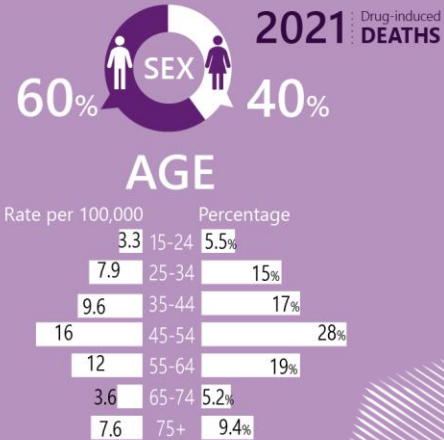




**DRUG INVOLVEMENT**

(deaths per 100,000 population)

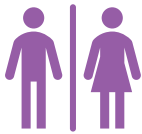
- 3.6 Opioids
- 2.1 Antiepileptic, sedative-hypnotic and anti-parkinsonism drugs
- 1.3 Amphetamine-type stimulants
- 0.79 Antidepressants
- (n≤10) Antipsychotics & neuroleptics
- (n≤10) Non-opioid analgesics
- (n≤10) Cocaine
- (n≤5) Cannabinoids



There were 128 registered overdose and other drug-induced deaths (excluding alcohol and tobacco) in [South Australia](#) in 2021, which is equivalent to 0.88% of all registered deaths in this jurisdiction.

The rate fluctuated between 2002 and 2019 without any particular trend. The highest rate was observed in 2017 reaching 8.3 deaths per 100,000 people. The preliminary age-standardised rate of drug-induced deaths in 2021 was 7.0 deaths per 100,000 people ([Figure 1](#)). This rate was not statistically different from the estimated rate in 2020 (7.0 deaths per 100,000 people), noting that estimates for 2019 to 2021 are subject to revision and may increase (Table 1).

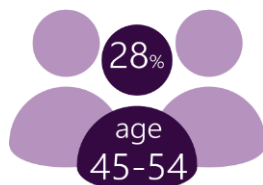
**Sex**



In 2021, males accounted for 60% (77 deaths) of drug-induced deaths. The rate of drug-induced deaths was also higher among males than females (8.5 versus 5.5 deaths per 100,000 people, respectively). Analyses did not indicate a statistically significant difference between 2020 and 2021 in the estimated rates for males or females (Table 1).

**Age**

In 2021, drug-induced deaths were most common among the 45-54 age group (28%, 36 deaths).



The age specific population rate was also highest in the 45-54 age group (16 deaths per 100,000 people).

Analyses did not indicate a statistically significant difference in the estimated rates between 2020 and 2021 for any of the age groups (Table 2).

**Remoteness Area of Usual Residence**

The greatest proportion of drug-induced deaths in 2021 occurred among people residing in major city areas (73%, 93 deaths), but the highest rate was observed among people in inner regional areas (8.4 deaths per 100,000 people).

South Australia has shown a pattern since 2009 of consistently higher rates of drug-induced deaths in regional and remote versus major city areas. However, for the first time in 2021, the rate in regional and remote areas was higher than in major city areas (7.1 and 6.8 deaths per 100,000 people, respectively) (Table 3).

**Intent of Drug Overdose Deaths**

In 2021, 95% (122 deaths) of drug-induced deaths were due to [overdose](#). Unintentional drug overdose accounted for 56% (68 deaths) and intentional drug overdose for 30% (36 deaths) of these deaths in 2021. This has fluctuated over time. Comparison of estimated rates did not suggest a significant change between 2020 and 2021 (Table 4).

**Place of Occurrence**

In 2021, the location of the incident underlying death was coded as home for the majority (71%, 91 deaths) of drug overdose deaths.



