between 2023 and 2024 (32%), reaching 2.0 deaths per 100,000 people, a rate comparable to the peaks observed in the late 2010s and early 2020s.

An ageing cohort of people who use heroin: Recent NCIS research ([Darke et al. 2026](#)) identified the emergence of an older cohort of Australians dying from heroin overdose, with almost all heroin toxicity deaths among people aged 65 years and over occurring after 2015. These deaths commonly involved long-term heroin use, multiple co-occurring health conditions and polydrug use, highlighting the need for overdose prevention, opioid treatment and harm reduction strategies tailored to older people who use heroin.

- The most pronounced changes in 2024 occurred, however, among stimulant-related deaths. Mortality involving **amphetamine-type stimulants** increased by 29% from 2023 to 2024, reaching the highest rate observed during the monitoring period (2.9 deaths per 100,000 people), while **cocaine**-related mortality increased by 40% to a peak of 0.54 deaths per 100,000 people.
- The increase in deaths involving **amphetamine-type stimulants** was driven by a substantial increase in

male mortality, whose rate increased from 3.2 in 2023 to 4.3 deaths per 100,000 males in 2024. Higher rates were recorded across all age groups, with statistically significant changes noted among those aged 25-34, 35-44 and 55-64 years.

- The increase in deaths involving **cocaine** was also driven by a substantial increase in male mortality, whose rate increased from 0.65 in 2023 to 0.94 deaths per 100,000 males in 2024. Higher rates were recorded across all age groups, with a statistically significant change noted among those aged 25-34 years.
- In contrast, overdose deaths involving **antipsychotics and neuroleptics** continued to decline. The 2024 rate was significantly lower than the 2023 rate (1.2 and 1.4 deaths per 100,000 people, respectively). Rates involving **antidepressants, alcohol, non-opioid analgesics** and **cannabinoids** were similar to those observed in 2023, with no statistically significant changes observed.
- **Polysubstance involvement:** Polydrug use remained a defining feature of overdose mortality. Between 2020 and 2024, among overdose deaths involving at least one selected drug class, almost three-quarters (73%)

of overdose deaths involved two or more major drug classes.

These findings indicate that recent changes in Australia's overdose profile have been driven increasingly by stimulant-related harms, rather than broad increases across all drug classes.

Emerging psychoactive substances: Analyses of National Coronial Information System (NCIS) data complement routine ABS mortality statistics by identifying specific new psychoactive substances that cannot be distinguished using ICD-10 codes. Recent NCIS research highlights the emergence of fatal poisonings involving new psychoactive stimulants and hallucinogens ([Darke et al. 2026](#)), novel benzodiazepines ([Darke et al. \(2026\)](#)) and nitazenes ([Darke et al. \(2024\)](#)) in Australia, demonstrating the importance of enhanced surveillance for detecting emerging drug-related harms.

Jurisdiction of Usual Residence

Detailed analyses of deaths by jurisdiction (including by sex, age group, intent, remoteness area, drug type and place of occurrence) are available at the end of this report.

Background and Methods

Data Source

Data from the Australian Bureau of Statistics (ABS) were accessed from the Cause of Death Unit Record File (COD URF) through the Australian Coordinating Registry (ACR) and analysed in consultation with the ABS. **Data are presented for 2005-2024; data for 2023 and 2024 are not final and may be subject to revision (see below).**

Completeness of coroner-referred deaths data at the time of preliminary coding

To complete a death registration, the death must be certified by either a doctor using the Medical Certificate of Cause of Death, or by a coroner. Drug-induced deaths are one of the causes of death with the highest proportion of coroner-referred cases. On average, [97%](#) of drug-induced deaths are certified by a coroner. As indicated in the ABS [Causes of Death Methodology document](#) and the NCIS [Operational Statistics](#), deaths that are referred to a coroner for investigation take time to be closed. For coroner-certified deaths where the coronial investigation remains open and insufficient information is available, less-specific ICD codes may be assigned provisionally. Those cases often cannot be reported on or, when they are counted as drug-induced deaths, the drug/s involved remain unspecified. Those cases are then revised and recoded when additional coronial information becomes available. More information on coding of coroner certified deaths can be found in [Cause of Death, Australia methodology](#).

Data Revision

Because of delays in the certification and coding of deaths, particularly for coroner-certified deaths, the ABS undertakes a revision process to improve the completeness and accuracy of mortality data (see [Cause of Death methodology](#) for details). The revision process primarily focuses on open coroner cases but may also incorporate updates to closed coroner cases and doctor-certified deaths. In 2021, the ABS expanded the revision process from three to four stages. Data for the most recent year are initially released as preliminary and subsequently progress through preliminary revised (approximately six months after first publication), revised (approximately 18 months after first publication), and final stages. Once data become final, further coding changes are considered unlikely.

Table 1 outlines changes in the number of drug-induced deaths with each data revision undertaken by the ABS. When data undergo the first revision process, the change between the preliminary and revised number is greater than when data changes from revised to final.

This publication reports on findings from the most recently revised datasets (as of [May 2026](#)), namely:

- 2005-2022 final data,
- 2023 revised data, and
- 2024 preliminary revised data.

Based on the percent changes in estimated numbers of drug-induced deaths after historical revisions (Table 1), the 2023 revised estimates in this publication may increase between 0.59% and 1.64% when they become final. The 2024 preliminary revised estimates (referred to as '[preliminary](#)' in the text) will undergo two further revisions and are expected to increase between 2.3% and 3.6% in the next revision cycle and a further 0.59% to 1.64% when they become final. These changes can vary between jurisdictions (which have different coroner case closure statistics) and for some drug types as indicated in [the ABS publication](#).

Table 1. Changes in the number of drug-induced deaths between COD URF revisions (from preliminary to final), Australia, 2016-2024

	Preliminary	Preliminary revised	Revised		Final		
Registration year	N	N	N	% change from prelim.	N	% change from revised	% change from prelim.
2016	n/a		1,858	n/a	1,869	0.59%	n/a
2017	1,795		1,991	11%	2,003	0.60%	12%
2018	1,817		1,948	7.2%	1,980	1.64%	9.0%
2019	1,865		1,966	5.4%	1,978	0.61%	6.1%
2020	1,842		1,946	5.6%	1,967	1.08%	6.8%
2021		1,788	1,830	2.3%*	1,858	1.53%	3.9%*
2022		1,819	1,874	3.0%*	1,892	0.96%	4.0%*
2023		1,762	1,826	3.6%*	-	-	-
2024		2,005	-	-	-	-	-

Note: The numbers used in this report are highlighted. Data for 2005-2015 are final but are not displayed in the table. 'n/a' indicates that historical data are not available from previous reporting; '-' indicates that data are not available yet and will be completed in future reports when they become available. *Indicates change related to preliminary revised data. The ABS introduced the preliminary revised stage of its revision process from 2021 onwards. Consequently, preliminary estimates for 2021-2024 are not shown here, and no equivalent preliminary revised estimates are available for 2016-2020.

Scope of Reporting

We present estimates of drug-induced deaths directly attributable to use of *illicit drugs* (e.g., heroin), some *prescription medicines* (that may be prescribed to the individual or obtained via other means) and *medicines available over-the-counter*. These figures only include overdose and other drug-induced deaths where drugs have been deemed the underlying cause of death (**Panel A**. Terminology). The figures presented here do not include deaths from accidents caused by being under the influence of a drug (e.g., motor vehicle accident). In this report, the mortality caused by cocaine, amphetamine-type stimulants, and opioids are given particular attention.

Panel A. Terminology

From the [Australian Bureau of Statistics](#):

- **Underlying cause of death (UCOD)** is the disease or condition which initiated the sequence of events resulting in death. There can be only one underlying cause of death.
- **Associated causes of death (ACOD)** are any other diseases or conditions that contributed to the death and are listed on the death certificate but were not deemed the underlying cause of death.
- **Multiple causes of death (MCOD)** include all causes, diseases and conditions reported on the death certificate. This includes the underlying cause of death and all associated causes of death.
- **Drug-induced death** includes all deaths where the UCOD indicates a substance-use disorder or direct harm due to selected substances (excluding alcohol and tobacco). Captured within this category are drug poisoning (overdose) deaths, which comprise all deaths where the acute toxic effects of a drug were determined by the coroner, forensic pathologist or forensic toxicologist to be the UCOD, regardless of intent.
- **Drug overdose death involving selected drug** is where poisoning by the drug of interest (e.g., benzodiazepines) was indicated in the UCOD or MCOD, noting that there may be other drugs coded to these fields. For example, a 'drug overdose death involving benzodiazepines' could comprise an opioid as UCOD and a benzodiazepine and alcohol as MCOD.
- **All-cause mortality** comprises all deaths of any causes certified by a doctor and/or a coroner.

- **External cause mortality** comprises deaths due to causes external to the body (for example intentional self-harm, transport accidents, falls, poisoning, overdose and other drug-induced death, etc.)
- **Potentially avoidable mortality** refers to deaths of persons under 75 years of age that arise from conditions that may be avoided through individualised care or treated through primary care or hospitalisation. Conditions causing potentially avoidable deaths include natural diseases (e.g., specific types of cancer, ischaemic heart disease, diabetes, and infectious diseases) and external causes of death (e.g., overdose, accidents, suicides, and assaults).
- **Excess mortality** is typically defined as the difference between the total number of deaths in a specified period and the expected numbers of deaths in that same period.
- **Registration year** refers to the calendar year in which the death was officially registered with a state or territory Registry of Births, Deaths and Marriages. There can be a delay between the actual date of death and its registration, especially in cases involving coronial investigations.
- **Reference year** is used by the ABS to group deaths for statistical reporting. It is based on the registration year and the date the record was received by the ABS.

This report presents trends in drug-induced deaths from 2005 to 2024. Please refer to [earlier publications](#) and the [online interactive data visualisation](#) for estimates from 1997. Data prior to 1997 were also reported on in earlier publications, but the data were coded using ICD-9 and may not be directly comparable to the data presented in this report.

The definition of drug-induced deaths excludes deaths where conditions related to alcohol or tobacco use comprise the underlying cause of death as they fall outside the scope of our monitoring. However, rates of alcohol involvement in drug-induced deaths, as a substance *contributing* to a drug-induced death (as opposed to being the *underlying* cause), are reported. As a special addition to this report, we also included a summary of alcohol-induced deaths (**Panel C**) as defined by the ABS in the [Causes of Death, Australia, 2024 report](#). We acknowledge the significant loss of life from both alcohol and tobacco (see the [National Alcohol Indicators Project](#), [ABS reporting](#) and [Australian Institute of Health and Welfare reporting](#) for further information).

The codes applied here to identify cause of death have limited specificity by drug type, often identifying only the broad drug class (e.g., amphetamine-type stimulants). It is important to note that many drug-induced deaths involve more than one drug (including alcohol), and sometimes it is not possible to determine one substance as the underlying cause of death.

Reporting of Results

In line with ABS guidelines for presenting annual time series, this and last year's reports present cause of death data based on the year of death registration, rather than the reference year as in previous reports. To ensure consistency and enable meaningful comparisons over time, this change has been applied to all years in the data series. As a result, figures may differ from those previously reported. For more information on how this change affects the results and comparisons with earlier years, refer to the [methods document](#).

Estimates presented here comprise number of deaths and age-standardised mortality rates for Australians of all ages. The exception is where we report by age group (e.g., 10-year age groups); in these instances, we present age-specific rates calculated as population crude rates in the given age group. Small numbers (between 1 and 5) and rates of deaths calculated from small numbers are not presented to protect the confidentiality of individuals. Although these data are suppressed, we note that each death represents a substantial individual and community burden.

Our reporting aims to describe the profile of drug-induced deaths (i.e., key sociodemographic, clinical and contextual features of these deaths) and the trend over time in rates of drug-induced deaths adjusting for age and changes in population size. Joinpoint regression was used to estimate the trend in rates between 2005 and 2022 (i.e., years in which the data are 'final'), expressed as an average annual percent change; we also determined whether the overall change was statistically significant.

In saying this, we acknowledge that there is particular interest in whether the new release of estimates for 2024 reflects a change relative to the previous year. Percent change and 95% confidence intervals (95% CI) were computed to determine whether there was a statistically significant difference between 2023 and 2024 mortality rates for all such comparisons (see the [methods](#) for further detail). Results of these tests are presented in tables within a separate [Appendix](#) document and throughout the report as percentage increase and decrease. The ▲ up arrow indicates a statistically significant increase, while the ▼ down arrow indicates a statistically significant decrease in population rates from 2023 to 2024. **Estimates for both 2023 and 2024 are anticipated to increase with revisions, however they are not at the same stage of revision (2023 being revised and 2024 preliminary revised). Larger increases are therefore expected for 2024 data than for 2023, given these data are at an earlier stage of the revision process** (see Table 1). Percent changes for all comparisons of 2023 and 2024 mortality rates are available in **Appendix A**, and statistically significant comparisons are identified in-text.

All other comparisons of numbers and rates between other years are descriptive.

When reporting on demographic characteristics, data were only available by sex (male/female) as classified by the ABS, meaning we were unable to report on gender identity or sexual orientation. We acknowledge the importance of inclusive data and the need for improved data collection in these areas.

We align our coding practices with those of the Australian Bureau of Statistics (ABS), which are based on the World Health Organization's International Classification of Diseases (ICD) mortality coding standards and international rules for selecting the underlying cause of death, thereby supporting consistency and international comparability. However, estimates of drug-induced deaths may differ between organisations because of differences in the ICD codes, case definitions and inclusion criteria applied. For a summary of reporting approaches used in Australia, see the AIHW [Technical notes](#) accompanying the web resource *Alcohol, tobacco and other drugs in Australia*.

Supporting Resources

An accompanying public [online data visualisation](#) allows viewers to disaggregate data in many different ways and to download these images for their own use. This visualisation allows viewers to explore trends by drug, jurisdiction, sex, age group, remoteness and intent.

Full details of the [methods](#) (including the codes used) are available for download; this document and the [ABS Cause of Death Methodology](#) should be read alongside this report.

1

Overall Trend in Drug-Induced Deaths

2024 Drug-induced
DEATHS

2,005

drug-induced
deaths

▲ 7.3

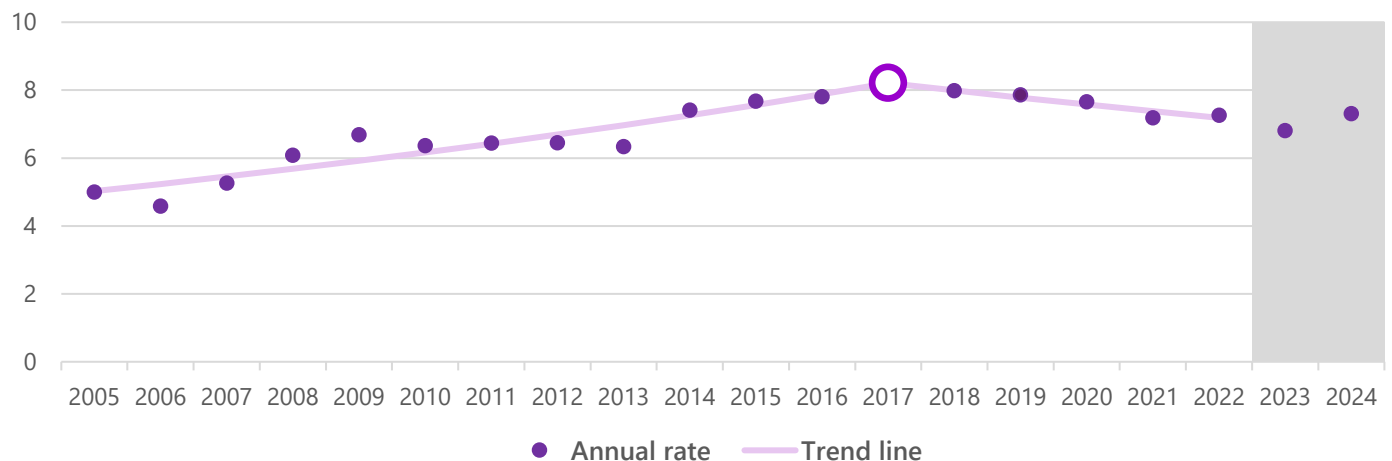
deaths per
100,000
Australians

5.5

deaths
per day1.1% of all registered
deaths in Australia

2005-2024

Age-standardised rate per 100,000 people of
DRUG-induced deaths,
Australia, 2005-2024



Note: Deaths where conditions related to alcohol or tobacco comprised the underlying cause of death are not captured here.
Causes of death data for 2023 and 2024 are not final and thus are subject to further revision (indicated by the grey area on the plot).

Overall Trend

Table 2. Number and age-standardised rate per 100,000 people of drug-induced deaths, Australia, 2021-2024

Registration year	Number	Rate per 100,000
2021 Final	1,858	7.2
2022 Final	1,892	7.3
2023 Revised	1,826	6.8
2024 Preliminary revised	2,005	▲ 7.3

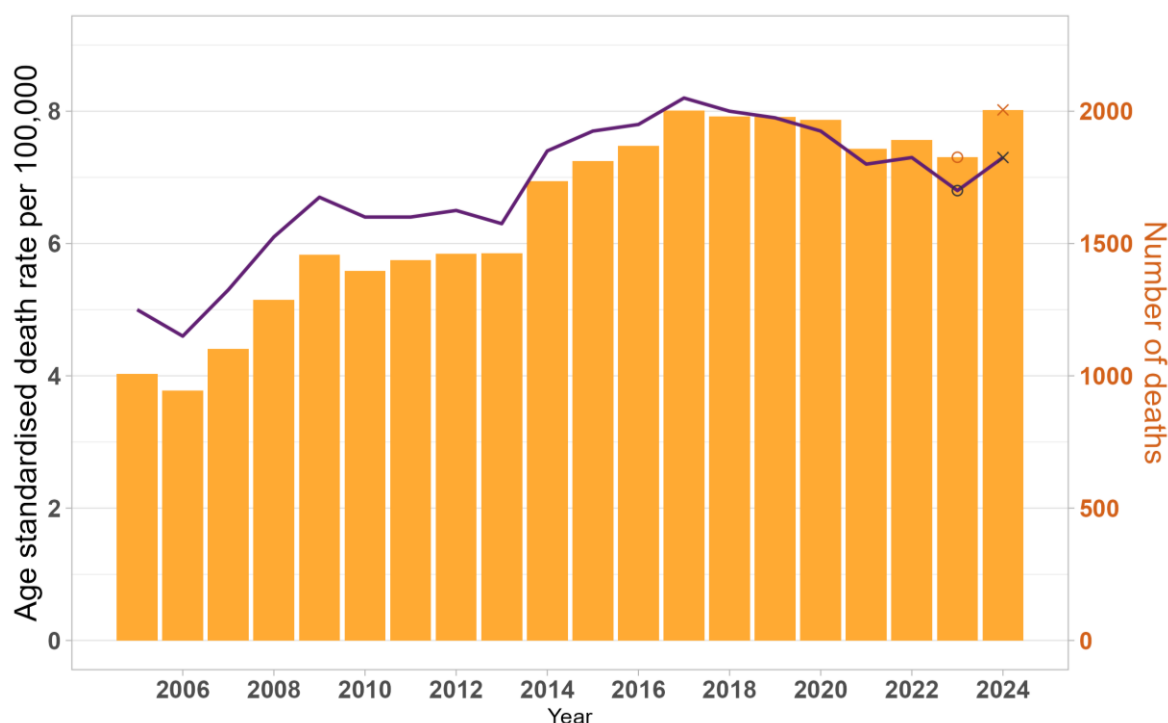
Note: These deaths do not include deaths where conditions related to alcohol or tobacco use were the underlying cause of death, although a summary of rates of alcohol-induced deaths is presented in [Panel C](#) for reference.

In 2024, Australia recorded **2,005 drug-induced deaths**, representing 1.1% of [all registered deaths](#) nationwide and the highest number observed during the 20-year monitoring period ([Table 2](#)). This translates to a mortality rate of **7.3 deaths per 100,000 Australians**, or more than five deaths per day, and represents a significant increase from 2023 ([Figure 1](#)). Notably, the preliminary 2024 estimates exceed the revised 2023 estimates (1,826 deaths; 6.8 deaths per 100,000 people) despite the 2024 data remaining subject to further revision. This finding is in contrast to the all-cause mortality rate, which [decreased](#) in 2024 compared with 2023, despite an increase in the total number of registered deaths in Australia.

Trends since 2005

Australia's experience with drug-induced mortality over the past two decades has been characterised by a sustained rise through the 2000s and early 2010s, culminating in a peak rate of 8.2 deaths per 100,000 people in 2017. Rates then gradually declined over the following six years, reaching 6.8 deaths per 100,000 people in 2023. Preliminary data for 2024 suggest a change in direction, with the rate increasing to 7.3 deaths per 100,000 people, and likely to increase even further in subsequent revision cycles. This indicates that the downward trajectory observed between 2017 and 2023 may have stalled and aligns with the reported increase in [potentially avoidable mortality due to external causes](#) in 2024 (see [Panel A](#) for definition).

Figure 1. Number and age-standardised rate per 100,000 people of drug-induced deaths, Australia, 2005-2024



Note: Deaths where conditions related to alcohol or tobacco comprised the underlying cause of death are not captured here. Causes of death data for 2023 and 2024 are not final and thus are subject to further revision. The symbol 'o' indicates revised estimates and 'x' preliminary revised estimates.

Panel B. Drug-induced deaths in the context of overall mortality in Australia

Understanding trends in drug-induced deaths requires consideration of broader patterns in mortality across Australia. In 2024, there were 187,268 registered deaths nationally. The age-standardised all-cause mortality rate declined from 513.0 in 2023 to 507.8 deaths per 100,000 people in 2024 ([ABS 2026](#)). COVID-19 continued to contribute to mortality but accounted for fewer deaths than during the peak pandemic years, falling from the third leading cause of death in 2022 to twelfth in 2024 (4,029 deaths). Recent ABS analyses also estimated that Australia experienced **1.7% fewer deaths than expected in 2024**, following several years of unusually volatile mortality during the COVID-19 pandemic ([Excess mortality, January 2024 - December 2025 | Australian Bureau of Statistics](#)). Those fluctuations included historically low mortality in 2020 and 2021, followed by elevated mortality in 2022 and 2023, reflecting both the direct and indirect impacts of the pandemic on population health. This reflects Australia's transition from the acute phase of the pandemic to a broader pattern of seasonal respiratory disease.

Drug-induced deaths represented a relatively small proportion of all deaths (1.1%), yet they remain an important cause of premature mortality. Unlike the overall decline in all-cause mortality rate observed from 2023 to 2024, preliminary estimates indicate that the age-standardised rate of drug-induced deaths increased from 6.8 to 7.3 deaths per 100,000 people. Because deaths from drug poisoning occur predominantly among younger and middle-aged adults, they contribute disproportionately to years of life lost relative to their share of overall mortality.

This pattern is also consistent with recent Australian Bureau of Statistics' findings on potentially avoidable mortality ([ABS, AIHW](#)). While the overall mortality rate declined in 2024, deaths from external causes, including drug poisoning, increased and continue to represent an important component of potentially avoidable deaths among people aged under 75 years. The increase in preliminary drug-induced mortality in 2024 therefore diverges from the broader improvement observed in all-cause mortality and highlights the ongoing public health burden of preventable drug-related harm.

Panel C. Alcohol-induced deaths

Overall trend in alcohol-induced deaths

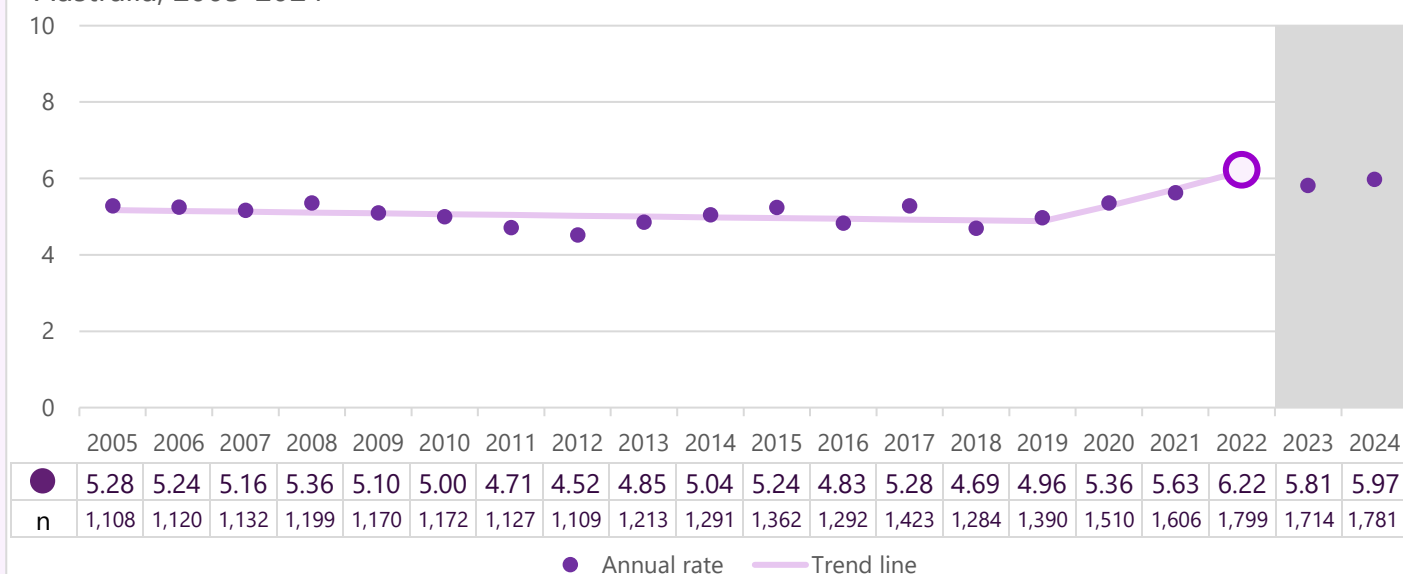
Alcohol use as an underlying cause of death is excluded from the analyses presented in this report, which focus on deaths resulting from the use of pharmaceutical or illegal drugs. However, alcohol remains a major contributor to mortality in Australia and a significant public health concern.

According to the latest available data, in 2024, there were **1,781 alcohol-induced deaths** registered in Australia, equivalent to **6.0 deaths per 100,000 people**. The 2024 mortality rate was higher than that observed in 2023 (**1,714 deaths, 5.8 deaths per 100,000 people**) and approaching the peak rate recorded in 2022 (**6.2 deaths per 100,000 people**). As with other causes of death that are largely coroner-certified, the 2023 and 2024 estimates remain subject to further revisions and may increase ([ABS cat. 3303.0](#)).

It is important to note that these estimates only capture deaths directly attributed to alcohol use; they do not capture all accidents, homicides, and other causes partially attributable to alcohol use (see [methods](#) for details and list of ICD-10 codes used) which often carry even greater mortality burden. We refer the reader to the [National Alcohol Indicators Project](#) for estimates of alcohol-attributable deaths.

Age-standardised rate per 100,000 people of
ALCOHOL-induced deaths,
Australia, 2005-2024

The highest rate in the past 20 years was
recorded in **2022** at
6.2 deaths per 100,000 Australians



Specific causes

In terms of specific causes of alcohol-induced deaths, **alcoholic liver disease** continued to account for the majority of deaths in 2024 (**60%** vs 62% in 2023), followed by mental and behavioural disorders due to alcohol use (25%). Unintentional alcohol poisoning represented a smaller proportion of alcohol-induced mortality (8.3%).

Sex

In 2024, **males** accounted for the majority (**74%**) of alcohol-induced deaths, with **1,319 deaths** and an age-standardised mortality rate of **9.0 deaths per 100,000 male** Australians. Among **females**, there were **462 alcohol-induced deaths**, corresponding to an age-standardised mortality rate of **3.1 deaths per 100,000 female** Australians. Compared with the revised 2023 estimates, both the number of deaths and the age-standardised mortality rate were higher among males in 2024 (2023: 1,210 deaths; 8.3 deaths per 100,000 males), whereas the corresponding estimates for females were slightly lower (2023: 504 deaths, 3.4 deaths per 100,000 females). As the 2023 and 2024 estimates remain subject to further revision, these apparent differences should be interpreted with caution.

Age

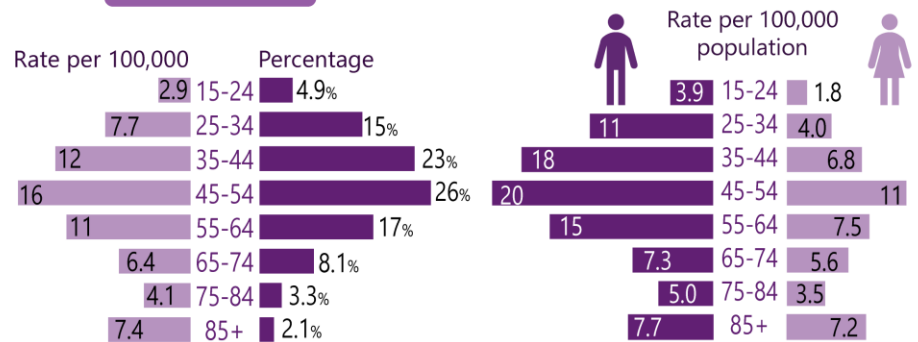
The age group with the highest crude rate of alcohol-induced deaths in 2024 was **55-64 years**, with **16.4 deaths per 100,000 people (502 deaths)**, followed by those aged 65-74 years (14.7 per 100,000 people, 373 deaths) and 45-54 years (13.3 per 100,000 people, 442 deaths). Together, these three age groups accounted for **74%** of all alcohol-induced deaths in 2024. Although the 2024 estimates remain preliminary and are subject to further revision, rates were higher than the revised 2023 rates among people aged 35-44 years, 45-54 years and 65-74 years, with the **largest increase** observed among those aged **45-54 years** (from **12.2 to 13.3 deaths per 100,000 people**).

2

Sociodemographic Characteristics

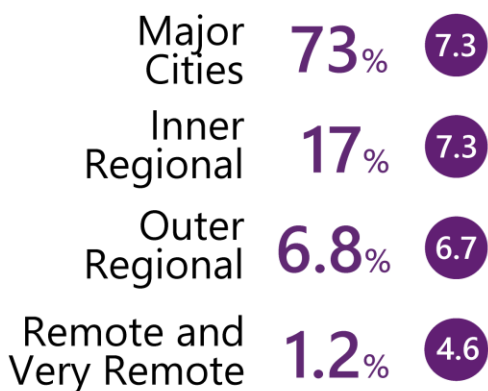
2024 Drug-induced
DEATHS

Age

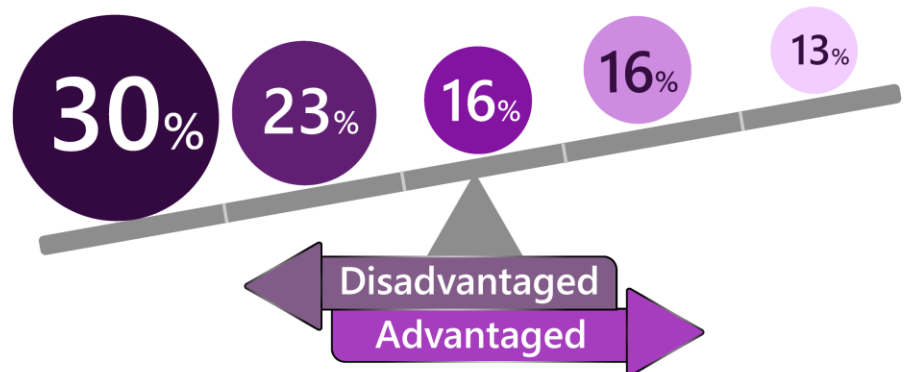


Remoteness

Percentage (rate per 100,000 people)



Socio-economic status of area



Sex

Table 3. Number and rate per 100,000 people of drug-induced deaths by sex, Australia, 2021-2024

Sex	Number (%)			
	2021 F	2022 F	2023 R	2024 P
Male	1,167 (63)	1,207 (64)	1,180 (65)	1,331 (66)
Female	691 (37)	685 (36)	646 (35)	674 (34)
Sex	Rate per 100,000 people			
	2021 F	2022 F	2023 R	2024 P
Male	9.3	9.5	9.0	▲9.9
Female	5.1	5.1	4.6	4.7

In 2024, drug-induced deaths were approximately twice as frequent among males compared with females, with 9.9 deaths per 100,000 male Australians and 4.7 deaths per 100,000 female Australians (Table 3). The sex profile remains consistent with previous years; however, the increased rate observed among males in 2024 represents a potential reversal of the downward trend observed between 2018 and 2023.

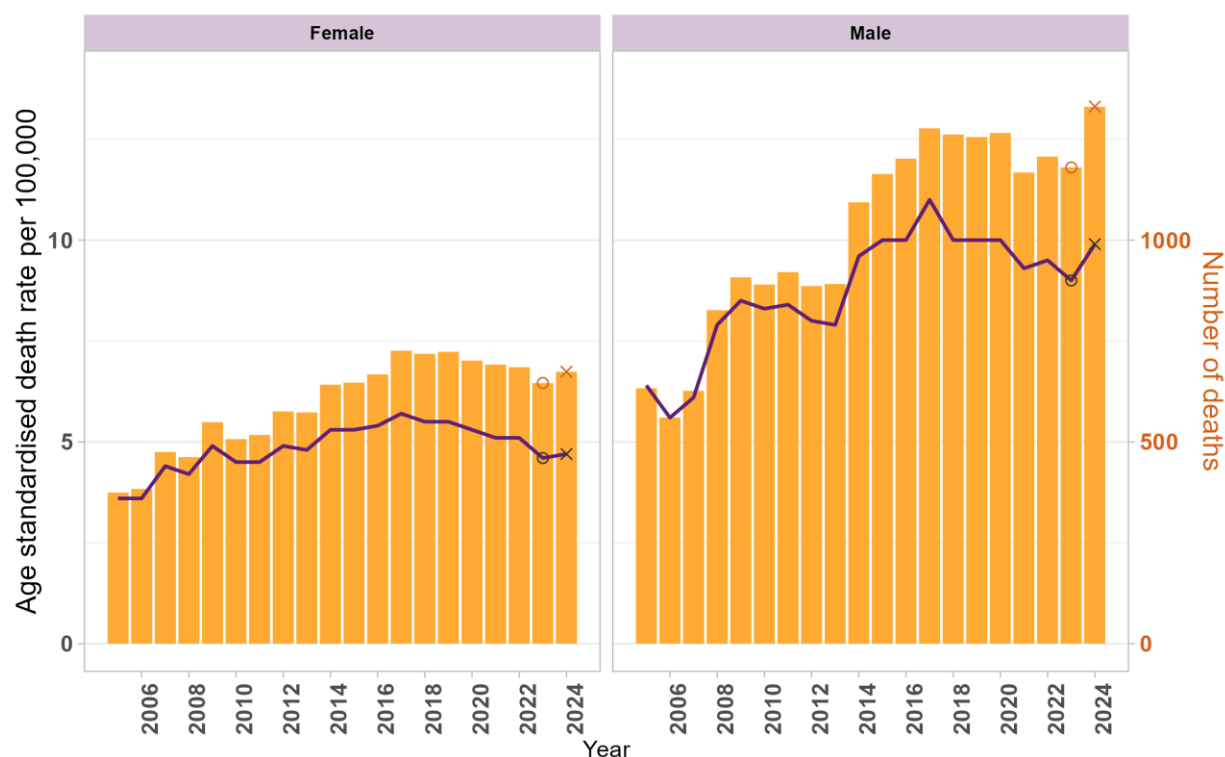
Note: Data were only available by sex (male/female), which means we were unable to report on gender identity. We acknowledge the importance of inclusive data and the need for improved data collection in these areas. 'F' means final, 'R' - 'revised' and 'P' - 'preliminary revised'.

Trend since 2005

From 2005, age-standardised mortality rates increased among both males and females, rising on average by 4.6% and 3.5% per year, respectively, until reaching a peak in 2017 of 11 deaths per 100,000 males and 5.7 deaths per 100,000 females (Figure 2). Following this peak, rates generally declined for both sexes until 2023, reaching 9.0 deaths per 100,000 males and 4.6 deaths per 100,000 females.

Between 2023 and 2024, the age-standardised mortality rate remained relatively stable among females but increased by 10% among males to the highest rate observed since 2020, indicating a change in the recent downward trend observed between 2018 and 2023.

Figure 2. Number and age-standardised rate per 100,000 people of drug-induced deaths by sex, Australia, 2005-2024



Note: Deaths where conditions related to alcohol or tobacco comprised the underlying cause of death are not captured here. Causes of death data for 2023 and 2024 are not final and thus are subject to further revision. The symbol 'o' indicates revised estimates and 'x' preliminary revised estimates.

Age

Table 4. Number and rate per 100,000 people of drug-induced deaths by age, Australia, 2021-2024

Age	Number (%)			
	2021 F	2022 F	2023 R	2024 P
15-24	94 (5.1)	116 (6.1)	104 (5.7)	99 (4.9)
25-34	281 (15)	278 (15)	236 (13)	309 (15)
35-44	456 (25)	444 (23)	421 (23)	466 (23)
45-54	475 (26)	513 (27)	489 (27)	515 (26)
55-64	291 (16)	303 (16)	315 (17)	342 (17)
65-74	124 (6.7)	137 (7.2)	144 (7.9)	163 (8.1)
75-84	75 (4.0)	57 (3.0)	72 (3.9)	66 (3.3)
85+	58 (3.1)	41 (2.2)	39 (2.1)	43 (2.1)

Age	Rate per 100,000 people			
	2021 F	2022 F	2023 R	2024 P
15-24	3.0	3.7	3.1	2.9
25-34	7.6	7.4	6.0	▲7.7
35-44	13	12	11	12
45-54	15	16	15	16
55-64	9.6	10	10	11
65-74	5.1	5.6	5.8	6.4
75-84	5.5	4.0	4.8	4.2
85+	11	7.5	7.0	7.4

Note: 'F' means final, 'R' - 'revised' and 'P' - 'preliminary revised'.

