

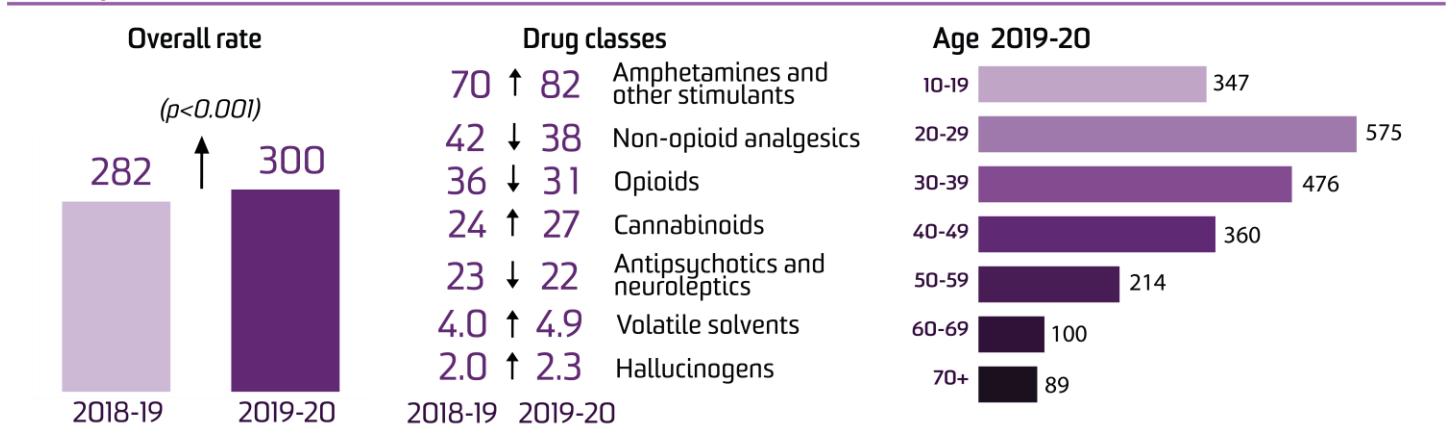
Trends in drug-related hospitalisations, 1999-2020

Agata Chrzanowska, Nicola Man, Rachel Sutherland, Louisa Degenhardt and Amy Peacock

Queensland



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



Note: Arrows indicate a statistically significant increase/decrease between 2018-19 and 2019-20 ($p < 0.05$)

There were 14,893 hospitalisations with a drug-related principal diagnosis in Queensland in 2019-20, equivalent to 0.55% of all hospitalisations in Queensland.

This is equivalent to 300 hospitalisations per 100,000 people, which was a significant increase from 2018-19 (282 hospitalisations per 100,000 people; $p < 0.001$) (Table 1) and higher than reported in 1999-00 (218 hospitalisations per 100,000 people) (Figure 1).

Sex

The rate of hospitalisations was higher among females than males in 2019-20 (307 versus 294 hospitalisations per 100,000 people).

Age

In 2019-20, the rate of hospitalisations was highest among the 20-29 age group, followed by the 30-39 and 40-49 age groups (575, 476, and 360 hospitalisations per 100,000 people, respectively).

Remoteness Area of Usual Residence

The highest rate of hospitalisations in 2019-20 was observed in outer regional Queensland (326 hospitalisations per 100,000 people), while the

number of hospitalisations was highest in major cities (9,884 hospitalisations) (Figure 2).

External Cause of Drug Poisoning

In 2019-20, 56% of drug-related hospitalisations in Queensland were due to drug poisoning. Furthermore, 72% of drug poisoning related hospitalisations were intentional (121 hospitalisations per 100,000 people) and 21% were unintentional (34 hospitalisations per 100,000 people) (Figure 3).

Drug Type

In 2019-20, the rate of hospitalisations was highest where there was a principal diagnosis indicating amphetamines and other stimulants (82 hospitalisations per 100,000 people) (Figure 4).

Compared to 2018-19, there were significant decreases in 2019-20 in the rates of hospitalisations related to non-opioid analgesics; opioids; and antipsychotics and neuroleptics ($p < 0.050$) (Table 1).

In contrast, there were significant increases in the rate of hospitalisations related to amphetamines and other stimulants; cannabinoids; multiple drug use; volatile solvents; and hallucinogens ($p < 0.050$) (Table 1).

Figure 1. Age-standardised rate per 100,000 people of drug-related hospitalisations, by sex, Queensland, 1999-00 to 2019-20.

