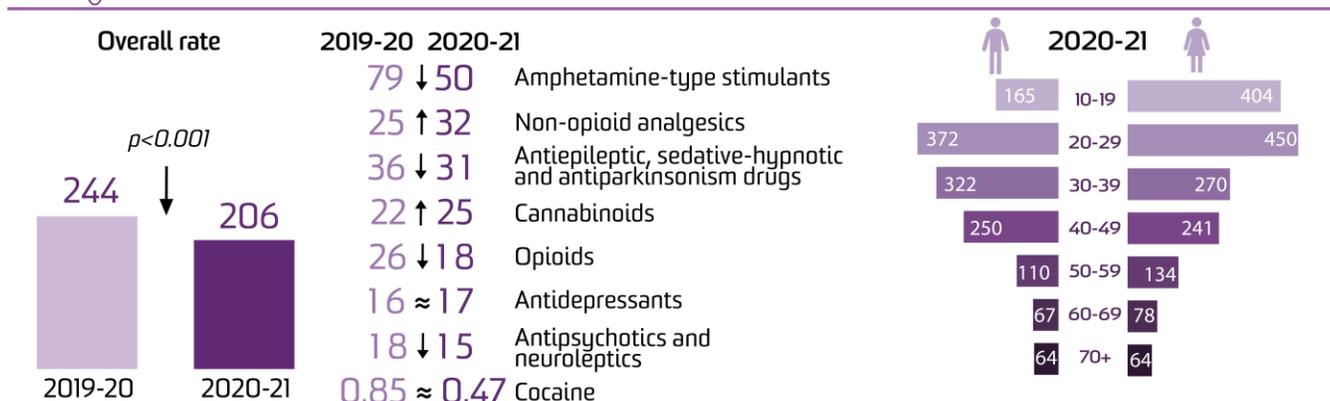


Western Australia



Drug-related hospitalisations per 100,000 people (excluding alcohol and tobacco)



Note: Arrows indicate a statistically significant increase/decrease between 2019-20 and 2020-21 ($p < 0.05$); sign "≈" indicates no significant change.

There were 5,415 hospitalisations with a drug-related principal diagnosis in [Western Australia](#) in 2020-21, equivalent to 0.45% of all hospitalisations in Western Australia.

This is equivalent to 206 hospitalisations per 100,000 people, which was a significant decrease from 2019-20 (244 hospitalisations per 100,000 people; $p < 0.001$) (Table A26) and similar to the rate reported in 1999-00 (209 hospitalisations per 100,000 people) ([Figure 1](#)).

Sex

The rate of hospitalisations was higher among [females](#) than males in 2020-21 (227 versus 187 hospitalisations per 100,000 people, respectively).

Age

In 2020-21, the rate of hospitalisations was highest [among](#) the 20-29 age group, followed by the 30-39 and 10-19 age groups (410, 296, and 281 hospitalisations per 100,000 people, respectively). Among both males and females, the rates of drug-related hospitalisations were highest in the 20-29 age groups.

Remoteness Area of Usual Residence

The highest rate of hospitalisations in 2020-21 was observed in [outer regional](#) Western Australia (459 hospitalisations, 273 per 100,000 people), while the number of hospitalisations

was highest in major city areas (4,006 hospitalisations, 192 per 100,000 people) ([Figure 2](#)).

External Cause of Drug Poisoning

In 2020-21, 54% of drug-related hospitalisations in Western Australia were due to drug poisoning. Furthermore, 71% of drug poisoning related hospitalisations were intentional (80 hospitalisations per 100,000 people) and 24% were unintentional (26 hospitalisations per 100,000 people) ([Figure 3](#)).

Drug Type

In 2020-21, the rate of hospitalisations was [highest](#) where there was a principal diagnosis indicating amphetamine-type stimulants (50 hospitalisations per 100,000 people) ([Figure 4](#)).

