

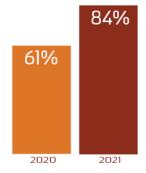
Trends in cocaine use in Tasmania, 2003-2021

Authors: Raimondo Bruno^{1,2} and Yalei Wilson¹

¹School of Psychological Sciences, University of Tasmania

²National Drug and Alcohol Research Centre, University of New South Wales Sydney

Key Findings:



The percentage of EDRS Hobart participants reporting past six month cocaine use has substantially increased over the past decade, including a significant increase from 61% in 2020 to 84% in 2021.



This use is infrequent, with the vast majority (93% of the total sample in 2021) reporting less than weekly use.



Experience of cocaine related harms is low.

Introduction

The World Drug Report 2022 (1) has noted a steady increase in seizures of cocaine internationally between 2016 and 2020. The number of seizures in Australia have likewise been increasing over the past decade (2). The Australian general population survey of substance use, the National Drug Strategy Household survey, suggests that past year cocaine use has increased from 2.5% in 2016 to 4.2% in 2019 (3).

With these indicators of increasing use and availability of the drug, there have also been indications of increases in harms associated with cocaine. Nationally, modelling suggests that hospitalisations relating to cocaine have increased from 5.1 to 15.6 per 100 000 people from 2011/12 to 2017/18, and treatment episodes for cocaine increased from 3.2 to 5.9 per 100 000 between 2016 and 2018 (4).

Historically, there has been low availability of cocaine in Tasmania, with few reports of use, arrests, seizures or treatment episodes relating to the drug (5). Past year reported cocaine use among Tasmanian adults was estimated as 1.6% in 2019, lower than the national rate of 4.2% (3). However, given the increased indications of cocaine use nationally, this bulletin aims to summarise changes in cocaine use and indicators of health harms and service use in Tasmania.

Funded by the Australian Government Department of Health under the Drug and Alcohol Program ©NDARC, UNSW SYDNEY 2022. 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 the information manager, NDARC, UNSW Sydney, NSW 2052, Australia.

















Method

The majority of the data presented here was obtained from the Ecstasy and Related Drugs Reporting System (EDRS), which surveys people who regularly use illicit stimulants. These interviews were conducted in Hobart, Tasmania between 2003 and 2021 via face-to-face or telephone surveys (due to COVID-19 restrictions). To be eligible, participants had to have used illicit stimulants on a monthly or more frequent basis in the six months leading up to interview, have lived in Hobart for the majority of the past year and to be at least 18 years of age. Approximately 100 participants are interviewed each year. For further details on the overall methods of the EDRS, see (6).

A number of other sources of information relating to cocaine use in Tasmania were also used and these sources are referenced in the subsequent section.

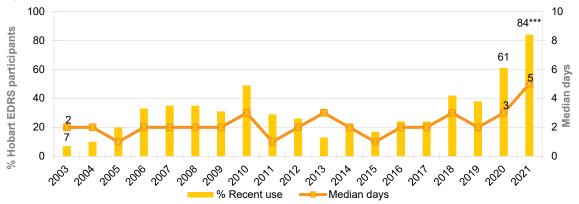
Results

Use of cocaine among Hobart EDRS population

Recent use of cocaine has substantially increased since 2013, with the largest per cent reporting any recent use in the history of the Tasmanian EDRS in 2021 at 84%. This was a significant increase from the 61% reporting past six month use of cocaine in 2020 (p<0.001). However, cocaine is used infrequently by these individuals. In the 2021 survey, participants reported using it on a median of five occasions in the previous six months (IQR 2-7), and this did not significantly differ to the three occasions in the past six months reported by participants in 2020 (IQR=2-7; p=0.324).

It is worth noting that among participants who frequently inject drugs in the Hobart Illicit Drug Reporting System (IDRS) studies, past six month cocaine use was substantially lower than among Hobart EDRS participants in 2021 (16% of IDRS participants, 84% of EDRS participants), and the frequency of this use was also low (a median of 3 of the previous 180 days). Please refer to Wilson & Bruno, 2022 for further information.