In 2024, people aged 45-54 years accounted for the largest proportion of drug-induced deaths (26%; 515 deaths), followed by those aged 35-44 years (23%; 466 deaths) (Table 4). These age groups also recorded the highest mortality rates (16 and 12 deaths per 100,000 people, respectively). In contrast, people aged 75 years and over accounted for the smallest proportion of deaths (5.4%).

Trend since 2005

Between 2005 and 2024, the age profile of drug-induced deaths in Australia has shifted progressively towards older age groups (Figure 3). Mortality rates increased among people aged 45-54 years (7.7 to 16 deaths per 100,000 people), 55-64 years (4.5 to 11 deaths per 100,000 people), and 65-74 years (3.3 to 6.4 deaths per 100,000 people). The 35-44 age group also experienced a marked increase, with rates peaking in 2017 before gradually declining; although, notably, they continued to record one of the highest rates of drug-induced mortality in 2024. In contrast, mortality rates among people aged 15-24 years remained comparatively low throughout the period, while rates among those aged 75 years and over fluctuated because of the relatively small number of deaths.

Compared with the revised 2023 estimates, the largest and only statistically significant change in 2024 was observed among those aged **25-34 years**, whose mortality increased from 6.0 to 7.7 deaths per 100,000 people. Although changes in other age groups were not statistically significant, the mortality rate among people aged 65-74 years reached the highest level recorded during the monitoring period, while the rate among those aged 45-54 years remained among the highest observed over the past two decades. Together, these findings are consistent with the continuing shift in drug-induced mortality towards older age groups. As the 2024 estimates remain preliminary and are subject to further revision, these findings should be interpreted with caution.

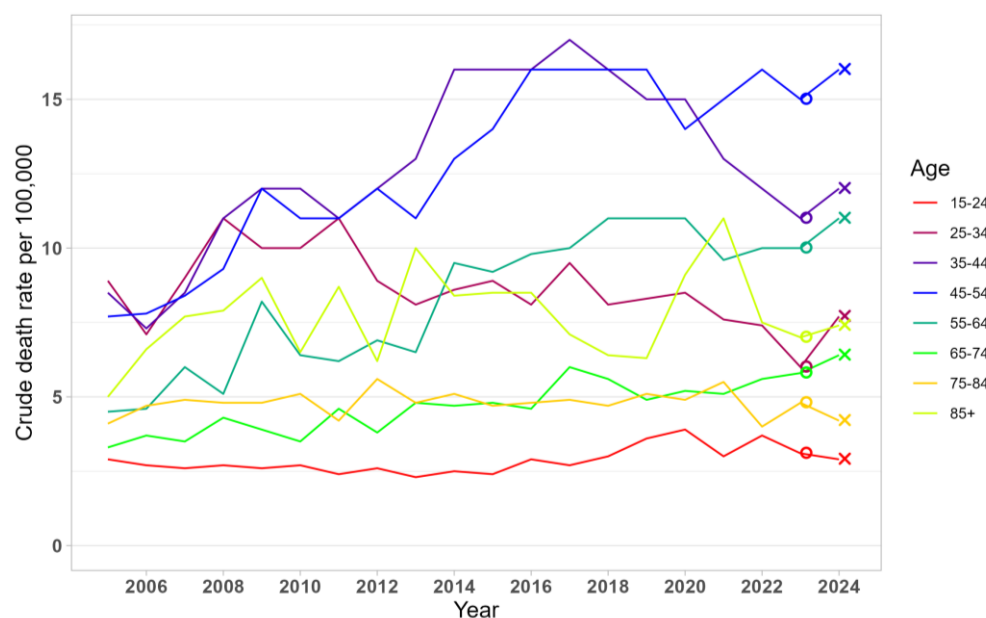


Figure 3. Age-specific rate per 100,000 people of drug-induced deaths by age group, Australia, 2005-2024

Note: Deaths where conditions related to alcohol or tobacco comprised the underlying cause of death are not captured here. Causes of death data for 2023 and 2024 are not final and thus are subject to further revision. The symbol 'o' indicates revised estimates and 'x' preliminary revised estimates. The rates for the 0-14 age group are not presented due to sensitivity of the data.

Sex and Age

Table 5. Number and rate per 100,000 people of drug-induced deaths by age and sex, Australia, 2021-2024

Age	MALE				FEMALE			
	Number (%)				Number (%)			
	2021 F	2022 F	2023 R	2024 P	2021 F	2022 F	2023 R	2024 P
15-24	67 (5.7)	82 (6.8)	71 (6.0)	69 (5.2)	27 (3.9)	34 (5)	33 (5.1)	30 (4.5)
25-34	200 (17)	210 (17)	162 (14)	228 (17)	81 (12)	68 (9.9)	74 (11)	81 (12)
35-44	311 (27)	301 (25)	291 (25)	334 (25)	145 (21)	143 (21)	130 (20)	132 (20)
45-54	295 (25)	320 (27)	323 (27)	331 (25)	180 (26)	193 (28)	166 (26)	184 (27)
55-64	164 (14)	180 (15)	199 (17)	224 (17)	127 (18)	123 (18)	116 (18)	118 (18)
65-74	64 (5.5)	65 (5.4)	74 (6.3)	89 (6.7)	60 (8.7)	72 (11)	70 (11)	74 (11)
75-84	37 (3.2)	31 (2.6)	40 (3.4)	37 (2.8)	38 (5.5)	26 (3.8)	32 (5.0)	29 (4.3)
85+	27 (2.3)	18 (1.5)	17 (1.4)	18 (1.4)	31 (4.5)	23 (3.4)	22 (3.4)	25 (3.7)
Age	Rate per 100,000 people				Rate per 100,000 people			
	2021 F	2022 F	2023 R	2024 P	2021 F	2022 F	2023 R	2024 P
15-24	4.2	5.0	4.1	3.9	1.8	2.2	2.0	1.8
25-34	11	11	8.3	▲11	4.4	3.6	3.8	4.0
35-44	18	17	16	18	8.2	7.9	6.9	6.8
45-54	18	20	20	20	11	12	9.9	11
55-64	11	12	13	15	8.2	7.9	7.5	7.5
65-74	5.5	5.5	6.2	7.3	4.8	5.7	5.4	5.6
75-84	5.8	4.6	5.6	5.0	5.3	3.4	4.0	3.5
85+	13	8.3	7.6	7.7	9.5	6.9	6.5	7.2

Note: 'F' means 'final', 'R' - 'revised' and 'P' - 'preliminary revised'.

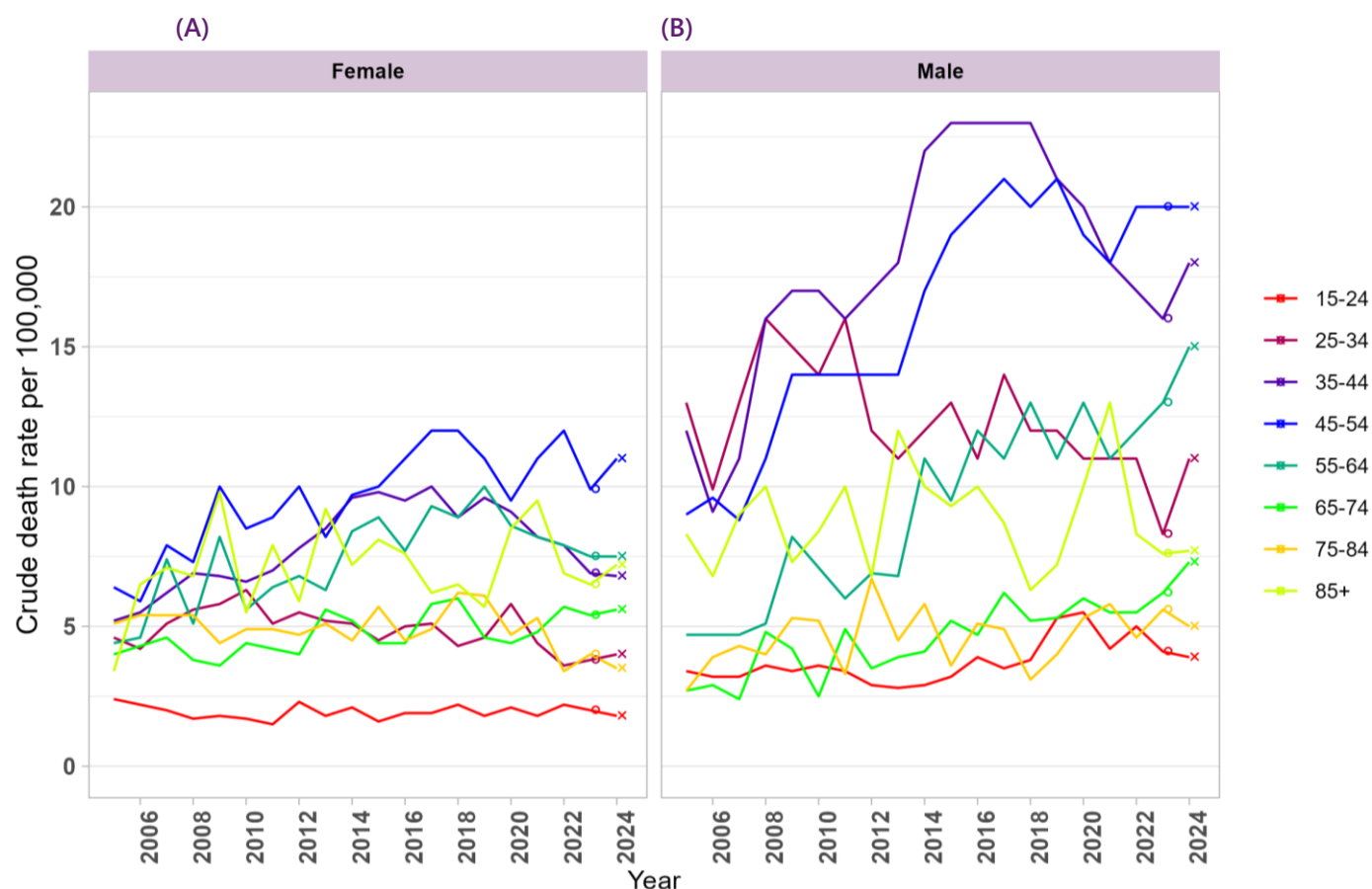
In 2024, the highest proportion and rate of drug-induced deaths among males were observed in the 45-54 and 35-44 year age groups. The same age groups also accounted for the largest proportion of deaths among females, although mortality rates were consistently lower than among males (Table 5).

Trend since 2005

Since 2005, the age profile of drug-induced deaths has shifted towards older age groups for both males and females. The proportion of deaths occurring among people aged 45-74 years has increased, while younger age groups account for a smaller share of deaths than they did in earlier years.

Compared with the revised 2023 estimates, rates in 2024 were higher or similar in most male age groups, with the only statistically significant difference observed in those aged 25-34 years. Among females, the 2023 and 2024 rates were relatively similar across most age groups. As the 2024 data are preliminary, these findings should be interpreted with caution.

Figure 4. Age-specific rate per 100,000 people of drug-induced deaths among females (A) and males (B), by age group, Australia, 2005-2024



Note: Deaths where conditions related to alcohol or tobacco comprised the underlying cause of death are not captured here. Causes of death data for 2023 and 2024 are not final and thus are subject to further revision. The symbol 'o' indicates revised estimates and 'x' preliminary revised estimates. The rates for the 0-14 years age group are not presented due to sensitivity of the data.

Remoteness Area of Usual Residence

Remoteness area of usual residence (hereafter 'remoteness area', comprising major city, inner regional, outer regional, remote and very remote areas) has been identified for decedents since 2009. Remoteness area was identified in 99% of drug-induced deaths in 2024. Where remoteness area is disaggregated by another variable (e.g., sex), data are presented for major city areas versus regional and remote areas combined (hereafter 'regional/remote areas').

Table 6. Number and rate per 100,000 people of drug-induced deaths by remoteness area, Australia, 2021-2024

Remoteness Area	Number (%)			
	2021 F	2022 F	2023 R	2024 P
Major City	1,354 (73)	1,389 (73)	1,298 (71)	1,468 (73)
Inner Regional	312 (17)	314 (17)	333 (18)	333 (17)
Outer Regional	142 (7.6)	133 (7.0)	137 (7.5)	137 (6.8)
Remote and Very Remote	25 (1.3)	26 (1.4)	24 (1.3)	24 (1.2)
Remoteness Area	Rate per 100,000 people			
	2021 F	2022 F	2023 R	2024 P
Major City	7.2	7.3	6.6	▲7.3
Inner Regional	6.9	6.8	7.4	7.3
Outer Regional	6.8	6.3	6.6	6.7
Remote and Very Remote	5.2	5.2	4.7	4.6

Note: 'F' means 'final', 'R' - 'revised' and 'P' - 'preliminary revised'.

In 2024, almost three-quarters of all drug-induced deaths occurred among residents of major cities, reflecting the concentration of Australia's population in these areas (Table 6). However, when population size was taken into account, mortality rates were similar in major cities and inner regional areas, both higher than those observed in outer regional/remote areas.

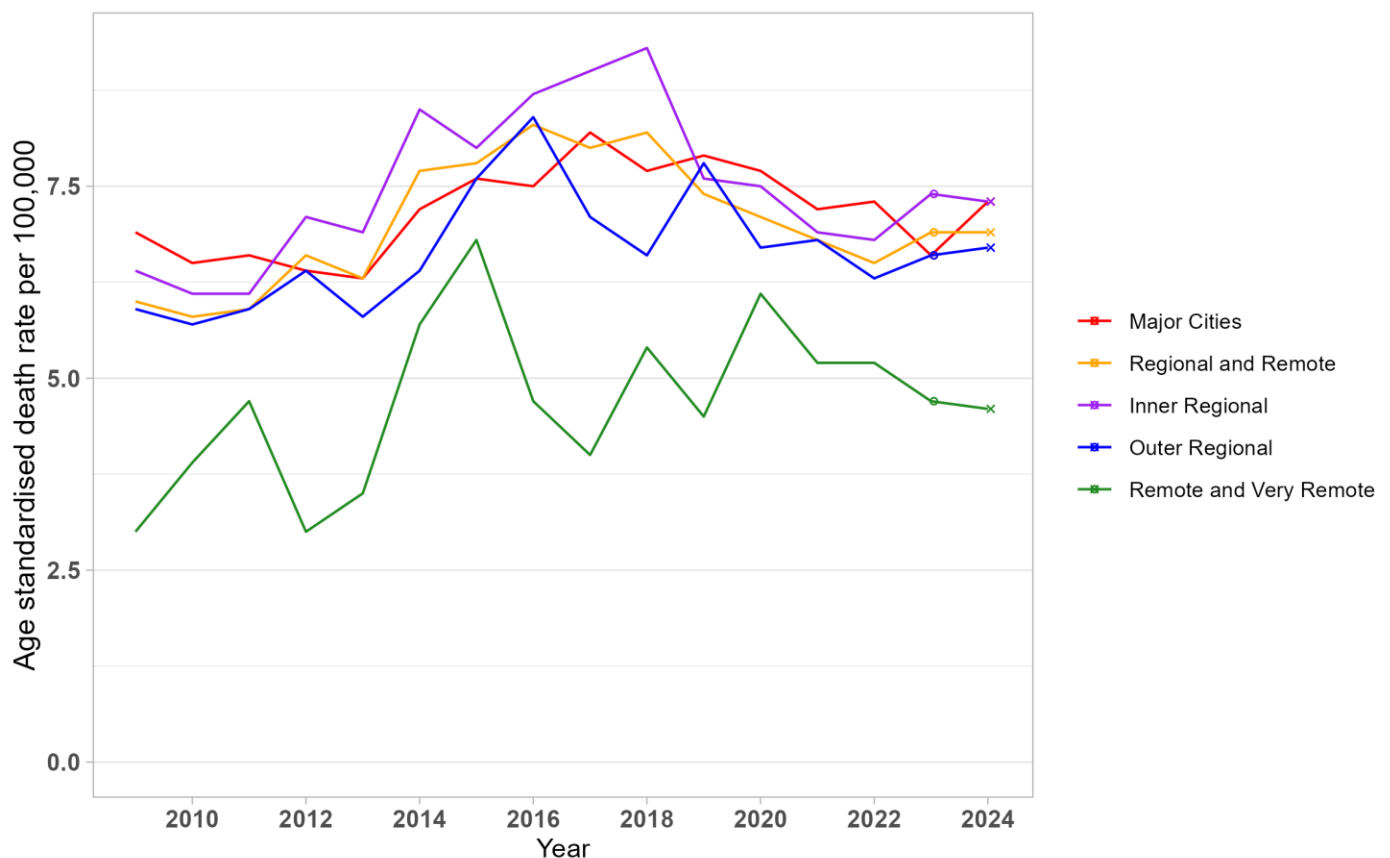
Trend since 2009

The geographic profile of drug-induced deaths has remained relatively stable over time, with around seven in ten deaths occurring among residents of major cities. However, trends in mortality rates tell a more nuanced story.

Since 2009, rates generally increased across major cities and regional/remote areas, peaking during the mid to late 2010s before declining (**Figure 5**). Inner regional areas experienced a noticeable peak in 2018 and subsequently declined to rates comparable to, and at times higher than, those observed in major cities. In recent years, the gap between the two areas has narrowed, indicating that the burden of drug-induced mortality is not confined to metropolitan areas.

In 2024, the mortality rate in major cities increased to a level comparable to that observed in 2022, following a decline in 2023. Rates in inner regional, outer regional, and remote and very remote areas remained relatively stable between 2023 and 2024. Trends in remote and very remote areas should be interpreted cautiously because of the small number of deaths.

Figure 5. Age-standardised rate per 100,000 people of drug-induced deaths by remoteness area, Australia, 2009-2024



Note: Deaths where conditions related to alcohol or tobacco comprised the underlying cause of death are not captured here. Causes of death data for 2023 and 2024 are not final and thus are subject to further revision. The symbol 'o' indicates revised estimates and 'x' preliminary revised estimates.

Remoteness Area and Sex

Table 7. Number and rate per 100,000 people of drug-induced deaths, by remoteness area and sex, Australia, 2021-2024

Remoteness Area	MALE				FEMALE			
	Number (%)				Number (%)			
	2021 F	2022 F	2023 R	2024 P	2021 F	2022 F	2023 R	2024 P
Major City	870 (64)	891 (64)	836 (64)	988 (67)	484 (36)	498 (36)	462 (36)	480 (33)
Inner Regional	178 (57)	186 (59)	219 (66)	215 (65)	134 (43)	128 (41)	114 (34)	118 (35)
Outer Regional	83 (58)	88 (66)	89 (65)	81 (59)	59 (42)	45 (34)	48 (35)	56 (41)
Remote and Very Remote	18 (72)	20 (77)	14 (58)	11 (46)	7 (28)	6 (23)	10 (42)	13 (54)
Rate per 100,000 people	Rate per 100,000 people				Rate per 100,000 people			
	2021 F	2022 F	2023 R	2024 P	2021 F	2022 F	2023 R	2024 P
Major City	9.5	9.6	8.8	▲10	5.0	5.1	4.6	4.6
Regional/Remote	8.2	8.4	9.3	8.9	5.4	4.6	4.6	4.9

Note: 'F' means 'final', 'R' - 'revised' and 'P' - 'preliminary revised'.

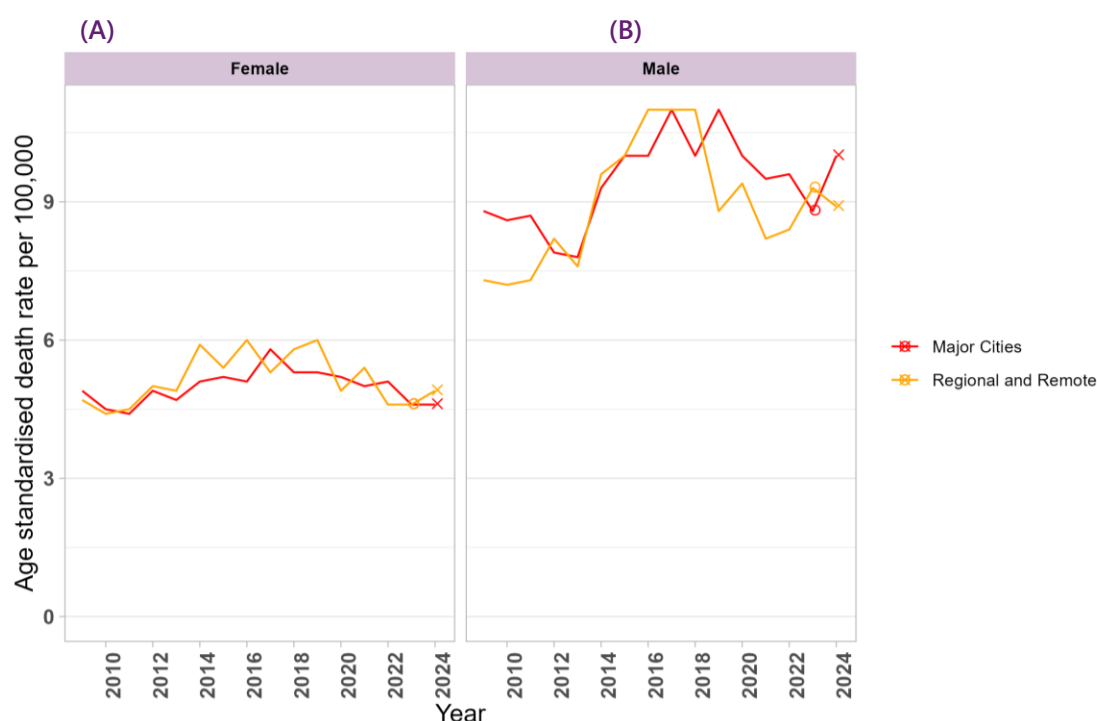
In 2024, around two-thirds of drug-induced deaths in both major city and inner regional areas occurred among males, while females accounted for a slightly larger share of deaths in remote and very remote areas than in previous years (note that this is based on small numbers and should not be interpreted as a stable pattern) (Table 7).

Trend since 2009

The pattern of drug-induced mortality by remoteness area has been broadly similar for males and females over time, with rates increasing across both major city and regional/remote areas until the late 2010s before declining. Mortality rates remained substantially higher among males than females regardless of remoteness area.

In 2024, the mortality rate among males living in major cities increased relative to 2023, returning to a level similar to that observed in 2022. In contrast, rates among females in major cities remained stable, as did mortality rates in regional/remote areas for both sexes. These findings suggest that the increase observed nationally in 2024 was driven primarily by males residing in major cities.

Figure 6. Age-standardised rate per 100,000 people of drug-induced deaths for (A) females and (B) males, by remoteness area, Australia, 2009-2024



Note: Deaths where conditions related to alcohol or tobacco comprised the underlying cause of death are not captured here. Causes of death data for 2023 and 2024 are not final and thus are subject to further revision. The symbol 'o' indicates revised estimates and 'x' preliminary revised estimates. Numbers in remote and very remote area were too small to be shown separately; hence the regional, remote and very remote areas were collapsed into one category.

Remoteness Area and Age

In 2024, the highest proportion and rates of drug-induced deaths in both major city and regional/remote areas occurred among people aged 45-54 years (Table 8). Notably, rates among people aged 25-34 years were similar in major cities and regional/remote areas, although the former increased significantly in 2024 relative to 2023 (Figure 7; Table A6, Appendix).

Table 8. Proportion, number and population rate of drug-induced deaths in major cities versus regional/remote areas by age group, Australia, 2024

Age group	Major Cities		Regional/Remote	
	Number (%)	Rate per 100,000	Number (%)	Rate per 100,000
15-24	83 (5.7%)	3.2	16 (3.2%)	1.9
25-34	235 (16%)	7.4	65 (13%)	7.5
35-44	351 (24%)	12	103 (21%)	12
45-54	361 (25%)	15	140 (28%)	16
55-64	240 (16%)	12	96 (19%)	9.8
65-74	117 (8.0%)	7.1	45 (9.1%)	5.0
75-84	51 (3.5%)	4.9	14 (2.8%)	2.6
85+	30 (2.0%)	7.4	13 (2.6%)	7.3

Trend since 2009

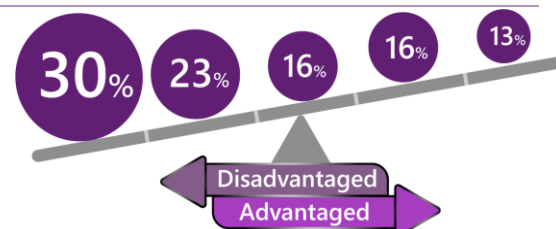
Age-specific patterns of drug-induced mortality have been broadly similar across major city and regional/remote areas over time, with rates consistently highest among people aged 35-54 years, albeit with the 45-54 age group exceeding the 35-44 age groups from 2020 onwards. Across both areas, there have been increasing contributions from older age groups, especially those aged 55-74 years, while rates among people aged 15-24 years remained comparatively low throughout the monitoring period.

Figure 7. Rate per 100,000 people of drug-induced deaths in (A) major city areas and (B) regional and remote areas, by age, Australia 2009-2024



Note: Deaths where conditions related to alcohol or tobacco comprised the underlying cause of death are not captured here. Causes of death data for 2023 and 2024 are not final and thus are subject to further revision. The symbol 'o' indicates revised estimates and 'x' preliminary revised estimates. The rates for the 0-14 years age group are not presented due to sensitivity of the data. Numbers in remote and very remote area were too small to be shown separately hence the regional, remote and very remote areas were collapsed into one category. Rates for small numbers (less than or equal to 5 deaths) were not calculated. Suppressed data are visible as gaps in the data series.

Socio-Economic Advantage and Disadvantage



Profile in 2024



In 2024, 30% (593 deaths) of drug-induced deaths occurred among residents of the most disadvantaged areas. This pattern was broadly similar across sexes, although a slightly higher proportion of female decedents lived in the most disadvantaged areas compared with males (32% versus 28%) (Table 9).



As in previous years, the greatest proportion of decedents aged 25-84 years lived in the two most disadvantaged areas (quintiles 1 and 2). In contrast, among those aged 15-24 and 85 years and over, the highest proportion resided in the two most advantaged areas.



Both unintentional and intentional drug overdose deaths were most frequently recorded among people living in the most disadvantaged areas (31% and 26%, respectively).



Residents of the most disadvantaged areas accounted for the highest proportion of overdose deaths involving all major drug classes except cocaine. Cocaine-related deaths were more concentrated in more advantaged areas, with the highest proportion occurring among people living in the most advantaged areas (quintile 5, 24%, 34 deaths), followed by those living in fairly advantaged areas (quintile 4; 23%, 33 deaths).

Table 9. Percentage of deaths by the Index of Relative Socio-Economic Advantage and Disadvantage (IRSAD) quintiles by sex, age group, intent and drug involved in overdose, Australia, 2024

	Disadvantaged		← SEIFA →	Advantaged		Total with SEIFA
	Quintile 1	Quintile 2	Quintile 3	Quintile 4	Quintile 5	
	%	%	%	%	%	%
Total	30	23	16	16	13	98
Sex						
Male	28	22	16	15	15	97
Female	32	24	14	17	11	99
Age						
15-24	19	19	16	21	23	99
25-34	26	22	14	18	17	97
35-44	26	26	15	17	15	97
45-54	35	23	17	14	9	97
55-64	34	25	15	14	11	98
65-74	32	21	16	17	12	99
75-84	32	15	20	14	18	98
85+	21	16	14	23	26	100
Overdose intent						
Unintentional	31	23	16	16	12	97
Intentional	26	22	15	17	19	99
Overdose by Drug						
Amphetamine-type stimulants	33	24	15	14	11	97
Antidepressants	26	23	16	18	15	99
Antiepileptic, sedative-hypnotic & antiparkinsonism drugs	27	24	16	17	15	98
Antipsychotics & neuroleptics	30	20	15	17	17	99
Cannabinoids	37	28	12	19	4.7	100
Cocaine	15	20	16	23	24	99
Non-opioid analgesics	34	23	15	15	12	99
Opioids	29	23	16	16	13	98

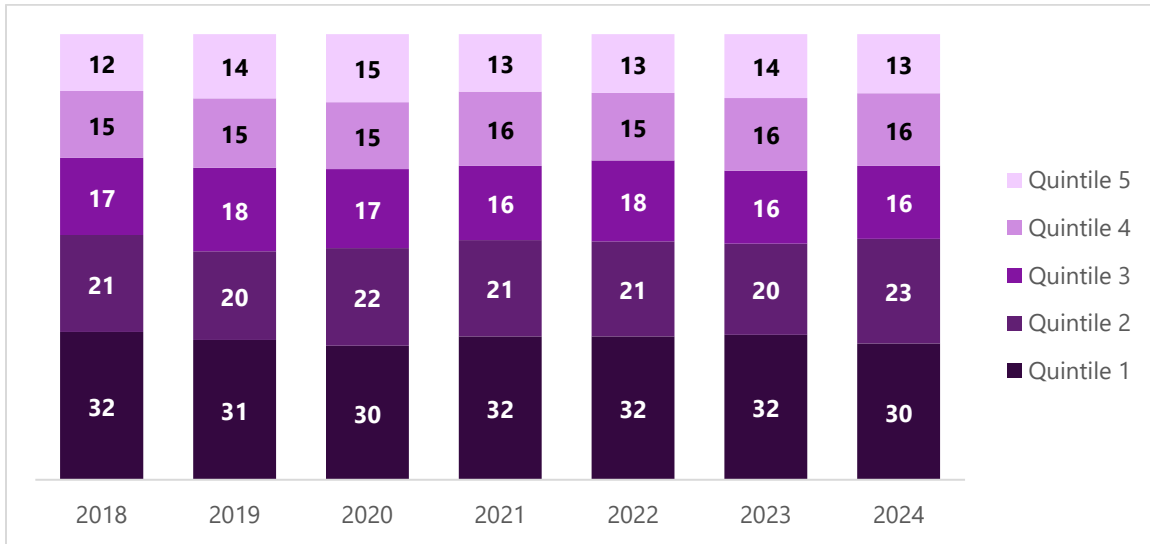
Note: A lower score indicates relatively greater disadvantage and a lack of advantage in general. A higher score indicates a relative lack of disadvantage and greater advantage in general.

Trend since 2018

The distribution of drug-induced deaths by socioeconomic disadvantage has remained relatively stable since 2018, with around 30% of deaths occurring among residents of the most disadvantaged areas each year (**Figure 8**).

This socioeconomic gradient has been observed across most drug classes. Cocaine remains the main exception, with cocaine-related deaths consistently more concentrated in advantaged areas than other drug-related deaths (**Figure 9**).

Figure 8. Percentage of drug-induced deaths by the Index of Relative Socio-Economic Advantage and Disadvantage (IRSAD) quintiles, Australia, 2018-2024



Note: A lower score indicates a relatively greater disadvantage and a lack of advantage in general. A higher score indicates a relative lack of disadvantage and greater advantage in general.

Figure 9. Percentage of overdose deaths by the index of relative socio-economic advantage and disadvantage quintiles and drug class, Australia, 2018-2024



Note: A lower score indicates a relatively greater disadvantage and a lack of advantage in general. A higher score indicates a relative lack of disadvantage and greater advantage in general.

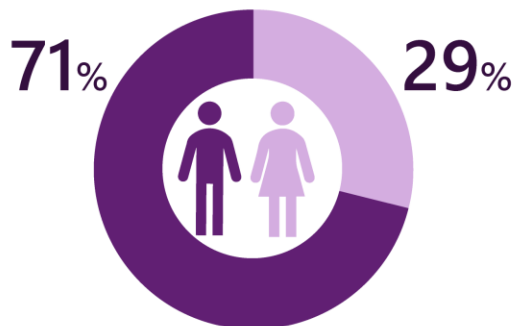
3

Underlying Cause and Intent of Drug-Induced Deaths

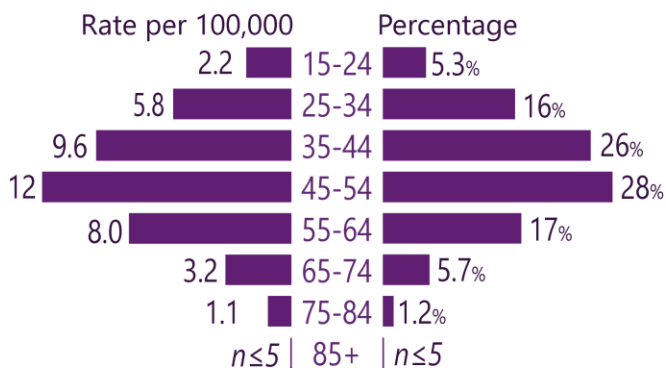
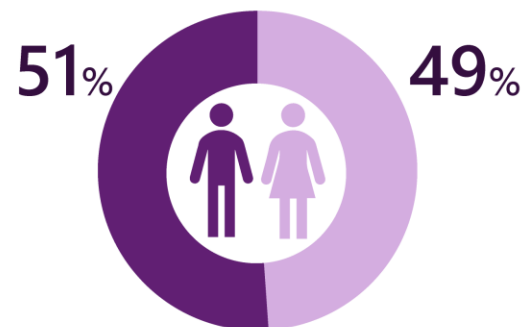
2024 Drug-induced
DEATHS

1,939 97% of DEATHS

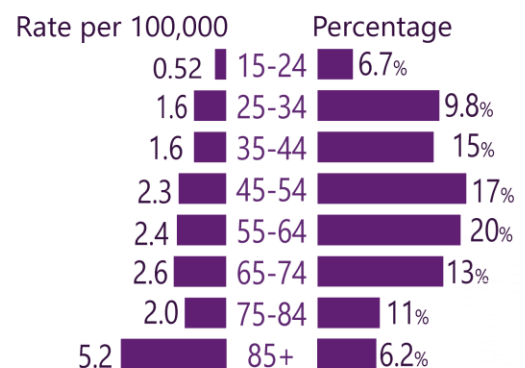
OVERDOSE DEATHS

3.9%
Undetermined74%
Unintentional

AGE

22%
Intentional

AGE



Underlying Cause of Death

Table 10. Number and rate per 100,000 people of drug overdose deaths by intent, Australia, 2021-2024

	Number (%)			
	2021 F	2022 F	2023 R	2024 P
Drug overdose	1,803 (97)	1,838 (97)	1,767 (97)	1,939 (97)
Unintentional	1,273 (71)	1,316 (72)	1,246 (71)	1,442 (74)
Intentional	470 (26)	468 (25)	451 (26)	420 (22)
Undetermined	60 (3.3)	54 (2.9)	69 (3.9)	76 (3.9)

	Rate per 100,000 people			
	2021 F	2022 F	2023 R	2024 P
Unintentional	5.1	5.2	4.8	▲ 5.4
Intentional	1.7	1.7	1.6	1.4
Undetermined	0.23	0.21	0.26	0.27

Note: 'F' means 'final', 'R' - 'revised' and 'P' - 'preliminary revised'.

Of the 2,005 drug-induced deaths recorded nationally in 2024, 1,939 (97%) were due to overdose (poisoning), while the remaining deaths were attributed to other drug-induced conditions. This pattern has been consistent throughout monitoring, with overdose deaths accounting for 97% to 99% of all drug-induced deaths each year.

Intent of Drug Overdose Deaths

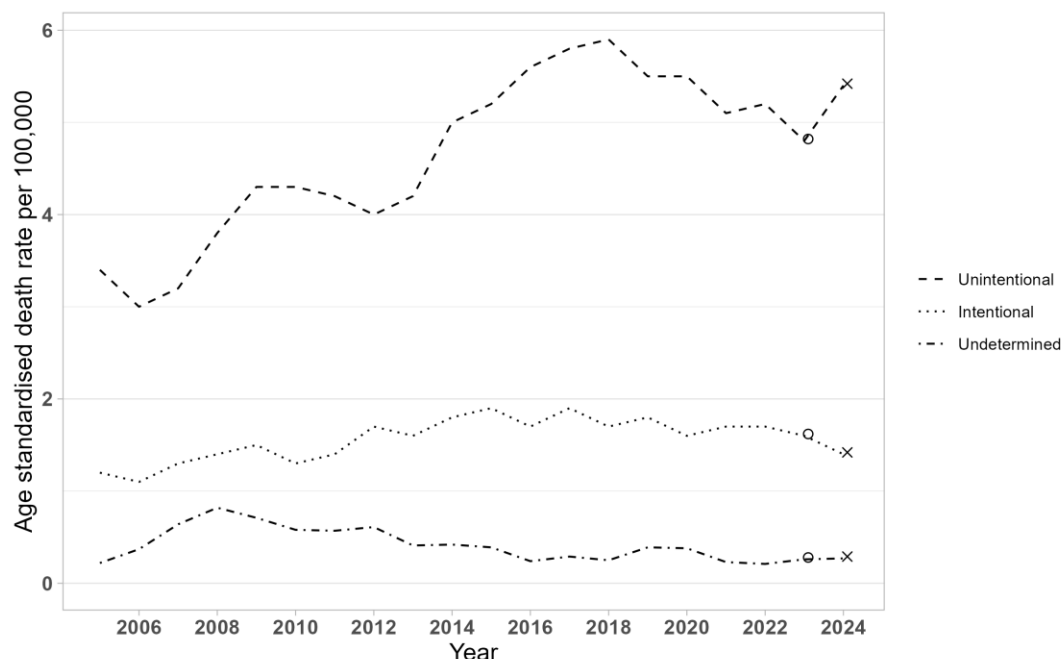
Intent is recorded only for drug overdose deaths. In 2024, almost three-quarters of overdose deaths (74%; 1,442 deaths) were classified as unintentional, while 22% (420 deaths) were classified as intentional and 3.9% (76 deaths) as undetermined intent (Table 10). Unintentional deaths have consistently accounted for most drug overdose deaths in Australia.

Trend since 2005

The rate of [unintentional drug overdose deaths](#) increased steadily between 2005 and 2018, declined through to 2023 (4.8 deaths per 100,000 people), and then increased in 2024 (5.4 deaths per 100,000 people) (Figure 10).