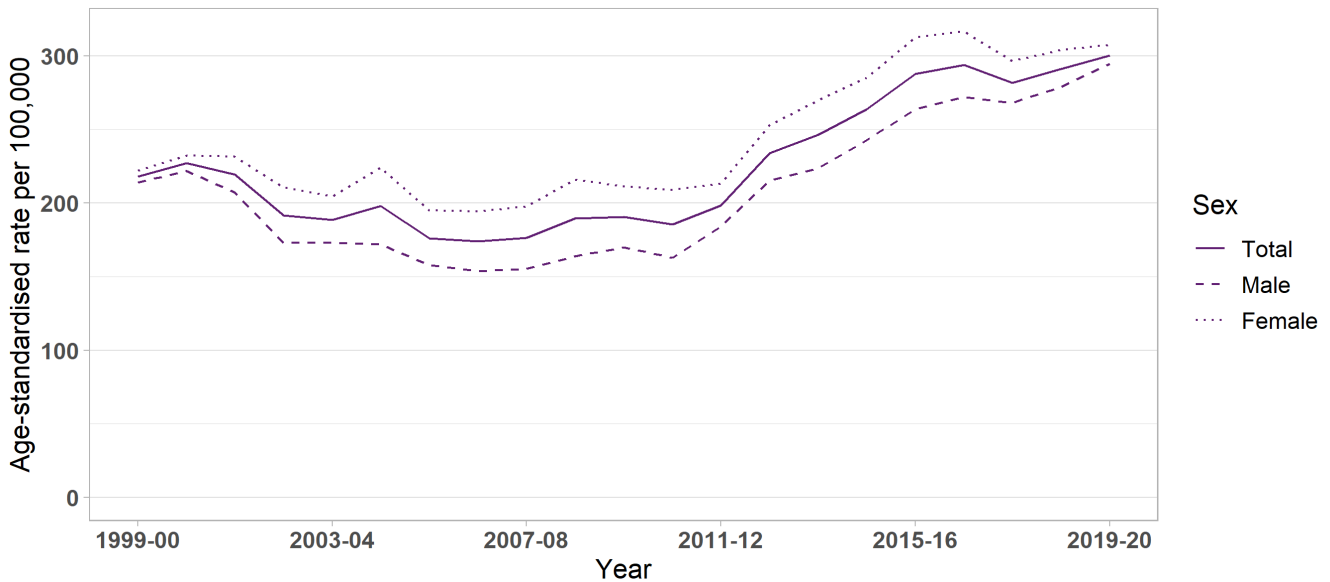
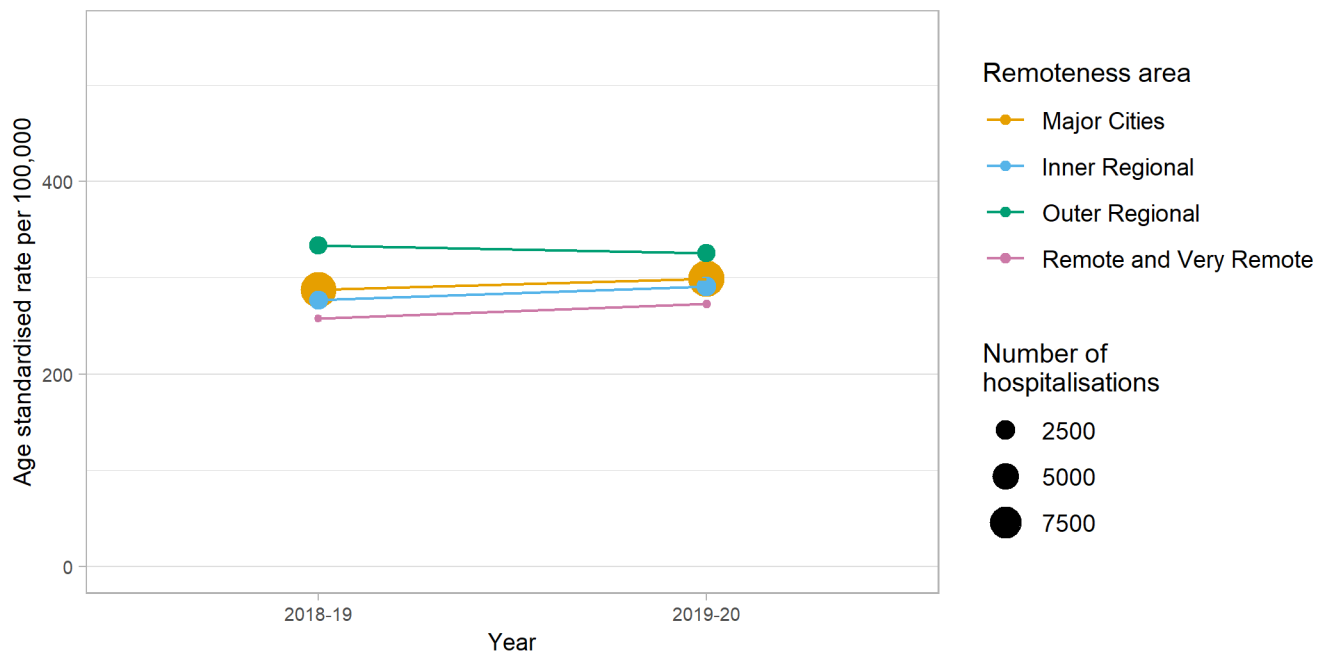