Figure 1: Past six month use and frequency of cocaine, Hobart EDRS 2003-2021.



Note. Median days computed among those who reported recent use (maximum 180 days). Median days rounded to the nearest whole number. Y axis reduced to 10 days to improve visibility of trends for days of use. Data labels are only provided for the first (2003) and two most recent years (2020 and 2021) of monitoring, however labels are suppressed where there are small numbers (i.e., $n \le 5$ but not 0). *p < 0.050; *p < 0.010; *p < 0.010; *p < 0.001 for 2020 vs 2021.









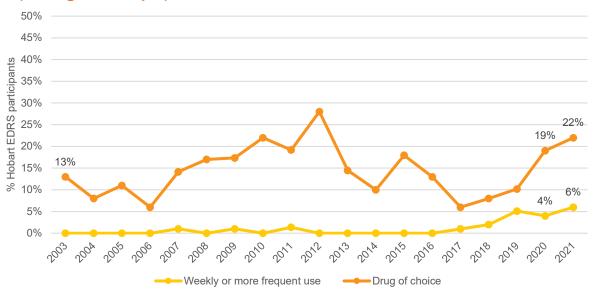








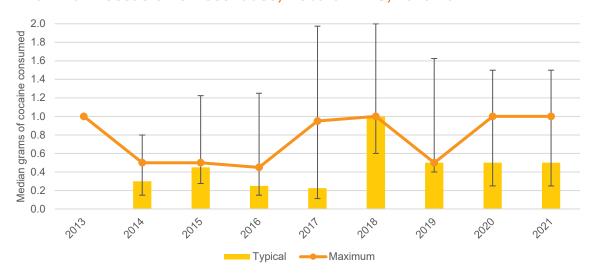
Figure 2: Drug of choice and weekly or more frequent use of cocaine (among full sample), Hobart EDRS, 2003-2021



Note. Y-axis reduced to 50% to improve visibility of trends. Data labels are only provided for the first (2003) and two most recent years (2020 and 2021) of monitoring, however labels are suppressed where there are small numbers (i.e., $n \le 5$ but not 0).

Consistent with the overall low frequency of use of cocaine among Hobart participants, in the 2021 survey just 6% of EDRS participants reported weekly or more frequent cocaine use in the preceding six months. This occurred despite one-in-five participants reporting cocaine as their drug of choice.

Figure 3: Median amount of cocaine used (g) in a 'typical' and in the 'maximum' occasion of recent use, Hobart EDRS, 2013-2021



Note. This is reported among those that had used cocaine in the previous six months only. For a 'typical' session, the interquartile range is presented as error bars in addition to the median. Quantity information was only available from 2013 onwards.

In the past three EDRS surveys, despite an increasing number of participants reporting use, the median amount of cocaine used in a 'typical' occasion of use has remained around 0.50 grams.

















Other indicators of cocaine use in Tasmania

Wastewater Drug Monitoring

Wastewater surveillance indicates a general increase in the mass of cocaine consumed in larger population areas in Tasmania since 2018, consistent with the trends seen among EDRS participants in Hobart. It is notable that the mass load of cocaine identified in Tasmanian sites is substantially below the national average, and that it is largely concentrated in the larger city sites. Please refer directly to the National Wastewater Drug Monitoring Reports here for more information.

Needle and Syringe Program

Consistent with the low reports of cocaine use in the Hobart IDRS studies, very small proportions of Needle and Syringe Program occasions of service relating to cocaine use have been recorded in Tasmania, with 0.1% of transactions in 2019/20 and 0.2% of transactions in both 2020/21 and 2021/22 relating to cocaine (Population Health Services, Tasmanian Department of Health).

Tasmania Police Seizures

A small but increasing number of cocaine seizures have been reported by Tasmania police over the past decade (rising from 3 in 2010/11 to 30 during 2019/20).