In contrast, intentional overdose mortality has remained comparatively low and stable over time, with the 2024 rate being slightly lower than in 2023 (1.4 versus 1.6 deaths per 100,000 people) (Table 10; Table A7, Appendix). Caution is warranted when interpreting trends in 2005, as these data pre-date the ABS revisions process for coroner-certified deaths.

Figure 10. Age-standardised rate per 100,000 people of drug overdose deaths by intent, Australia, 2005-2024



Note: Deaths where conditions related to alcohol or tobacco comprised the underlying cause of death are not captured here. Causes of death data for 2023 and 2024 are not final and thus are subject to further revision. The symbol 'o' indicates revised estimates and 'x' preliminary revised estimates.

Sex

Table 11. Number and rate per 100,000 people of drug overdose deaths, by intent and sex, Australia, 2021-2024

Sex	UNINTENTIONAL				INTENTIONAL			
	Number (%)				Number (%)			
	2021 F	2022 F	2023 R	2024 P	2021 F	2022 F	2023 R	2024 P
Male	860 (68)	908 (69)	893 (72)	1,023 (71)	239 (51)	236 (50)	211 (47)	216 (51)
Female	413 (32)	408 (31)	353 (28)	419 (29)	231 (49)	232 (50)	240 (53)	204 (49)
	Rate per 100,000 people				Rate per 100,000 people			
	2021 F	2022 F	2023 R	2024 P	2021 F	2022 F	2023 R	2024 P
Male	7.0	7.3	7.0	▲7.7	1.8	1.8	1.5	1.5
Female	3.2	3.1	2.6	▲3.1	1.6	1.6	1.6	▼1.4

Note: 'F' means 'final', 'R' - 'revised' and 'P' - 'preliminary revised'. Data were available only by sex (male/female); information on gender identity and sexual orientation was not available. We acknowledge the importance of inclusive data and the need for improved data collection in these areas.

In 2024, males accounted for the majority (71%) of unintentional drug overdose deaths, whereas intentional overdose deaths were distributed more evenly by sex, with females accounting for 49% of deaths. This pattern has remained relatively consistent over time. The age-standardised rate of unintentional overdose deaths among males was more than twice that of females in 2024 (7.7 versus 3.1 deaths per 100,000 people, respectively). In contrast, the rates of intentional overdose deaths were similar for males and females (1.5 and 1.4 deaths per 100,000 people, respectively) (Table 11).

Trend since 2005

Over the past two decades, unintentional drug overdose deaths have predominantly occurred among males, although the trend has followed a similar pattern among both sexes. Rates increased steadily to a peak in 2017 among males (8.3 deaths per 100,000 males) and in 2018 among females (3.5 deaths per 100,000 females), before subsequently declining. In 2024, however, unintentional overdose mortality increased significantly for both sexes, reaching 7.7 deaths per 100,000 males and 3.1 deaths per 100,000 females (Figure 11).

In contrast, intentional drug overdose mortality remained comparatively low and broadly similar for males and females throughout the monitoring period. Between 2023 and 2024, rates remained stable among males (1.5 deaths per 100,000 males) but declined significantly among females, from 1.6 to 1.4 deaths per 100,000 females. As a result, males continued to account for most unintentional overdose deaths, while intentional overdose deaths remained more evenly distributed between the sexes (Table A7, Appendix).

Figure 11. Age-standardised rate per 100,000 people of drug overdose deaths for females and males, by intent, Australia, 2005-2024



Note: Deaths where conditions related to alcohol or tobacco comprised the underlying cause of death are not captured here. Causes of death data for 2023 and 2024 are not final and thus are subject to further revision. The symbol 'o' indicates revised estimates and 'x' preliminary revised estimates.

Age

In 2024, the majority of unintentional drug overdose deaths continued to occur among people aged 35-54 years, with the highest rate observed among those aged 45-54 years (12 deaths per 100,000 people) and 35-44 years (9.6 per 100,000 people). Intentional overdose deaths were more evenly distributed across age groups, although people aged 85 years and over continued to have the highest population rate. This age pattern is broadly consistent with intentional self-harm mortality more generally, where rates are also highest among older Australians ([Intentional self-harm \(suicide\) deaths, 2024](#) | [Australian Bureau of Statistics](#)).

Table 12. Number and rate per 100,000 people of drug overdose deaths, by intent and age, Australia, 2021-2024

Age	UNINTENTIONAL				INTENTIONAL			
	Number (%)				Number (%)			
	2021 F	2022 F	2023 R	2024 P	2021 F	2022 F	2023 R	2024 P
15-24	63 (4.9)	83 (6.3)	68 (5.5)	76 (5.3)	26 (5.5)	27 (5.8)	27 (6.0)	18 (4.3)
25-34	224 (18)	220 (17)	177 (14)	235 (16)	51 (11)	49 (10)	43 (10)	63 (15)
35-44	346 (27)	347 (26)	325 (26)	370 (26)	80 (17)	75 (16)	71 (16)	60 (14)
45-54	373 (29)	383 (29)	385 (31)	409 (28)	83 (18)	102 (22)	78 (17)	77 (18)
55-64	185 (15)	203 (15)	202 (16)	246 (17)	86 (18)	78 (17)	91 (20)	74 (18)
65-74	53 (4.2)	57 (4.3)	70 (5.6)	82 (5.7)	63 (13)	69 (15)	61 (14)	65 (15)
75-84	14 (1.1)	14 (1.1)	11 (0.9)	18 (1.2)	44 (9.4)	36 (7.7)	50 (11)	32 (7.6)
85+	14 (1.1)	8 (0.6)	7 (0.6)	np	35 (7.4)	30 (6.4)	26 (5.8)	30 (7.1)
Age	Rate per 100,000 people				Rate per 100,000 people			
	2021 F	2022 F	2023 R	2024 P	2021 F	2022 F	2023 R	2024 P
15-24	2.0	2.6	2.0	2.2	0.84	0.85	0.81	0.52
25-34	6.0	5.9	4.5	▲5.8	1.4	1.3	1.1	1.6
35-44	9.8	9.6	8.7	9.6	2.3	2.1	1.9	1.6
45-54	11	12	12	12	2.5	3.1	2.4	2.3
55-64	6.1	6.7	6.6	8.0	2.9	2.6	3.0	2.4
65-74	2.2	2.3	2.8	3.2	2.6	2.8	2.5	2.6
75-84	1.0	1.0	0.7	1.1	3.3	2.5	3.3	▼2.0
85+	2.6	1.5	1.2	np	6.6	5.5	4.6	5.2

Note: 'F' means 'final', 'R' - 'revised' and 'P' - 'preliminary revised'. Np stands for not publishable.

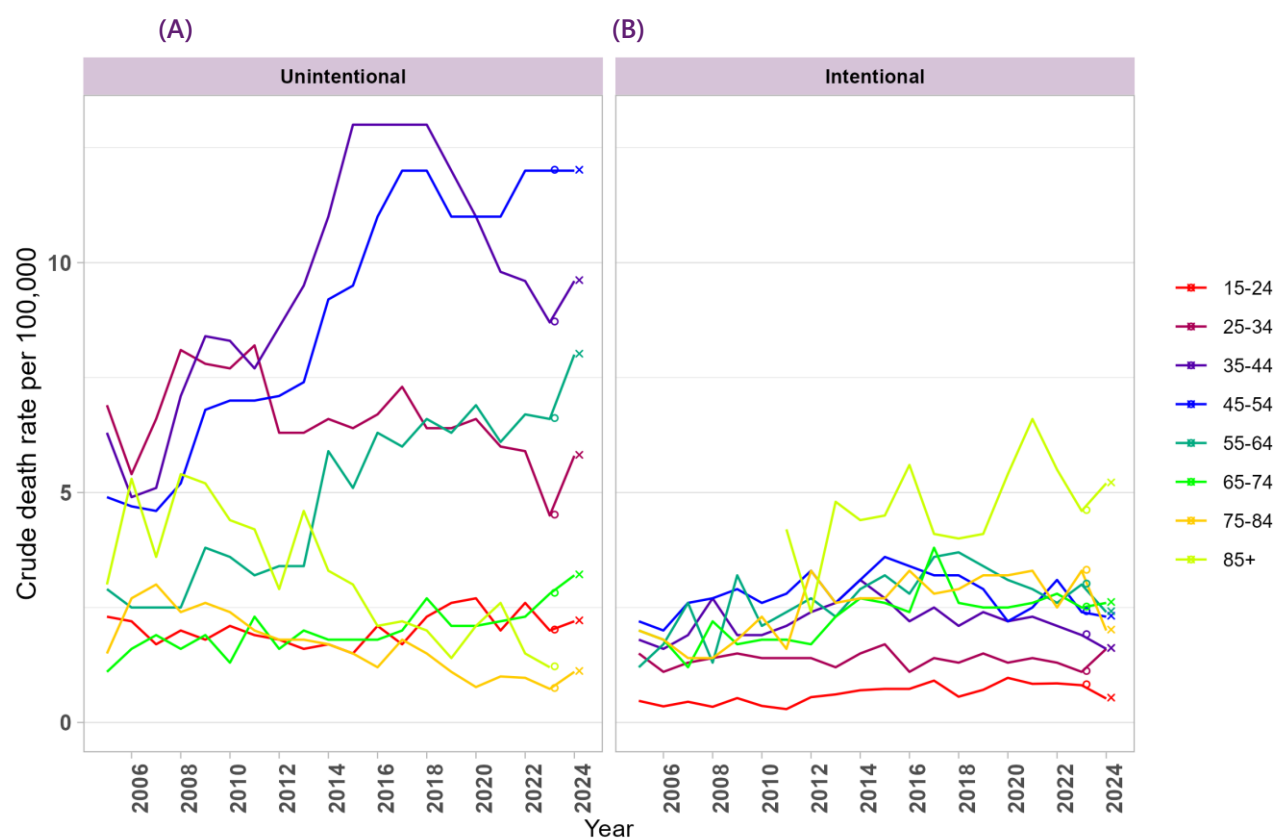
Trend since 2005

Over the past two decades, the profile of drug overdose deaths has shifted from younger adults towards middle-aged Australians. Unintentional overdose deaths are now most common among people aged 35-54 years. In contrast, intentional overdose deaths have generally been more evenly distributed across middle and older age groups ([Figure 12](#)).

The rise in unintentional overdose mortality was particularly pronounced among people aged 35-64 years. The rate approximately doubled among those aged 35-44 years before declining from 2019 onwards. Among those aged 45-54 years, the rate more than doubled and remained elevated after first peaking in 2017-2018, reaching its highest observed level in 2022-2024. An approximately threefold increase was observed among those aged 55-64 years, with the rate reaching a new peak in 2024. By comparison, rates remained relatively low and stable among people aged 15-24 and 65-74 years and generally declined among those aged 75 years and over. Intentional overdose mortality followed a different pattern. Rates remained low among younger adults but generally increased over time among people aged 55 years and over, despite considerable year-to-year variation.

Compared with 2023, the most notable change in 2024 was a significant increase in the unintentional overdose mortality rate among people aged 25-34 years, from 4.5 to 5.8 deaths per 100,000 people. The ageing profile of unintentional overdose mortality also continued, with record-high rates among people aged 55-64 years (8.0 deaths per 100,000 people) and 65-74 years (3.2 deaths per 100,000 people), while rates among those aged 45-54 years remained elevated ([Table 12](#); [Table A8](#), Appendix). These findings are consistent with the longer-term shift towards older age groups. As 2024 data are preliminary, these findings should be interpreted with caution and are likely to increase.

Figure 12. Age-specific rate per 100,000 people of drug overdose deaths coded as (A) unintentional and (B) intentional, by age, Australia, 2005-2024



Note: Deaths where conditions related to alcohol or tobacco comprised the underlying cause of death are not captured here. Causes of death data for 2023 and 2024 are not final and thus are subject to further revision. The symbol 'o' indicates revised estimates and 'x' preliminary revised estimates. The rates for the 0-14 years age group are not presented due to sensitivity of the data. Rates for small numbers (less than or equal to 5 deaths) were not calculated. Suppressed data are visible as gaps in the data series.

Remoteness Area of Usual Residence

Table 13. Number and rate per 100,000 people of drug overdose deaths, by intent and remoteness area, Australia, 2021-2024

Remoteness Aea	UNINTENTIONAL				INTENTIONAL			
	Number (%)				Number (%)			
	2021 F	2022 F	2023 R	2024 P	2021 F	2022 F	2023 R	2024 P
Major City	950 (75)	1,000 (76)	907 (73)	1,074 (74)	325 (69)	323 (69)	304 (67)	287 (68)
Regional/Remote	300 (24)	288 (22)	313 (25)	332 (23)	144 (31)	144 (31)	142 (31)	129 (31)
	Rate per 100,000 people				Rate per 100,000 people			
	2021 F	2022 F	2023 R	2024 P	2021 F	2022 F	2023 R	2024 P
Major City	5.1	5.4	4.7	▲5.4	1.6	1.6	1.5	1.3
Regional/Remote	4.5	4.1	4.6	4.8	1.8	1.8	1.8	1.6

Note: 'F' means 'final', 'R' - 'revised' and 'P' - 'preliminary revised'.

In 2024, nearly three-quarters of unintentional overdose deaths (74%) and around two-thirds of intentional overdose deaths (68%) occurred among people living in major cities (Table 13).

When population size was taken into account, however, the geographic differences were less pronounced. The rate of unintentional overdose deaths was slightly higher in major cities than in regional/remote areas (5.4 versus 4.8 deaths per 100,000 people), while intentional overdose death rates remained higher in regional/remote areas (1.6 versus 1.3 deaths per 100,000 people).

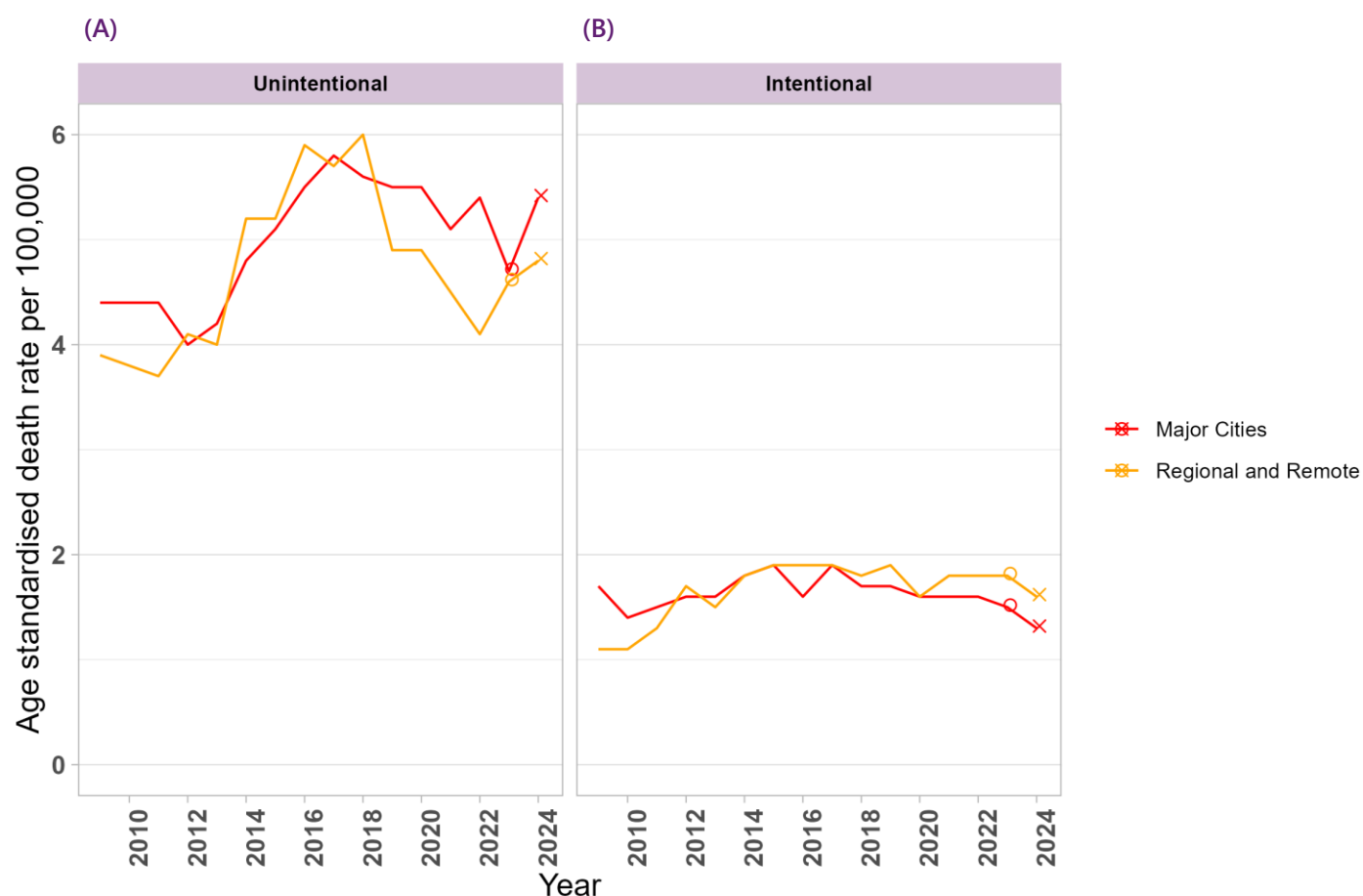
Trend since 2009

Since 2009, overdose mortality has followed a broadly similar trajectory across major cities and regional/remote Australia, increased steadily until their peak in 2017 in major cities (5.8 deaths per 100,000 people) and in 2018 in regional/remote areas (6.1 deaths per 100,000 people), before subsequently declining (**Figure 13**).

A different pattern was observed for intentional overdose deaths. In major cities, rates have remained relatively stable over time (between 1.4 and 1.9 deaths per 100,000 people). In regional/remote areas, rates rose from 1.1 deaths per 100,000 people in 2009 to 1.9 deaths per 100,000 people in 2015, before stabilising.

The most recent data suggest that the increase in overdose mortality observed nationally in 2024 was driven primarily by unintentional overdose deaths in major cities. Compared with 2023, the rate of unintentional overdose deaths in major cities increased significantly from 4.7 to 5.4 deaths per 100,000 people. In contrast, differences in rates between regional/remote areas were modest and not statistically significant (4.6 to 4.8 deaths per 100,000 people). Intentional overdose rates declined slightly in both geographic areas between 2023 and 2024, although neither change was statistically significant (Table A9, Appendix).

Figure 13. Age-standardised rate per 100,000 people of drug overdose deaths coded as (A) unintentional and (B) intentional, by the remoteness area of usual residence, Australia, 2009-2024



Note: Deaths where conditions related to alcohol or tobacco comprised the underlying cause of death are not captured here. Causes of death data for 2023 and 2024 are not final and thus are subject to further revision. The symbol 'o' indicates revised estimates and 'x' preliminary revised estimates.

4

Psychosocial Risk Factors and Place of Occurrence in Drug-Induced Deaths

2024 Drug-induced
DEATHS

62% of risk factors were related to
**SOCIOECONOMIC AND
PSYCHOSOCIAL
CIRCUMSTANCES**



25% of risk factors were related to
**CONDITIONS INFLUENCING
HEALTH STATUS
(E.G., FAMILY AND
PERSONAL HISTORY)**

12%



of those
who died from
drug-induced death
had
**PERSONAL HISTORY
OF SELF HARM**

25%



of those
aged **75 years and over**
had a risk factor
related to
**LIMITATION OF ACTIVITIES
DUE TO DISABILITY**

70%



of all
drug-overdose death
occurred
at
HOME

Psychosocial Risk Factors

Psychosocial factors like employment, housing, social and family support may be important determinants of health outcomes and mortality patterns ([CSDH 2008](#), [Psychosocial risk factors for suicide](#)). Psychosocial factors are not routinely recorded on a death certificate but may be captured as part of the coronial investigation. As a result, psychosocial risk factors identified in coronial, police and pathology reports on coroner-certified drug-induced deaths were coded and added to COD URF datasets from 2017 onwards by the ABS. It is important to exercise caution while interpreting these data (see [ABS notes](#) and our [methods document](#) for discussion of caveats). In particular, risk factors could only be identified based on information within the reports, and drug-induced deaths are likely to involve a variety of risk factors for mortality.

Common Psychosocial Risk Factors



Psychosocial circumstances continue to feature prominently in drug-induced deaths in Australia. In 2024, at least one [psychosocial risk factor](#) was recorded in 911 drug-induced deaths, representing 45% of all drug-induced deaths. As in previous years, [personal history of self-harm](#) remained the most frequently identified psychosocial risk factor, recorded in 235 deaths (12%). This includes deliberate self-injury, causing self-inflicted pain and suicidal and non-suicidal self-injury, but excludes suicide ideation, which is coded separately by the ABS (see note below). Other commonly identified factors reflected relationship breakdown, bereavement, legal difficulties and ongoing health-related challenges. These included disruption of family by separation and divorce (115 deaths; 5.7%), problems related to legal circumstances (112 deaths; 5.6%), disappearance or death of a family member (109 deaths; 5.4%), and problems in relationships with a spouse or partner (105 deaths; 5.2%). The profile of the most common risk factors has remained broadly stable since monitoring commenced in 2017 (available [online](#)).

related to legal circumstances (112 deaths; 5.6%), disappearance or death of a family member (109 deaths; 5.4%), and problems in relationships with a spouse or partner (105 deaths; 5.2%). The profile of the most common risk factors has remained broadly stable since monitoring commenced in 2017 (available [online](#)).

Table 14. Most common psychosocial risk factors in drug-induced deaths, Australia, 2024

Rank	Risk factors	Number of deaths	Percentage of all drug-induced deaths
1	Personal history of self-harm	235	12%
2	Disruption of family by separation and divorce	115	5.7%
3	Problems related to other legal circumstances	112	5.6%
4	Disappearance and death of a person in the primary support group	109	5.4%
5	Problems in relationship with spouse or partner	105	5.2%
6	Personal history of noncompliance with medical treatment and regimen	79	3.9%
7	Limitation of activities due to disability or chronic health condition	68	3.4%
8	Absence of family member	63	3.1%
9	Unemployment, unspecified	52	2.6%
9	Conviction in civil and criminal proceedings without imprisonment	52	2.6%

● Risk factor related to socioeconomic and psychosocial circumstances conditions influencing health status ● Other risk factors.

● Risk factor related to family and personal history and certain

Note: Suicide ideation is coded separately and classified under R45.8 (Symptoms and signs involving emotional state).

Sex

Psychosocial risk factors were more frequently identified among females (52%) than males (42%) in 2024.

A [personal history of self-harm](#) remained the leading psychosocial risk factor for both sexes, but was almost twice as common among females (17%) as males (9.1%). Among males, other commonly recorded factors included legal circumstances (6.1%), family disruption due to separation or divorce (5.3%), and bereavement following the disappearance or death of a family member (4.3%). Among females, relationship and family-related stressors featured more prominently, including problems in relationships with a spouse or partner (8.3%), disappearance or death of a family member (7.7%), family disruption due to separation or divorce (6.7%), and limitations of activities due to disability (4.6%) ([Table 15](#)).

Despite some variation in rankings from year to year, the overall pattern of psychosocial risk factors by sex has remained relatively consistent since 2017 (available [online](#)).

Table 15. Ten most common psychosocial risk factors in drug-induced deaths by sex, Australia, 2024

 Male	N	%	Rank	%	N	Female 
At least one psychosocial risk factor	559	42%		52%	352	At least one psychosocial risk factor
Personal history of self-harm	121	9.1%	1	17%	114	Personal history of self-harm
Problems related to other legal circumstances	81	6.1%	2	8.3%	56	Problems in relationship with spouse or partner
Disruption of family by separation and divorce	70	5.3%	3	7.7%	52	Disappearance and death of family member
Disappearance and death of family member	57	4.3%	4	6.7%	45	Disruption of family by separation and divorce
Problems in relationship with spouse or partner	49	3.7%	5	4.6%	31	Limitation of activities due to disability
Personal history of noncompliance with medical treatment and regimen	48	3.6%	6	4.6%	31	Problems related to other legal circumstances
Problems related to release from prison	46	3.5%	7	4.6%	31	Personal history of noncompliance with medical treatment and regimen
Unemployment, unspecified	40	3.0%	8	4.5%	30	Absence of family member
Conviction in civil and criminal proceedings without imprisonment	39	2.9%	9	3.6%	24	Victim of crime and terrorism
Homelessness	38	2.9%	10	3.4%	23	Other specified problems related to primary support group

Note: Percentages were calculated of total number of male and female drug-induced deaths. Data were only available by sex (male/female), which means we were unable to report on gender identity. We acknowledge the importance of inclusive data and the need for improved data collection in these areas.

Age

In 2024, at least one psychosocial risk factor was recorded in 42-45% of deaths among most age groups, however was higher among those aged 25-34 years (52%) and 75 years and over (53%).

Across most age groups, a personal history of self-harm was the most frequently identified psychosocial risk factor, highlighting the ongoing importance of mental health vulnerabilities among people who die from drug-induced causes. The prominence of relationship and family-related stressors was also evident across middle-aged adults.

A different pattern emerged among older Australians. Among people aged 75 years and over, the most frequently recorded factor was limitation of activities due to disability, identified in one-quarter (25%) of deaths. This factor was also the second most common psychosocial risk factor among those aged 65-74 years (9.8%). Bereavement and dependency-related issues were also more frequently identified in older age groups, reflecting the increasing role of chronic health conditions, disability and social loss later in life (Table 16).

Table 16. Five most common psychosocial risk factors in drug-induced deaths by age, Australia, 2024

Risk Factor	15-24		25-34		35-44		45-54		55-64		65-74		75+	
	Rank	%	Rank	%	Rank	%	Rank	%	Rank	%	Rank	%	Rank	%
At least one psychosocial risk factor		42%		52%		45%		43%		42%		45%		53%
Personal history of self-harm	1	18%	1	17%	1	9.7%	1	10%	1	11%	1	12%	4	8.3%
Disappearance and death of a person in the primary support group	3	6.1%			5	4.7%	3	5.6%	3	5.0%	3	6.7%	2	13%
Problems related to other legal circumstances	2	8.1%	3	7.8%	2	8.2%			4	4.4%				
Conviction in civil and criminal proceedings without imprisonment	4	5.1%												
Disruption of family by separation and divorce	4	5.1%	2	8.7%	4	6.7%	2	6.0%	5	4.1%				
Social exclusion and rejection	4	5.1%												
Problems in relationship with spouse or partner			4	5.2%	3	6.9%	5	4.5%	2	6.1%			5	4.6%
Personal history of noncompliance with medical treatment and regimen			4	5.2%			4	4.9%			4	6.1%		
Personal history of other specified conditions														
Limitation of activities due to disability or chronic health condition											2	9.8%	1	25%
Absence of family member							5	4.5%						
Other specified problems related to primary support group											5	3.7%		
Other problems related to care-provider dependency													3	10%

● Risk factor related to socioeconomic and psychosocial circumstances, ● Risk factor related to family and personal history and certain conditions influencing health status, ● Other risk factors.

Intent of Drug Overdose Deaths

In 2024, psychosocial risk factors were identified more frequently in intentional (74%, 312 deaths) than unintentional (38%, 548 deaths) drug overdose deaths. This difference may partly reflect more comprehensive documentation of psychosocial circumstances during coronial investigations of suspected intentional self-harm.

A **personal history of self-harm** was the most frequently identified risk factor for both intent categories, but was far more common among intentional (31%) compared with unintentional (5.7%) overdose deaths (**Table 17**).

Among intentional overdose deaths, the next most common risk factors reflected chronic health and interpersonal challenges, including limitation of activities due to disability (15%), bereavement following the disappearance or death of a family member (13%), family disruption due to separation or divorce (11%), and relationship problems with a spouse or partner (10%).

In contrast, the psychosocial profile of unintentional overdose deaths was more likely to include legal difficulties (4.8%), non-compliance with medical treatment or prescribed regimens (4.1%), family disruption due to separation or divorce (4.0%), and relationship problems with a spouse or partner (3.6%).

Overall, the psychosocial profiles of intentional and unintentional overdose deaths in 2024 were broadly consistent with patterns observed since monitoring commenced in 2017.

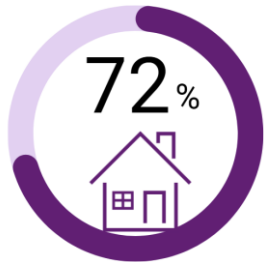
Table 17. The most common psychosocial risk factors in unintentional and intentional overdose deaths, Australia, 2024

Unintentional overdose deaths		Rank		Intentional overdose deaths	
At least one psychosocial risk factor	38%		74%	At least one psychosocial risk factor	
Personal history of self-harm	5.7%	1	31%	Personal history of self-harm	
Problems related to other legal circumstances	4.8%	2	15%	Limitation of activities due to disability	
Personal history of noncompliance with medical treatment and regimen	4.1%	3	13%	Disappearance and death of family member	
Disruption of family by separation and divorce	4.0%	4	11%	Disruption of family by separation and divorce	
Problems in relationship with spouse or partner	3.6%	5	10%	Problems in relationship with spouse or partner	
Disappearance and death of family member	3.5%	6	8.1%	Problems related to other legal circumstances	
Conviction in civil and criminal proceedings without imprisonment	3.4%	7	6.2%	Other specified problems related to primary support group	
Unemployment, unspecified	3.1%	8	5.5%	Other problems related to housing and economic circumstances	
Problems related to release from prison	3.0%	9	5.0%	Absence of family member	
Homelessness	2.8%	10	4.3%	Personal history of noncompliance with medical treatment and regimen	

Note: Percentages were calculated of total number of unintentional and intentional overdose deaths respectively.

Place of Occurrence

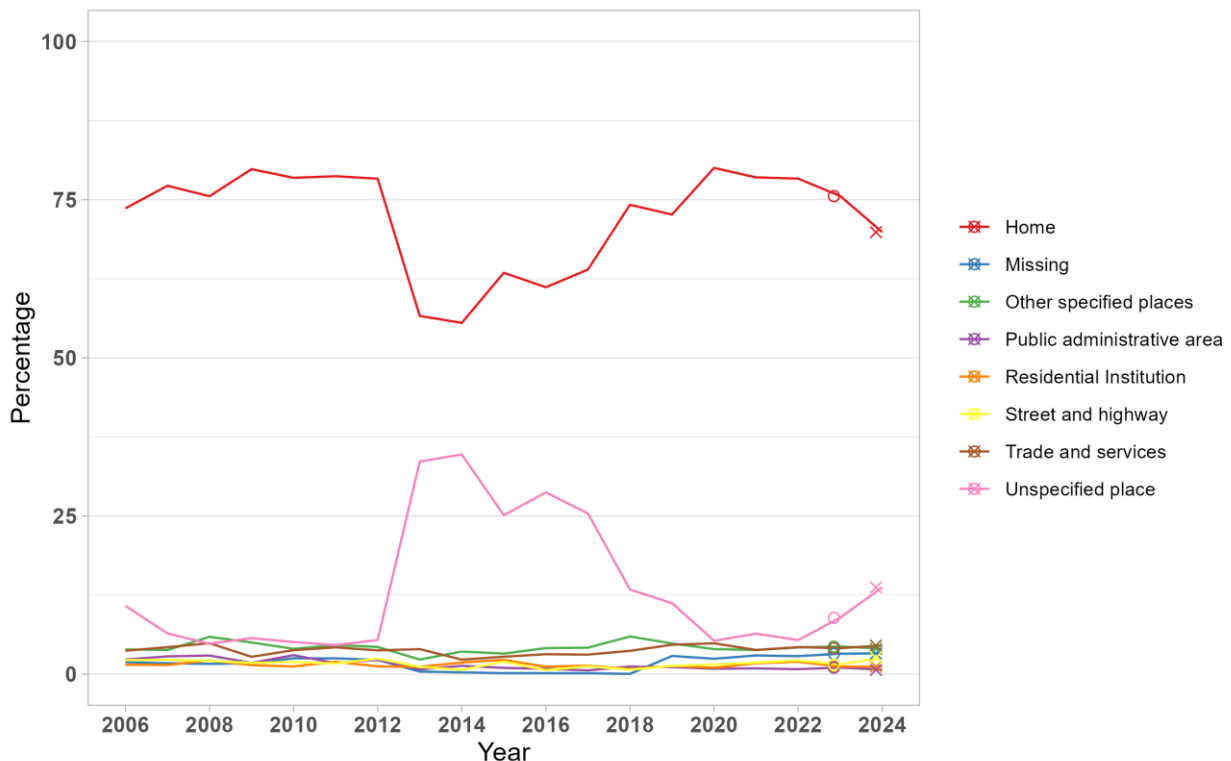
Place of occurrence refers to a physical location where the event leading to death (such as an injury, poisoning or adverse effect) occurred. Beginning in 2006, all such deaths in Australia have been coded with this information. See the [methods](#) for details on change in coding practices.



In 2024, home remained by far the most common setting in which the incident leading to a drug overdose death occurred (72%, 1,401 deaths). A further 4.7% (91 deaths) occurred in trade and services locations, such as hotels, shopping centres, transport hubs and commercial premises, while 2.7% (53 deaths) occurred on streets and highways. Residential institutions accounted for 1.2% of deaths (24 deaths), and 4.2% (81 deaths) occurred in other specified locations, including schools, public places, sporting venues and industrial or construction areas. The place of occurrence was coded as unspecified for 14% of overdose deaths (275 deaths).

Over the past two decades, the home has consistently been the setting where most fatal drug overdoses have occurred ([Figure 14](#)). In contrast, all other specified locations have each contributed less than 5% of deaths annually. The proportion of deaths with an unspecified place of occurrence was particularly elevated between 2013 and 2019. This pattern may reflect differences in the availability of coronial information and coding practices over time and reinforces the need for caution when interpreting year-to-year changes.

Figure 14. Most frequently identified places of occurrence for drug overdose deaths, Australia, 2006-2024



Note: Causes of death data for 2023 and 2024 are not final and thus are subject to further revision. For data from 2006 to 2012, place of occurrence was derived from the 4th digit of the ICD-10 code assigned to deaths due to external causes, for matched coroner records. For 2013 data onwards, place of occurrence was coded directly from comments in the reports relating to the coroners' investigation.

Intent of Drug Overdose Deaths

In 2024, 72% (1,035 deaths) of unintentional overdose deaths and 76% (321 deaths) of intentional overdose deaths occurred at home. Since monitoring began in 2006, the majority of both unintentional and intentional overdose deaths have occurred in the home.

5

Drug Involvement in Drug Overdose Deaths

2024 Drug-induced DEATHS

1082

Overdose
deaths
involving
OPIOIDS4.0 per 100,000
Australians vs. 3.8
in 2023

870

Overdose
deaths
involving
**ANTIEPILEPTIC, SEDATIVE-HYPNOTIC
AND ANTI-PARKINSONISM DRUGS**3.2 per 100,000
Australians vs. 3.3
in 2023

753

Overdose
deaths
involving
**AMPHETAMINE-TYPE
STIMULANTS**2.9 per 100,000
Australians vs. 2.2
in 2023

466

Overdose
deaths
involving
ANTIDEPRESSANTS1.7 per 100,000
Australians vs. 1.8
in 2023

310

Overdose
deaths
involving
**ANTIPSYCHOTICS
& NEUROLEPTICS**1.2 per 100,000
Australians vs. 1.4
in 2023

249

Overdose
deaths
involving
ALCOHOL*0.91 per 100,000
Australians vs. 1.0
in 2023

*as in combination with other drugs

137

Overdose
deaths
involving
**NON-OPIOID
ANALGESICS**0.48 per 100,000
Australians vs. 0.54
in 2023

142

Overdose
deaths
involving
COCAINE0.54 per 100,000
Australians vs. 0.39
in 2023

43

Overdose
deaths
involving
CANNABINOIDS0.16 per 100,000
Australians vs. 0.15
in 2023

Drug overdose deaths continue to account for the overwhelming majority of drug-induced deaths in Australia, representing around 97-99% of cases each year. Consequently, the findings presented in this chapter and the subsequent drug-specific chapters focus primarily on overdose deaths. When a specific substance is identified through toxicological investigation and determined to have contributed to a fatal poisoning event, the death is classified as a drug overdose.

Drug categories presented in this report are not mutually exclusive. Multiple substances frequently contribute to a single overdose death, meaning that counts for individual drug classes cannot be summed to derive a total number of deaths. In addition, involvement of some substances may be underestimated because not all drugs are routinely identified or recorded in post-mortem toxicology testing. Throughout Chapters 5-8, alcohol refers to its involvement as a contributing substance in drug overdose deaths rather than as the underlying cause of death. These estimates should therefore not be compared directly with the alcohol-induced deaths presented in Panel C, which capture deaths where alcohol itself was identified as the underlying cause.

