

# Trends in drug-related hospitalisations, 1999-2020

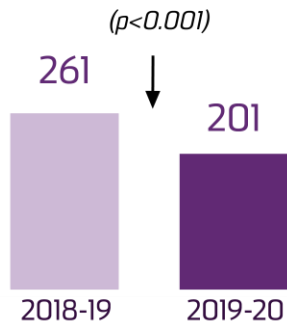
Agata Chrzanowska, Nicola Man, Rachel Sutherland, Louisa Degenhardt and Amy Peacock

## Tasmania



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

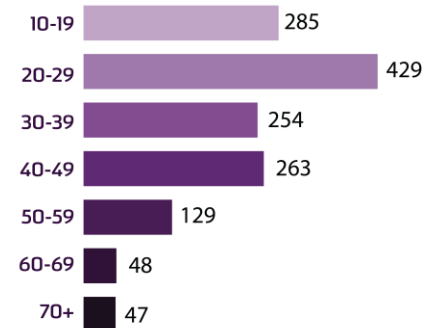
### Overall rate



### Drug classes

2018-19	Change	2019-20	Drug class
47	↑	52	Amphetamines and other stimulants
36	↓	34	Cannabinoids
42	↓	29	Non-opioid analgesics
34	↓	21	Antidepressants
39	↓	20	Antiepileptic, sedative-hypnotic and antiparkinsonism drugs
25	↓	18	Opioids
24	↓	14	Antipsychotics and neuroleptics

### Age 2019-20



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

There were 969 hospitalisations with a drug-related principal diagnosis in [Tasmania](#) in 2019-20.

This is equivalent to 201 hospitalisations per 100,000 people, which was a significant decrease from 2018-19 (261 hospitalisations per 100,000 people;  $p < 0.001$ ) ([Table 1](#)) but higher than reported in 1999-00 (127 hospitalisations per 100,000 people) ([Figure 1](#)).

### Sex

The rate of hospitalisations was higher among [females](#) than males in 2019-20 (241 versus 163 hospitalisations per 100,000 people).

### Age

In 2019-20, the rate of hospitalisations was [highest](#) among the 20-29 age group, followed by the 10-19 and 40-49 age groups (429, 285, and 263 hospitalisations per 100,000 people, respectively).

### Remoteness Area of Usual Residence

The highest number and rate of hospitalisations in 2019-20 was observed in [inner regional](#) Tasmania (756 hospitalisations, 223 hospitalisations per 100,000 people; noting there are no major cities in Tasmania) ([Figure 2](#)).

### External Cause of Drug Poisoning

In 2019-20, 48% of drug-related hospitalisations in Tasmania were due to drug poisoning. Furthermore, 82% of drug poisoning related hospitalisations were intentional (78 hospitalisations per 100,000 people) and 11% were unintentional (9.2 hospitalisations per 100,000 people) ([Figure 3](#)).