Figure 2. Age-standardised rate per 100,000 people of drug-related hospitalisations, by remoteness, Queensland, 2019-20.



Note: Data by remoteness area was only provided for 2018-19 and 2019-20 in Queensland. The size (area) of the bubble is proportional to the number of hospitalisations.

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), Queensland, 1999-00 to 2019-20.

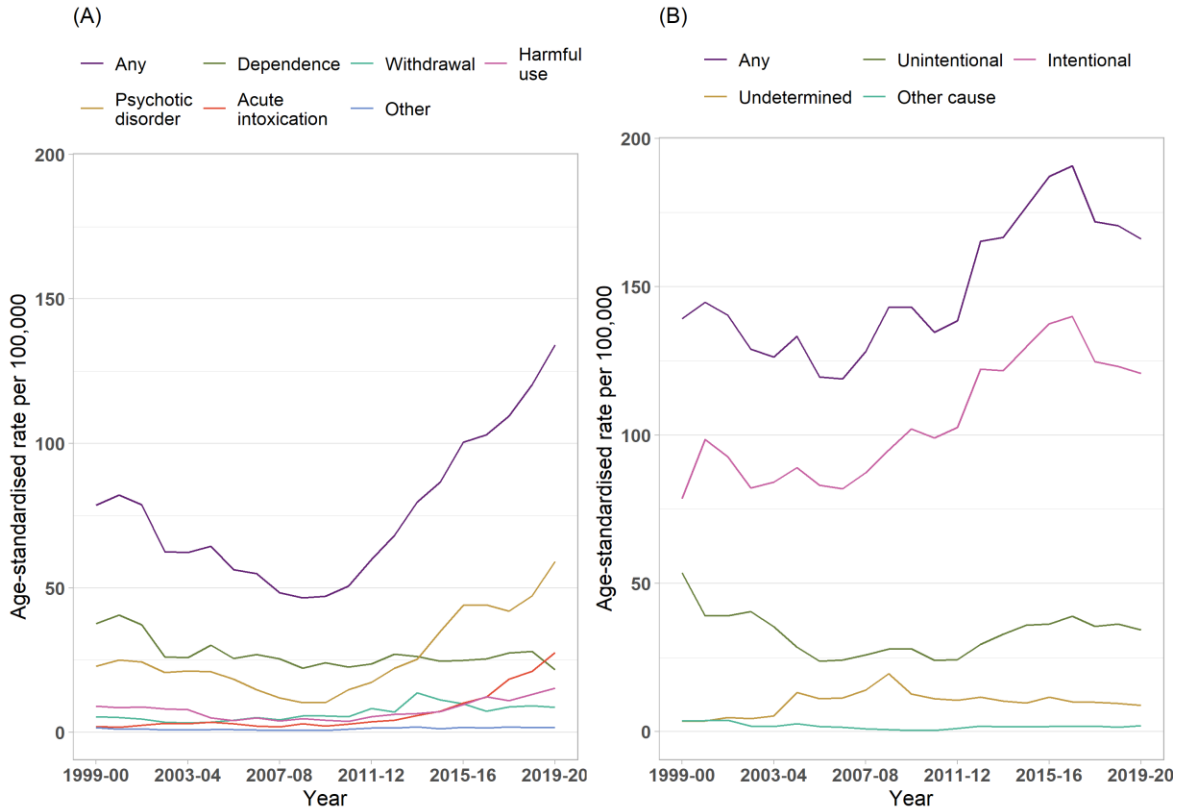
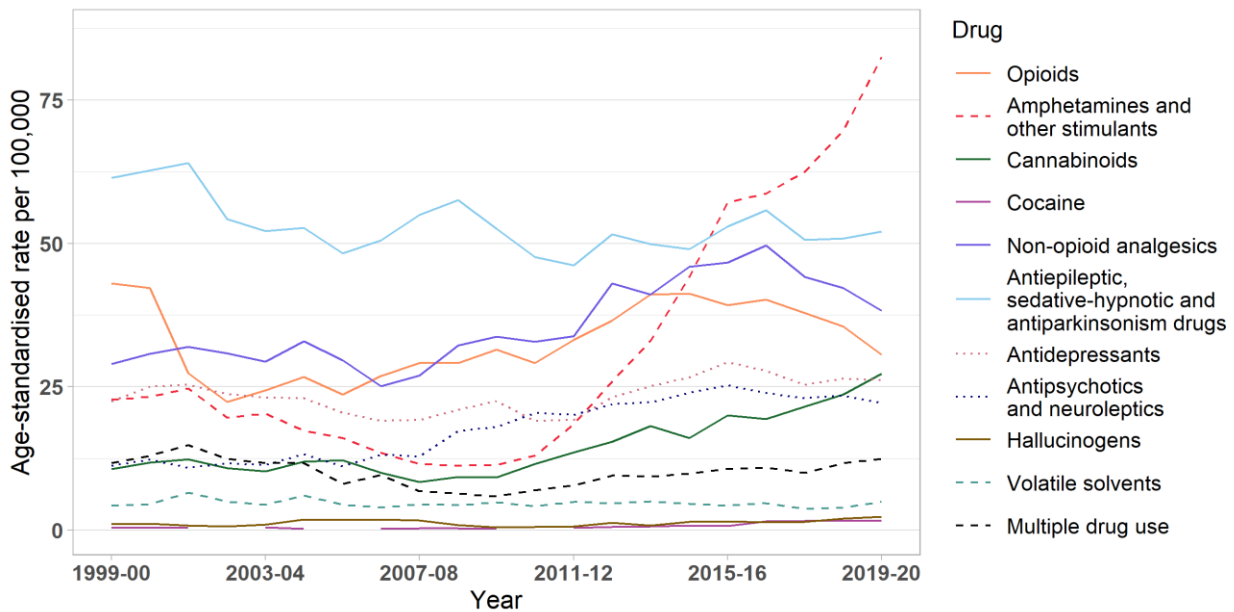


