EDRS

AUSTRALIAN DRUG TRENDS 2019

Key Findings from the National Ecstasy and related Drugs Reporting System (EDRS) Interviews

KEY FINDINGS FROM THE NATIONAL ECSTASY AND RELATED DRUGS REPORTING SYSTEM (EDRS) INTERVIEWS

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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.

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

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Research Team

The National Drug and Alcohol Research Centre (NDARC), University of New South Wales (UNSW) Sydney, coordinated the EDRS. The following researchers and research institutions contributed to EDRS 2019:

- Antonia Karlsson, Julia Uporova, Daisy Gibbs, Rosie Swanton, Olivia Price, Georgia Kelly, Professor Louisa Degenhardt, Professor Michael Farrell and Dr Amy Peacock, National Drug and Alcohol Research Centre, University of New South Wales;
- Amy Kirwan, Cristal Hall, Dr Campbell Aiken and Professor Paul Dietze, Burnet Institute Victoria;
- Callula Sharman and Associate Professor Raimondo Bruno, School of Psychology, University of Tasmania;
- Jodie Grigg and Professor Simon Lenton, National Drug Research Institute, Curtin University, Western Australia; and
- Catherine Daly, Jennifer Juckel, Leith Morris and Dr Caroline Salom, Institute for Social Science Research, The University of Queensland.

We would like to thank past and present members of the research team.

Participants

We would like to thank all the participants who were interviewed for the EDRS in the present and in previous years.

Contributors

We thank all the individuals who contributed to questionnaire development and assisted with the collection and input of data at a jurisdictional and national level. We would also like to thank the members of the Drug Trends Advisory Committee for their contribution to the project.

Abbreviations

2C-B	4-bromo-2,5-dimethoxyphenethylamine
4-AcO-DMT	4-Acetoxy-N,N-dimethyltryptamine
4-FA	4-Fluoroamphetamine
5-MeO-DMT	5-methoxy-N,N-dimethyltryptamine
ACT	Australian Capital Territory
Alpha-PVP	α-Pyrrolidinopentiophenone
AUDIT	Alcohol Use Disorders Identification Test
BZP	Benzylpiperazine
DMT	Dimethyltryptamine
DO-x	4-Substituted-2,5-dimethoxyamphetamines
EDRS	Ecstasy and Related Drugs Reporting System
GBL	Gamma-butyrolactone
GHB	Gamma-hydroxybutyrate
HIV/STI	Human Immunodeficiency Virus/Sexually transmitted infections
IDRS	Illicit Drug Reporting System
IQR	Interquartile range
LSD	*d*-lysergic acid
MDA	3,4-methylenedioxyamphetamine
MDMA	3,4-methylenedioxymethamphetamine
MDPV	Methylenedioxypyrovalerone
MXE	Methoxetamine
N (or n)	Number of participants
NDARC	National Drug and Alcohol Research Centre
NPS	New psychoactive substances
NSW	New South Wales
NT	Northern Territory
OTC	Over-the-counter
PMA	Paramethoxyamphetamine
QLD	Queensland
SD	Standard deviations
SA	South Australia
TAS	Tasmania
UNSW	University of New South Wales
VIC	Victoria
WA	Western Australia

Executive Summary

The 2019 EDRS sample (N=797) were predominantly young, well-educated males, consistent with the sample profile since monitoring began. Ecstasy and cannabis were the most commonly reported drug of choice, whilst cannabis and alcohol were the drugs used most often in the past month.

Ecstasy
Reports of ecstasy pill use continued to decline, with ecstasy capsules being the most commonly used form for the first time since monitoring began. Indeed, 77%, 67%, 63% and 29% of the sample reported past six month use of ecstasy capsules, pills, crystal, and powder, respectively. One in four participants (28%) reported weekly or more frequent ecstasy use. The median number of capsules used in a typical and maximum session were 2 and 4, respectively.

Methamphetamine
Methamphetamine use declined from when monitoring began to 2017, stabilising in the past three years with one in three participants reporting past six month use in 2019. One in five participants (21%) who had recently used methamphetamine reported weekly or more frequent use. While powder has consistently been the main form used, the difference in the per cent reporting use of powder and crystal in 2019 was the smallest observed historically (21% and 18%, respectively). Four in five participants (80%) who had used crystal had recently smoked this form.