Drug Involvement

Table 18. Number and rate per 100,000 people of drug overdose deaths by drug class, Australia, 2021-2024

Drug class	Number (%)			
	2021 F	2022 F	2023 R	2024 P
Opioids	1,125 (62)	1,193 (65)	1,018 (58)	1,082 (56)
Antiepileptic, sedative-hypnotic and anti-parkinsonism drugs	1,073 (60)	1,026 (56)	893 (51)	870 (45)
Amphetamine-type stimulants	504 (28)	554 (30)	566 (32)	753 (39)
Antidepressants	629 (35)	604 (33)	493 (28)	466 (24)
Antipsychotics and neuroleptics	404 (22)	400 (22)	362 (20)	310 (16)
Alcohol	316 (18)	333 (18)	272 (15)	249 (13)
Cocaine	91 (5.0)	73 (4.0)	99 (5.6)	142 (7.3)
Non-opioid analgesics, antipyretics and antirheumatics	232 (13)	213 (12)	149 (8.4)	137 (7.1)
Cannabinoids	102 (5.7)	65 (3.5)	38 (2.2)	43 (2.2)
Drug class	Rate per 100,000 people			
	2021 F	2022 F	2023 R	2024 P
Opioids	4.4	4.6	3.8	4.0
Antiepileptic, sedative-hypnotic and anti-parkinsonism drugs	4.2	4.0	3.3	3.2
Amphetamine-type stimulants	2.1	2.2	2.2	▲2.9
Antidepressants	2.4	2.3	1.8	1.7
Antipsychotics and neuroleptics	1.6	1.6	1.4	▼1.2
Alcohol	1.2	1.3	1.0	0.91
Cocaine	0.37	0.30	0.39	▲0.54
Non-opioid analgesics, antipyretics and antirheumatics	0.86	0.78	0.54	0.48
Cannabinoids	0.42	0.27	0.15	0.16

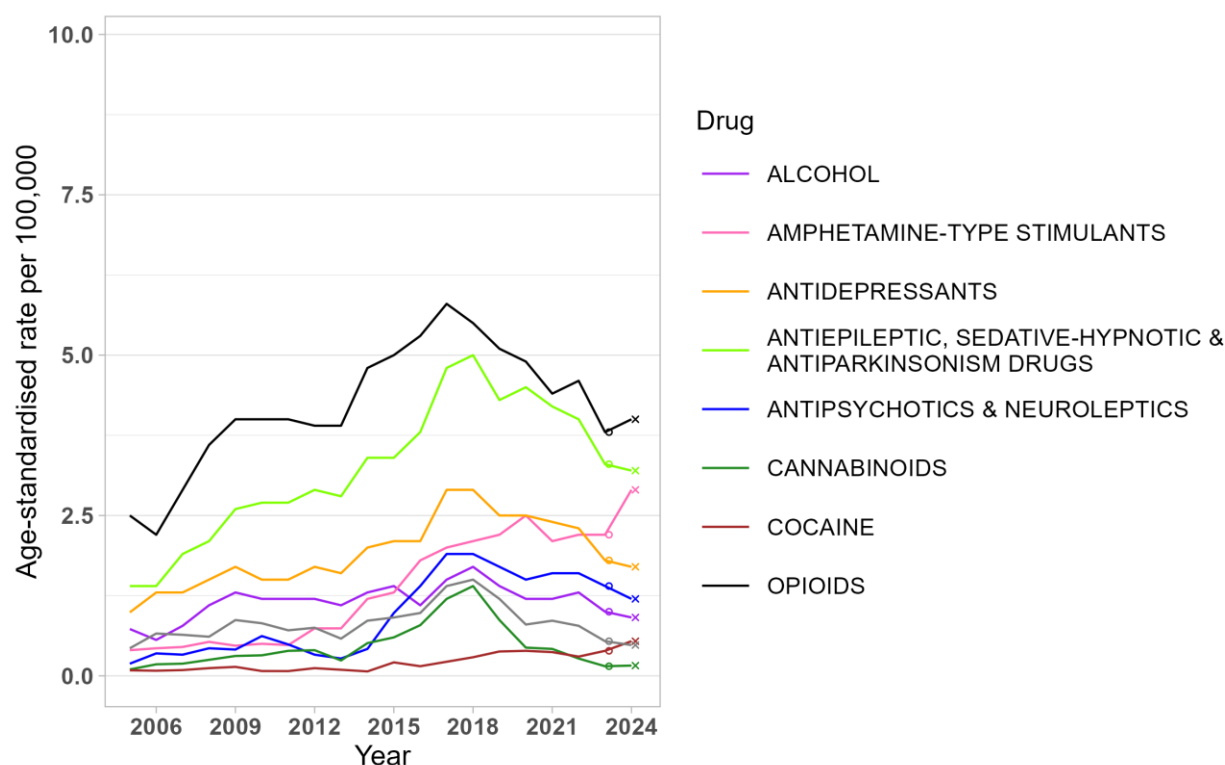
Note: 'F' means 'final', 'R' - 'revised' and 'P' - 'preliminary revised'.

In 2024, **opioids** remained the most commonly identified drug class in overdose deaths, involved in 1,082 deaths (56% of all overdose deaths). They were followed by **antiepileptic, sedative-hypnotic and anti-parkinsonism drugs**, involved in 870 deaths (45%), the majority of which were benzodiazepines (79%, 688 deaths). Despite retaining their position as the two most frequently identified drug classes, both recorded lower rates than those observed during the peak years in the late 2010s.

The most notable change in 2024 was the rise in stimulant-related overdose deaths. **Amphetamine-type stimulants** were involved in 753 deaths, accounting for 39% of all overdose deaths and increasing significantly to an all-time high of 2.9 deaths per 100,000 people. **Cocaine-related overdose deaths** also increased substantially, rising from 99 deaths in 2023 to 142 deaths in 2024, with a rate of 0.54 deaths per 100,000 people (Table 18, Figure 15). Although the ABS data do not provide information on the clinical circumstances or mechanisms underlying these increases, analyses of detailed coronial records from the National Coronial Information System (NCIS) can provide additional insight. Recent findings on the ageing profile of stimulant-related deaths and associated comorbidities are summarised in Panel F.

In contrast, overdose deaths involving antipsychotics and neuroleptics continued to decline. The 2024 rate was significantly lower than the 2023 rate (1.2 and 1.4 deaths per 100,000 people, respectively). Rates involving antidepressants, alcohol, non-opioid analgesics and cannabinoids were similar to those observed in 2023, with no statistically significant changes observed. It is important to note that some cases are still under investigation, and the substances involved may not yet be fully identified in the revised and preliminary estimates.

Figure 15. Age-standardised rate per 100,000 people of drug overdose deaths by drug class, Australia, 2005-2024



Note: Deaths where conditions related to alcohol or tobacco comprised the underlying cause of death are not captured here. Causes of death data for 2023 and 2024 are not final and thus are subject to further revision. The symbol 'o' indicates revised estimates and 'x' preliminary revised estimates.

Trend since 2005

The changing pattern of drug involvement in overdose deaths tells an important story about the evolution of drug-related harm in Australia. Since 2005, rates involving most major drug classes increased substantially, reflecting the broader rise in overdose mortality. For many substances, this growth accelerated throughout the 2010s, with rates generally reaching their highest levels between 2017 and 2020 before stabilising or declining.

Opioids remained the dominant drug class throughout the monitoring period. The rate of opioid-related overdose deaths more than doubled between 2005 and its peak in 2017, before gradually declining in subsequent years. A similar trajectory was observed for antiepileptic, sedative-hypnotic and anti-parkinsonism drugs, as well as antidepressants and antipsychotics, which experienced marked increases during the 2010s followed by a period of stabilisation or decline.

In contrast, stimulant-related overdose deaths followed a different path. After increasing steadily over many years, deaths involving amphetamine-type stimulants remained elevated into the 2020s and rose sharply again in 2024. The rate reached 2.9 deaths per 100,000 people, representing the highest level recorded since monitoring began. Cocaine-related overdose deaths showed a similar pattern. Following sustained growth throughout the past decade, the rate increased substantially in 2024 to 0.54 deaths per 100,000 people, the highest rate observed in the series.

These findings suggest that the profile of overdose mortality in Australia may be shifting, with stimulant-related harms becoming increasingly prominent alongside the continuing burden associated with opioids and sedative medicines.

It is important to note that both the 2023 and 2024 estimates are not final and will be subject to further revision.

Panel D. In-depth study of fatal new psychoactive substance poisonings in Australia via the National Coronial Information System (NCIS)

The analyses presented in this report use Australian Bureau of Statistics (ABS) Cause of Death Unit Record File data. While these data provide valuable national monitoring of drug-induced mortality, the ICD-10 coding system used by the ABS generally does not identify specific new psychoactive substances (NPS) involved in deaths. Rather, NPS are grouped within broader drug categories or remain undetected, meaning that the emergence and impact of these substances cannot be reliably monitored through these data. Detailed coronial records and toxicology findings available through the National Coronial Information System (NCIS) provide a means of addressing this limitation, enabling identification of individual NPS, detailed examination of circumstances of death, and earlier detection. Below we overview recent work undertaken by our team to better understand deaths related to NPS in Australia.

New Psychoactive Stimulants and Hallucinogens

[Darke et al. \(2026\)](#) identified 70 cases of fatal poisonings involving **new psychoactive stimulants and hallucinogens** in Australia between 2000 and 2025 [1]. The first recorded case occurred in 2007. Most deaths were unintentional (93%) and predominantly involved males (83%), with an average age of 33 years.

A total of 31 different substances were detected, including synthetic cathinones, phenethylamines, tryptamines and piperazines. Thirteen of these substances were first identified in fatalities during the 2020s, demonstrating the continual emergence of new compounds. Cathinones, particularly α -pyrrolidinovalerophenone (α -PVP) and methylenedioxypyrovalerone (MDPV), were the most commonly detected substances. More recent deaths were increasingly characterised by the presence of tryptamines, while phenethylamines became less common.

Poly-drug use was a prominent feature. Nearly all cases (93%) involved other psychoactive substances in addition to the novel psychoactive stimulant or hallucinogen, most commonly psychostimulants and sedatives. Multiple NPS substances were detected in one-quarter of cases.

The study also found that almost one-quarter of decedents appeared unaware they were consuming an NPS, believing instead that they had taken drugs such as MDMA, methamphetamine or LSD. Common clinical features preceding death included severe agitation, sudden collapse, hyperthermia, seizures and delirium. Most deaths occurred in private settings such as homes.

Overall, these findings suggest a wider range of novel psychoactive stimulants and hallucinogens have been detected in recent fatal poisonings, with tryptamines becoming more common in the 2020s, and phenethylamines less common.

Novel Benzodiazepines

[Darke et al. \(2026\)](#) identified 258 cases of fatal poisonings involving novel benzodiazepines (NBZDs) in Australia between 2000 and 2025 [2]. The first recorded case occurred in 2013, with 87% of deaths occurring during the 2020s. Most deaths were unintentional (86%) and predominantly involved males (84%), with an average age of 32 years.

A total of 15 different NBZDs were detected, nine of which first appeared in fatalities during the 2020s, demonstrating the rapid diversification of this drug class. Etizolam and bromazolam were the most commonly detected substances, with bromazolam rapidly emerging after its first detection in 2021. Poly-drug use was almost universal (99.6%), most commonly involving opioids, registered benzodiazepines and other hypnosedatives, and psychostimulants. Multiple NBZDs were detected in over one-third of cases and became increasingly common during the 2020s.

Overall, the marked increase in NBZD-related deaths reflects both the expanding diversity of these compounds and their frequent use in high-risk drug combination.

Nitazenes

[Darke et al. \(2024\)](#) conducted searches of the NCIS in 2024, identifying 17 cases of fatal nitazene poisonings in Australia between 2000 and 2024 [3]. The first recorded case occurred in 2021. All deaths were unintentional and involved males, with an average age of 31.5 years. Histories of substance use problems, mental health issues and injecting drug use were common, although only one decedent was enrolled in drug treatment at the time of death.

Three nitazenes were identified: etodesnitazene (n = 9), metonitazene (n = 4) and protonitazene (n = 4). Poly-drug use was universal, with all cases involving at least one additional psychoactive substance. The most common co-occurring drug class was hypnotosedatives, predominantly novel benzodiazepines, followed by psychostimulants (n = 6) and antidepressants (n = 5). Additional novel psychoactive substances were detected in almost half of cases. Only five decedents received medical intervention prior to death.

Overall, these findings suggest nitazenes have emerged as a public health concern in Australia, and warrant continued close monitoring.

Implications and Future Directions

Collectively, these studies highlight the challenges posed by an increasingly diverse and rapidly changing market for NPS, and the importance of ongoing toxicological surveillance through coronial data systems such as the NCIS. While findings cannot be assumed to comprise all deaths related to these drugs in Australia due to challenges in detecting NPS and lags in coronial determination, they provide important information on emerging substances, changing patterns of drug use and evolving mortality risks that are not captured through routine ICD-10 coded mortality data alone. We will continue to monitor the emergence of NPS and their involvement in drug-related deaths.

Please contact the Drug Trends team (drug.trends@unsw.edu.au) for more information or to discuss any particular data needs.

References:

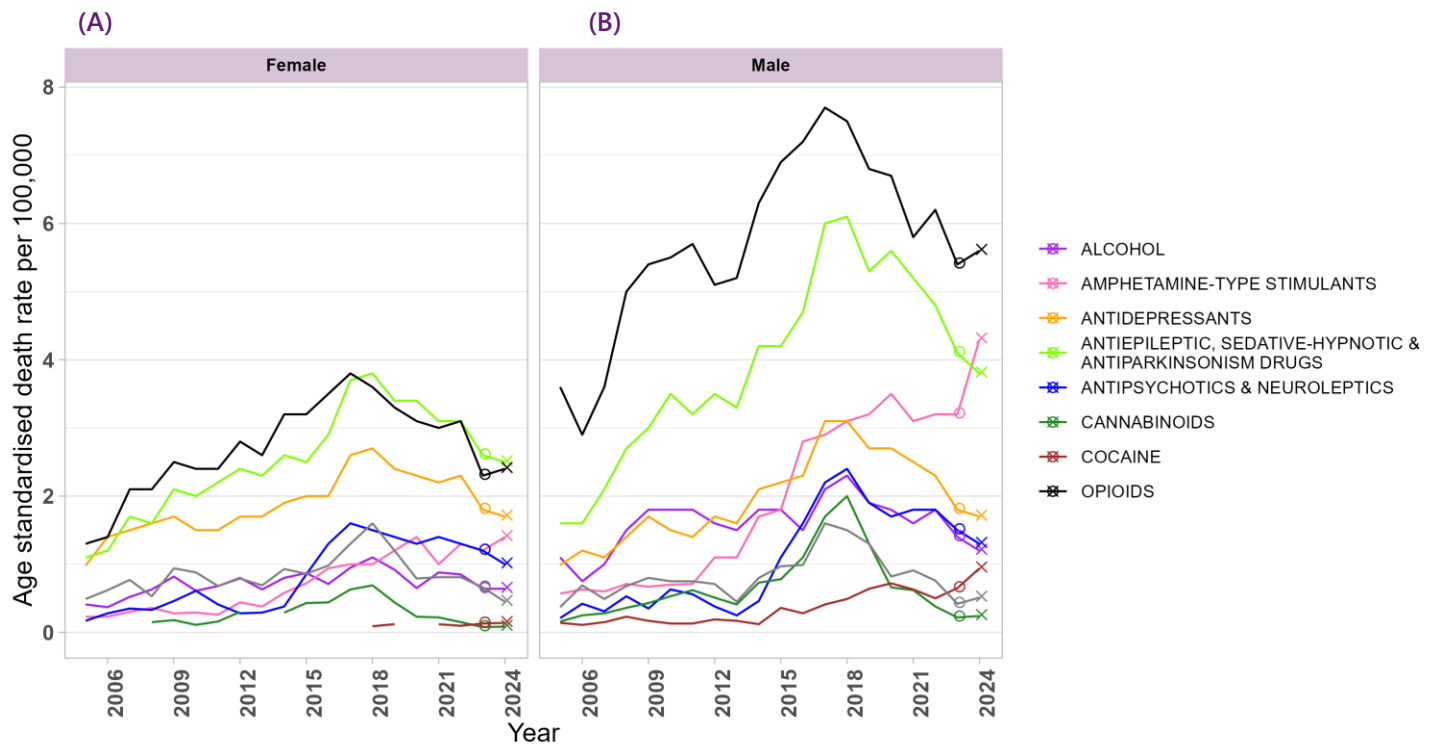
- [1] Darke S, Duflou J, Farrell M, Lappin J, Peacock A. *The toxicology and characteristics of fatal new psychoactive stimulant and hallucinogen-related poisonings in Australia, 2000-2025*. *Drug and Alcohol Dependence Reports*. 2026. <https://doi.org/10.1016/j.dadr.2026.100434>
- [2] Darke S, Duflou J, Farrell M, Lappin J, Peacock A. *Changing characteristics in the 2020s of fatal 'novel' benzodiazepine toxicity cases in Australia*. *Drug and Alcohol Dependence*. 2026; <https://doi.org/10.1016/j.drugalcdep.2026.113085>
- [3] Darke, S., Duflou, J., Farrell, M., Lappin, J. & Peacock, A. (2024) *Emergence of deaths due to nitazene toxicity in Australia*. *Drug and Alcohol Review*. <https://doi.org/10.1111/dar.13920>

Sex

The pattern of drug involvement differed somewhat between males and females in 2024. Among males, opioids remained the most commonly identified drug class in overdose deaths (5.6 deaths per 100,000 males), followed by antiepileptic, sedative-hypnotic and anti-parkinsonism drugs (3.8 deaths per 100,000 males). However, the most notable change was the continued increase in stimulant-related mortality ([Figure 16](#)). The rate of overdose deaths involving amphetamine-type stimulants increased significantly from 3.2 to 4.3 deaths per 100,000 males between 2023 and 2024, while the rate involving cocaine increased significantly from 0.65 to 0.94 deaths per 100,000 males.

Among females, antiepileptic, sedative-hypnotic and anti-parkinsonism drugs remained the most commonly identified drug class (2.6 deaths per 100,000 females), followed by opioids (2.4 deaths per 100,000 females) and antidepressants (2.0 deaths per 100,000 females). Although stimulant-related overdose deaths also increased among females in 2024, the change relative to 2023 was not statistically significant. Overall, the profile of drug involvement among females remained relatively stable compared with previous years.

Figure 16. Age-standardised rate per 100,000 people of drug overdose deaths for (A) female and (B) male, by drug class, Australia, 2005-2024



Note: Deaths where conditions related to alcohol or tobacco comprised the underlying cause of death are not captured here. Data were only available by sex (male/female), which means we were unable to report on gender identity. We acknowledge the importance of inclusive data and the need for improved data collection in these areas. Causes of death data for 2023 and 2024 are not final and thus are subject to further revision. The symbol 'o' indicates revised estimates and 'x' preliminary revised estimates. Age-standardised rates were not calculated if the number of deaths was less than or equal to 10 (please refer to our [methods](#) document for details). Suppressed data are visible as gaps in the data series.

Age

The age profile of drug involvement in overdose deaths remained broadly consistent in 2024. Opioids continued to record the highest mortality rates among people aged 35-74 years, while antiepileptic, sedative-hypnotic and anti-parkinsonism drugs remained prominent across all age groups.

A notable exception to this pattern was among older Australians. For those aged 75 years and over, antiepileptic, sedative-hypnotic and anti-parkinsonism drugs continued to be the most commonly identified drug class in overdose deaths, reflecting the greater contribution of pharmaceutical medicines to overdose mortality in older age groups.

Recent increases in stimulant-related mortality were concentrated among younger and middle-aged adults. Between 2023 and 2024, overdose deaths involving amphetamine-type stimulants increased significantly among people aged 25-34, 35-44 and 55-64 years, while cocaine overdose deaths increased significantly among those aged 25-34 years. At the same time, cocaine overdose mortality among people aged 35-44 years continued its longer-term upward trajectory, reaching the highest rate observed to date. Together, these findings reinforce the growing contribution of stimulants to overdose mortality among working-age Australians.

Intent of Drug Overdose Deaths

Table 19. Number and rate per 100,000 people of drug overdose deaths, by drug class and intent, Australia, 2024

	Unintentional			Intentional		
	Number (%)	Rate		Number (%)	Rate	
Opioids	877 (61)	3.3		163 (39)	0.56	
Amphetamine-type stimulants	696 (48)	▲2.7		42 (10)	0.16	
Antiepileptic, sedative-hypnotic and anti-parkinsonism	622 (43)	2.3		208 (50)	0.71	
Antidepressants	292 (20)	1.1		150 (36)	0.52	
Antipsychotics and neuroleptics	215 (15)	0.81		75 (18)	▼0.27	
Alcohol	163 (11)	0.61		77 (18)	0.26	
Cocaine	126 (8.7)	▲0.48		12 (2.9)	0.05	
Non-opioid analgesics, antipyretics and antirheumatics	75 (5.2)	0.27		51 (12)	0.17	
Cannabinoids	36 (2.5)	0.14		6 (1.4%)	np	

Note: np – not publishable; data for intentional drug overdose deaths involving cannabinoids were too small to present.

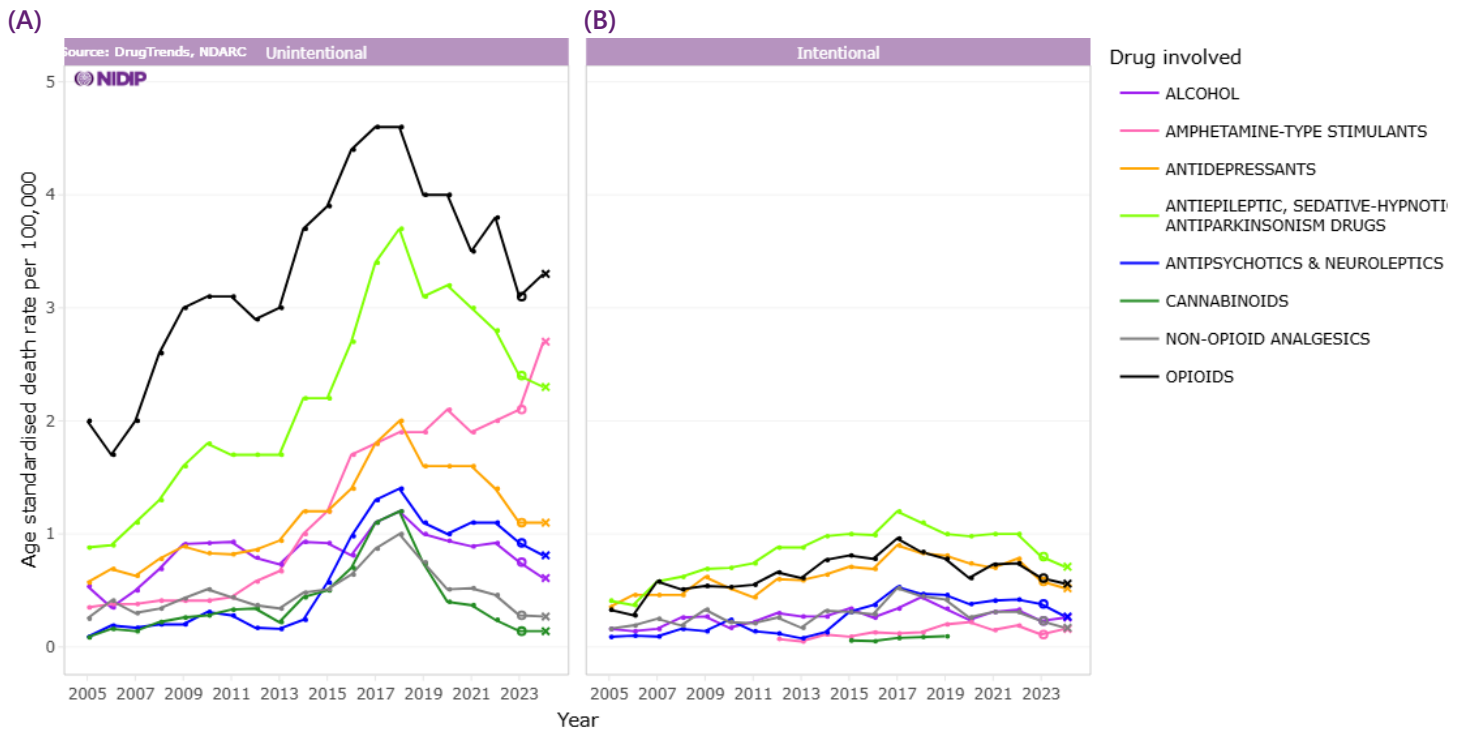
In 2024, the profile of drug involvement differed between [unintentional](#) and [intentional](#) overdose deaths (Table 19). Among unintentional overdose deaths, opioids remained the most commonly identified drug class, followed by amphetamine-type stimulants and antiepileptic, sedative-hypnotic and anti-parkinsonism drugs. In contrast, intentional overdose deaths continued to be characterised by greater involvement of pharmaceutical medicines, particularly antiepileptic, sedative-hypnotic and anti-parkinsonism drugs, opioids and antidepressants.

The most notable change in 2024 was the continued rise in stimulant-related harms. Rates of unintentional overdose deaths involving amphetamine-type stimulants and cocaine increased significantly compared with 2023, while the only significant change among intentional overdose deaths was a decline in those involving antipsychotics and neuroleptics.

Over the past two decades, rates of both unintentional and intentional overdose deaths involving most drug classes increased, generally reaching their highest levels during the late 2010s (Figure 17). The pattern was particularly pronounced for opioids and sedative medicines, which accounted for much of the increase in overdose mortality over this period.

More recently, the patterns for unintentional and intentional overdose deaths have diverged. While rates involving many drug classes have stabilised or declined, unintentional overdose deaths involving stimulants have continued to increase, with amphetamine-type stimulants becoming the second most common drug class involved in unintentional overdose deaths in 2024, overtaking antiepileptic, sedative-hypnotic and anti-parkinsonism drugs. In contrast, intentional overdose deaths have shown little recent change across most drug classes (Table A11 Appendix).

Figure 17. Age-standardised rate per 100,000 people of (A) unintentional and (B) intentional drug overdose deaths, by drug class, Australia, 2005-2024



Note: Deaths where conditions related to alcohol or tobacco comprised the underlying cause of death are not captured here.

Causes of death data for 2023 and 2024 are not final and thus are subject to further revision. The symbol 'o' indicates revised estimates and 'x' preliminary revised estimates. Age-standardised rates were not calculated if the number of deaths was less than or equal to 10 (please refer to our [methods](#) document for details). Suppressed data are visible as gaps in the data series.

Profile of Drug Involvement

Our [earlier research](#) demonstrated that more than one drug class was involved in the majority of drug overdose deaths, and that intentional and unintentional overdose deaths had distinct demographic and drug involvement profiles. As a result, this section describes common drug pattern profiles separately for unintentional and intentional overdose deaths. Heroin and other opioids are presented as separate drug types because of their different chemical compositions, origins, patterns of use and social contexts.

A small proportion of overdose deaths involved none of the drug classes examined in this section. Due to the large number of possible drug combinations and the relatively small number of deaths within individual profiles, data from 2020 to 2024 were combined for reporting purposes.

Between 2020 and 2024, there were 9,266 drug overdose deaths, of which 72% were unintentional and 24% were intentional (6,648 and 2,257 deaths, respectively). Of those cases with at least one drug class of interest (8,733 deaths), 73% (6,339 deaths) involved two or more drug classes (range 2-7 classes). Specifically:

- 27% (2,394 deaths) of drug overdose deaths involved **one drug class** (27% of unintentional vs 29% of intentional),
- 25% (2,141 deaths) involved **two drug classes** (24% of unintentional vs 26% of intentional),
- 24% (2,135 deaths) involved **three drug classes** (24% of unintentional vs 25% of intentional), and
- 24% (2,063 deaths) involved **four or more of these drug classes** (24% of unintentional vs 20% of intentional).

Profile by Intent of Drug Overdose Deaths

Unintentional overdose deaths

Among unintentional overdose deaths, **amphetamine-type stimulants alone** were the single most common drug pattern profile, accounting for 11% of deaths (754 deaths). **Heroin alone** was the second most common profile (5.9%, 393 deaths), followed by **other opioids in combination with antiepileptic, sedative-hypnotic and anti-parkinsonism drugs** (4.7%, 312 deaths), **other opioids combined with antiepileptic, sedative-hypnotic and anti-parkinsonism drugs and antidepressants** (4.0%, 267 deaths), and **other opioids alone** (3.9%, 262 deaths). Together, these five profiles accounted for 30% of all unintentional overdose deaths (**Overall**, intentional overdose deaths were characterised by a greater prominence of medicines commonly prescribed for mental health conditions and a higher proportion of deaths involving drug combinations containing antidepressants and sedative-hypnotic drugs).

Figure 18A).

Polydrug use remained a defining feature of unintentional overdose mortality. Other commonly observed profiles included heroin with amphetamine-type stimulants (3.4%, 223 deaths), other opioids combined with antiepileptic, sedative-hypnotic and anti-parkinsonism drugs, antidepressants and antipsychotics (2.3%, 155 deaths), and other opioids combined with antiepileptic, sedative-hypnotic and anti-parkinsonism drugs and amphetamine-type stimulants (2.3%, 150 deaths).

Intentional overdose deaths

Intentional overdose deaths showed a markedly different pattern. The most common profile involved drugs outside the main classes examined in this report (15%, 341 deaths). Among the drug classes of interest, **antiepileptic, sedative-hypnotic and anti-parkinsonism drugs alone** were the most common profile, accounting for 8.7% of intentional overdose deaths (197 deaths). (**Overall**, intentional overdose deaths were characterised by a greater prominence of medicines commonly prescribed for mental health conditions and a higher proportion of deaths involving drug combinations containing antidepressants and sedative-hypnotic drugs).

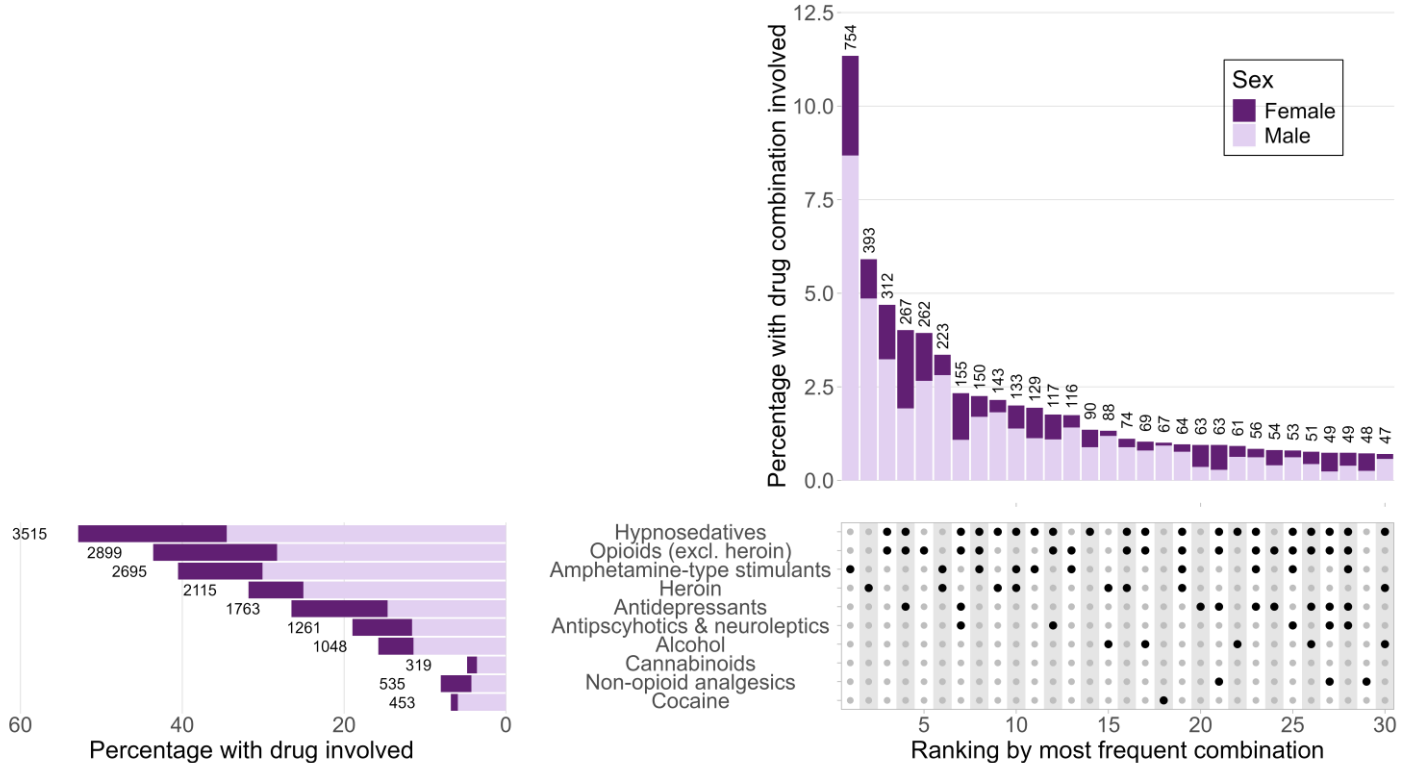
Figure 18B).

The next most frequent profiles were **other opioids combined with antiepileptic, sedative-hypnotic and anti-parkinsonism drugs** (5.8%, 131 deaths), **antidepressants alone** (5.1%, 115 deaths), **other opioids combined with antiepileptic, sedative-hypnotic and anti-parkinsonism drugs and antidepressants** (5.1%, 114 deaths), and **other opioids alone** (3.7%, 83 deaths). Antiepileptic, sedative-hypnotic and anti-parkinsonism drugs combined with antidepressants (3.4%, 77 deaths) and with antidepressants and antipsychotics (3.2%, 72 deaths) were also common profiles.

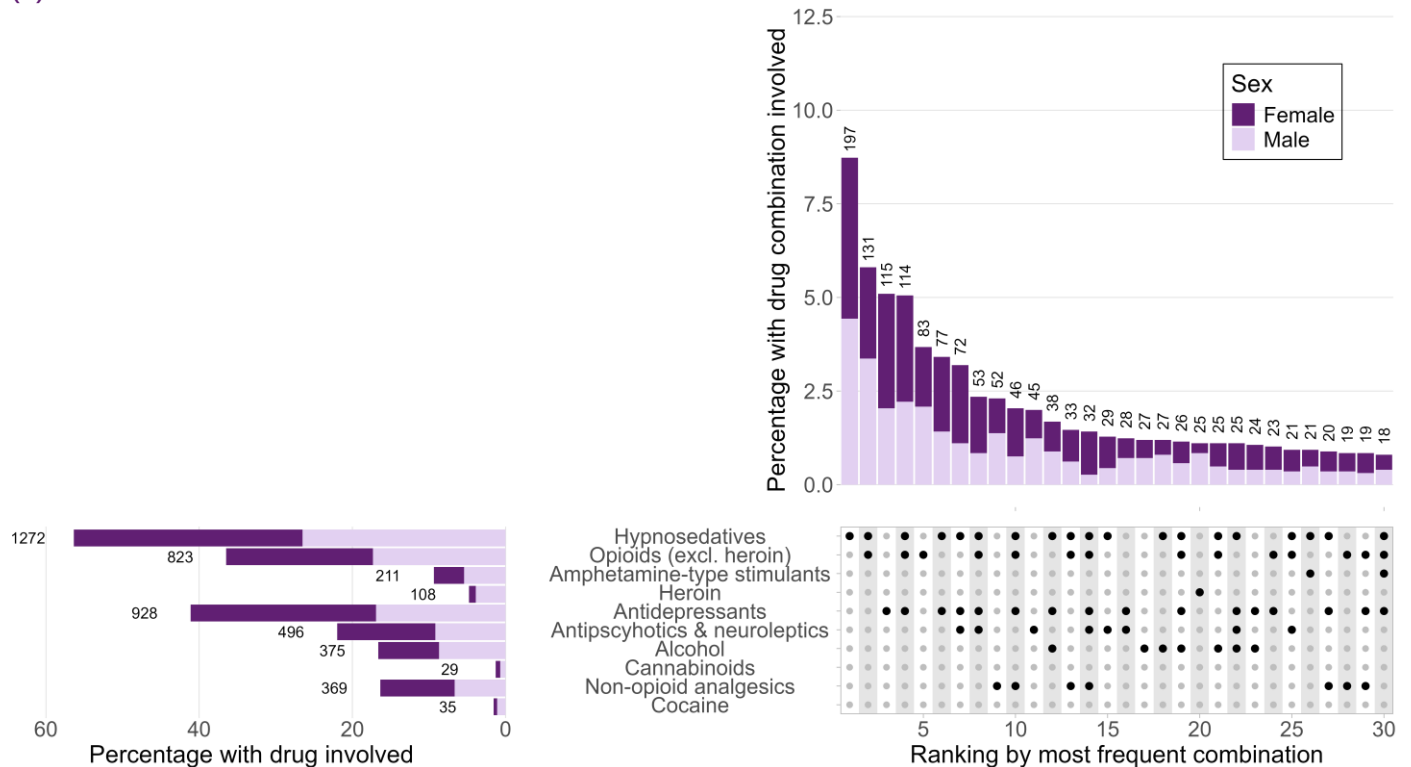
Overall, intentional overdose deaths were characterised by a greater prominence of medicines commonly prescribed for mental health conditions and a higher proportion of deaths involving drug combinations containing antidepressants and sedative-hypnotic drugs.

Figure 18. Thirty most common drug pattern profiles of unintentional (A) and intentional (B) drug overdose deaths, by sex, Australia, 2020-2024

(A) Unintentional



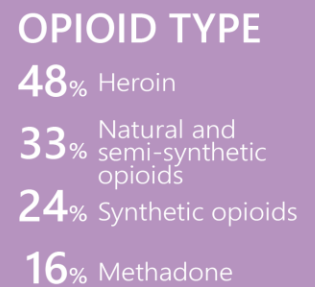
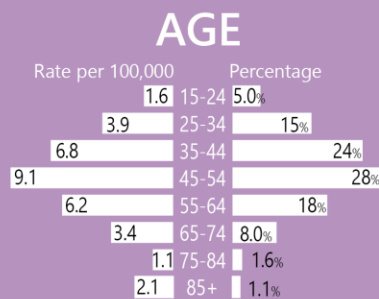
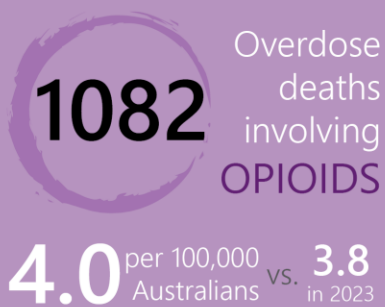
(B) Intentional



Note. Figures present the number of deaths by drug pattern profile for males and females. Dots represent intersection of drug classes involved in the drug pattern profile. Note the axis depicts the percentage of deaths, and data labels show the number of deaths. The percentage axes have been rescaled to improve presentation of the results. Antiepileptic, sedative-hypnotic and anti-parkinsonism drugs are shown as Hypnotosedatives in the figure.