## Drug Involvement

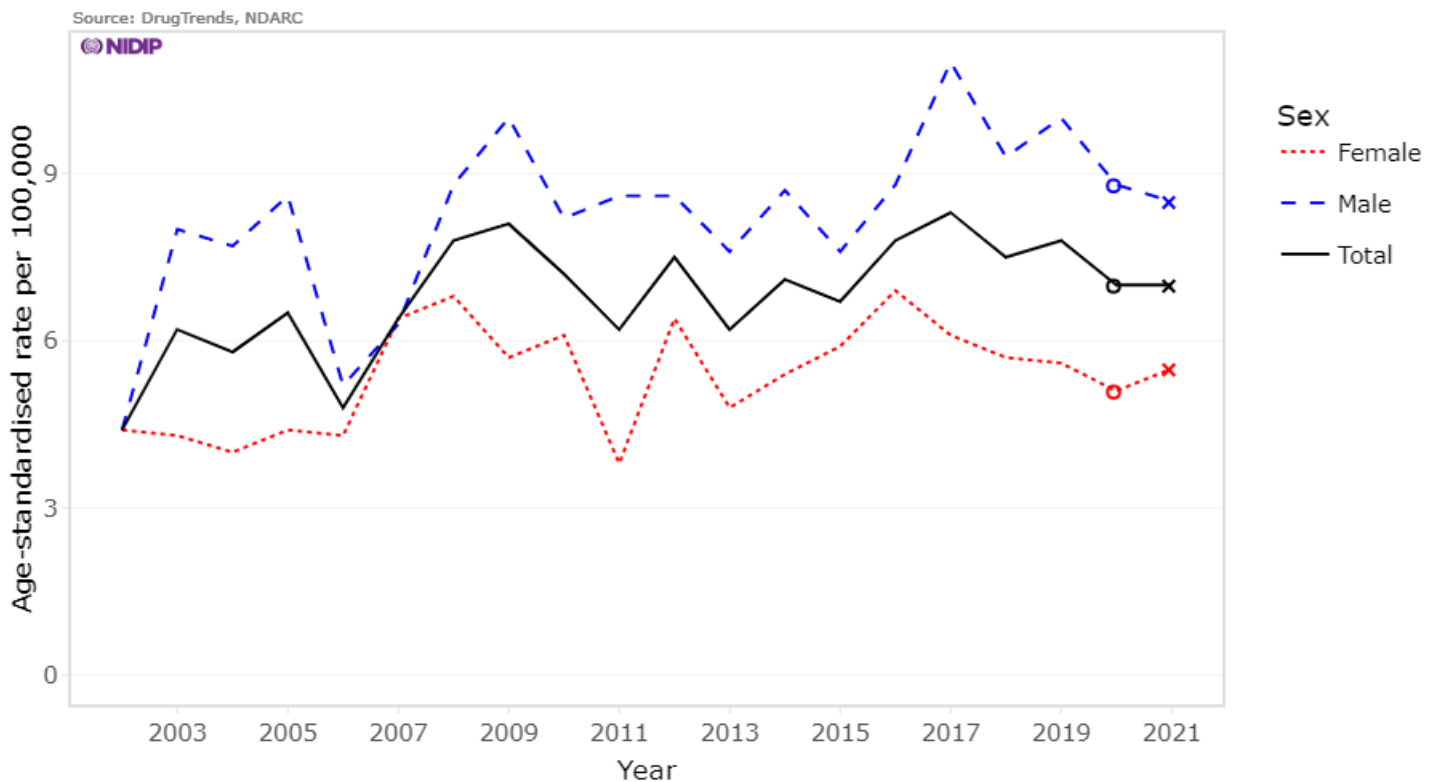
In South Australia, the three most common drug types involved in drug overdose deaths in 2021 were:

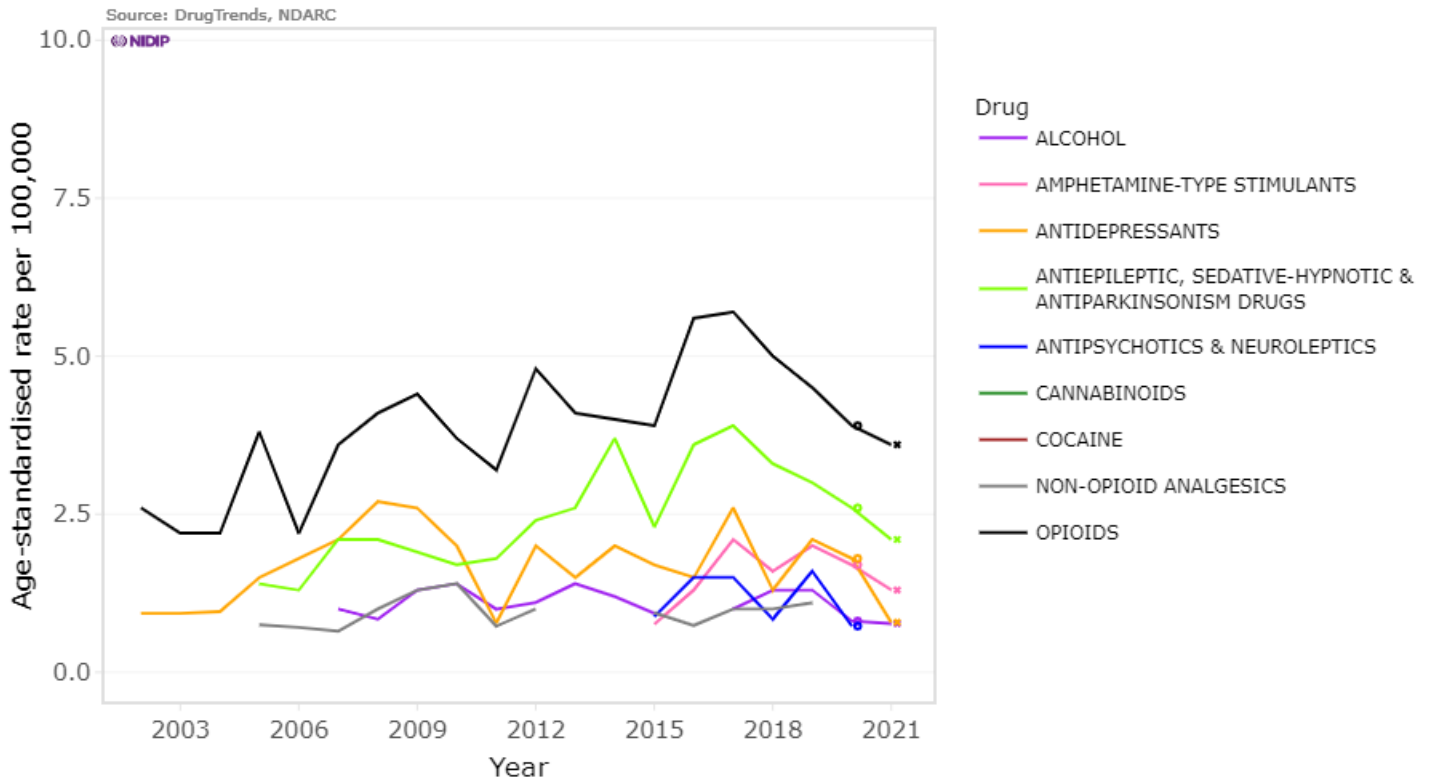
- **opioids** (3.5 deaths per 100,000 people, 65 deaths,
- **antiepileptic, sedative-hypnotic and anti-parkinsonism drugs** (2.1 deaths per 100,000 people, 38 deaths),

- **amphetamine-type stimulants** (1.3 deaths per 100,000 people, 22 deaths) ([Figure 2](#)).

Comparison of estimated rates of drug overdose deaths in South Australia identified a significantly lower rate for deaths involving antidepressants in 2021 as compared to 2020 (0.79 versus 1.8 deaths per 100,000 people), noting that estimates for 2020 to 2021 are subject to revision and may increase (Table 5).