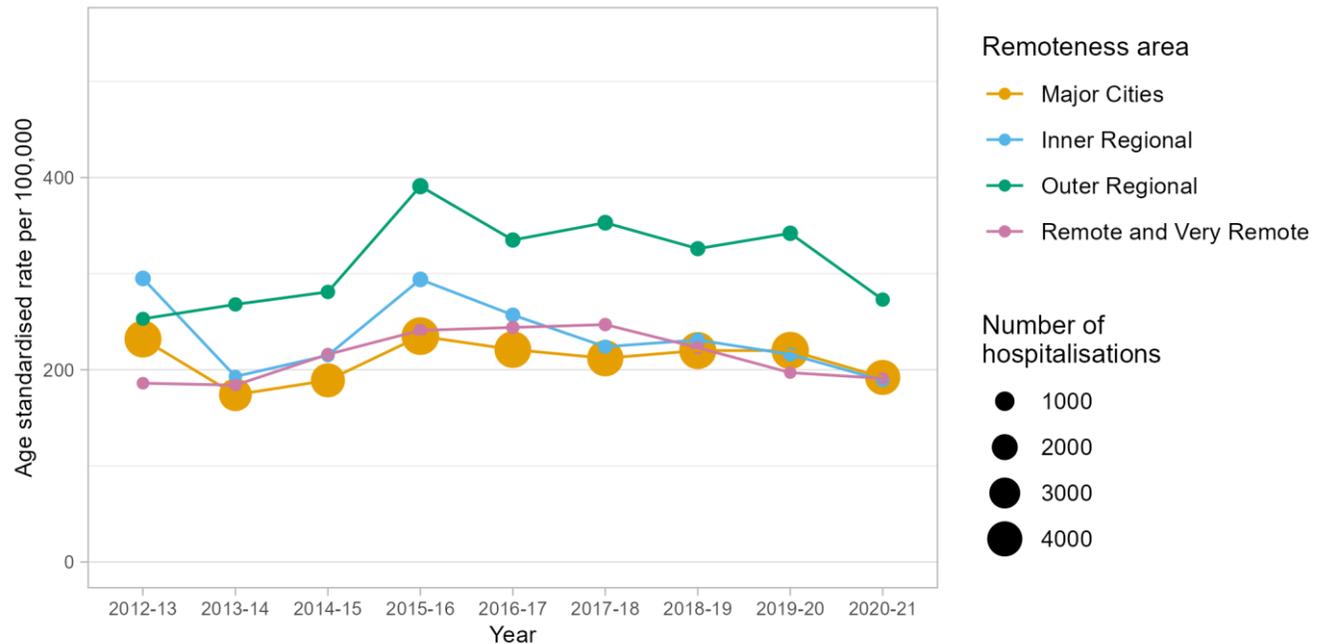
Compared to 2019-20, there were significant decreases in 2020-21 in the rates of hospitalisations related to: amphetamine-type stimulants; antiepileptic, sedative-hypnotic and antiparkinsonism drugs; opioids; and antipsychotics and neuroleptics ($p < 0.050$) (Table A26).

In contrast, there were significant increases in the rates of hospitalisations related to non-opioid analgesics; and cannabinoids ($p < 0.050$) (Table A26).

Figure 1. Age-standardised rate per 100,000 people of drug-related hospitalisations, by sex, Western Australia, 1999-00 to 2020-21.



Figure 2. Age-standardised rate per 100,000 people of drug-related hospitalisations, by remoteness, Western Australia, 2012-13 to 2020-21.



Note: The size (area) of the bubble is proportional to the number of hospitalisations. Data on remoteness are only available from 2012-13.

Figure 3. Age-standardised rate per 100,000 people of drug-related hospitalisations, by principal diagnosis of mental and behavioural disorder due to substance use (A) and external cause of poisoning (B), Western Australia, 1999-00 to 2020-21.