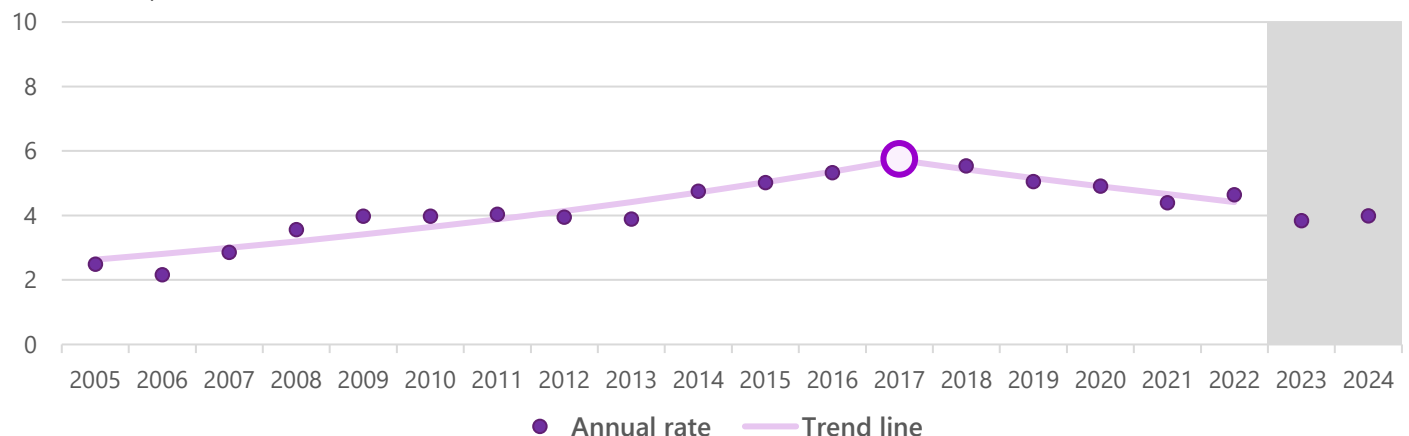
6

Drug Overdose Deaths Involving Opioids

2024 Drug-induced
DEATHS

2005-2024

Age-standardised rate per 100,000 people of drug overdose deaths involving OPIOIDS, Australia, 2005-2024



Note: Deaths where conditions related to alcohol or tobacco comprised the underlying cause of death are not captured here. Causes of death data for 2023 and 2024 are not final and thus are subject to further revision (indicated by the grey area on the plot).

Overall Characteristics

Table 20. Number and rate per 100,000 people of drug overdose deaths involving opioids, Australia, 2021-2024

Registration year	Number	Rate per 100,000
2021 Final	1,125	4.4
2022 Final	1,193	4.6
2023 Revised	1,018	3.8
2024 Preliminary revised	1,082	4.0

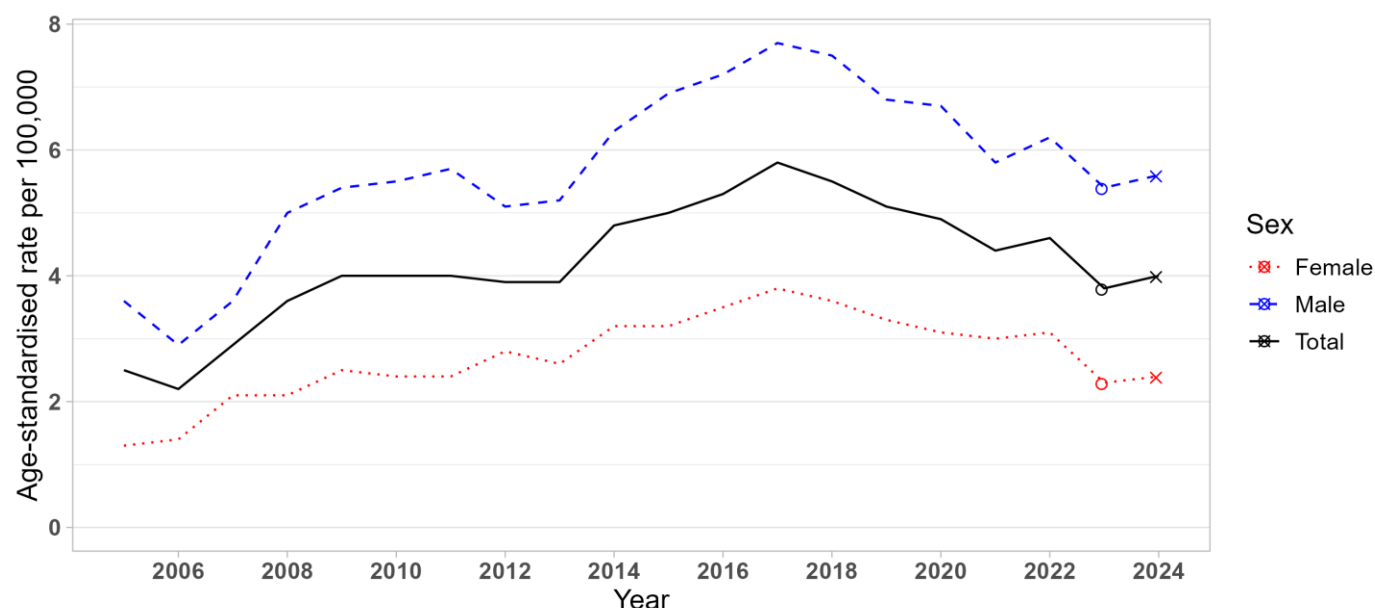
In 2024, there were 1,082 drug overdose deaths involving [opioids](#) among Australians, equivalent to 4.0 deaths per 100,000 people (Table 20). Despite ongoing declines from the peak levels observed in the late 2010s, opioids remained the drug class most commonly identified in overdose deaths.

Trend since 2005

The trend in opioid overdose deaths in Australia over the past two decades has been characterised by a rapid increase followed by a gradual decline from historic highs (Figure 19).

Between 2005 and 2017, the rate of overdose deaths involving opioids more than doubled, rising from around 2.5 to 5.8 deaths per 100,000 people and increasing on average by 6.7% per year. Opioid-related mortality then steadily declined, falling to 4.4 deaths per 100,000 people by 2021. This decline continued into 2023, when the rate reached 3.8 deaths per 100,000 people. In 2024, preliminary data suggest there were 4.0 deaths per 100,000 people (1,082 deaths) (Table A10, Appendix). While this estimate is not statistically different from the 2023 rate, it indicates that opioid overdose mortality remains at a persistently high level and warrants continued monitoring, particularly with future ABS revisions.

Figure 19. Age-standardised rate per 100,000 people of drug overdose deaths involving opioids by sex, Australia, 2005-2024



Note: Causes of death data for 2023 and 2024 are not final and thus are subject to further revision. The symbol 'o' indicates revised estimates and 'x' preliminary revised estimates.

Sex

Table 21. Number and rate per 100,000 people of drug overdose deaths involving opioids by sex, Australia, 2021-2024

Sex	Number (%)			
	2021 F	2022 F	2023 R	2024 P
Male	723 (64)	778 (65)	695 (68)	754 (70)
Female	402 (36)	415 (35)	323 (32)	328 (30)

	Rate per 100,000 people			
	2021 F	2022 F	2023 R	2024 P
Male	5.8	6.2	5.4	5.6
Female	3.0	3.1	2.3	2.4

Note: 'F' means 'final', 'R' - 'revised' and 'P' - 'preliminary revised'. Data were only available by sex (male/female), which means we were unable to report on gender identity. We acknowledge the importance of inclusive data and the need for improved data collection in these areas.

In 2024, more than two-thirds (70%; 754 deaths) of drug overdose deaths involving opioids occurred among males, while 30% (328 deaths) occurred among females (Table 21). This sex disparity has been a consistent feature of opioid overdose mortality throughout the monitoring period. The population rate among males (5.6 deaths per 100,000 people) remained more than twice that observed among females (2.4 deaths per 100,000 people).

Trend since 2005

The burden of opioid overdose mortality has consistently fallen more heavily on males than females. Throughout the past two decades, males have recorded rates that were around twice those observed among females.

From 2005, opioid overdose mortality increased steadily for both sexes, reaching a peak in 2017 at 7.7 deaths per 100,000 males and 3.8 deaths per 100,000 females. This period coincided with the broader rise in opioid-related harm seen nationally.

Following the 2017 peak, rates declined gradually over subsequent years, falling to 5.8 deaths per 100,000 males and 3.0 deaths per 100,000 females by 2021 (Figure 19). While the decline continued into 2023, preliminary 2024 data suggest that opioid mortality may have stabilised, with rates of 5.6 deaths per 100,000 males and 2.4 deaths per 100,000 females (Table A12, Appendix).

Age

Table 22. Number and rate per 100,000 people of drug overdose deaths involving opioids by age, Australia, 2021-2024

Age	Number (%)				Rate per 100,000 people			
	2021 F	2022 F	2023 R	2024 P	2021 F	2022 F	2023 R	2024 P
15-24	53 (4.7)	76 (6.4)	56 (5.5)	54 (5.0)	1.7	2.4	1.7	1.6
25-34	170 (15)	187 (16)	139 (14)	158 (15)	4.6	5.0	3.6	3.9
35-44	294 (26)	300 (25)	239 (23)	262 (24)	8.3	8.3	6.4	6.8
45-54	309 (27)	330 (28)	299 (29)	302 (28)	9.5	10	9.1	9.1
55-64	180 (16)	196 (16)	172 (17)	190 (18)	6.0	6.5	5.7	6.2
65-74	65 (5.8)	68 (5.7)	78 (7.7)	87 (8.0)	2.7	2.8	3.1	3.4
75-84	29 (2.6)	22 (1.8)	25 (2.5)	17 (1.6)	2.1	1.5	1.7	1.1
85+	22 (2.0)	13 (1.1)	8 (0.8)	12 (1.1)	4.1	2.4	1.4	2.1

Note: 'F' means 'final', 'R' - 'revised' and 'P' - 'preliminary revised'.

In 2024, opioid overdose deaths continued to be concentrated among middle-aged Australians. The highest proportion of deaths occurred among people aged 45-54 years (28%; 302 deaths), followed by those aged 35-44 years (24%; 262 deaths), 55-64 years (18%; 190 deaths) and 25-34 years (15%; 158 deaths) (Table 22).

When population size was taken into account, the highest rates were observed among people aged 45-54 years (9.1 deaths per 100,000 people), followed by those aged 35-44 years (6.8 per 100,000 people) and 55-64 years (6.2 per 100,000 people). Although accounting for a relatively small proportion of deaths, rates among older adults aged 65-74 years reached 3.4 deaths per 100,000 people, reflecting the continuing shift of opioid overdose mortality towards older age groups.

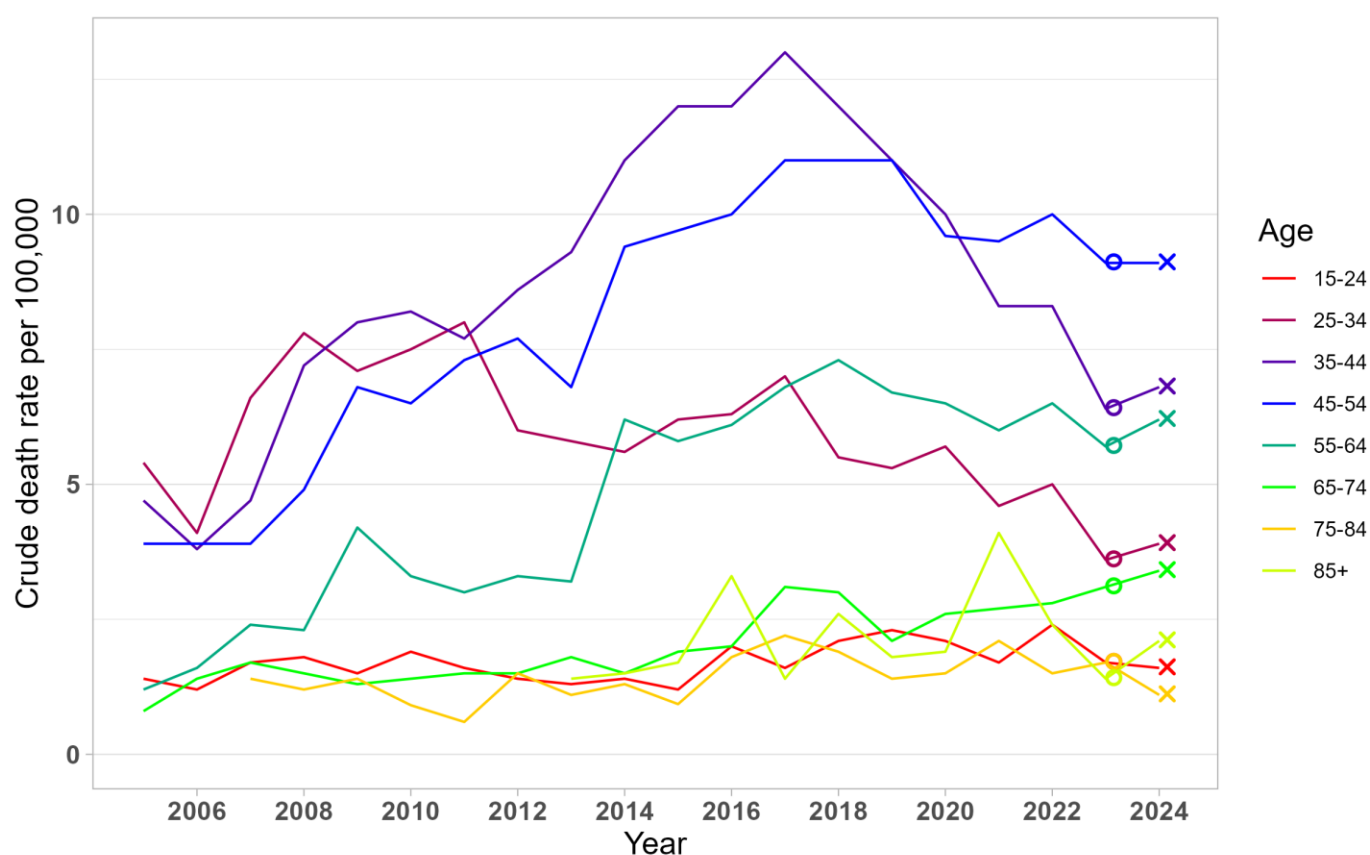
Trend since 2005

The age profile of opioid overdose deaths in Australia has shifted markedly over the past two decades. In the early 2000s, deaths were concentrated among younger adults, particularly those aged 25-34 years. Over time, however, the burden shifted towards older age groups, with increasing mortality among people aged 35-64 years and declining mortality among those aged 15-24 and 25-34 years.

This shift is also reflected in age-specific mortality rates (Figure 20). Between 2005 and the peaks observed in 2017-2018, rates increased substantially across the 35-74 age groups. Rates subsequently declined across most age groups, particularly among those aged 35-44 and 45-54 years. In contrast, the 25-34 age group peaked earlier (2008-2011) before declining, while declines among people aged 55-64 and 65-74 years were less pronounced, contributing to an increasingly older profile of opioid overdose mortality.

Compared with the revised 2023 estimates, preliminary 2024 rates were broadly similar across age groups, with small, non-significant increases among people aged 35-44, 55-64, and 65-74 years, stable rates among those aged 45-54 years, and a non-significant decrease among those aged 75-84 years. As both the 2023 and 2024 estimates remain subject to revision, these differences should be interpreted cautiously. Overall, the highest mortality rates continued to occur among Australians aged 35-64 years, and the longer-term trend towards an older age profile persists.

Figure 20. Age-specific rates per 100,000 people of drug overdose deaths involving opioids by age, Australia, 2005-2024



Note: Causes of death data for 2023 and 2024 are not final and thus are subject to further revision. The symbol 'o' indicates revised estimates and 'x' preliminary revised estimates. Rates for small numbers (less than or equal to 5 deaths) are suppressed. The rates for the 0-14 years age group are not presented due to sensitivity of the data.

Intent of Drug Overdose Deaths

Table 23. Number and rate per 100,000 people of drug overdose deaths involving opioids by intent, Australia, 2021-2024

Registration year	Number (%)		Rate per 100,000	
	Unintentional	Intentional	Unintentional	Intentional
2021 Final	884 (79)	206 (18)	3.5	0.73
2022 Final	960 (80)	204 (17)	3.8	0.74
2023 Revised	802 (79)	176 (17)	3.1	0.61
2024 Preliminary rev.	877 (81)	163 (15)	3.3	0.56

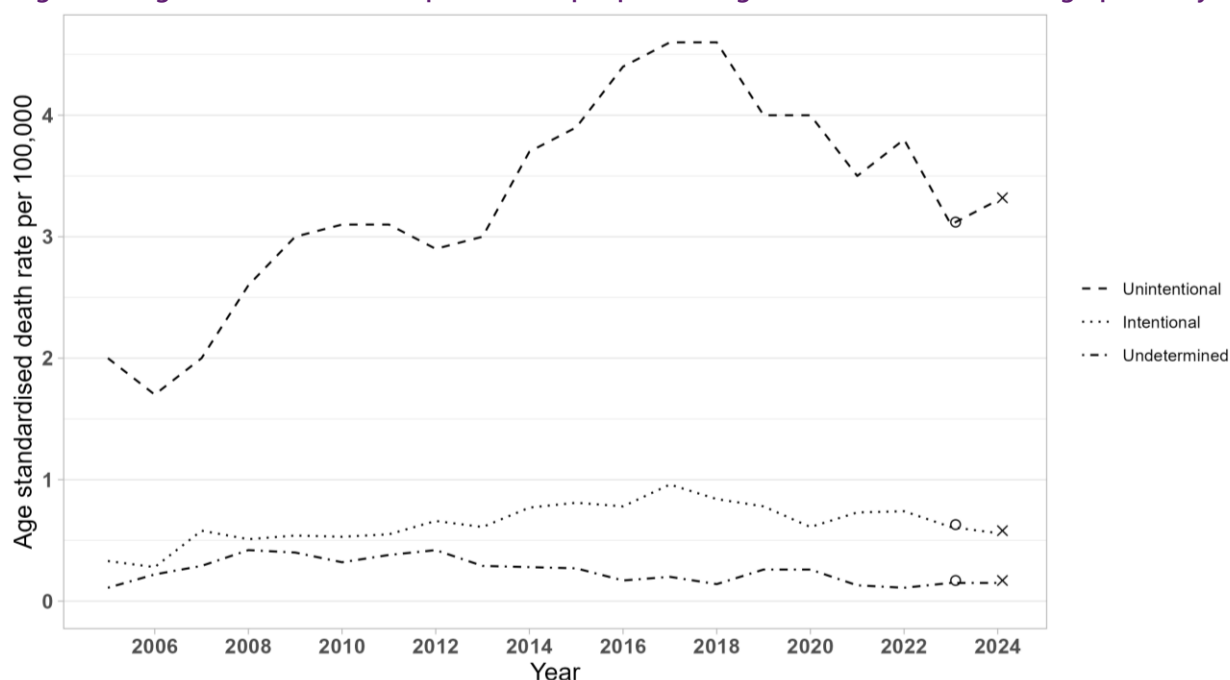
In 2024, four in five drug overdose deaths involving opioids were classified as unintentional (877 deaths; 81%), while 163 deaths (15%) were classified as intentional. A further 42 deaths (3.9%) were assigned an undetermined/other intent. This pattern has remained remarkably consistent over time, with unintentional overdoses accounting for the vast majority of opioid-related deaths (Table 23).

The long-term trend in opioid overdose mortality has been driven primarily by unintentional deaths. The rate of unintentional opioid overdose deaths increased steadily from 2005, reaching a high of 4.6 deaths per 100,000 people in 2017 and 2018, before declining over subsequent years. Although the rate rose slightly in 2024, it remained well below the levels observed during the late 2010s peak (Figure 21).

Intentional opioid overdose deaths followed a different trajectory. Rates increased from 0.33 deaths per 100,000 people in 2005 to a peak of 0.96 deaths per 100,000 people in 2017, before entering a sustained period of decline. By 2024, the rate had decreased to 0.56 deaths per 100,000 people, the lowest recorded since 2008.

Between 2023 and 2024, the number and rate of unintentional opioid overdose deaths increased (802 to 877 deaths; 3.1 to 3.3 deaths per 100,000 people), while intentional opioid overdose deaths continued to decline (176 to 163 deaths; 0.61 to 0.56 deaths per 100,000 people). Neither change was statistically significant (Table A11, Appendix). Together, these findings suggest that the recent decline in opioid overdose mortality may have slowed, although caution is warranted when interpreting year-to-year changes. Both 2023 and 2024 data remain subject to further ABS revisions.

Figure 21. Age-standardised rates per 100,000 people of drug overdose deaths involving opioids by intent, Australia, 2005-2024



Note: Causes of death data for 2023 and 2024 are not final and thus are subject to further revision. The symbol 'o' indicates revised estimates and 'x' preliminary revised estimates.

Opioid Type

Table 24. Number and rate per 100,000 people of drug overdose deaths involving opioids by opioid type, Australia, 2021-2024

Opioid type	Number (%)				Rate per 100,000 people			
	2021 F	2022 F	2023 R	2024 P	2021 F	2022 F	2023 R	2024 P
Heroin	361 (32)	514 (43)	382 (38)	522 (48)	1.5	2.1	1.5	▲2.0
Methadone	240 (21)	223 (19)	200 (20)	169 (16)	0.96	0.88	0.75	0.63
Natural & semi-synthetic	513 (46)	444 (37)	358 (35)	356 (33)	1.9	1.7	1.3	1.3
Synthetic opioids	241 (21)	261 (22)	282 (28)	265 (24)	0.93	1.0	1.1	0.96

Note: 'F' means 'final', 'R' - 'revised' and 'P' - 'preliminary revised'.

In 2024, **heroin** was once again the most frequently identified opioid involved in overdose deaths, being present in an estimated 522 deaths (48% of all opioid overdose deaths) (Table 24). **Natural and semi-synthetic opioids**, such as morphine, codeine and oxycodone, remained involved in a substantial proportion of deaths (356 deaths; 33%), followed by **synthetic opioids**, including fentanyl, tramadol and pethidine (265 deaths; 24%), and **methadone** (169 deaths; 16%). Because more than one opioid can contribute to a fatal overdose, these categories are not mutually exclusive.

Looking more closely at opioid involvement reveals how the pattern of overdose deaths has changed over time. In 2024, **407 deaths involved heroin alone**, accounting for around **one-third (38%) of all opioid overdose deaths**, while **553 deaths (51%)** involved pharmaceutical opioids without heroin. A further **115 deaths (11%)** involved both heroin and another opioid, indicating that most heroin-related overdose deaths continued to occur without another opioid being identified. Deaths involving opium or unspecified opioids remained rare, accounting for fewer than 10 deaths.

This profile is markedly different from that observed a decade earlier. Since 2012, heroin-only deaths have become increasingly common, while deaths involving pharmaceutical opioids alone have steadily declined. Some of this change is likely to reflect improvements in forensic toxicology and pathology practices. In earlier years, heroin-related deaths were more frequently recorded under broader descriptions such as morphine toxicity, whereas contemporary investigations are more likely to specifically identify heroin involvement (Stam et al.).

Trend since 2005

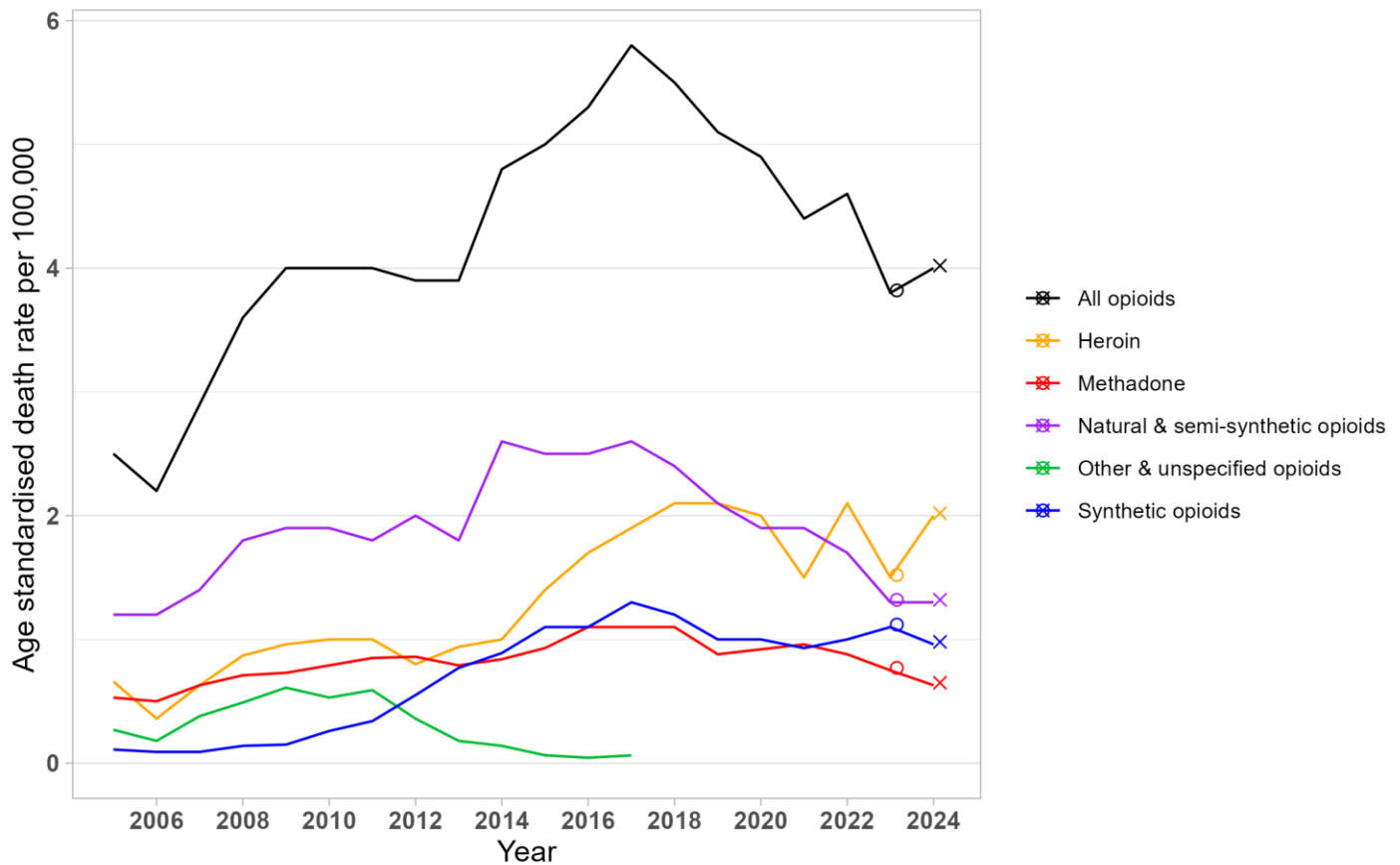
The changing profile of opioid overdose mortality over the past two decades has been driven by two contrasting trends. Following relatively low rates during the mid-2000s, deaths involving heroin increased steadily, rising from 0.36 deaths per 100,000 people in 2006 (73 deaths) to 2.1 per 100,000 people in 2018, 2019 and 2022 (496, 509 and 514 deaths, respectively). After decreasing to 1.5 deaths per 100,000 people in 2021 and 2023, the preliminary rate for 2024 increased significantly to 2.0 deaths per 100,000 people. Importantly, the data indicate that this trend has been driven primarily by heroin-only deaths, rather than by increasing combinations of heroin with pharmaceutical opioids.

In contrast, **natural and semi-synthetic opioids** followed a different trajectory. The rate of opioid overdose deaths involving natural and semi-synthetic opioids increased steadily through the late 2000s and early 2010s, peaking between 2014 and 2017 at 2.6 deaths per 100,000 people, before declining over subsequent years. The preliminary 2024 rate aligned with the revised 2023 estimate (both 1.3 deaths per 100,000 people), suggesting that the previous decline did not continue in the 2024 estimate.

A similar pattern was observed for **synthetic opioids** and **methadone**, with rates increasing until the mid-2010s before stabilising or gradually declining, with preliminary 2024 estimates reaching **0.96 and 0.63 deaths per 100,000 people, respectively**.

Overall, the exclusive opioid analysis provides little evidence that overdose deaths involving multiple opioid types have become more common over time. Instead, changes in opioid overdose mortality have primarily reflected shifts in deaths involving **heroin alone** and **pharmaceutical opioids alone**. Preliminary 2024 data are consistent with this pattern, although estimates will be subject to further revision.

Figure 22. Age-standardised rate per 100,000 people of drug overdose deaths involving opioids by opioid type, Australia, 2005-2024



Note: Causes of death data for 2023 and 2024 are not final and subject to further revision. The symbol 'o' indicates revised estimates and 'x' preliminary revised estimates. One opioid-overdose death may involve multiple opioid types and that findings here reflect the number of opioid-overdose deaths involving each opioid type (not necessarily attributed primarily to that opioid). Opioid type was identified if the following ICD-10 code was recorded: heroin (T40.1), methadone (T40.3), natural and semi-synthetic opioids (T40.2), synthetic opioids (T40.4), other and unspecified opioids (T40.0, T40.6). Age-standardised rates were not calculated if the number of deaths was less than or equal to 10 (please refer to our [methods](#) document for details). Suppressed data are visible as gaps in the data series.

Panel E. An ageing cohort: Heroin overdose deaths among older Australians

Unlike the annual Drug Trends report, which uses ABS Cause of Death data, studies based on the National Coronial Information System (NCIS) can examine individual case histories, toxicology findings and autopsy results. This provides important clinical detail that is not available in routine mortality data.

A recent NCIS study examined heroin toxicity deaths among Australians aged 65 years and over between 2000 and 2025 and identified the emergence of a new and growing cohort of older people who use heroin. The study found 59 heroin toxicity deaths in this age group, with almost all occurring after 2015 and none recorded before 2011. Most decedents were male (86%), had a documented history of injecting drug use and substance use problems, and the majority of deaths were classified as unintentional.

The findings highlighted the substantial burden of chronic disease among older heroin users. Nearly four in ten deaths were attributed to a combination of drug toxicity and underlying disease, most commonly cardiovascular or respiratory conditions. Autopsy findings frequently identified severe coronary artery disease, cardiomegaly, previous heart damage and chronic obstructive pulmonary disease, suggesting that age-related and drug-related health conditions may increase vulnerability to fatal overdose.

Toxicological analyses indicated that most deaths involved multiple substances in addition to heroin, particularly benzodiazepines, other opioids and antidepressants. The study also found evidence consistent with shorter survival times following overdose compared with younger heroin users, reinforcing the importance of rapid overdose detection and response.

The authors concluded that heroin overdose mortality in Australia is increasingly affecting an ageing population of long-term heroin users with complex health needs. The findings highlight the importance of improving engagement with opioid treatment services, maintaining access to take-home naloxone, and developing overdose response strategies tailored to older adults who use heroin.

Reference: Darke S, Duflou J, Farrell M, Lappin J, Peacock A. *Clinical characteristics of heroin overdose deaths among older adults in Australia, 2000-2025. Addiction.* 2026;121(2):423-428. <https://doi.org/10.1111/add.70216>

Other Drug Involvement

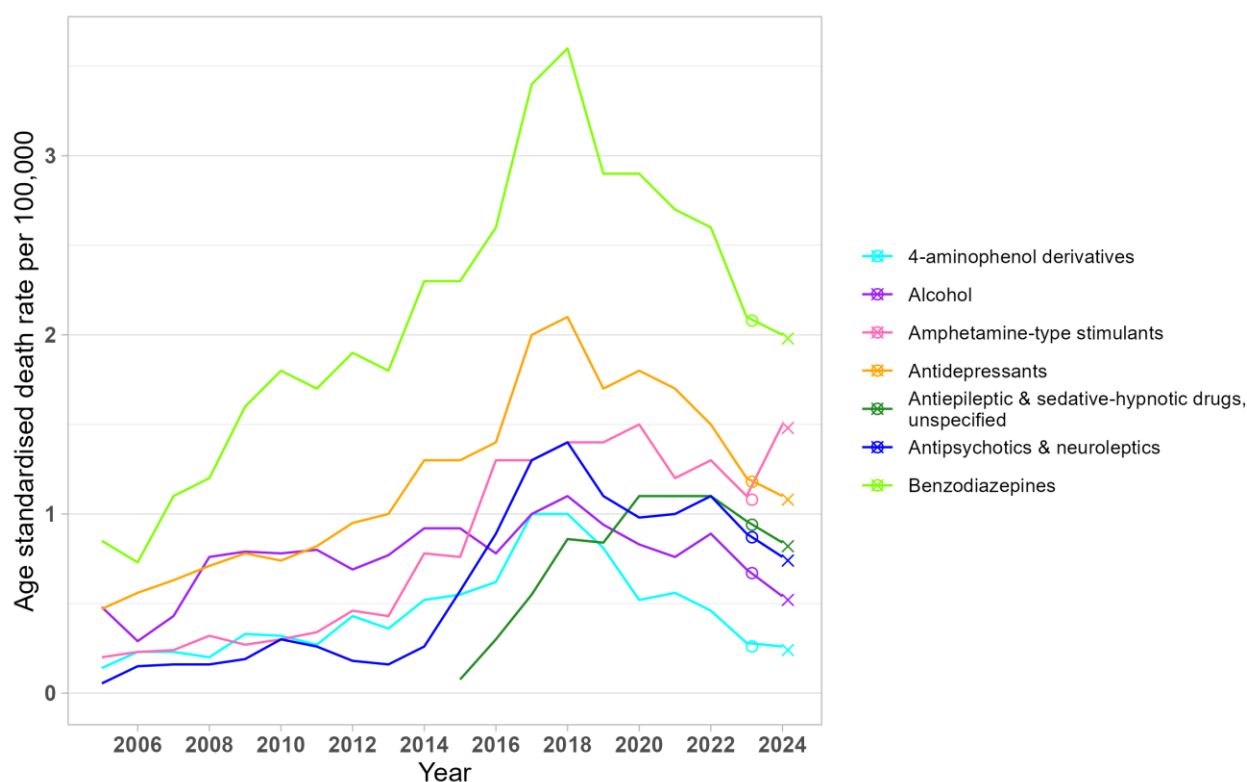
Table 25. Number and rate per 100,000 people of drug overdose deaths involving opioids, by other drug involvement, Australia, 2021-2024

Drug type involved	Number (%)				Rate per 100,000 people			
	2021 F	2022 F	2023 R	2024 P	2021 F	2022 F	2023 R	2024 P
Benzodiazepines	686 (61)	667 (56)	560 (55)	526 (49)	2.7	2.6	2.1	2.0
Antidepressants	427 (38)	399 (33)	325 (32)	292 (27)	1.7	1.5	1.2	1.1
Amphetamine-type stimulants	284 (25)	335 (28)	284 (28)	379 (35)	1.2	1.3	1.1	▲1.5
Antiepileptic & sedative-hypnotic drugs, unspecified	276 (25)	284 (24)	252 (25)	223 (21)	1.1	1.1	0.96	0.84
Antipsychotics & neuroleptics	259 (23)	269 (23)	232 (23)	204 (19)	1.0	1.1	0.89	0.76
Alcohol	191 (17)	224 (19)	180 (18)	148 (14)	0.76	0.89	0.69	▼0.54
4-aminophenol derivatives	150 (13)	124 (10)	75 (7.4)	74 (6.8)	0.56	0.46	0.28	0.26

Note: 'F' means 'final', 'R' - 'revised' and 'P' - 'preliminary revised'.

In 2024, **benzodiazepines** continued to be the most common non-opioid drug class involved in opioid overdose deaths, contributing to almost half of all cases (49%; 526 deaths; 2.0 deaths per 100,000 people) (Table 25). **Antidepressants** remained the second most frequently involved drug class (27%; 292 deaths; 1.1 per 100,000 people), although their contribution has gradually declined over recent years. In contrast, **amphetamine-type stimulants** continued their upward trajectory, being involved in over one-third (35%; 379 deaths) of opioid overdose deaths in 2024, with the population rate significantly increasing to 1.5 deaths per 100,000 people. **Antiepileptic and sedative-hypnotic drugs**, unspecified (predominantly pregabalin), remained involved in around one in five opioid overdose deaths (21%), while **antipsychotics and neuroleptics** (19%) and **alcohol** (14%) were less commonly identified than in previous years.

Figure 23. Age-standardised rate per 100,000 people of drug overdose deaths involving opioids by other drugs involved, Australia, 2005-2024



Note: Causes of death data for 2023 and 2024 are not final and subject to further revision. The symbol 'o' indicates revised estimates and 'x' preliminary revised estimates. Age-standardised rates were not calculated if the number of deaths was less than or equal to 10 (please refer to our [methods](#) document for details). Suppressed data are visible as gaps in the data series.

Trend since 2005

The pattern of drugs accompanying opioid overdose deaths has evolved considerably over the past two decades (**Figure 23**). Following increases through the 2000s and 2010s, involvement of benzodiazepines, antidepressants, antipsychotics, alcohol and non-opioid analgesics generally peaked around 2017 to 2019 before declining. Pregabalin represented a notable exception, with involvement increasing more than ten-fold between 2015 and 2020 before remaining consistently elevated, reflecting its established role in polysubstance opioid toxicity.

More recently, amphetamine-type stimulants have become increasingly prominent in opioid overdose deaths. Unlike most other contributory drug classes, their involvement has continued to rise, reaching the highest level observed during the monitoring period in 2024 (1.5 deaths per 100,000 people). Although the 2024 estimates remain preliminary and are expected to increase following future ABS revisions, the increase in stimulant involvement compared with the revised 2023 estimate was statistically significant, whereas changes for most other drug classes were not (Table A15, Appendix). By contrast, alcohol involvement showed a statistically significant decline between 2023 and 2024, although this finding should also be interpreted cautiously given the preliminary nature of the 2024 data.