**Figure 1.** Age-standardised rate per 100,000 people of drug-induced deaths, by sex, South Australia, 2002-2021.



**Figure 2.** Age-standardised rate per 100,000 people of drug overdose deaths, by drug class, South Australia, 2002-2021.

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

Causes of death data for 2020 and 2021 are not final and thus are subject to further revision. The symbol 'o' indicates revised estimates and 'x' preliminary 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.

**Table 1.** Age-standardised rate per 100,000 people of drug-induced deaths in South Australia in 2020 and 2021, and average percent change (APC) for difference between 2021 and 2020 (with 95% confidence intervals), by sex

Sex	Rate in 2020 (95% CI)	Rate in 2021 (95% CI)	APC (95% CI)
Female	5.1 (3.7, 6.8)	5.5 (4.1, 7.3)	8.5 (-27, 62)
Male	8.8 (6.9, 11)	8.5 (6.7, 11)	-3.5 (-30, 33)
Total	7 (5.8, 8.3)	7 (5.8, 8.3)	0.13 (-22, 29)

Note: Deaths where conditions related to alcohol or tobacco comprised the underlying cause of death are not captured here. Causes of death data for 2020 and 2021 are preliminary and thus are subject to further revision. 95% confidence intervals for the age-standardised rate and average percent change are shown in brackets. Please refer to our [methods](#) document on 'Presentation of results' for interpretation of average percent change. Please also refer to our [methods](#) document on 'Data source' and 'Coding of deaths' for details on the data used.

**Table 2.** Crude rate per 100,000 people of drug-induced deaths in South Australia in 2020 and 2021, and average percent change (APC) for difference between 2021 and 2020 (with 95% confidence intervals), by age

Age	Rate in 2020 (95% CI)	Rate in 2021 (95% CI)	APC (95% CI)
15-24	3.2 (1.3, 6.6)	3.3 (1.3, 6.8)	2.2 (-69, 241)
25-34	5.4 (2.9, 9.2)	7.9 (4.7, 12)	47 (-31, 223)
35-44	12 (7.9, 17)	9.6 (6, 15)	-20 (-57, 46)
45-54	15 (11, 21)	16 (11, 22)	3.1 (-37, 69)
55-64	11 (7.1, 16)	11 (6.7, 16)	-4.4 (-48, 74)

65-74	4.7 (2.2, 9)	3.6 (1.4, 7.4)	-24 (-76, 129)
75-84	5.7 (2.1, 12)	7.2 (3.1, 14)	27 (-61, 345)
85+	–	–	–

Note: Deaths where conditions related to alcohol or tobacco comprised the underlying cause of death are not captured here. Causes of death data for 2020 and 2021 are preliminary and thus are subject to further revision. 95% confidence intervals for the crude rate and average percent change are shown in brackets. Please refer to our [methods](#) document on 'Presentation of results' for interpretation of average percent change. The estimates for the 0-14 years age group are not presented due to sensitivity of the data. Please also refer to our [methods](#) document on 'Data source' and 'Coding of deaths' for details on the data used.

**Table 3. Age-standardised rate per 100,000 people of drug-induced deaths in South Australia in 2020 and 2021, and average percent change (APC) for difference between 2021 and 2020 (with 95% confidence intervals), by remoteness area**

Remoteness	Rate in 2020 (95% CI)	Rate in 2021 (95% CI)	APC (95% CI)
Major Cities	7.3 (5.9, 8.9)	6.8 (5.5, 8.3)	-6.9 (-30, 24)
Regional and Remote	5.7 (3.6, 8.5)	7.1 (4.8, 10)	24 (-27, 114)

Note: Deaths where conditions related to alcohol or tobacco comprised the underlying cause of death are not captured here. Causes of death data for 2020 and 2021 are preliminary and thus are subject to further revision. 95% confidence intervals for the age-standardised rate and average percent change are shown in brackets. Please refer to our [methods](#) document on 'Presentation of results' for interpretation of average percent change. Please also refer to our [methods](#) document on 'Data source' and 'Coding of deaths' for details on the data used.