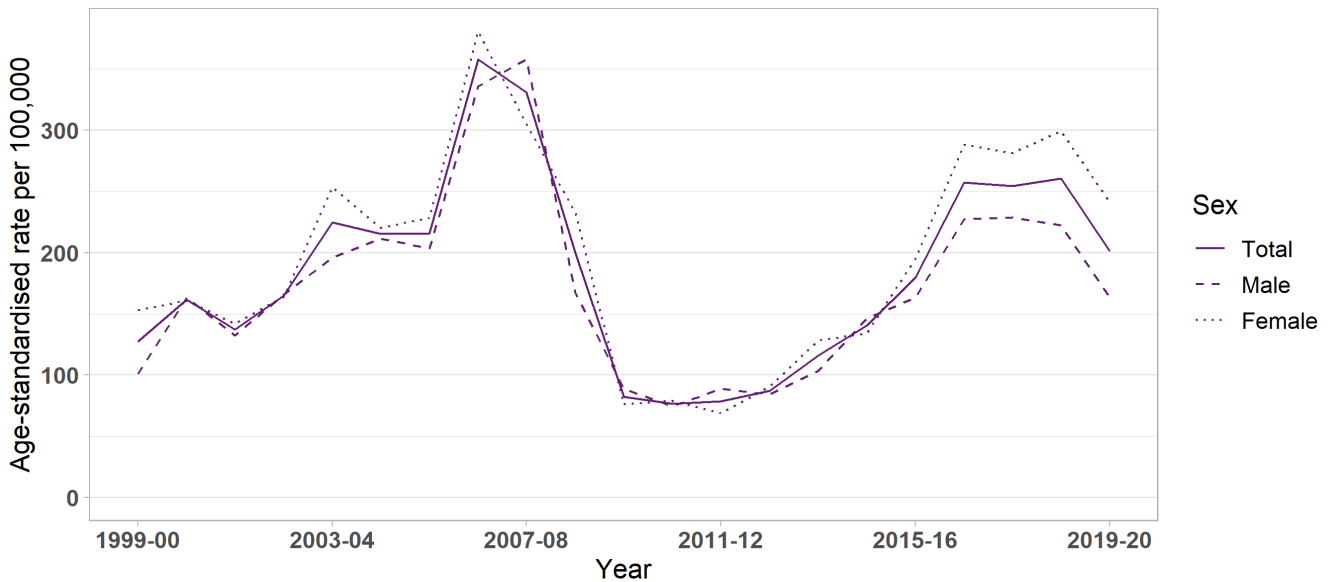
### Drug Type

In 2019-20, the rate of hospitalisations was [highest](#) where there was a principal diagnosis indicating amphetamines and other stimulants (52 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 cannabinoids; non-opioid analgesics; antidepressants; antiepileptic, sedative-hypnotic and antiparkinsonism drugs; opioids; and antipsychotics and neuroleptics ( $p < 0.050$ ) ([Table 1](#)).

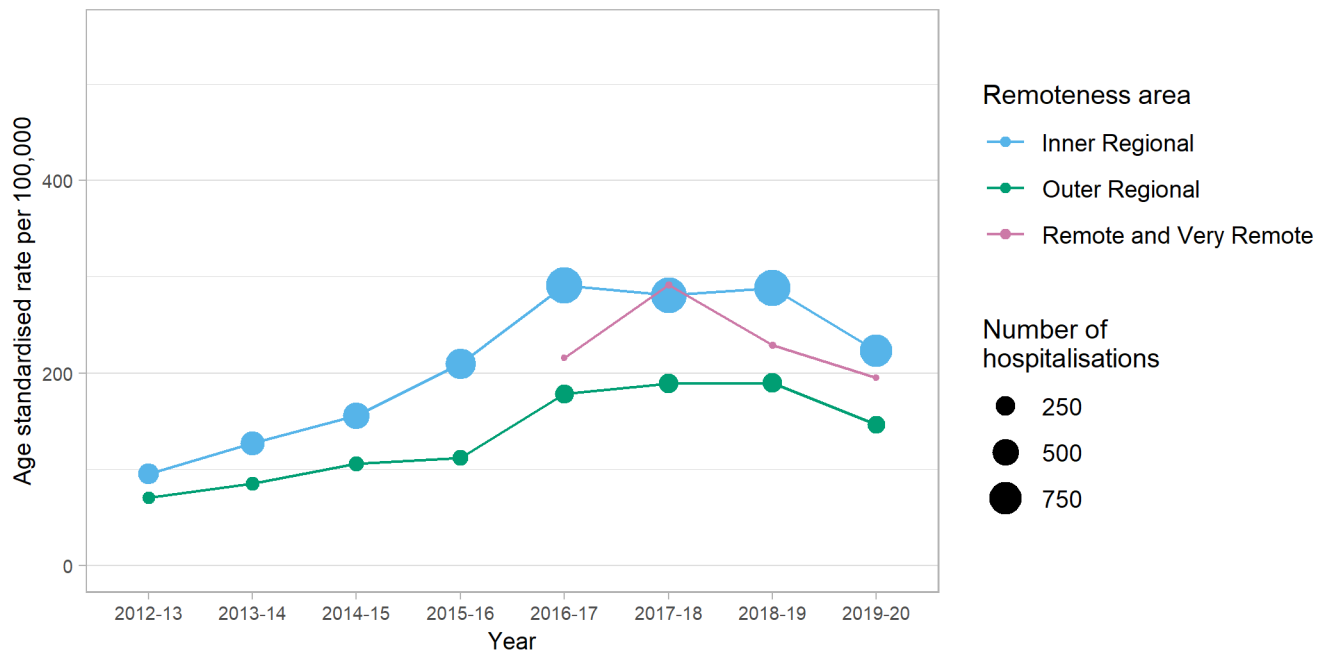
In contrast, there was a significant increase in the rate of hospitalisations related to amphetamines and other stimulants ( $p < 0.050$ ) ([Table 1](#)).