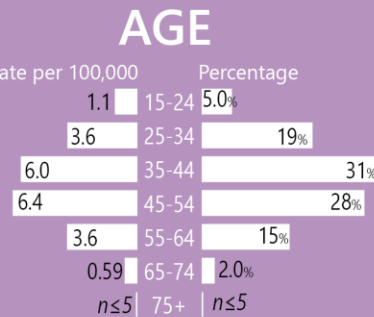
7

Drug Overdose Deaths Involving Amphetamine-Type Stimulants

2024 Drug-induced DEATHS

753 Overdose deaths involving AMPHETAMINE-TYPE STIMULANTS

2.9 per 100,000 Australians vs. **2.2** in 2023

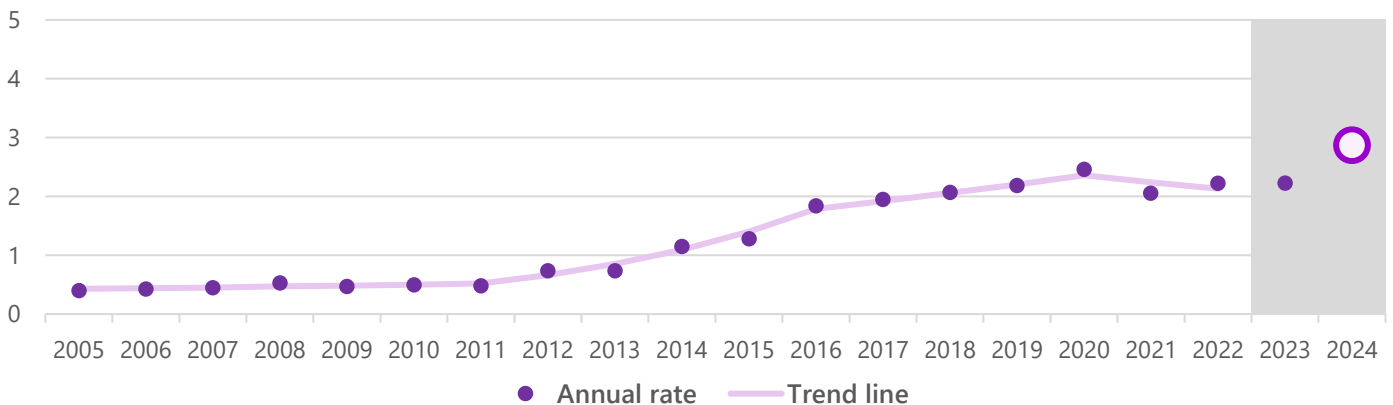


92% UNINTENTIONAL

2005-2024

Age-standardised rate per 100,000 people of drug overdose deaths involving AMPHETAMINE-TYPE STIMULANTS, Australia, 2005-2024

The highest rate was recorded in **2024** at **2.9** deaths per 100,000 Australians



Note: Deaths where conditions related to alcohol or tobacco comprised the underlying cause of death are not captured here. Causes of death data for 2023 and 2024 are not final and thus are subject to further revision (indicated by the grey area on the plot).

Overall Characteristics

Table 26. Number and rate per 100,000 people of drug overdose deaths involving amphetamine-type stimulants, Australia, 2021-2024

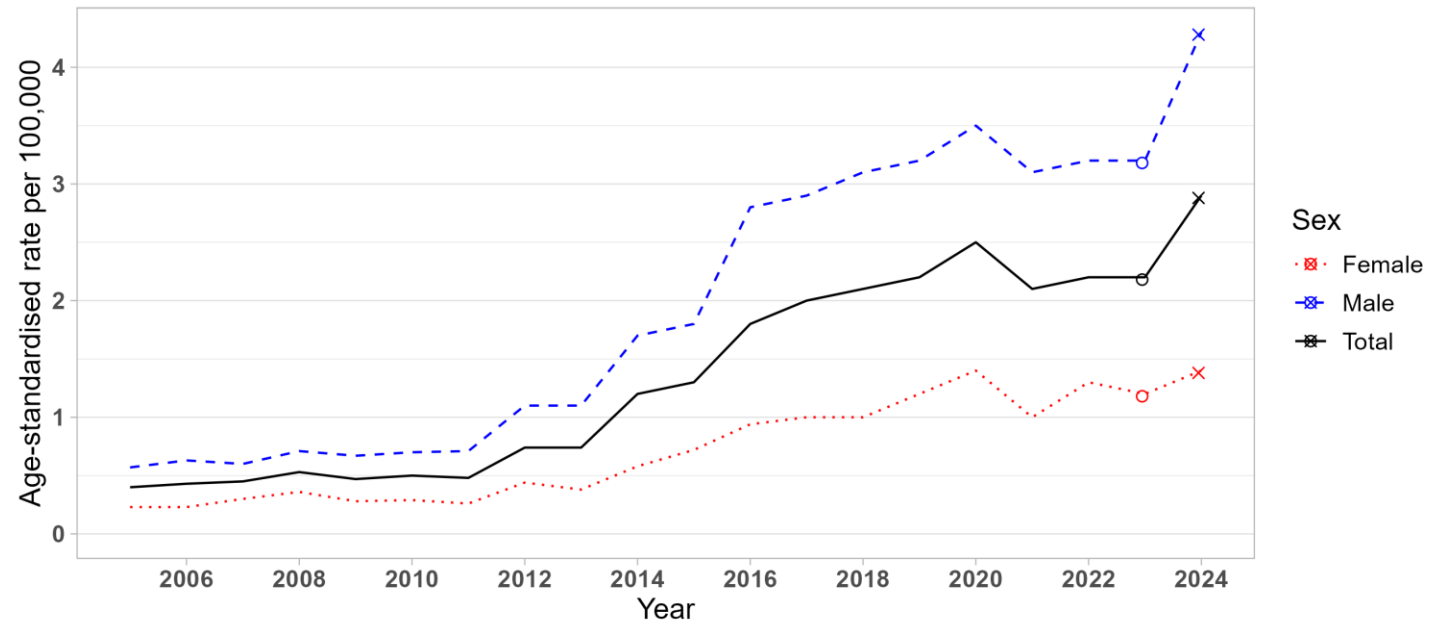
Registration year	Number	Rate per 100,000
2021 Final	504	2.1
2022 Final	554	2.2
2023 Revised	566	2.2
2024 Preliminary revised	753	▲2.9

In 2024, there were 753 drug overdose deaths involving amphetamine-type stimulants (e.g., methamphetamine, amphetamine and MDMA), equivalent to 2.9 deaths per 100,000 people (Table 26). This represents the highest number of amphetamine-type stimulant overdose deaths recorded in Australia to date.

Trends since 2005

Since 2005, overdose deaths involving amphetamine-type stimulants have risen, with the age-standardised mortality rate increasing from 0.40 deaths per 100,000 people to 2.5 in 2020. The most rapid growth occurred between 2011 and 2020, after which the rate stabilised in 2021, 2022 and 2023 (Figure 24). The preliminary 2024 estimate increased to 2.9 deaths per 100,000 people, exceeding the previous peak recorded in 2020. As the 2024 data are preliminary and will be revised as additional coronial information becomes available, the final rate is likely to be higher than currently reported.

Figure 24. Age-standardised rate per 100,000 people of drug overdose deaths involving amphetamine-type stimulants by sex, Australia, 2005-2024



Note: Causes of death data for 2023 and 2024 are not final and thus are subject to further revision. The symbol 'o' indicates revised estimates and 'x' preliminary revised estimates.

Sex

Table 27. Number and rate per 100,000 people of drug overdose deaths involving amphetamine-type stimulants by sex, Australia, 2021-2024

Registration year	Number (%)		Rate per 100,000	
	Male	Female	Male	Female
2021 Final	377 (75)	127 (25)	3.1	1.0
2022 Final	396 (71)	158 (29)	3.2	1.3
2023 Revised	406 (72)	160 (28)	3.2	1.2
2024 Preliminary rev.	564 (75)	189 (25)	▲4.3	1.4

Note: 'F' means 'final', 'R' - 'revised' and 'P' - 'preliminary revised'. Data were only available by sex (male/female), meaning we were unable to report on gender identity. We acknowledge the importance of inclusive data and the need for improved data collection in these areas.

In 2024, three-quarters (75%) of drug overdose deaths involving amphetamine-type stimulants occurred among males, consistent with the pattern observed throughout monitoring. The mortality rate among males (4.3 deaths per 100,000 people) was around three times that of females (1.4 per 100,000 people) (Table 27).

Trends since 2005

Since 2005, mortality rates involving amphetamine-type stimulants have increased among both males and females, following broadly similar trajectories but remaining consistently higher among males. The steepest increases occurred between 2011 and 2020, when rates rose from 0.71 to 3.5 deaths per 100,000 males and from 0.26 to 1.4 deaths per 100,000 females (Figure 24).

Following a period of relative stability from 2021 to 2023, the preliminary 2024 estimate indicates a marked increase among males compared to 2023 (3.2 to 4.3 deaths per 100,000 males). In contrast, the female rate was 1.2 and 1.4 deaths per 100,000 people in 2023 and 2024, respectively. Although both years are expected to increase with future revisions, the available data indicate that the recent increase in amphetamine-type stimulant overdose mortality occurred primarily among males (Table A16, Appendix).

Age

Table 28. Number and rate per 100,000 people of drug overdose deaths involving amphetamine-type stimulants by age, Australia, 2021-2024

Age	Number (%)				Rate per 100,000 people			
	2021 F	2022 F	2023 R	2024 P	2021 F	2022 F	2023 R	2024 P
15-24	24 (4.8)	34 (6)	33 (5.8)	38 (5.0)	0.77	1.1	0.99	1.1
25-34	105 (21)	109 (20)	91 (16.1)	144 (19)	2.8	2.9	2.3	▲3.6
35-44	166 (33)	165 (30)	170 (30)	230 (31)	4.7	4.6	4.6	▲6.0
45-54	142 (28)	162 (29)	186 (33)	213 (28)	4.4	4.9	5.6	6.4
55-64	58 (12)	71 (12.8)	78 (14)	110 (15)	1.92	2.3	2.6	▲3.6
65-74	8 (1.6)	12 (2.2)	8 (1.4)	15 (2)	0.33	0.49	0.32	0.59
75-84	0	np	0	np	0	np	0	np
85+	0	0	0	0	0	0	0	0

Note: 'F' means 'final', 'R' - 'revised' and 'P' - 'preliminary revised'. np – data not publishable due to small number of cases.

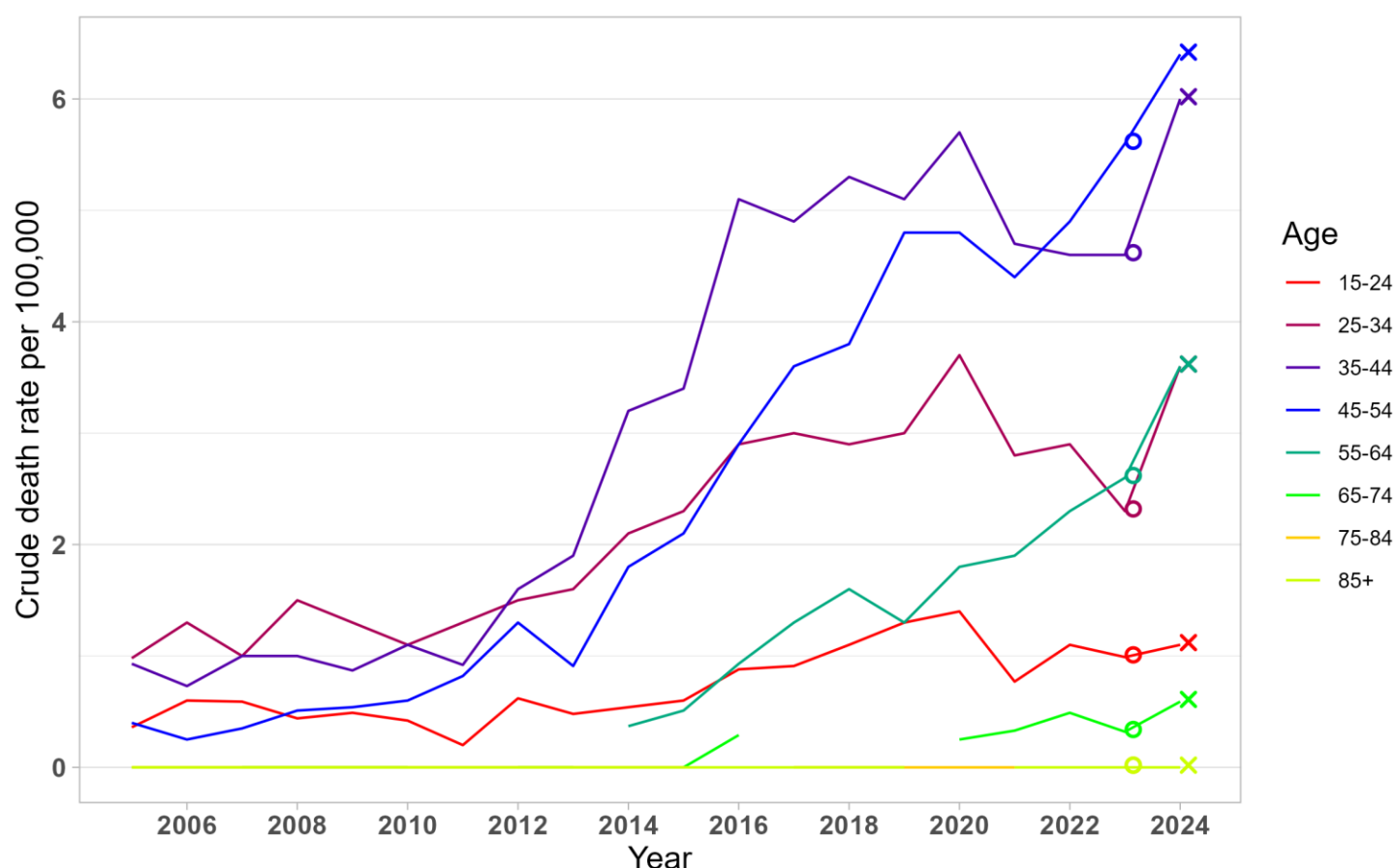
In 2024, drug overdose deaths involving amphetamine-type stimulants remained concentrated among middle-aged Australians. The largest proportions occurred among people aged 35-44 years (31%; 230 deaths) and 45-54 years (28%; 213 deaths), followed by those aged 25-34 years (19%; 144 deaths) and 55-64 years (15%; 110 deaths) (Table 28). When population size was taken into account, the highest mortality rates were observed among people aged 45-54 years (6.4 deaths per 100,000 people) and 35-44 years (6.0 per 100,000), with rates substantially lower among those aged 15-24 years (1.1 per 100,000) and rare among people aged 65 years and over.

Trends since 2005

Over the past two decades, the age profile of amphetamine-type stimulant overdose deaths has shifted steadily towards older age groups. In 2005, one in eight deaths occurred among people aged 15-24 years, whereas by 2024 this age group accounted for only 5% of deaths. At the same time, mortality rates increased across most adult age groups, particularly among those aged 45-54 years (from 0.40 to 6.4), 35-44 years (from 0.93 to 6.0 deaths per 100,000 people), 25-34 years (from 0.98 to 3.6), and 55-64 years (from almost zero to 3.6). Amphetamine-type stimulants continued to be only rarely identified in overdose deaths among people aged 65 years and over (Figure 25).

The preliminary 2024 estimates suggest that this upward trend has broadened, with increases observed across most adult age groups. The largest increases compared with the revised 2023 estimates occurred among people aged 25-34 years (2.3 to 3.6 deaths per 100,000 people), 35-44 years (4.6 to 6.0) and 55-64 years (2.6 to 3.6), while the rate among those aged 45-54 years reached a new high of 6.4 deaths per 100,000 people. Although the increases in 2024 should be interpreted cautiously, the increases for the 25-34, 35-44 and 55-64 age groups were statistically significant, suggesting that the recent rise in amphetamine-type stimulant overdose mortality extended beyond a single age group (Table A17, Appendix).

Figure 25. Age-specific rate per 100,000 people of drug overdose deaths involving amphetamine-type stimulants by age, Australia, 2005-2024



Note: Causes of death data for 2023 and 2024 are not final and thus are subject to further revision. The symbol 'o' indicates revised estimates and 'x' preliminary revised estimates. Rates for small numbers (less than or equal to 5 deaths) are suppressed. The rates for the 0-14 years age group are not presented due to sensitivity of the data.

Panel F. An ageing population of people who use stimulants and co-existing comorbidities

The ABS mortality data utilised in this report provide information on the drugs involved in overdose deaths and other contributory causes of death, while detailed coronial records available through the National Coronial Information System (NCIS) allow examination of additional clinical and contextual characteristics.

Consistent with the age shift in overdose deaths involving amphetamine-type stimulants identified in the current report, recent NCIS research has also documented an ageing profile among people dying from amphetamine-related causes in Australia [1], and a corresponding increase in deaths attributed to circulatory disease [2]. As the population of people using methamphetamine ages, underlying cardiovascular disease is likely to become increasingly important. Prior NCIS research has demonstrated that clinically significant cardiovascular pathology is common among methamphetamine-related deaths, even where cardiovascular disease is not the immediate cause of death [3]. Amphetamine-type stimulants are known to increase heart rate and blood pressure and may contribute to fatal cardiovascular complications, including arrhythmias, myocardial infarction and other acute cardiac events, particularly among people with underlying cardiovascular disease [2, 3, 4].

Together, these findings provide important context for the recent increase in amphetamine-related deaths identified in the ABS data and highlight the need for ongoing surveillance of stimulant-related harms, particularly among older adults with complex health needs.

Reference

- [1] Stronach O, Dietze P, Livingston M, Roxburgh A. An age-period-cohort-interaction analysis of meth/amphetamine-related deaths in Australia, 2001–2020. *Addiction*. 2025; 120(10): 2032–2043. <https://doi.org/10.1111/add.70100>
- [2] Stronach O, Dietze P, Livingston M, Roxburgh A. 20-year trends in Australian methamphetamine-related deaths, 2001–2020. *International Journal of Drug Policy*. 2024; 131: 104548. <https://doi.org/10.1016/j.drugpo.2024.104548>
- [3] Darke S, Duflou J, Kaye S. Prevalence and nature of cardiovascular disease in methamphetamine-related deaths: A national study. *Drug and Alcohol Dependence*. 2017; 179: 174–179. <https://doi.org/10.1016/j.drugalcdep.2017.07.001>
- [4] Darke S, Kaye S, Duflou J. Rates, characteristics and circumstances of methamphetamine-related death in Australia: a national 7-year study. *Addiction*. 2017; 112: 2191–2201. doi: [10.1111/add.13897](https://doi.org/10.1111/add.13897).

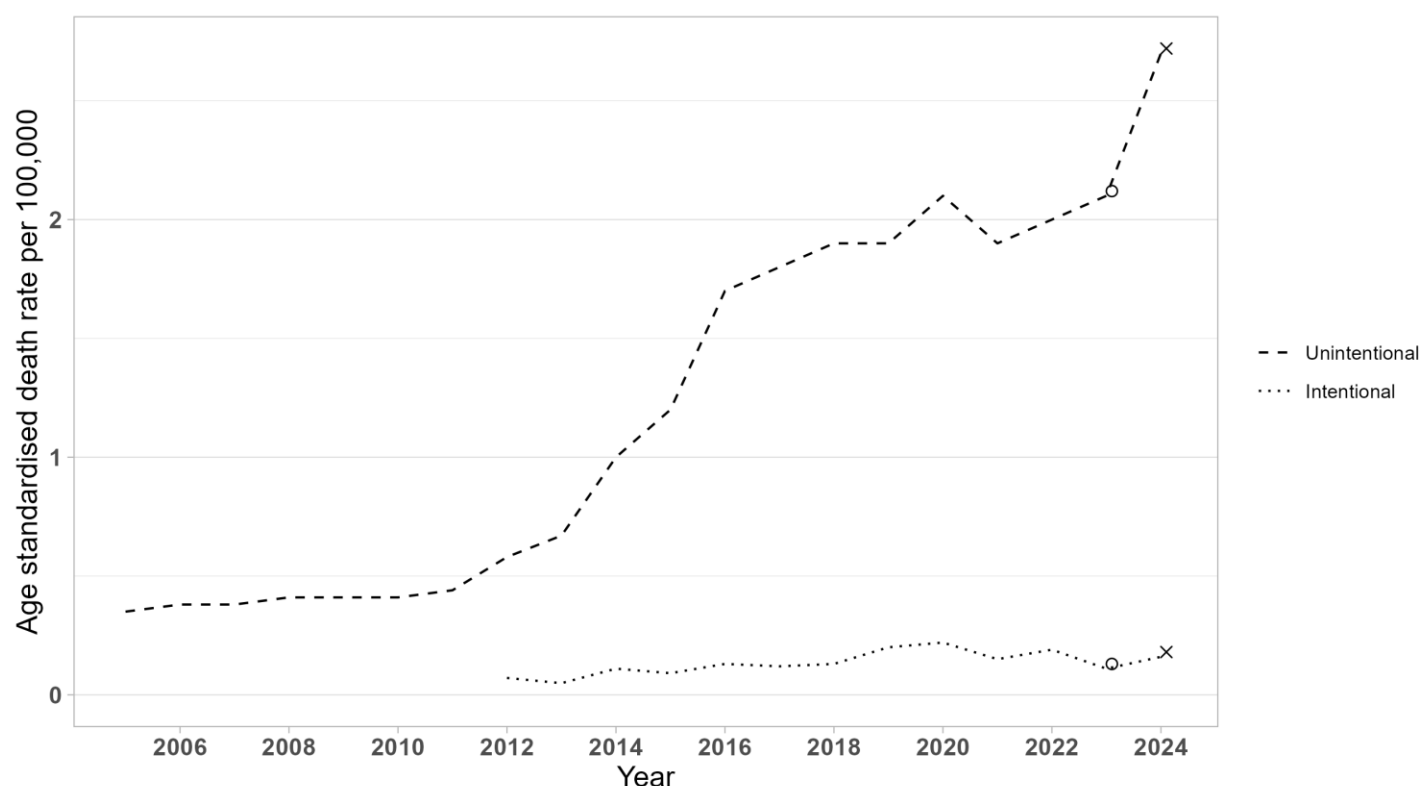
Intent of Drug Overdose Deaths

Table 29. Number and rate per 100,000 people of drug overdose deaths involving amphetamine-type stimulants by intent, Australia, 2021-2024

Registration year	Number (%)		Rate per 100,000	
	Unintentional	Intentional	Unintentional	Intentional
2021 Final	457 (91)	39 (7.7)	1.9	0.15
2022 Final	499 (90)	47 (8.5)	2.0	0.19
2023 Revised	523 (92)	28 (4.9)	2.1	0.11
2024 Preliminary rev.	696 (92)	42 (5.6)	▲2.7	0.16

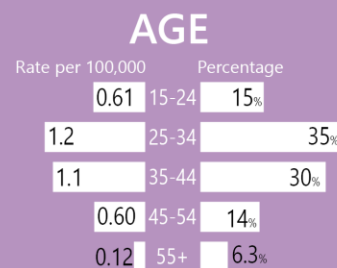
In 2024, more than nine in ten (92%; 696 deaths) drug overdose deaths involving amphetamine-type stimulants were classified as unintentional, while 5.6% (42 deaths) were intentional (Figure 26, Table 29). This distribution has remained broadly consistent throughout monitoring, with unintentional overdoses consistently accounting for between 77% and 98% of amphetamine-type stimulant overdose deaths.

Figure 26. Age-standardised rate per 100,000 people of drug overdose deaths involving amphetamine-type stimulants by intent, Australia, 2005-2024



8

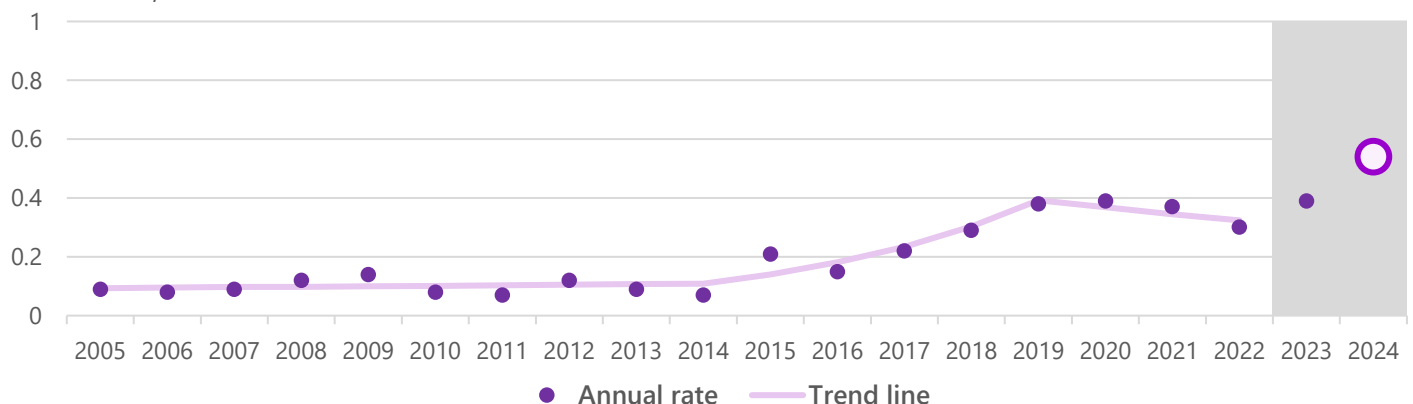
Drug Overdose Deaths Involving Cocaine

2024 Drug-induced
DEATHS

2005-2024

Age-standardised rate per 100,000 people of drug overdose deaths involving COCAINE, Australia, 2005-2024

The highest rate was recorded in 2024 at 0.54 deaths per 100,000 Australians



Note: Deaths where conditions related to alcohol or tobacco comprised the underlying cause of death are not captured here. Causes of death data for 2023 and 2024 are not final and thus are subject to further revision (indicated by the grey area on the plot).

Overall Characteristics

Table 30. Number and rate per 100,000 people of drug overdose deaths involving cocaine by sex, Australia, 2021-2024

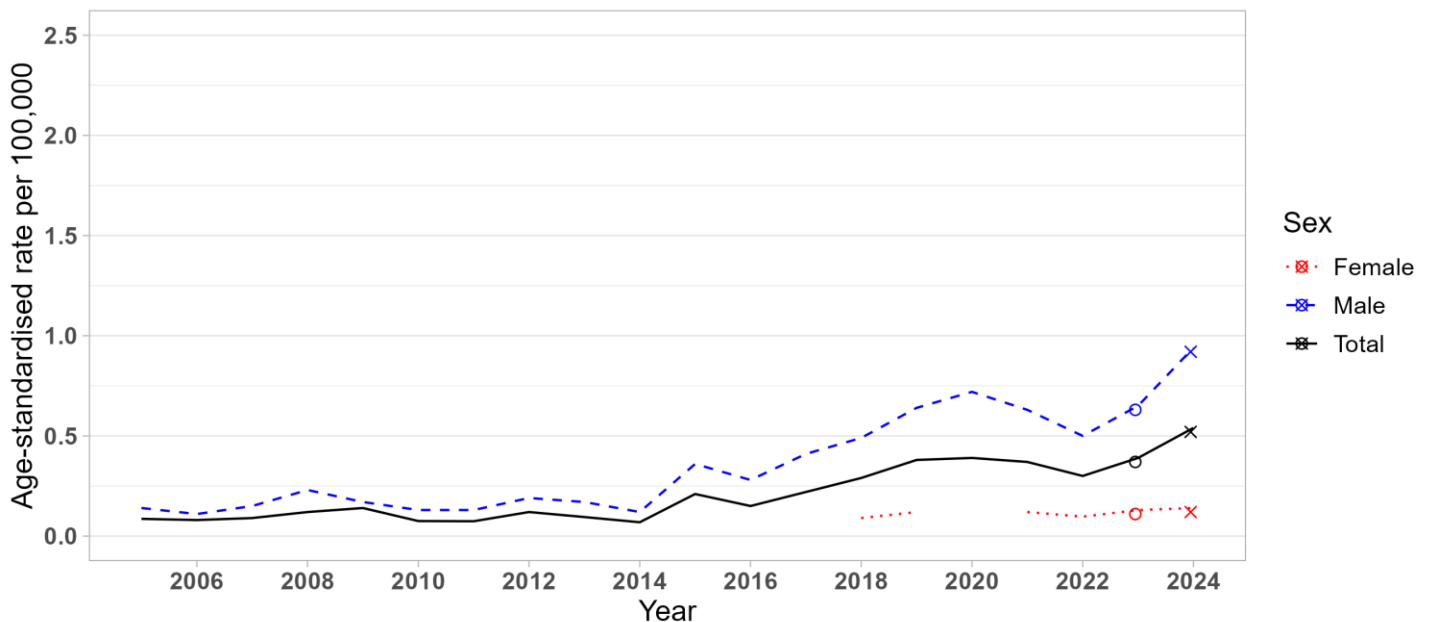
Registration year	Number	Number (%)		Rate per 100,000		
	Overall	Male	Female	Overall	Male	Female
2021 Final	91	77 (85)	14 (15)	0.37	0.63	0.12
2022 Final	73	61 (84)	12 (16)	0.30	0.50	0.10
2023 Revised	99	82 (83)	17 (17)	0.39	0.65	0.13
2024 Preliminary revised	142	123 (87)	19 (13)	▲0.54	▲0.94	0.14

Cocaine overdose deaths are less common compared with opioid or amphetamine-related overdose deaths, but have become increasingly prominent over the past decade. Preliminary estimates for 2024 show that Australia recorded 142 cocaine overdose deaths, equivalent to 0.54 deaths per 100,000 people (Table 30). Although both the 2023 and 2024 estimates remain subject to further ABS revision, with the 2024 estimate likely to increase more than the 2023 estimate, the preliminary 2024 rate is already higher than the revised 2023 estimate (0.39 deaths per 100,000 people) and the highest recorded to date, consistent with a continuing rise in cocaine-related mortality.

Trends since 2005

In the mid-2000s, cocaine overdose deaths were relatively rare. This changed rapidly from around 2013, with mortality increasing almost every year before peaking in 2020. After easing in 2021 and 2022, the revised 2023 estimate and the preliminary 2024 estimate indicate that the upward trajectory has resumed. The age-standardised mortality rate in 2024 was significantly higher than in 2023, although the size of this increase should be interpreted cautiously with further revisions expected.

Figure 27. Age-standardised rate per 100,000 people of drug overdose deaths involving cocaine by sex, Australia, 2005-2024



Note: Causes of death data for 2023 and 2024 are not final and thus are subject to further revision. The symbol 'o' indicates revised estimates and 'x' preliminary revised estimates. Rates for small numbers (less than or equal to 10 deaths) were not calculated.

Sex

Cocaine overdose deaths have consistently been concentrated among males, and this pattern strengthened further in 2024. Nearly nine in ten deaths (87%) occurred among males, who experienced a mortality rate almost seven times that of females (0.94 versus 0.14 deaths per 100,000 people, respectively) (Table 30).

Trends since 2005

The rise in cocaine overdose mortality over the past decade has been driven almost entirely by males. Male mortality accelerated between 2014 and 2020 and, despite fluctuations in recent years, the preliminary 2024 estimate represents the highest male mortality rate recorded. Deaths among females have remained comparatively uncommon throughout the monitoring period, with numbers often too small for rates to be published.

Age

Table 31. Number and rate per 100,000 people of drug overdose deaths involving cocaine by age, Australia, 2021-2024

Age	Number (%)				Rate per 100,000 people			
	2021 F	2022 F	2023 R	2024 P	2021 F	2022 F	2023 R	2024 P
15-24	12 (13)	13 (18)	17 (17)	21 (15)	0.39	0.41	0.51	0.61
25-34	50 (55)	32 (44)	30 (30)	50 (35)	1.34	0.85	0.77	▲1.2
35-44	16 (18)	17 (23)	27 (27)	42 (30)	0.45	0.47	0.73	1.1
45-54	11 (12)	9 (12)	17 (17)	20 (14)	0.34	0.27	0.52	0.60
55+	np	np	8 (8.1)	9 (6.3)	np	np	0.11	0.12

Note: 'F' means 'final', 'R' - 'revised' and 'P' - 'preliminary revised'. np – data not publishable due to small number of cases.

In 2024, cocaine overdose deaths occurred predominantly among young and middle-aged adults. People aged 25-34 years accounted for the largest proportion of deaths (35%), closely followed by those aged 35-44 years (30%). After accounting for population size, these two age groups also recorded the highest mortality rates, at 1.2 and 1.1 deaths per 100,000 people, respectively.

Trends since 2005

Earlier in the monitoring period, cocaine overdose deaths were largely concentrated among adults aged 25-44 years. Over time, the age profile has broadened, with increasing mortality extending into the 15-24 and 45-54 age groups. The preliminary 2024 estimates show a resurgence among people aged 25-34 years following lower rates in 2022 and 2023, while the rate among those aged 35-44 years continued to rise, reaching its highest level observed to date. Given the relatively small number of deaths, these recent changes should be interpreted cautiously until the data are finalised.

Intent of Drug Overdose Deaths

The profile of cocaine overdose deaths has changed little over time, with around nine in ten deaths being identified as unintentional. In 2024, 89% of cocaine overdose deaths were classified as unintentional and 8.5% as intentional. The remainder had undetermined or other intent.

9

Drug-Induced Deaths by Jurisdiction of Usual Residence

This chapter describes the profile of drug-induced deaths for each jurisdiction in 2024 and the trend in drug-induced deaths from 2005 to 2024. We encourage caution when interpreting some of these figures given the small number of deaths for some drug types in less populous jurisdictions (e.g., Northern Territory, Tasmania). Data on the number and rate (age-specific and/or age-standardised) of deaths by sex, age group and drug type for each jurisdiction can be obtained from the publicly accessible [online interactive data visualisation](#).

An additional consideration is the impact of the COVID-19 pandemic between 2020 and 2023. Differences between states and territories in COVID-19 burden, public health restrictions, access to healthcare, and broader social and economic conditions may have influenced drug use patterns and contributed to variations in drug-related mortality.



Australian Capital Territory



Drug-induced deaths
in the

Australian
Capital Territory

DRUG INVOLVEMENT

(deaths per 100,000 population)

- 2.3 Opioids (n=8)
- Antiepileptic, sedative-hypnotic and anti-parkinsonism drugs (n≤5)
- Amphetamine-type stimulants (n≤5)
- Antidepressants (n≤5)
- Antipsychotics & neuroleptics (n=0)
- Non-opioid analgesics (n=0)
- Cannabinoids (n=0)
- Cocaine (n=0)



AGE	Number	Percentage	Rate per 100,000
25-34	7	25%	8.2
45-54	6	21%	10

Drug-induced deaths in the Australian Capital Territory remained stable between 2023 and 2024, following a decline from the higher rates observed around 2020. In 2024, deaths were predominantly among males and were largely overdose-related, with most overdose incidents occurring at home. Because of small numbers, caution is warranted in interpreting trends.

There were 28 registered overdose and other drug-induced deaths (excluding alcohol and tobacco) in the [Australian Capital Territory](#) in 2024, which is equivalent to 1.2% of all registered deaths in this jurisdiction.

The age-standardised rate of [drug-induced deaths](#) in the Australian Capital Territory has fluctuated over time; small numbers mean they are susceptible to year-on-year variation. Broadly, the rate increased between 2015 and 2020 from 4.3 to 12 deaths per 100,000 people, before declining to 5.7 deaths per 100,000 people in 2023 (27 deaths). In 2024, the preliminary age-standardised rate of 5.6 deaths per 100,000 people was similar to the revised rate in 2023 ([Figure 28](#); Table A18). Estimates for 2023 and 2024 are subject to further revision and may increase.

Sex



In 2024, [males](#) accounted for 64% (18 deaths versus 10 deaths for females) of drug-induced deaths, with a rate of 7.6 deaths per 100,000 people, which was not significantly different from the rate in 2023 for males (7.3 deaths per 100,000 people, 17 deaths; Table A18). The rates for females were not calculated due to small numbers.

Age



In 2024, there were 7 drug-induced deaths in the 25-34 age group and 6 deaths in the 45-54 age group. Other age groups accounted for five or fewer deaths each (Table A19).

Remoteness Area of Usual Residence

Over 99% of the population in the Australian Capital Territory resided in major city areas and the remaining resided in inner regional areas in 2024. For this reason, data on deaths by remoteness area are not presented.

Intent of Drug Overdose Deaths

In 2024, 25 of 28 drug-induced deaths were due to overdose, of which 68% (17 deaths) were deemed [unintentional](#) and 24% (6 deaths) were intentional. This profile has been broadly consistent over time.

Place of Occurrence



In 2024, the location of the incident underlying death was coded as home for the majority (92%, 23 deaths) of drug overdose deaths.

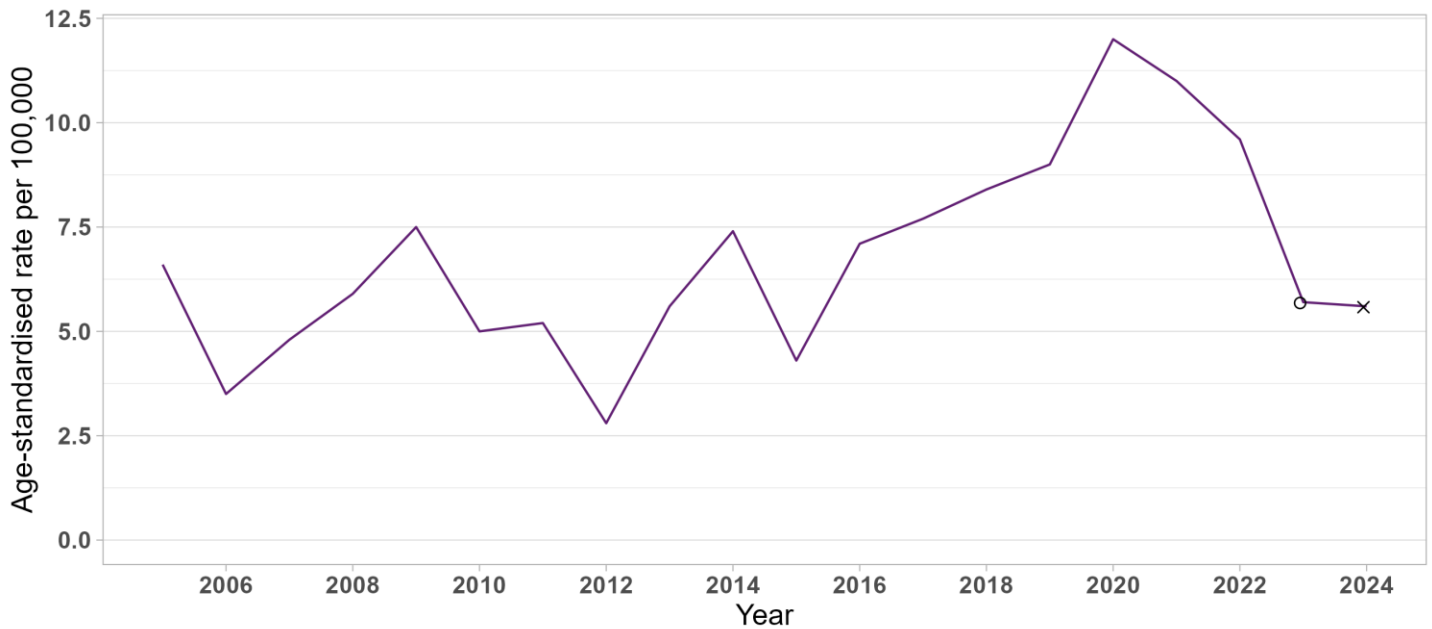
Drug Involvement

In the Australian Capital Territory, the two **most common** drug types involved in drug overdose deaths in 2024 were

- **opioids** (2.3 deaths per 100,000 people, 11 deaths)
- **antiepileptic, sedative-hypnotic and anti-parkinsonism drugs** (8 deaths).