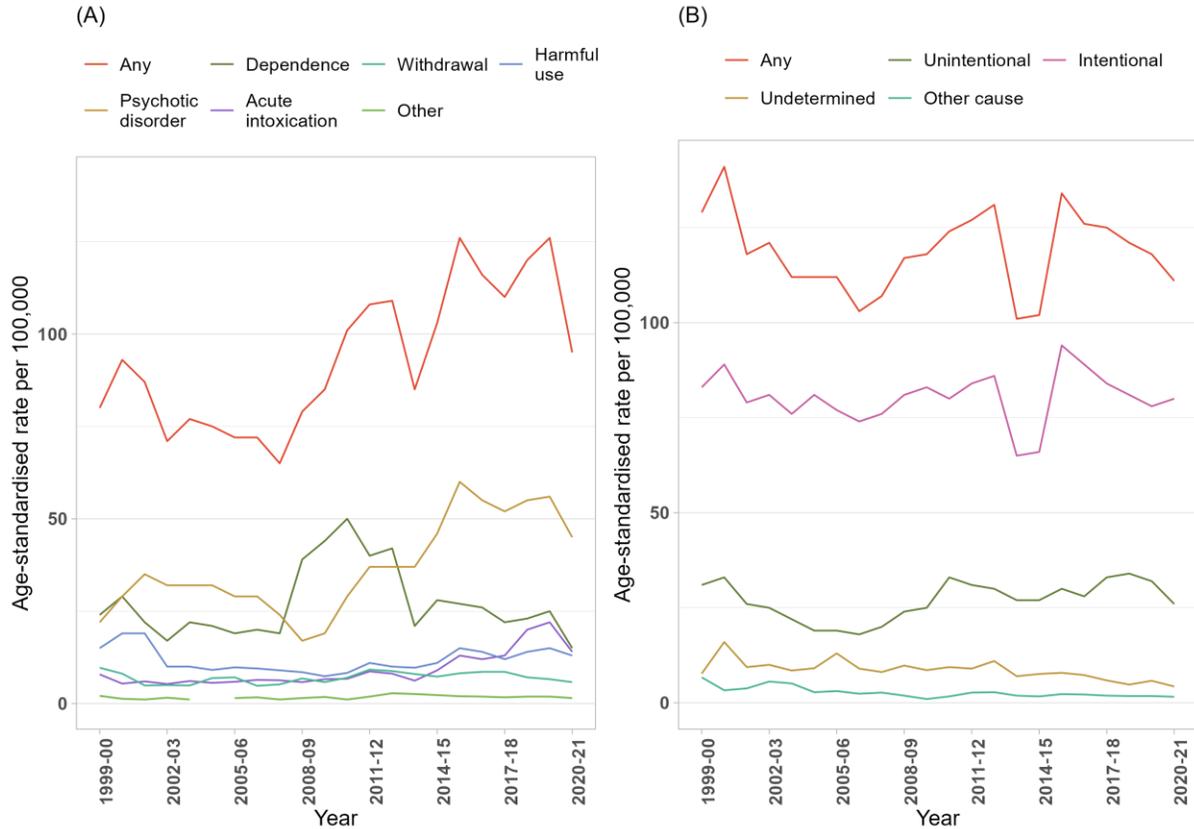
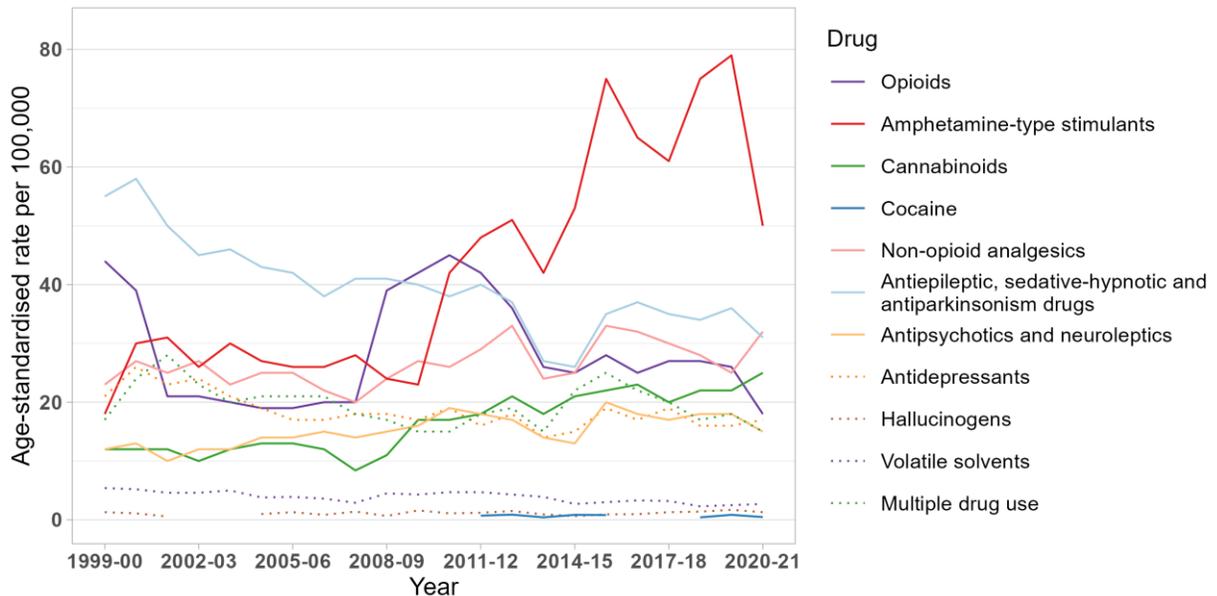


Figure 4. Age-standardised rate per 100,000 people of drug-related hospitalisations, by drug identified in the principal diagnosis, Western Australia, 1999-00 to 2020-21.