500 50 450 45 400 40 350 35 Weight of seizures 300 30 250 200 20 150 15 100 10 50 5 Number of seizures Grams

Figure 5: Cocaine seizures by Tasmania Police 2010/11-2019/20

Source: Australian Criminal Intelligence Commission Illicit Drug Data Reports 2010/11-2019/20

Cocaine-related health harms

In the EDRS surveys, participants are asked if they had recently 'binged' on substances, namely had a period of time where they had used substances for 48 hours or longer without sleep. Over the course of the survey, past six month 'binge' substance use has declined with one-in-five participants reporting bingeing in 2021. While many different substances are reported during these binge sessions, in 2 out of 3 of these occasions, cocaine was consumed during the most recent binge session in 2021.









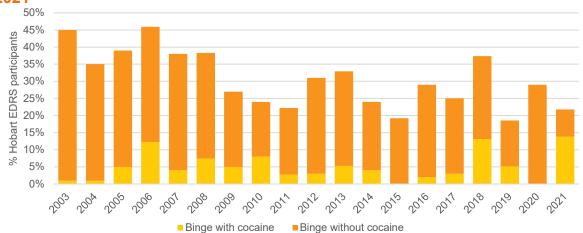








Figure 6: Past six month 'binge' use of drugs (continuous substance use for at least 48 hours without sleep) and involvement of cocaine, TAS EDRS, 2003-2021

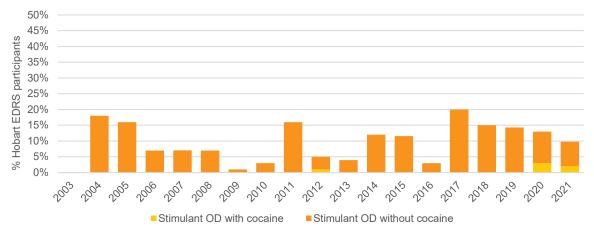


Note. Y-axis reduced to 50% to improve visibility of trends. The drugs involved in a 'binge' session were not recorded in 2020. The combination of the per cent who report bingeing with cocaine and the per cent who report bingeing without cocaine is the per cent who reported 'any' binge session in the past six months.

Cocaine involvement in stimulant overdose

EDRS participants self report on the recent experience of stimulant overdose. While the definition of this has changed over time, from 2019 onwards this is defined to participants as "the experience of symptoms (e.g., nausea, vomiting, chest pain, tremors, increased body temperature, increased heart rate, seizure, extreme paranoia, extreme anxiety, extreme agitation, panic, hallucinations, excited delirium) that are outside the participant's normal drug experience or where the participant felt professional assistance would have been helpful." Between 2003 and 2021, reported stimulant overdose in the year prior to interview was relatively uncommon, and was reported by one-in-ten participants in 2021. Participants are asked to list all of the drugs involved in the overdose experience: cocaine has been very infrequently involved in these experiences.

Figure 7: Self-reported past 12 month experience of non-fatal stimulant overdose, and involvement of cocaine, Hobart EDRS, 2003-2021



Note. Y-axis reduced to 50% to improve visibility of trends. The combination of the per cent who reported 'stimulant OD with cocaine' and the per cent who reported 'stimulant OD without cocaine' is the per cent who reported any stimulant overdose in the past year.













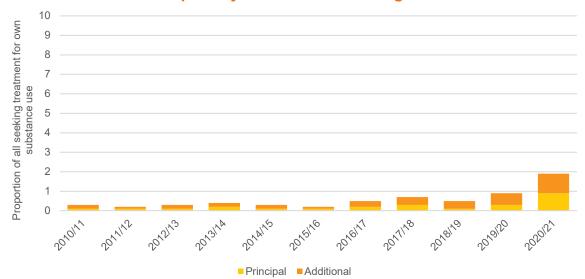




Treatment

Cocaine relates to an extremely small proportion of cases of people seeking treatment for their substance use. In 2021/21, around 1% of people accessing Tasmanian treatment services did so for a primary issue relating to cocaine. There were a further 1% of treatment episodes where cocaine was noted as an additional drug of concern.

Figure 8: Proportion of Tasmanian alcohol and other drug treatment episodes where cocaine was the primary or an additional drug of concern



Note. Y-axis reduced to 10% to improve visibility of trends.