Comparison of estimated rates of drug overdose deaths in the Australian Capital Territory did not identify a significant change in rates of drug involvement between 2023 and 2024 (Table A21).

Figure 28. Age-standardised rate per 100,000 people of drug-induced deaths, Australian Capital Territory, 2005-2024



Note: Deaths where conditions related to alcohol or tobacco comprised the underlying cause of death are not captured here. Causes of death data for 2023 and 2024 are not final and thus are subject to further revision. The symbol 'o' indicates revised estimates and 'x' preliminary revised estimates.

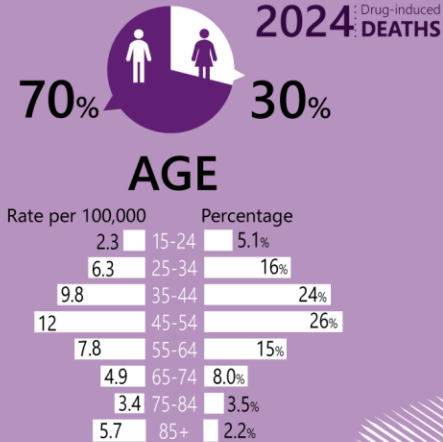
New South Wales



DRUG INVOLVEMENT

(deaths per 100,000 population)

2.9	Opioids
2.1	Amphetamine-type stimulants
1.7	Antiepileptic, sedative-hypnotic and anti-parkinsonism drugs
0.62	Cocaine
0.60	Antidepressants
0.40	Antipsychotics & neuroleptics
0.21	Non-opioid analgesics
(n=6)	Cannabinoids



The rate of drug-induced deaths in New South Wales in 2024 was slightly higher than in 2023, but the longer-term trend remains one of decline from the 2017 peak before showing little change in recent years. Deaths were concentrated among males, people aged 35-54 years and residents of major cities. Opioids remained the leading drug class, while amphetamine-type stimulants were the second most common class.

There were 490 registered overdose and other drug-induced deaths (excluding alcohol and tobacco) in [New South Wales](#) in 2024, which is equivalent to 0.82% of all registered deaths in this jurisdiction.

The rate increased from 4.7 deaths per 100,000 people in 2005 to 7.8 deaths per 100,000 people in 2017, before subsequently decreasing to 5.6 deaths per 100,000 people in 2023. In 2024, the preliminary age-standardised rate of drug-induced deaths was 5.8 deaths per 100,000 people (**Figure 29**). The 2024 rate was slightly higher than the revised 2023 rate, with no statistically significant difference, suggesting that the downward trend may have slowed. However, this conclusion should be caveated, as both estimates for 2023 and 2024 are subject to revision and likely to increase (Table A22).

Sex



In 2024, males accounted for 70% (341 deaths) of drug-induced deaths. The rate of drug-induced deaths was also higher among males than females (8.2 versus 3.4 deaths per 100,000 people, respectively).

However, for both males and females, the 2024 rates did not differ significantly from the revised 2023 estimates (Table A22).

Age



In 2024, drug-induced deaths were most common among the [45-54 age group](#) (26%, 127 deaths), closely followed by the 35-44 age group (24%, 116 deaths).

The rate was also highest in the 45-54 age group (12 deaths per 100,000 people), followed by the 35-44 and 55-64 age groups (9.8 and 7.8 deaths per 100,000 people, respectively). Despite age groups 25-34, 35-44 and 55-64 having higher rates in 2024 compared to 2023, analyses did not indicate significant differences (Table A23).

Remoteness Area of Usual Residence

The greatest proportion of drug-induced deaths in 2024 was recorded among people residing in major city areas (75%, 367 deaths). The highest rate was observed among people in inner regional areas (6.6 deaths per 100,000 people), followed by major city areas (5.6 deaths per 100,000 people). Analyses did not indicate a statistically significant difference in the estimated rates between 2024 and 2023 (Table A24).

Intent of Drug Overdose Deaths

In 2024, 95% (467 deaths) of drug-induced deaths were due to overdose. Unintentional drug overdose accounted for 76% (354 deaths) and intentional drug overdose for

21% (98 deaths) of these deaths. This profile has been broadly consistent over time, and rates were similar between 2023 and 2024 (Table A25).

Place of Occurrence



In 2024, the location of the incident underlying death was coded as home for the majority (62%, 288 deaths) of drug overdose deaths. The preliminary data has a relatively large number of missing or unspecified place of occurrence compared to previous years and other jurisdictions (27%).

Drug Involvement

In New South Wales, the three [most common drug types](#) involved in drug overdose deaths in 2024 were:

- **opioids** (2.9 deaths per 100,000 people, 242 deaths),
- **amphetamine-type stimulants** (2.1 deaths per 100,000 people, 169 deaths), and
- **antiepileptic, sedative-hypnotic and anti-parkinsonism drugs** (1.7 deaths per 100,000 people, 149 deaths) ([Figure 30](#)).

Although the preliminary estimates of drug overdose deaths involving amphetamine-type stimulants and cocaine were higher than the 2023 rates, the differences were not statistically significant. There was, however, a significantly lower rate of drug overdose deaths involving antidepressants in 2024 compared to 2023 (lower by 40%). Estimates for 2023 and 2024 are subject to revision and may increase (Table A26).

Figure 29. Age-standardised rate per 100,000 people of drug-induced deaths by sex, New South Wales, 2005-2024

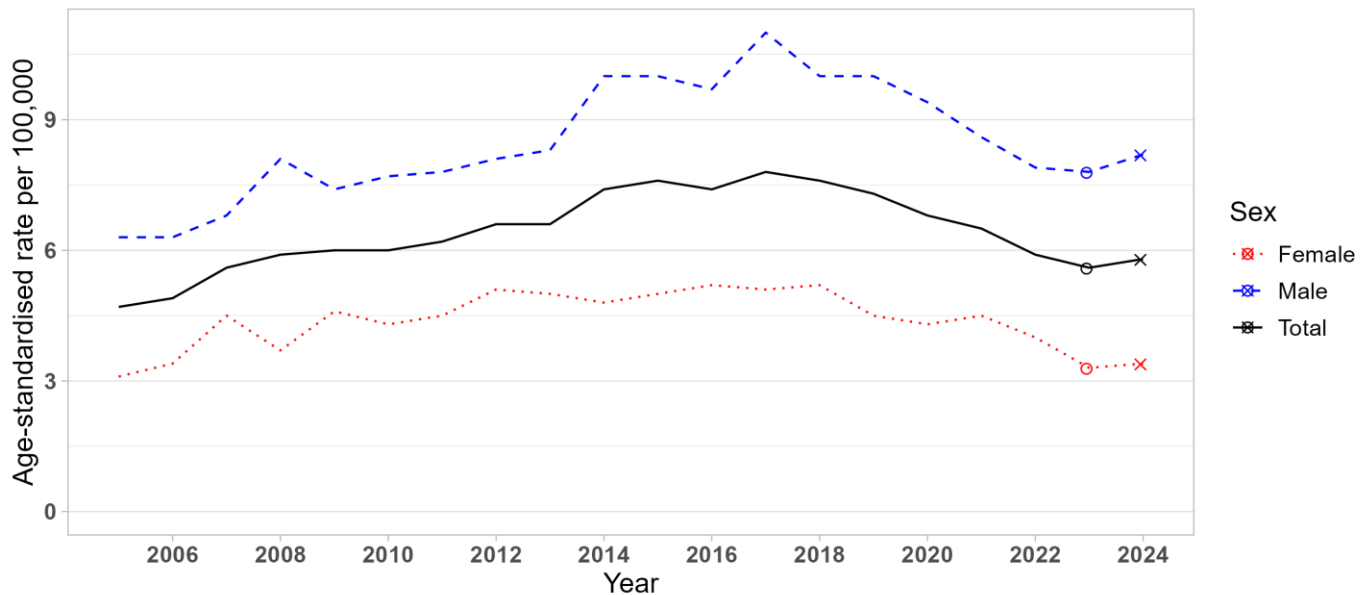
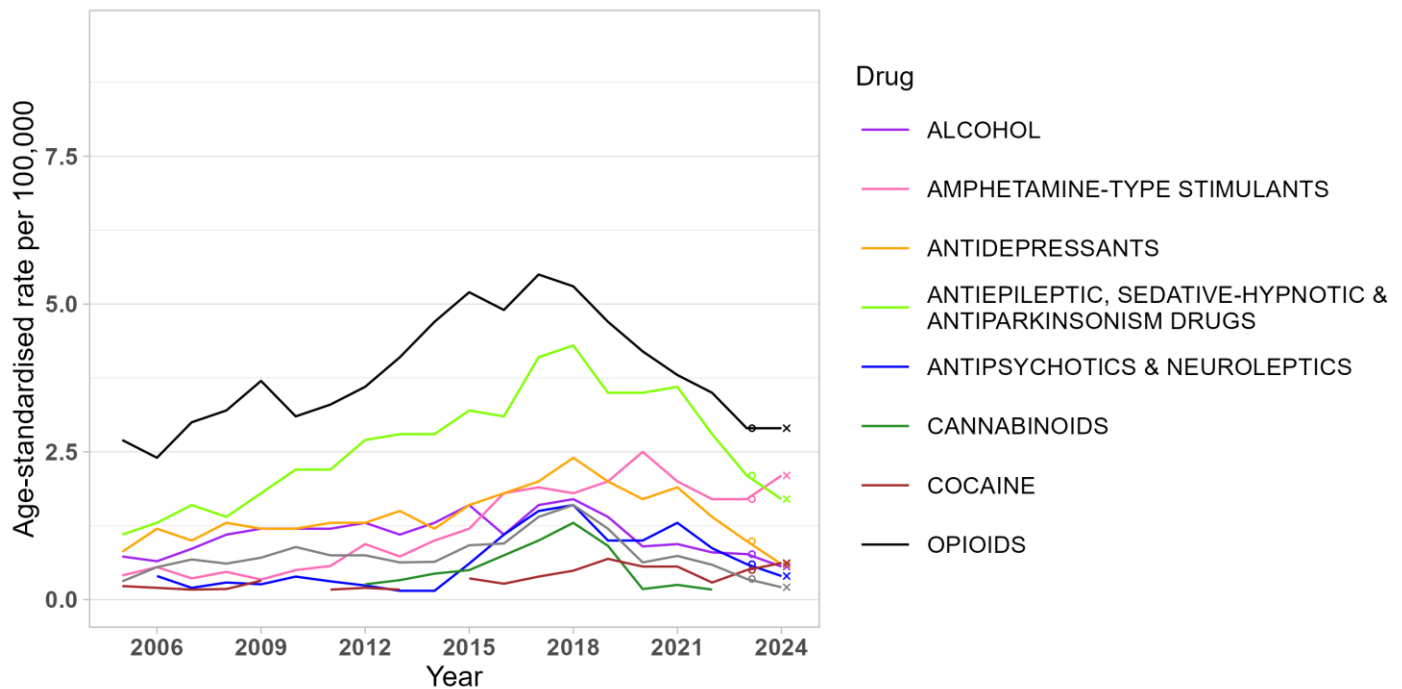


Figure 30. Age-standardised rate per 100,000 people of drug overdose deaths by drug class, New South Wales, 2005-2024



Note: Deaths where conditions related to alcohol or tobacco comprised the underlying cause of death are not captured here. Causes of death data for 2023 and 2024 are not final and thus are subject to further revision. The symbol 'o' indicates revised estimates and 'x' preliminary revised estimates. Age-standardised rates were not calculated if the number of deaths was less than or equal to 10 (please refer to our [methods document](#) for details). Suppressed data are visible as gaps in the data series.

Northern Territory

2020-2024 Drug-induced DEATHS



Drug
Induced
Deaths
in the

Northern Territory

DRUG INVOLVEMENT

(number of deaths)

27	Opioids
24	Antiepileptic, sedative-hypnotic and anti-parkinsonism drugs
15	Amphetamine-type stimulants
13	Antidepressants
9	Antipsychotics & neuroleptics
7	Non-opioid analgesics
n<5	Cannabinoids
0	Cocaine



AGE

Percentage (number)

15-34	22% (13 deaths)
35-44	15% (9 deaths)
45-54	25% (15 deaths)
55-64	24% (14 deaths)
65+	14% (8 deaths)

For the Northern Territory, annual interpretation remains limited by small numbers, so data has been pooled across 2020-2024. Across this period, deaths were concentrated among people aged 35-64 years and were more common among males. Most deaths were overdose deaths and most overdose deaths were unintentional. The main drug classes identified across the five years were opioids, antiepileptic, sedative-hypnotic and antiparkinsonism drugs, and amphetamine-type stimulants.

In 2024, there were 11 registered overdose and other drug-induced deaths (excluding alcohol and tobacco) in the [Northern Territory](#), which is equivalent to 0.89% of all registered deaths in this jurisdiction ([Figure 31](#)). Due to the small number of drug-induced deaths recorded each year, it was not feasible to analyse annual trends or detailed profiles. To address this, data from the five-year period between 2020 and 2024 have been combined.

Pooled results, 2020-2024

A total of 59 overdose and other drug-induced deaths were registered in the Northern Territory between 2020 and 2024.

Sex

Males accounted for 58% of these deaths (34 deaths) compared to 25 deaths among females.

Age

The majority of deaths (64%) occurred among individuals aged 35 to 64 years. The most affected age groups were 45-54 and 55-64 years, accounting for 25% and 24% of all deaths, respectively.

Remoteness Area of Usual Residence

The Northern Territory does not include any major city or inner regional areas. Remoteness area data were unavailable for 3 cases.

Of the 56 cases with available data:

- 70% resided in outer regional areas.
- 30% lived in remote or very remote areas.

Intent of Drug Overdose Deaths

92% (54 deaths) of drug-induced deaths were due to drug overdose. Of these:

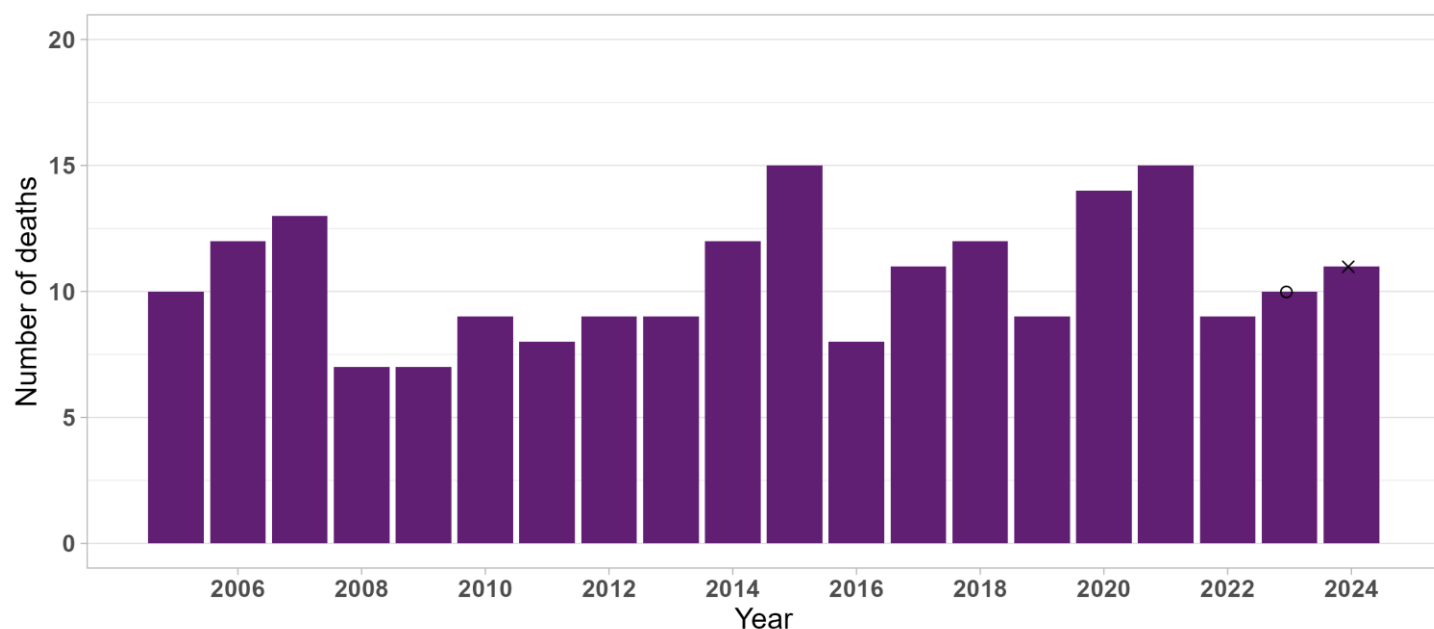
- 78% (42 deaths) were classified as unintentional.
- 20% (11 deaths) were intentional.

Drug Involvement

The three most commonly identified drug classes involved in deaths between 2020 and 2024 were:

- **opioids** – 27 deaths,
- **antiepileptic, sedative-hypnotic and anti-parkinsonism drugs** – 24 deaths,
- **amphetamine-type stimulants** – 15 deaths.

Caution note: Estimates for the Northern Territory are based on relatively small numbers of deaths and should therefore be interpreted with caution, as they may be subject to substantial year-to-year variation.

Figure 31. Number of drug-induced deaths, Northern Territory, 2005-2024

Note: Deaths where conditions related to alcohol or tobacco comprised the underlying cause of death are not captured here. Causes of death data for 2023 and 2024 are not final and thus are subject to further revision. The symbol 'o' indicates revised estimates and 'x' preliminary revised estimates.

Queensland



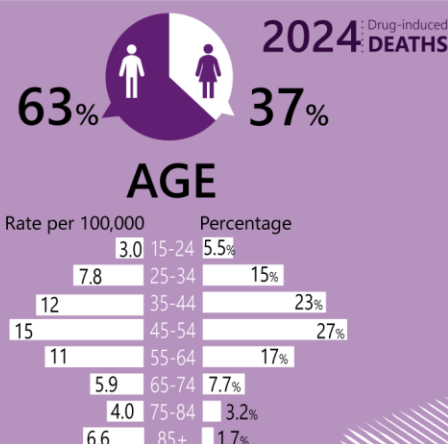
Drug-induced deaths in

Queensland

DRUG INVOLVEMENT

(deaths per 100,000 population)

3.9	Opioids
3.1	Antiepileptic, sedative-hypnotic and anti-parkinsonism drugs
2.6	Amphetamine-type stimulants
2.0	Antidepressants
1.7	Antipsychotics & neuroleptics
0.59	Non-opioid analgesics
0.54	Cocaine
(n=10)	Cannabinoids



After relatively downward trend in recent years, drug-induced mortality in Queensland showed signs of increasing again in 2024. The age-standardised rate rose from 6.2 to 7.2 deaths per 100,000 people compared with 2023, with statistically significant increases observed overall and in major cities. The rise was driven primarily by higher mortality among people aged 25-34 years, alongside increases in unintentional overdose deaths and deaths involving opioids and amphetamine-type stimulants.

There were 402 registered overdose and other drug-induced deaths (excluding alcohol and tobacco) in [Queensland](#) in 2024, which is equivalent to 1.0% of all registered deaths in this jurisdiction.

The age-standardised rate increased from 4.6 to 8.5 deaths per 100,000 people from 2005 to 2015, subsequently decreasing to 6.2 deaths per 100,000 people in 2023. In 2024, the preliminary rate of drug-induced deaths was 7.2 deaths per 100,000 people ([Figure 32](#)). This rate was significantly higher than the revised rate for 2023, noting that estimates for 2023 and 2024 are subject to revision and may increase (Table A28).

Sex



In 2024, [males](#) accounted for 63% (253 deaths) of drug-induced deaths. The rate of drug-induced deaths was also higher among males than females (9.4 versus 5.1 deaths per 100,000 people, respectively). Although preliminary rates in 2024 for both males and females were higher than the revised 2023 rates, analyses did not indicate a statistically significant difference for either sex (Table A28).

Age



In 2024, drug-induced deaths were most common among the [45-54 age group](#) (27%, 107 deaths).

The rate was also highest in the 45-54 age group (15 deaths per 100,000 people), followed by the 35-44 and 55-64 age groups (12 and 11 deaths per 100,000 people, respectively).

Comparison of preliminary rates showed that the 2024 rate for the 25-34 age group was significantly higher than that in 2023 (7.8 versus 4.7 per 100,000 people) (Table A29).

Remoteness Area of Usual Residence

The greatest proportion of drug-induced deaths in 2024 occurred among people residing in major city areas (69%, 276 deaths). The highest rate was also observed among people in major city areas (7.5 deaths per 100,000 people), closely followed by inner regional areas (7.2 deaths per 100,000 people). The 2024 rate for major city areas was significantly higher than the 2023 estimate (6.1 deaths per 100,000 people) (Table A30).

Intent of Drug Overdose Deaths

In 2024, 96% (384 deaths) of drug-induced deaths were due to overdose. Unintentional drug overdose accounted for 65% (248 deaths) and intentional drug overdose for 29% (113 deaths) of these deaths. This profile was broadly consistent over time. The preliminary 2024 rate was significantly higher than the revised 2023 rate for unintentional drug overdose deaths (4.6 versus 3.6 per 100,000 people) (Table A31).

Place of Occurrence



In 2024, the location of the incident underlying death was coded as home for the majority (79%, 303 deaths) of drug overdose deaths.

Drug Involvement

In Queensland, the three [most common drug types](#) involved in drug overdose deaths in 2024 were:

- **opioids** (3.9 deaths per 100,000 people, 214 deaths),
- **antiepileptic, sedative-hypnotic and anti-parkinsonism drugs** (3.1 deaths per 100,000 people, 173 deaths),
- **amphetamine-type stimulants** (2.6 deaths per 100,000 people, 138 deaths) (Figure 33).

Compared to 2023, the estimated rates of drug overdose deaths in Queensland were significantly higher in 2024 for opioids (by 29%) and amphetamine-type stimulants (by 45%), noting that these estimates are subject to revision and may increase further (Table A32).

Figure 32. Age-standardised rate per 100,000 people of drug-induced deaths by sex, Queensland, 2005-2024

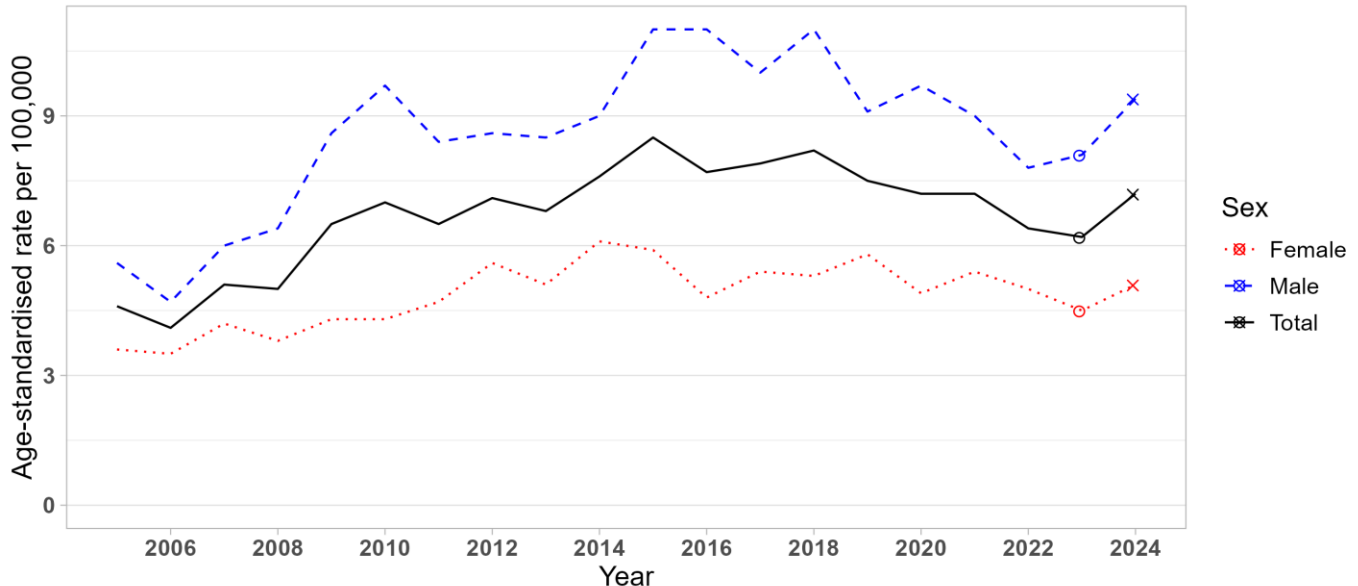
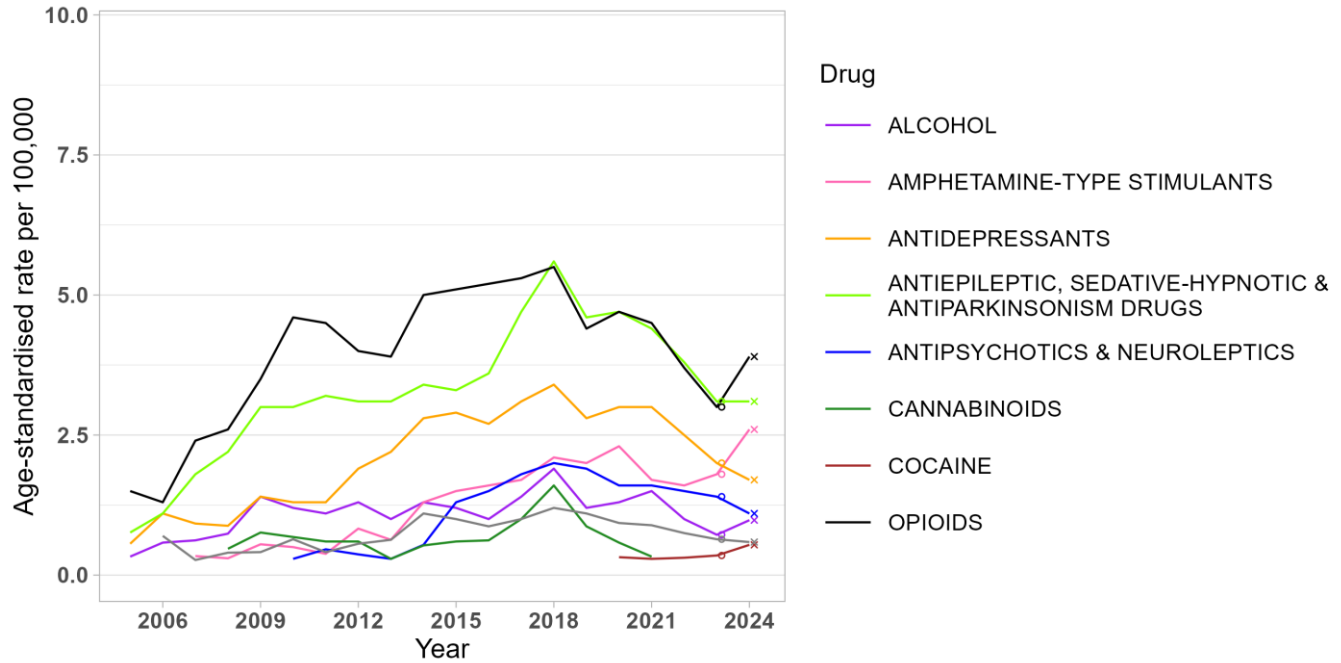
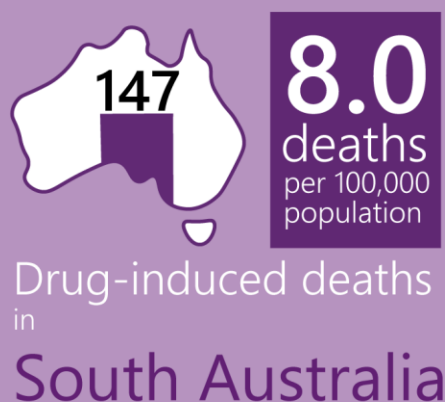


Figure 33. Age-standardised rate per 100,000 people of drug overdose deaths by drug class, Queensland, 2005-2024

Note: Deaths where conditions related to alcohol or tobacco comprised the underlying cause of death are not captured here. Causes of death data for 2023 and 2024 are not final and thus are subject to further revision. The symbol 'o' indicates revised estimates and 'x' preliminary revised estimates. Age-standardised rates were not calculated if the number of deaths was less than or equal to 10 (please refer to our [methods document](#) for details). Suppressed data are visible as gaps in the data series.

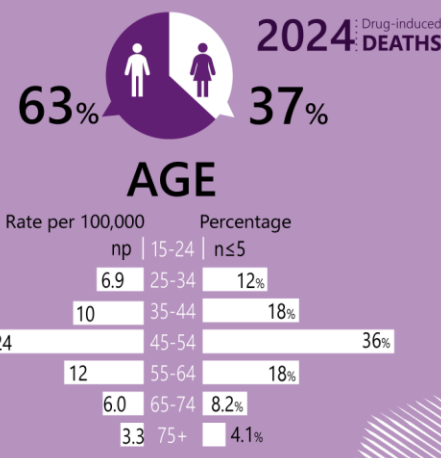
South Australia



DRUG INVOLVEMENT

(deaths per 100,000 population)

- 3.6** Opioids
- 3.5** Amphetamine-type stimulants
- 2.8** Antiepileptic, sedative-hypnotic and anti-parkinsonism drugs
- 1.5** Antidepressants
- 0.98** Antipsychotics & neuroleptics
- (n=8)** Non-opioid analgesics
- (n≤5)** Cocaine
- (n=0)** Cannabinoids



South Australia showed a marked increase in drug-induced deaths in 2024, with the rate rising from 6.1 to 8.0 deaths per 100,000 people. The most affected group was people aged 45-54 years, whose rate was substantially higher than other age groups. Opioids and amphetamine-type stimulants contributed at similarly high rates to overdose deaths, with amphetamine-type stimulant involvement increasing significantly compared with 2023.

There were 147 registered overdose and other drug-induced deaths (excluding alcohol and tobacco) in [South Australia](#) in 2024, which is equivalent to 0.93% of all registered deaths in this jurisdiction.

The rate fluctuated between 2005 and 2023, with the highest rate observed in 2009 (8.8 deaths per 100,000 people). The preliminary age-standardised rate of drug-induced deaths in 2024 was 8.0 deaths per 100,000 people, significantly higher than the rate for 2023 (6.1 deaths per 100,000 people in 2023; [Figure 34](#); Table A33). Both estimates remain subject to further revision and may change.

Sex



In 2024, [males](#) accounted for 63% (93 deaths) of drug-induced deaths. The rate of drug-induced deaths was also higher among males than females (10 versus 5.7 deaths per 100,000 people, respectively). Although both male and female rates in 2024 were higher than the revised 2023 rates, analyses did not indicate a statistically significant difference for either sex (Table A33).

Age



In 2024, drug-induced deaths were most common among the [45-54 age group](#) (36%, 53 deaths).

The age-specific rate was highest in the 45-54 age group, followed by the 55-64 and 35-44 age groups (24, 12 and 11 deaths per 100,000 people, respectively).

Compared with the revised 2023 estimates, the preliminary 2024 mortality rate doubled among people aged 45-54 years, rising from 12 to 24 deaths per 100,000, and almost doubled among those aged 25-34 years, from 3.5 to 6.9 deaths per 100,000. However, only the increase among people aged 45-54 years was statistically significant (Table A34).

Remoteness Area of Usual Residence

In 2024, the greatest proportion and the highest age-standardised rate of drug-induced deaths occurred among people residing in major city areas (76%, 114 deaths, 8.0 deaths per 100,000 people).

Analyses did not indicate statistically significant differences in the estimated rates between 2024 and 2023 for any region (see Table A35).

Intent of Drug Overdose Deaths

In 2024, 98% (144 deaths) of drug-induced deaths were due to overdose. Unintentional drug overdose accounted for 76% (110 deaths) and intentional drug overdose for 17% (25 deaths) of these deaths. Although the rate of unintentional overdose deaths has fluctuated over time, it was significantly higher in 2024 than in 2023 (Table A36).

Place of Occurrence



In 2024, the location of the incident underlying death was coded as home for the majority (72%, 104 deaths) of drug overdose deaths.

Drug Involvement

In South Australia, the three [most common drug types](#) involved in drug overdose deaths in 2024 were:

- **opioids** (3.6 deaths per 100,000 people, 68 deaths),
- **amphetamine-type stimulants** (3.5 deaths per 100,000 people, 62 deaths), and
- **antiepileptic, sedative-hypnotic and anti-parkinsonism drugs** (2.8 deaths per 100,000 people, 49 deaths) (Figure 35).

Comparison of estimated rates of drug overdose deaths in South Australia identified a significantly higher rate of deaths involving **amphetamine-type stimulants** in 2024 compared to 2023 (by 74%), noting that both these estimates are subject to revision and may increase (Table A37).

Figure 34. Age-standardised rate per 100,000 people of drug-induced deaths, by sex, South Australia, 2005-2024

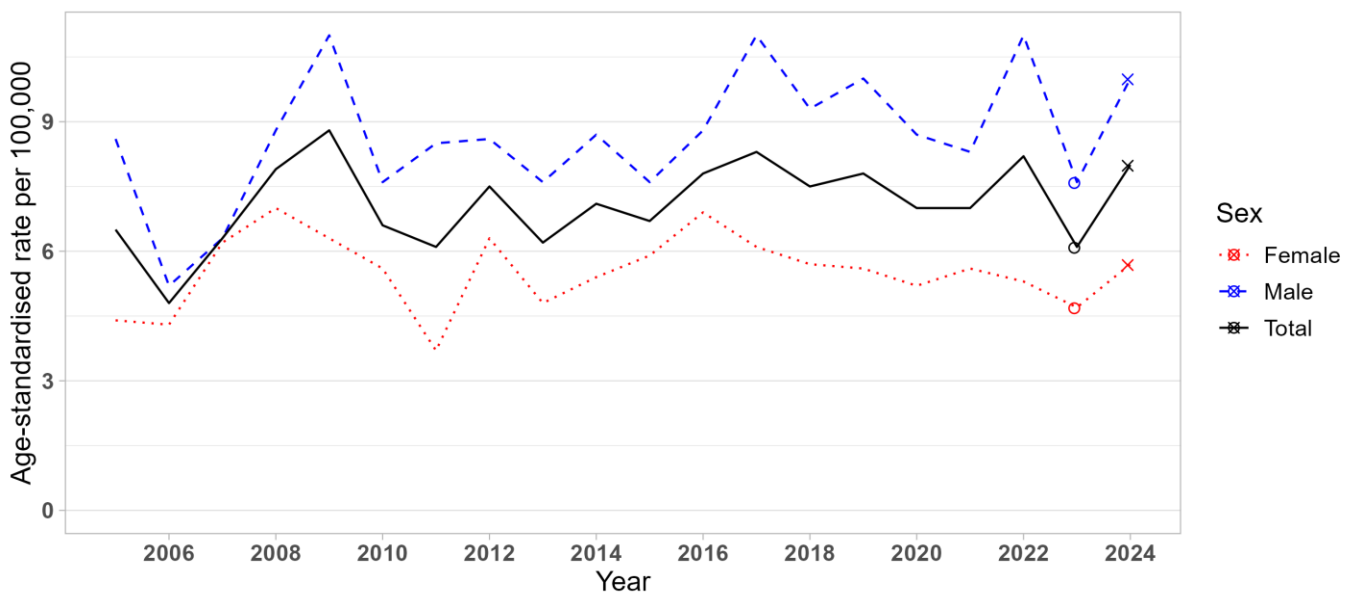
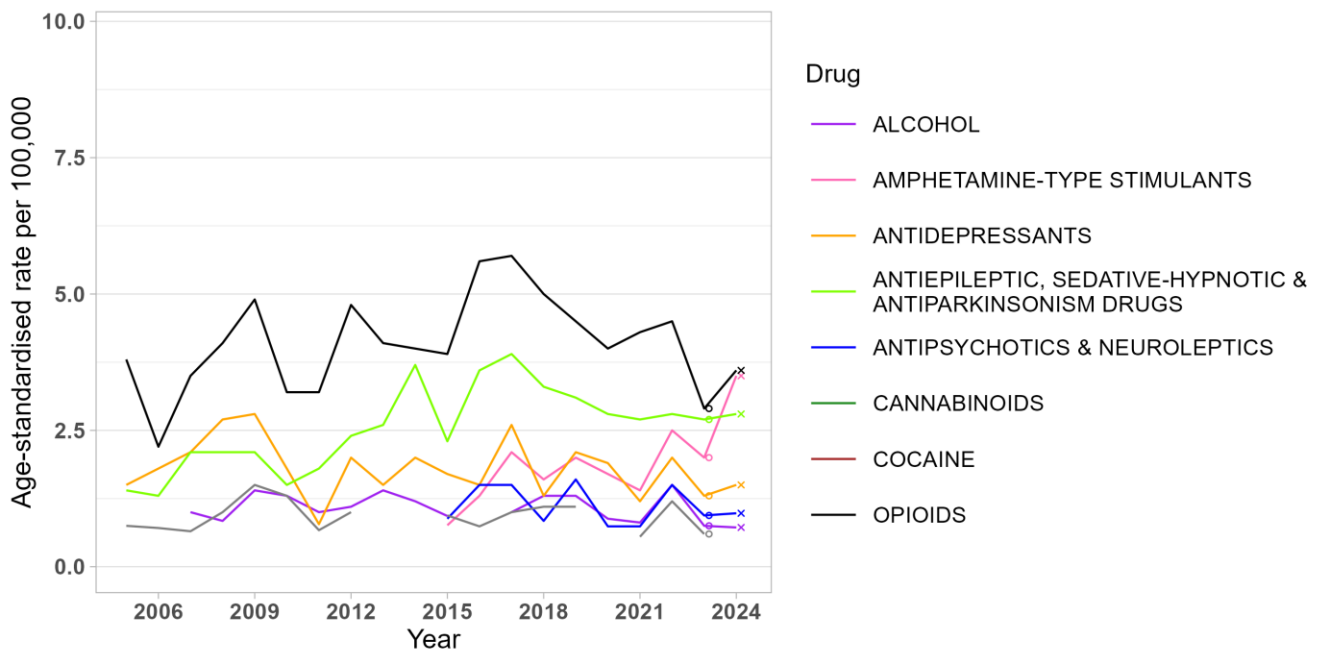
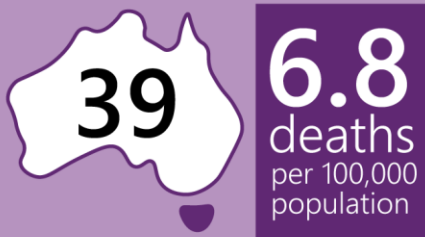


Figure 35. Age-standardised rate per 100,000 people of drug overdose deaths, by drug class, South Australia, 2005-2024

Note: Deaths where conditions related to alcohol or tobacco comprised the underlying cause of death are not captured here. Causes of death data for 2023 and 2024 are not final and thus are subject to further revision. The symbol 'o' indicates revised estimates and 'x' preliminary revised estimates. Age-standardised rates were not calculated if the number of deaths was less than or equal to 10 (please refer to our [methods document](#) for details). Suppressed data are visible as gaps in the data series.