Note: Age-standardised rates were not calculated if the number of hospitalisations 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 A26. Age-standardised rate (per 100,000 people) of drug-related hospitalisations in 2020-21 and rate ratio and p-value for difference compared to 2019-20, in Western Australia by drug type identified in the principal diagnosis

Drug	Rate in 2020-21 (95% CI)	Rate in 2019-20 (95% CI)	Rate ratio (95% CI)	P-value
All drugs	206 (201, 212)	244 (238, 250)	0.85 (0.82, 0.88)	<0.001
Amphetamine-type stimulants	50 (47, 52)	79 (76, 83)	0.63 (0.59, 0.67)	<0.001
Non-opioid analgesics	32 (30, 34)	25 (23, 27)	1.30 (1.17, 1.45)	<0.001
Antiepileptic, sedative-hypnotic and antiparkinsonism drugs	31 (29, 33)	36 (34, 38)	0.86 (0.78, 0.94)	0.001
Cannabinoids	25 (23, 27)	22 (20, 24)	1.13 (1.01, 1.27)	0.031
Opioids	18 (17, 20)	26 (24, 28)	0.71 (0.63, 0.80)	<0.001
Antidepressants	17 (15, 19)	16 (15, 18)	1.04 (0.91, 1.19)	0.597
Antipsychotics and neuroleptics	15 (13, 16)	18 (16, 20)	0.83 (0.73, 0.95)	0.007
Multiple drug use	15 (13, 16)	18 (16, 19)	0.83 (0.73, 0.96)	0.009
Volatile solvents	2.7 (2.1, 3.4)	2.5 (1.9, 3.2)	1.08 (0.77, 1.51)	0.661
Hallucinogens	1.3 (0.9, 1.8)	1.7 (1.2, 2.3)	0.77 (0.49, 1.22)	0.268
Cocaine	0.47 (0.24, 0.83)	0.85 (0.53, 1.3)	0.56 (0.28, 1.13)	0.104

Note: 95% confidence intervals for the age-standardised rate and rate ratio are shown in brackets. Please refer to our [methods](#) document on 'Presentation of results' for interpretation of rate ratios. Please also refer to our [methods](#) document on 'Scope of the data' and 'Coding of hospitalisations' for specifications of data selected and all exclusions.

For complete report on trends in drug-related hospitalisations in Australia please go to the [national report](#).

Acknowledgements

Funding

The Drug Trends program is funded by the Australian Government Department of Health and Aged Care under the Drug and Alcohol Program.

Data source

We would like to acknowledge the Australian Institute of Health and Welfare for data from the National Hospital Morbidity Database.

Acknowledgements

We would like to acknowledge the contribution of those who have been involved in past reporting on drug-related hospitalisations by Drug Trends, specifically: A/Prof Timothy Dobbins, Dr Amanda Roxburgh, and A/Prof Lucinda Burns.

We thank Dr Louise Tierney and her team from the Tobacco, Alcohol and Other Drugs Unit at the Australian Institute of Health and Welfare for reviewing the report.

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

Related Links

- Hospitalisations data visualisations: https://drugtrends.shinyapps.io/hospital_separations
- Hospitalisations methods document: <https://ndarc.med.unsw.edu.au/resource-analytics/trends-drug-related-hospitalisations-australia-1999-2021>
- 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 AIHW and NHMD, go to: <https://www.aihw.gov.au/>
- For more information on ICD coding go to: <http://www.who.int/classifications/icd/en/>
<https://www.ihacpa.gov.au/resources/icd-10-amachiacs-eleventh-edition>
- For more research from the Drug Trends program go to: <https://ndarc.med.unsw.edu.au/program/drug-trends>

ISBN 978-0-7334-4058-8 ©NDARC, UNSW SYDNEY 2022

This report was prepared by researchers from the National Drug and Alcohol Research Centre for the Drug Trends program. The Drug Trends program is coordinated by the National Drug and Alcohol Research Centre, UNSW Sydney and undertaken in partnership with the Burnet Institute, National Drug Research Institute, University of Queensland, and University of Tasmania.

This work is copyright. You may download, display, print and reproduce this material in unaltered form only (retaining this notice) for your personal, non-commercial use or use within your organisation. All other rights are reserved. Requests and enquiries concerning reproduction and rights should be addressed to NDARC, UNSW Sydney, NSW 2052, Australia.

Recommended citation: Chrzanowska, A., Man, N., Akhurst, J., Sutherland, R., Degenhardt, L. & Peacock, A. (2022). Trends in drug-related hospitalisations in Australia, 1999-2021. Sydney: National Drug and Alcohol Research Centre, UNSW Sydney. [DOI: 10.26190/wrsv-3b78](https://doi.org/10.26190/wrsv-3b78)

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.