**Table 4. Age-standardised rate per 100,000 people of overdose deaths in South Australia in 2020 and 2021, and average percent change (APC) for difference between 2021 and 2020 (with 95% confidence intervals), by intent**

Intent	Rate in 2020 (95% CI)	Rate in 2021 (95% CI)	APC (95% CI)
Unintentional	3.3 (2.5, 4.3)	3.8 (3, 4.9)	16 (-19, 65)
Intentional	2 (1.4, 2.8)	1.8 (1.2, 2.5)	-9.3 (-44, 46)

Note: Deaths where conditions related to alcohol or tobacco comprised the underlying cause of death are not captured here. Causes of death data for 2020 and 2021 are preliminary and thus are subject to further revision. 95% confidence intervals for the age-standardised rate and average percent change are shown in brackets. Please refer to our [methods](#) document on 'Presentation of results' for interpretation of average percent change. Please also refer to our [methods](#) document on 'Data source' and 'Coding of deaths' for details on the data used.

**Table 5. Age-standardised rate per 100,000 people of overdose deaths in South Australia in 2020 and 2021, and average percent change (APC) for difference between 2021 and 2020 (with 95% confidence intervals), by drugs involved**

Drug	Rate in 2020 (95% CI)	Rate in 2021 (95% CI)	APC (95% CI)
Opioids	3.9 (3, 5)	3.6 (2.7, 4.6)	-8.5 (-35, 29)
Antiepileptic, sedative-hypnotic & antiparkinsonism drugs	2.6 (1.9, 3.5)	2.1 (1.5, 2.9)	-19 (-48, 24)
Amphetamine-type stimulants	1.7 (1.1, 2.5)	1.3 (0.78, 1.9)	-26 (-58, 29)
Antidepressants	1.8 (1.2, 2.6)	0.79 (0.44, 1.3)	-57 (-77, -19)
Alcohol	0.81 (0.44, 1.4)	0.77 (0.41, 1.3)	-5.7 (-56, 100)
Antipsychotics & neuroleptics	0.73 (0.39, 1.3)	–	–
Cannabinoids	–	–	–
Cocaine	–	–	–
Non-opioid analgesics	–	–	–

Note: Deaths where conditions related to alcohol or tobacco comprised the underlying cause of death are not captured here. Causes of death data for 2020 and 2021 are preliminary and thus are subject to further revision. 95% confidence intervals for the age-standardised rate and average percent change (APC) are shown in brackets. Please refer to our [methods](#) document on 'Presentation of results' for interpretation of average percent change. Please also refer to our [methods](#) document on 'Data source' and 'Coding of deaths' for details on the data used.

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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](mailto:drugtrends@unsw.edu.au).

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## Data source

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We acknowledge the traditional custodians of the land on which the work for this report was undertaken. We pay respect to Elders past, present, and emerging.

## Related Links

- For interactive data visualisations accompanying this report, go to: [https://drugtrends.shinyapps.io/Deaths\\_2021](https://drugtrends.shinyapps.io/Deaths_2021)
- For full details of the methods underpinning this report, go to: <https://ndarc.med.unsw.edu.au/resource-analytics/trends-drug-induced-deaths-australia-2002-2021>
- For other Drug Trends publications on drug-related hospitalisations and drug-induced deaths in Australia, go to: <https://ndarc.med.unsw.edu.au/project/national-illicit-drug-indicators-project-nidip>
- For more information on NDARC research, go to: <http://ndarc.med.unsw.edu.au/>

- 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: <https://ndarc.med.unsw.edu.au/program/drug-trends>
- 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/>