Tasmania

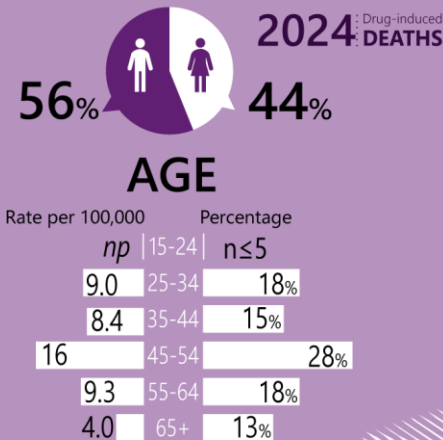


Drug-induced deaths in
Tasmania

DRUG INVOLVEMENT

(deaths per 100,000 population)

- 4.0 Antiepileptic, sedative-hypnotic and anti-parkinsonism drugs
- 3.0 Opioids
- 2.7 Amphetamine-type stimulants
- 2.3 Antidepressants
- (n≤5) Antipsychotics & neuroleptics
- (n≤5) Cocaine
- (n=0) Non-opioid analgesics
- (n=0) Cannabinoids



In Tasmania, the rate of drug-induced deaths in 2024 was lower than the revised 2023 rate, but small numbers mean this should be treated with caution and not as a clear decline. Deaths were concentrated among people aged 45-54 years, and most occurred among people living in inner regional areas, noting Tasmania has no major city areas. The leading drug class was antiepileptic, sedative-hypnotic and antiparkinsonism drugs, followed by opioids and amphetamine-type stimulants.

There were 39 registered overdose and other drug-induced deaths (excluding alcohol and tobacco) in [Tasmania](#) in 2024, which is equivalent to 0.73% of all registered deaths in this jurisdiction.

The rate fluctuated between 2005 and 2023. The highest rate was observed in 2016, reaching 10 deaths per 100,000 people. The preliminary age-standardised rate of drug-induced deaths in 2024 was 6.8 deaths per 100,000 people (8.0 deaths per 100,000 people in 2023) ([Figure 36](#)). Estimates for 2023 and 2024 are subject to revision and may increase.

Sex



In 2024, [males](#) accounted for 56% (22 deaths) of drug-induced deaths. The rate of drug-induced deaths was also higher among males than females (8.4 versus 5.3 deaths per 100,000 people, respectively). Analyses did not indicate a statistically significant difference between 2023 and 2024 in the rates for males or females (Table A38).

Age

In 2024, drug-induced deaths were most common among [people aged 45-54](#) (28%, 11 deaths). The rate was also



highest in the 45-54 age group, followed by the 55-64 and 25-34 age groups (16, 9.3 and 9.0 deaths per 100,000 people, respectively). Analyses did not indicate a statistically significant difference in the estimated rates for 2023 and 2024 for any age group (Table A39).

Remoteness Area of Usual Residence

The greatest proportion and age-standardised rate of drug-induced deaths in 2024 were recorded among people residing in inner regional areas (59%, 23 deaths, 6.7 deaths per 100,000 people), noting that there are no major city areas in Tasmania.

Intent of Drug Overdose Deaths

In 2024, 95% (37 deaths) of drug-induced deaths were due to overdose: unintentional overdose deaths accounted for 70% (26 deaths) and intentional overdose deaths for 30% (11 deaths). Given the relatively small number of deaths each year, the proportion between unintentional and intentional overdose deaths has fluctuated over time. The estimated rates in 2023 and 2024 were comparable (Table A40).

Place of Occurrence



In 2024, the location of the incident underlying death was coded as home for the majority (81%, 30 deaths) of drug overdose deaths.

Drug Involvement

In Tasmania, the three [most common drug types](#) involved in drug overdose deaths in 2024 were:

- **antiepileptic, sedative-hypnotic and anti-parkinsonism drugs** (4.0 deaths per 100,000 people, 23 deaths),
- **opioids** (3.0 deaths per 100,000 people, 16 deaths),
- **amphetamine-type stimulants** (2.7 deaths per 100,000 people, 14 deaths) ([Figure 37](#)).

Comparison of estimated rates of drug overdose deaths in Tasmania did not identify a significant change in rates of drug involvement between 2023 and 2024 ([Table A41](#)).

Caution note: Estimates for Tasmania are based on relatively small numbers of deaths and should therefore be interpreted with caution, as they may be subject to substantial year-to-year variation.

Figure 36. Age-standardised rate per 100,000 people of drug-induced deaths, by sex, Tasmania, 2005-2024

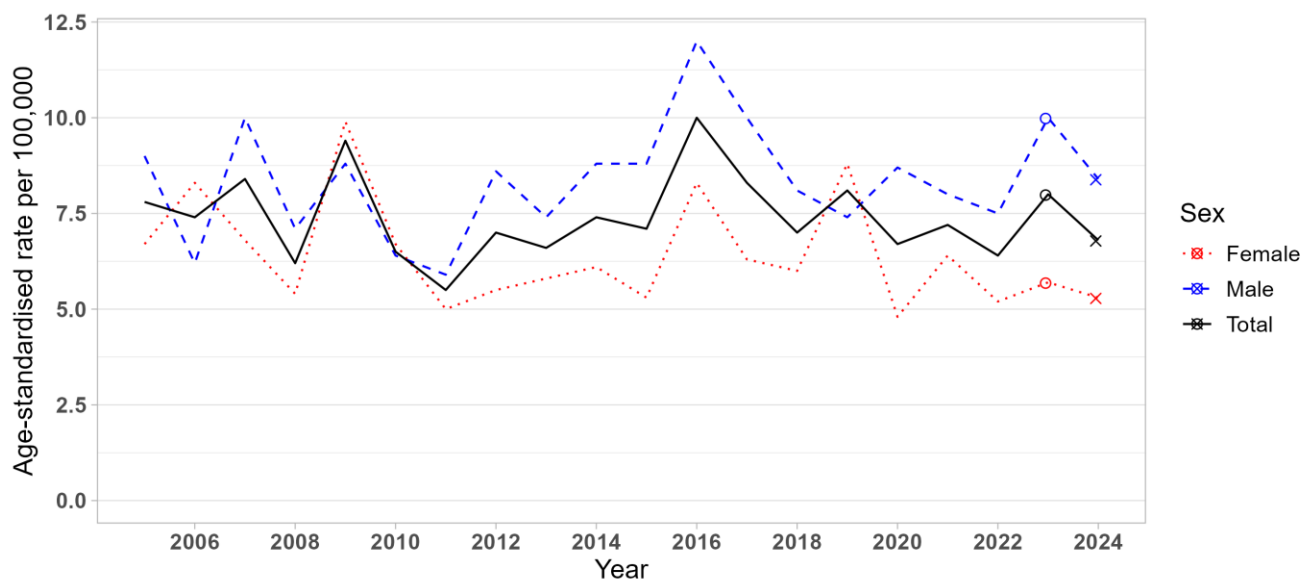
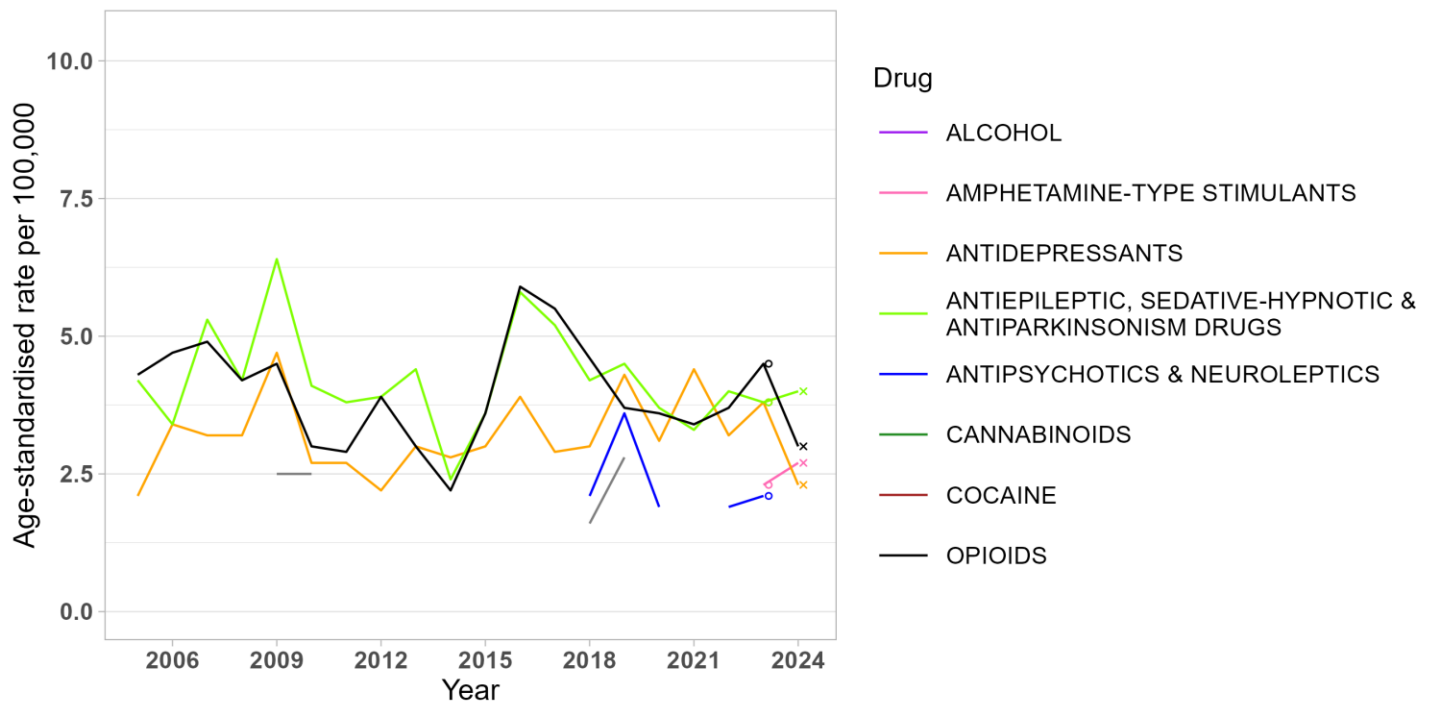
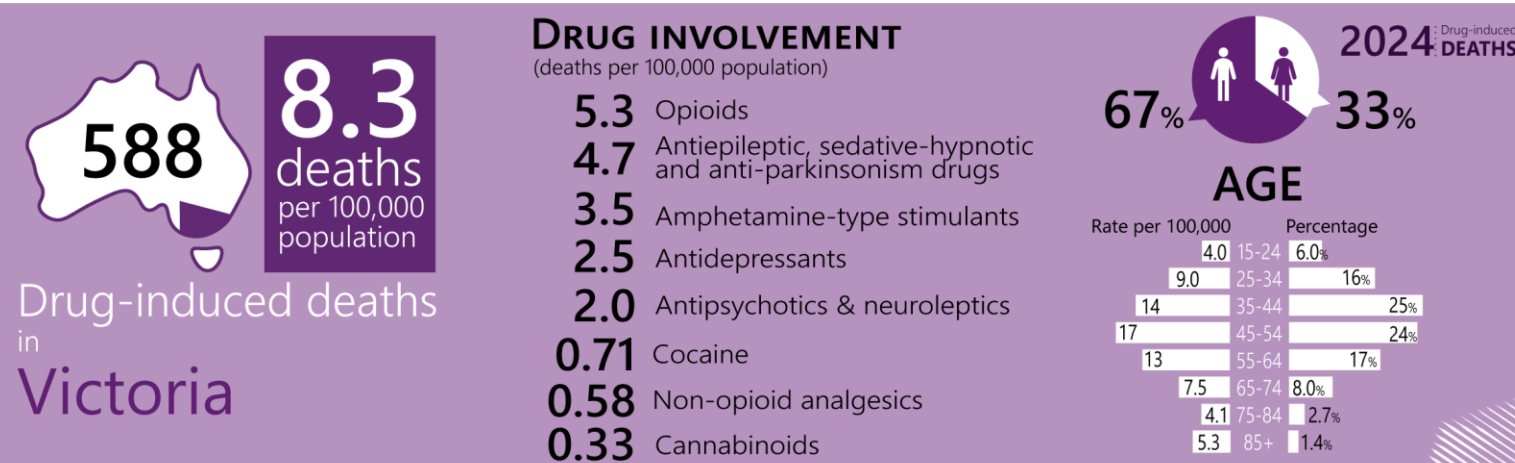


Figure 37. Age-standardised rate per 100,000 people of drug overdose deaths, by drug class, Tasmania, 2005-2024

Note: Deaths where conditions related to alcohol or tobacco comprised the underlying cause of death are not captured here. Causes of death data for 2023 and 2024 are not final and thus are subject to further revision. The symbol 'o' indicates revised estimates and 'x' preliminary revised estimates. Age-standardised rates were not calculated if the number of deaths was less than or equal to 10 (please refer to our [methods document](#) for details). Suppressed data are visible as gaps in the data series.

Victoria



In 2024, Victoria recorded the highest annual number of drug-induced deaths observed during the monitoring period and a higher mortality rate than in 2023, although the change was not statistically significant. Deaths were concentrated among males and people aged 35-54 years. Opioids remained the leading class, with substantial involvement of antiepileptic, sedative-hypnotic and antiparkinsonism drugs, and a higher rate of amphetamine-type stimulant involvement than in 2023.

There were 588 registered overdose and other drug-induced deaths (excluding alcohol and tobacco) in [Victoria](#) in 2024, which is equivalent to 1.3% of all registered deaths in this jurisdiction.

Between 2005 and 2024, the age-standardised rate of drug-induced deaths showed an overall upward trend, peaking at 8.5 deaths per 100,000 people in 2017. The preliminary rate was 8.3 deaths per 100,000 people in 2024, compared with 7.7 deaths per 100,000 in 2023 ([Figure 38](#); [Table A42](#)). This difference was not statistically significant, but both estimates may change following further revision.

Sex



In 2024, [males](#) accounted for 67% (396 deaths) of drug-induced deaths. The rate of drug-induced deaths was also higher among males than females (12 versus 5.2 deaths per 100,000 people, respectively). Analyses did not indicate a statistically significant difference between 2024 and 2023 in the rates for males and females ([Table A42](#)).

Age



In 2024, drug-induced deaths were most common among the 35-44 and [45-54 age groups](#) (25%, 145 deaths and 24%, 141 deaths, respectively). The rate was highest in the 45-54 age group, followed by the 35-44 and 55-64 age groups (17, 14 and 13 deaths per 100,000 people, respectively).

Analyses did not indicate a statistically significant difference in the estimated rates between 2023 and 2024 for any of the age groups ([Table A43](#)).

Remoteness Area of Usual Residence

The greatest proportion of drug-induced deaths in 2024 occurred among people residing in major city areas (74%, 437 deaths), while the rate was higher in regional/remote areas (9.2 versus 7.8 deaths per 100,000 people, respectively). Although the 2024 rate in regional/remote areas was higher than in 2023 (9.2 versus 7.9), the difference was not statistically significant ([Table A44](#)).

Intent of Drug Overdose Deaths

In 2024, 98% (575 deaths) of drug-induced deaths were due to overdose. Unintentional drug overdose accounted for 77% (445 deaths) and intentional drug overdose for 19% (109 deaths) of these deaths. Comparison of rates did not suggest a significant change between 2023 and 2024 (Table A45).

Place of Occurrence



In 2024, the incident leading to death occurred at home for 72% of drug overdose deaths in Victoria (412 deaths).

Drug Involvement

In Victoria, the three [most common drug types](#) involved in drug overdose deaths in 2024 were:

- **opioids** (5.3 deaths per 100,000 people, 365 deaths),
- **antiepileptic, sedative-hypnotic and anti-parkinsonism drugs** (4.7 deaths per 100,000 people, 330 deaths),
- **amphetamine-type stimulants** (3.5 deaths per 100,000 people, 243 deaths) ([Figure 39](#)).

The rate of overdose deaths involving amphetamine-type stimulants in Victoria in 2024 was significantly higher than in 2023 (2.7 deaths per 100,000 people) (Table A46).

Figure 38. Age-standardised rate per 100,000 people of drug-induced deaths, by sex, Victoria, 2005-2024

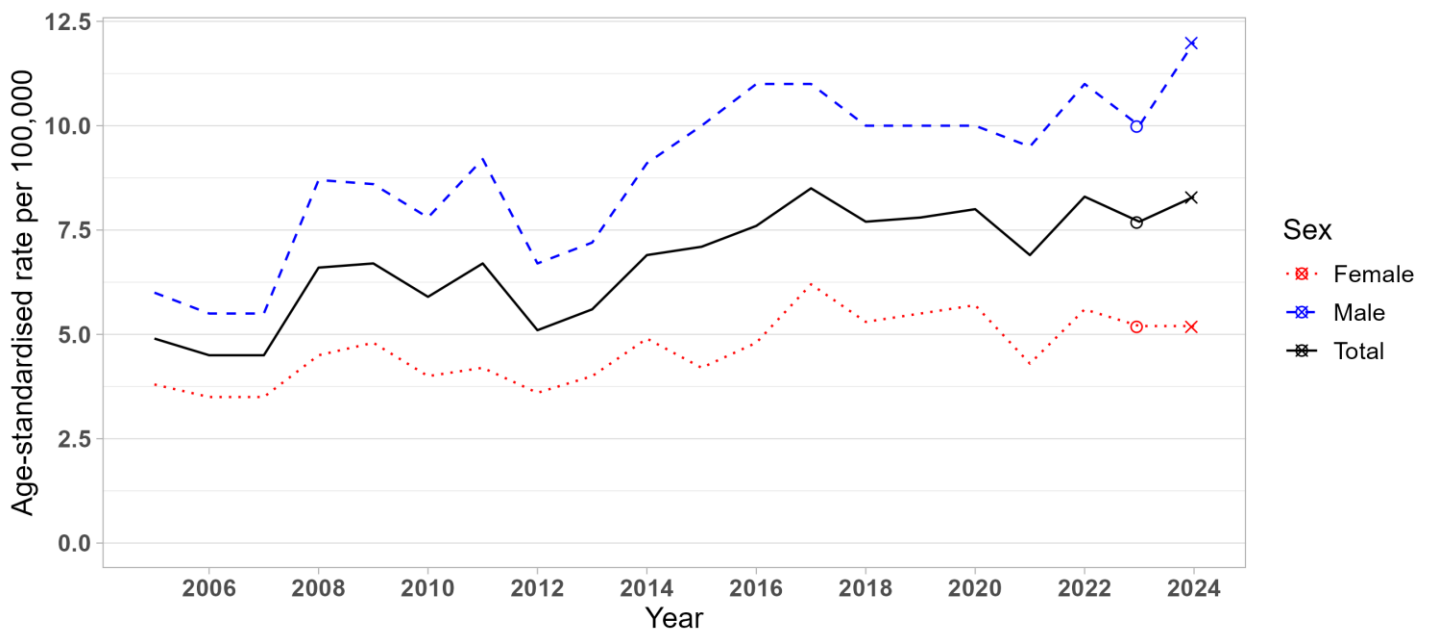
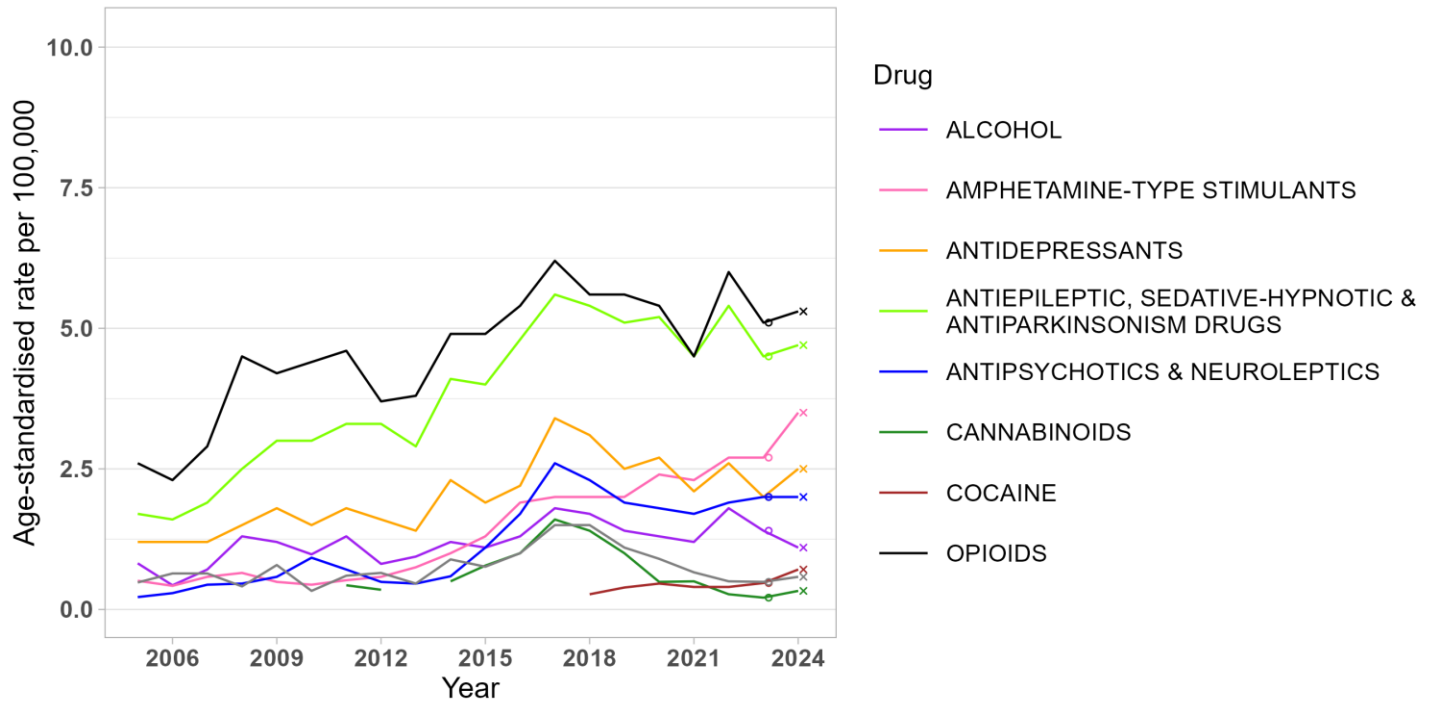
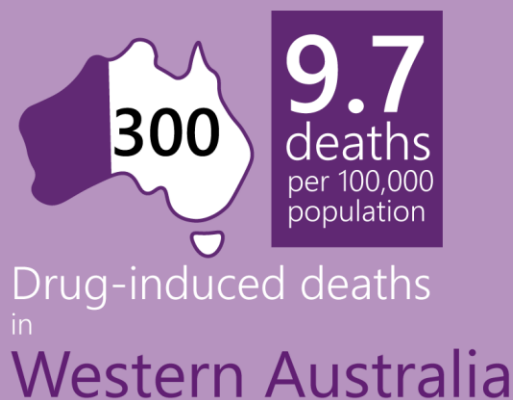


Figure 39. Age-standardised rate per 100,000 people of drug overdose deaths, by drug class, Victoria, 2005-2024

Note: Deaths where conditions related to alcohol or tobacco comprised the underlying cause of death are not captured here. Causes of death data for 2023 and 2024 are not final and thus are subject to further revision. The symbol 'o' indicates revised estimates and 'x' preliminary revised estimates. Age-standardised rates were not calculated if the number of deaths was less than or equal to 10 (please refer to our [methods document](#) for details). Suppressed data are visible as gaps in the data series.

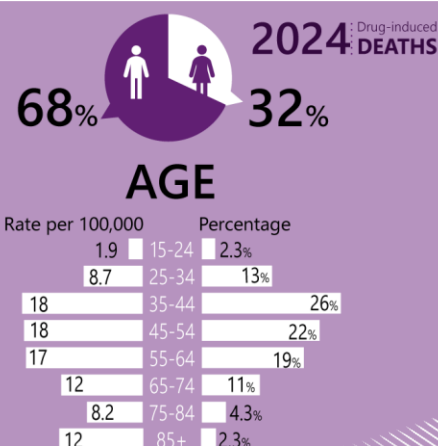
Western Australia



DRUG INVOLVEMENT

(deaths per 100,000 population)

- 5.2 Opioids
- 4.4 Antiepileptic, sedative-hypnotic and anti-parkinsonism drugs
- 4.0 Amphetamine-type stimulants
- 3.1 Antidepressants
- 1.8 Antipsychotics & neuroleptics
- 1.0 Non-opioid analgesics
- (n=10) Cannabinoids
- (n=8) Cocaine



The age-standardised rate of drug-induced deaths in Western Australia remained broadly unchanged in 2024 compared with 2023. Deaths remained concentrated among males and people aged 35-64 years. Most deaths occurred among residents of major cities, which also recorded the highest mortality rate. Opioids remained the leading drug class, followed by antiepileptic, sedative-hypnotic and antiparkinsonism drugs, and amphetamine-type stimulants.

There were 300 registered overdose and other drug-induced deaths (excluding alcohol and tobacco) in [Western Australia](#) in 2024, which is equivalent to 1.7% of all registered deaths in this jurisdiction.

The rate of drug-induced deaths increased from 5.0 in 2005 to 10 deaths per 100,000 people in 2023, peaking at 11 deaths per 100,000 people in 2019. The preliminary age-standardised rate of drug-induced deaths in 2024 was 9.7 deaths per 100,000 people (10 deaths per 100,000 people in 2023) ([Figure 40](#)). The estimates for 2023 and 2024 are subject to revision and may increase (Table A47).

Sex



In 2024, [males](#) accounted for 68% (203 deaths) of drug-induced deaths. The rate of drug-induced deaths was also higher among males than females (13 versus 6.1 deaths per 100,000 people, respectively).

Analyses did not indicate a statistically significant difference between 2023 and 2024 in the estimated rates for males and females (Table A47).

Age



In 2024, drug-induced deaths were most common among the [35-44 age group](#) (26%, 79 deaths). The rate in 2024 was equally high in the 35-44 and 45-54 age groups (18 deaths per 100,000 people), followed closely by the 55-64 age group (17 deaths per 100,000 people).

Analyses did not indicate a statistically significant difference in the estimated rates between 2023 and 2024 for any of the age groups (Table A48).

Remoteness Area of Usual Residence

The greatest proportion of drug-induced deaths and the highest rate in 2024 occurred among people residing in major city areas (82%, 246 deaths, 10 per 100,000 people). The 2024 rates were comparable to those observed in 2023 (Table A49).

Intent of Drug Overdose Deaths

In 2024, 99% (296 deaths) of drug-induced deaths were due to overdose. Unintentional drug overdose accounted for 78% (232 deaths) and intentional drug overdose for 19% (57 deaths) of these deaths. This profile was largely

consistent over time. Analyses did not indicate a statistically significant difference in the estimated rates between 2023 and 2024 (Table A50).

Place of Occurrence



In 2024, the incident leading to death occurred at home for 78% of drug overdose deaths in Western Australia (231 deaths).

Drug Involvement

In Western Australia, the three [most common drug types](#) involved in drug overdose deaths in 2024 were:

- **opioids** (5.2 deaths per 100,000 people, 159 deaths),
- **antiepileptic, sedative-hypnotic and anti-parkinsonism drugs** (4.4 deaths per 100,000 people, 135 deaths), and
- **amphetamine-type stimulants** (4.0 deaths per 100,000 people, 121 deaths) ([Figure 41](#)).

Comparison of estimated rates of drug overdose deaths in Western Australia did not identify a significant change in rates of drug involvement between 2023 and 2024 (Table A51).

Figure 40. Age-standardised rate per 100,000 people of drug-induced deaths, by sex, Western Australia, 2005-2024

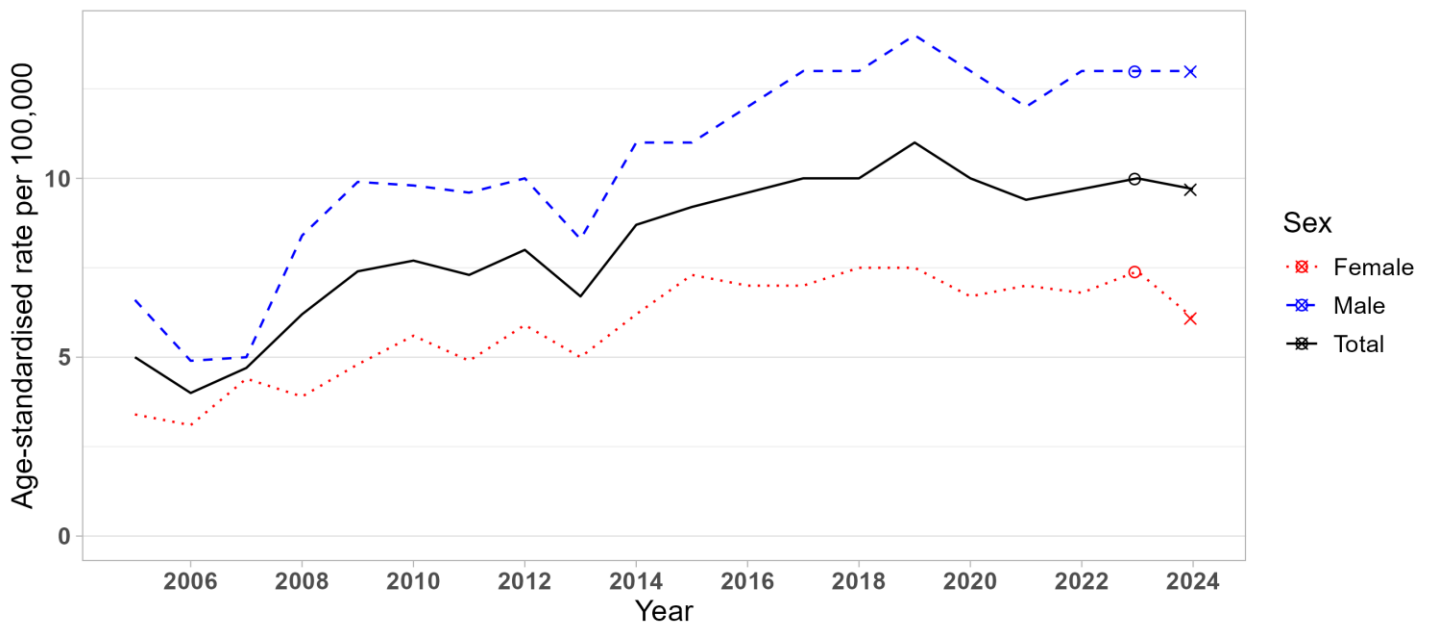
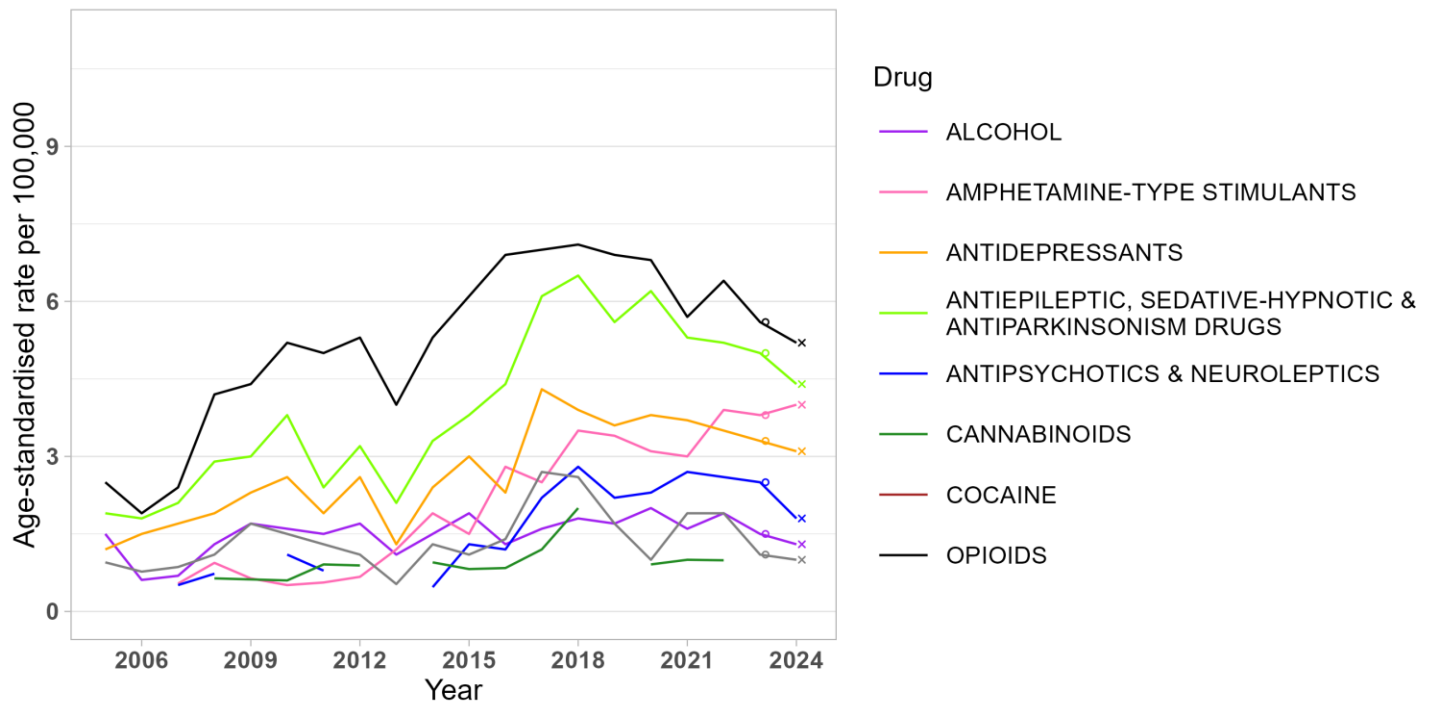


Figure 41. Age-standardised rate per 100,000 people of drug overdose deaths, by drug class, Western Australia, 2005-2024

Note: Deaths where conditions related to alcohol or tobacco comprised the underlying cause of death are not captured here. Causes of death data for 2023 and 2024 are not final and thus are subject to further revision. The symbol 'o' indicates revised estimates and 'x' preliminary revised estimates. Age-standardised rates were not calculated if the number of deaths was less than or equal to 10 (please refer to our [methods document](#) for details). Suppressed data are visible as gaps in the data series.

Acknowledgements

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Data source

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Related Links

- For interactive data visualisations accompanying this report, go to: https://drugtrends.shinyapps.io/deaths_2024
- For full details of the methods underpinning this report, go to: <http://www.unsw.edu.au/research/ndarc/resources/trends-drug-induced-deaths-australia-2005-2024>
- For other Drug Trends publications on drug-related hospitalisations and drug-induced deaths in Australia, go to: [National Illicit Drug Indicators Project \(NIDIP\) \(unsw.edu.au\)](http://www.unsw.edu.au/nidip)
- For more information on NDARC research, go to: [National Drug & Alcohol Research Centre | Medicine & Health - UNSW Sydney](http://www.unsw.edu.au/ndarc)
- For more information about the ABS, go to: <http://www.abs.gov.au>
- For more information on ICD coding go to: <http://www.who.int/classifications/icd/en/>
- For more information on the Remoteness Areas Structure within the Australian Statistical Geography Standard (ASGS), go to: <https://www.abs.gov.au/ausstats/abs@.nsf/mf/1270.0.55.005>
- For more research from the Drug Trends program and to subscribe to our newsletter, go to: [Drug trends | National Drug & Alcohol Research Centre - UNSW Sydney](http://www.unsw.edu.au/ndarc)
- For details on the collection, organisation and interpretation of NCIS data, go to: <https://www.ncis.org.au/about-the-data/explanatory-notes/>
- For statistics about case closure statistics in NCIS, go to: <https://www.ncis.org.au/about-the-data/operational-statistics/>