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



Provision of Tasmanian data between 2008-09 and 2015-16 was limited to drug related hospitalisations based on selected drug-related ICD-10-AM codes (see the [methods](#) for the list of ICD-10-AM codes). Estimates of drug-related hospitalisations for this period are likely to be underestimated.

Figure 2. Age-standardised rate per 100,000 people of drug-related hospitalisations, by remoteness, Tasmania, 2012-13 to 2019-20.



Note: The size (area) of the bubble is proportional to the number of hospitalisations. Data on remoteness are only available from 2012-13. There are no major cities in Tasmania. Where the number of hospitalisations for remote and very remote Tasmania were small (less than or equal to 10) age-standardised rates were not calculated. Please refer to our [methods](#) document for details.

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

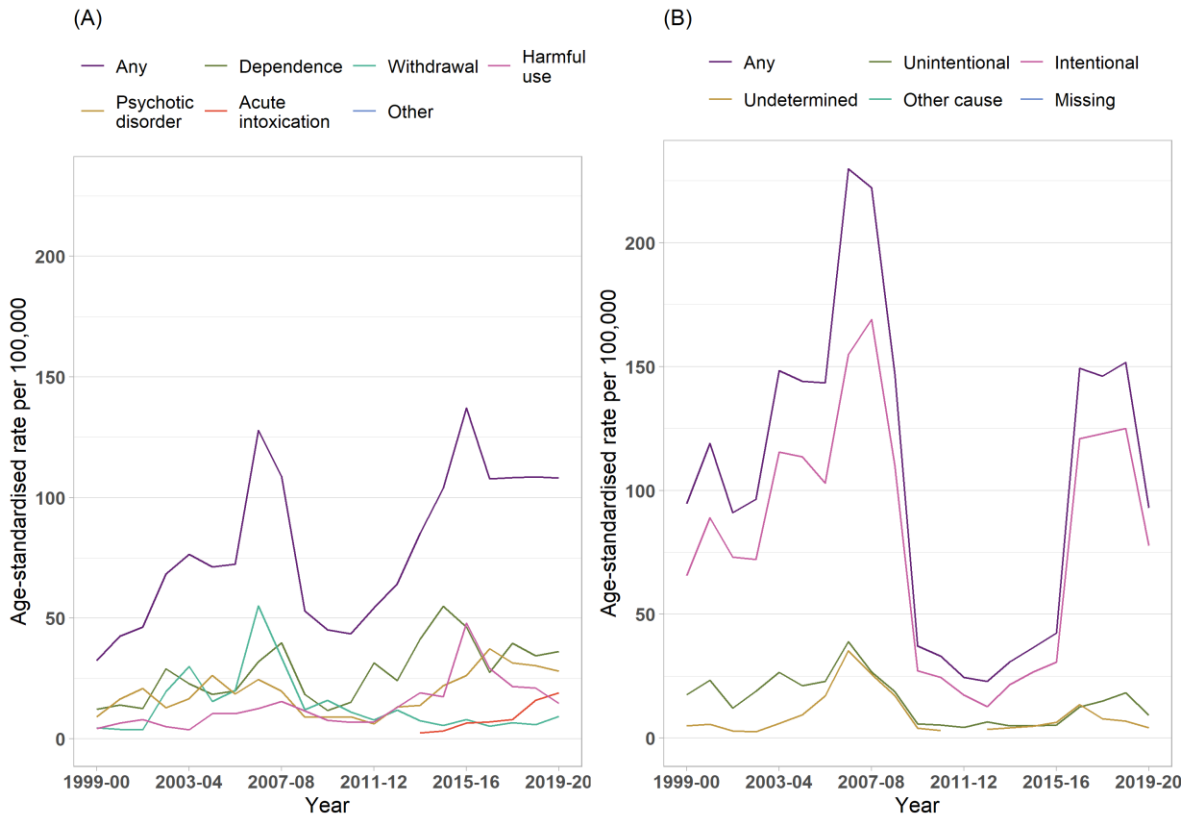
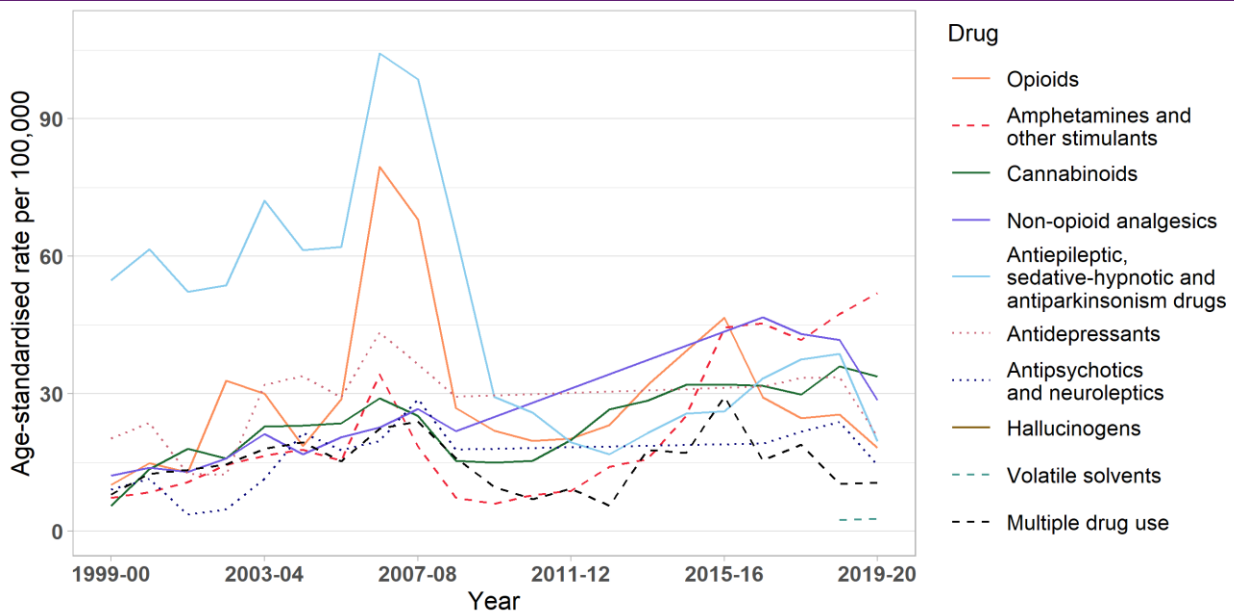