Source: Australian Institute of Health and Welfare: Alcohol and other drug treatment services in Australia reports

Hospitalisations and unintentional deaths associated with cocaine use in Tasmania

Rates of hospitalisations and deaths were lower than reporting thresholds in either of these datasets. For further information please refer to the <u>National Illicit Drug Indicators Project</u>.

Discussion

Exposure to cocaine has increased among EDRS participants in Tasmania, as per trends seen nationally in the Drug Trends studies and in wastewater monitoring. Data from both the Tasmanian IDRS study and the Needle and Syringe Program suggests that such increases are not apparent among people who inject drugs in Tasmania.

Use is infrequent, with approximately monthly use on average among EDRS participants and extremely small proportions reporting weekly or more frequent use. Consistent with this relatively low frequency of use, experience of cocaine-related harms among the EDRS sample is low, supported by the very small proportion of people accessing Tasmanian drug treatment services for cocaine as a primary or secondary drug of concern (less than 2% of all cases in 2020/21).

With the increasing access of cocaine in Australia, however, continued monitoring of the cocaine market is warranted.

















References

- 1. UNODC, World Drug Report 2022. United Nations publication; 2022. Available from: https://www.unodc.org/res/wdr2022/MS/WDR22 Booklet 2.pdf
- Illicit Drug Data Report 2019-20. Australian Criminal Intelligence Commission;
 2021. Available from: https://www.acic.gov.au/sites/default/files/2021 10/IDDR%202019-20 271021 Cocaine.pdf
- 3. National Drug Strategy Household Survey 2019. Australian Institute of Health and Welfare, Drug Statistics series no. 32. 2020;270. Available from: https://www.aihw.gov.au/reports/illicit-use-of-drugs/national-drug-strategy-household-survey-2019/contents/summary
- 4. Man N, Chrzanowska A, Price O, Bruno R, Dietze P, Sisson S, Degenhardt L, Salom C, Morris L, Farrell M, Peacock A. Trends in cocaine use, markets and harms in Australia, 2003-2019. Drug Alcohol Rev. 2021;40:946-56.
- 5. De Graaff B, Bruno R. Tasmanian Drug Trends 2010: Findings from the Illicit Drug Reporting System (IDRS). Sydney: National Drug and Alcohol Research Centre, UNSW. 2010.
- Wilson Y, Bruno R. Tasmanian Drug Trends 2021: Key findings from the ecstasy and related drugs reporting system (EDRS) interviews. Sydney: National Drug and Alcohol Research Centre, UNSW. 2022.

Participating Researchers and Research Centres

- Dr Rachel Sutherland, Antonia Karlsson, Julia Uporova, Daisy Gibbs, Rosie Swanton, Olivia Price, Udesha Chandrasena, Professor Louisa Degenhardt, Professor Michael Farrell and Associate Professor Amy Peacock, National Drug and Alcohol Research Centre, University of New South Wales, New South Wales;
- Cristal Hall, Sarah Eddy, Dr Campbell Aitken and Professor Paul Dietze, Burnet Institute Victoria;
- Yalei Wilson and Associate Professor Raimondo Bruno, School of Psychology, University of Tasmania, Tasmania;
- Dr Jodie Grigg and Professor Simon Lenton, National Drug Research Institute and EnAble Institute, Curtin University, Western Australia;
- Catherine Daly, Dr Jennifer Juckel, Dr Natalie Thomas and Associate Professor Caroline Salom, Institute for Social Science Research, The University of Queensland, Queensland.

Other Acknowledgements

- · The people who participated in the EDRS in present and in previous years;
- · The agencies that assisted with recruitment and interviewing;
- The EDRS is funded by the Australian Government under the Drug and Alcohol Program.

Suggested Citation

Bruno, R. & Wilson, Y. (2022). Trends in cocaine use in Tasmania, 2003-2021. Drug Trends Bulletin Series. Sydney: National Drug and Alcohol Research Centre, UNSW Sydney.