Figure 4. Age-standardised rate per 100,000 people of drug-related hospitalisations, by drug identified in the principal diagnosis, Queensland, 1999-00 to 2019-20.



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 1. Age-standardised rate (per 100,000 people) of drug-related hospitalisations in 2019-20 and rate ratio and p-value for difference compared to 2018-19, in Queensland by drug type identified in the principal diagnosis

Drug	Rate in 2019-20 (95% CI)	Rate in 2018-19 (95% CI)	Rate ratio	P-value
All drugs	300 (295.4,305.1)	291 (286,296)	1.03 (1.02,1.04)	<0.001
Amphetamines and other stimulants	82 (79.9, 85.0)	70 (67,72)	1.18 (1.16,1.21)	<0.001
Antiepileptic, sedative-hypnotic and antiparkinsonism drugs	52 (50.0, 54.1)	51 (49,53)	1.02 (1.00,1.05)	0.099
Non-opioid analgesics	38 (36.5, 40.0)	42 (40,44)	0.91 (0.88,0.94)	<0.001
Opioids	31 (29.1, 32.1)	36 (34,37)	0.86 (0.83,0.89)	<0.001
Cannabinoids	27 (25.8, 28.8)	24 (22,25)	1.15 (1.11,1.20)	<0.001
Antidepressants	26 (24.7, 27.6)	26 (25,28)	0.99 (0.95,1.03)	0.622
Antipsychotics and neuroleptics	22 (20.9, 23.5)	23 (22,25)	0.95 (0.91,0.99)	0.010
Multiple drug use	12 (11.5, 13.4)	12 (11,13)	1.06 (1.00,1.12)	0.049
Volatile solvents	4.9 (4.33, 5.58)	4.0 (3.4, 4.6)	1.24 (1.13,1.36)	<0.001
Hallucinogens	2.3 (1.94, 2.82)	2.0 (1.6, 2.4)	1.17 (1.03,1.34)	0.020
Cocaine	1.7 (1.34, 2.09)	1.7 (1.3, 2.1)	1.01 (0.87,1.18)	0.891

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.

Acknowledgements

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

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 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.

Funding:

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

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

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., Sutherland, R., Degenhardt, L. & Peacock, A. (2021). Trends in drug-related hospitalisations in Australia, 1999-2020. Sydney: National Drug and Alcohol Research Centre, UNSW Sydney.

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-1999-2020>
- 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.ihsa.gov.au/what-we-do/icd-10-am-achi-acsc-current-edition>
- For more research from the Drug Trends program go to: <https://ndarc.med.unsw.edu.au/program/drug-trends>

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