Figure 4. Age-standardised rate per 100,000 people of drug-related hospitalisations, by drug identified in the principal diagnosis, Tasmania, 1999-00 to 2019-20.



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 Tasmania 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
<b>All drugs</b>	201 (188.7,214.5)	261 (246,276)	0.77 (0.76,0.78)	<0.001
<b>Amphetamines and other stimulants</b>	52 (45.5, 59.1)	47 (41,54)	1.10 (1.07,1.13)	<0.001
<b>Cannabinoids</b>	34 (28.7, 39.5)	36 (31,42)	0.94 (0.91,0.97)	<0.001
<b>Non-opioid analgesics</b>	29 (24.0, 33.8)	42 (36,48)	0.68 (0.66,0.71)	<0.001
<b>Antidepressants</b>	21 (16.8, 25.3)	34 (29,39)	0.62 (0.59,0.64)	<0.001
<b>Antiepileptic, sedative-hypnotic and antiparkinsonism drugs</b>	20 (16.0, 23.8)	39 (33,45)	0.51 (0.49,0.53)	<0.001
<b>Opioids</b>	18 (14.7, 22.4)	25 (21,30)	0.72 (0.69,0.75)	<0.001
<b>Antipsychotics and neuroleptics</b>	14 (11.2, 18.4)	24 (20,29)	0.61 (0.58,0.64)	<0.001
<b>Multiple drug use</b>	11 (7.8, 14.0)	10 (8,14)	1.03 (0.97,1.10)	0.352
<b>Volatile solvents</b>	2.7 (1.41, 4.61)	2.4 (1.2, 4.1)	1.12 (0.99,1.27)	0.081

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