Cocaine
Cocaine use increased from 2018 to 2019, with the largest per cent of participants reporting recent use since monitoring began (67%). This was mostly driven by significant increases in use in various jurisdictions, most notably NSW, SA and the NT. Further, 59% of those who commented believed cocaine to be 'easy' or 'very easy' to obtain, the highest per cent observed throughout monitoring. Most consumers reported infrequent use of cocaine (7% weekly or more frequent use) and median price remained stable.

Cannabis
At least three in four participants have reported recent use of cannabis each year since monitoring began, although the per cent reporting use in 2019 (85%) decreased significantly compared to 2018 (90%). One-quarter (27%) reported daily use in the past six months in 2019.

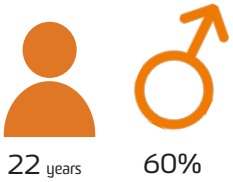
Ketamine & LSD
Recent use of ketamine significantly increased from 2018 to 2019, with 41% of the sample reporting recent use in 2019 (35% in 2018). Recent use of LSD remained stable, with 47% reporting recent use in 2019. Frequency of use for both these drugs was low. Reports of price, perceived purity and availability were mostly consistent with 2018.

New psychoactive substances (NPS) and other drugs
Thirty per cent of the sample reported recent use of at least one form of NPS. DMT and the 2C class were the most commonly used NPS in 2019 (16% and 6%, respectively). Reported recent use of e-cigarettes increased from 2018 to 2019 (34% to 40%); as did the per cent reporting amyl nitrite use (22% to 38%).

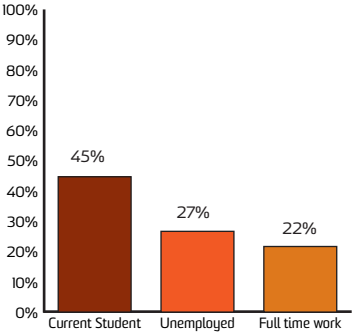
Drug-related harms and other risks
Ninety per cent of the sample reported using a combination of depressants, cannabis, or hallucinogens/dissociatives on their last occasion of stimulant use. In the past 12 months, 24% reported a non-fatal overdose following alcohol use, 27% after any depressant, and 22% after a stimulant. Reported past month injecting drug use remained low (3%). Treatment engagement also remained low (6% in the past year). In the sample 57% self-reported experiencing a mental health problem in the preceding six months, and 58% of this group had seen a mental health professional. Thirty-two per cent reported engaging in drug dealing and 21% reported engaging in property crime in the past month. The majority had purchased drugs face-to-face (82%) or via social networking applications (73%) in the past 12 months; one in ten (10%) had purchased drugs on darknet marketplaces.

2019 SAMPLE CHARACTERISTICS

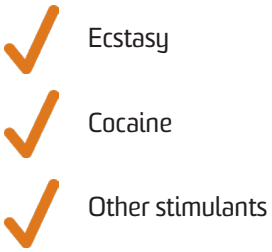
In 2019, 797 people from all Australian capital cities participated in EDRS interviews.



The median age in 2019 was 22 (IQR = 19 - 26), and 60% identified as male.

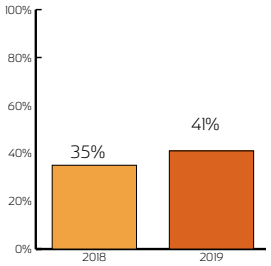


In the 2019 sample, 45% were enrolled students, 27% were unemployed, and 22% were employed full time.

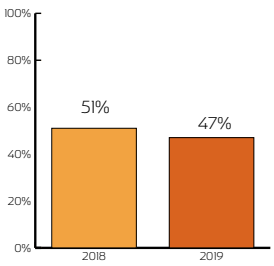


Participants were recruited on the basis that they had consumed ecstasy or other illicit stimulants at least monthly in the past 6 months.

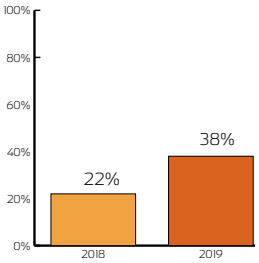
OTHER DRUGS



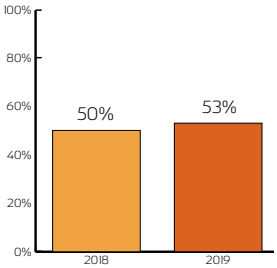
Past 6 month use of any ketamine increased from 35% in 2018 to 41% in the 2019 EDRS sample.



Past 6 month use of LSD was stable at 47% in the 2019 EDRS sample (51% in 2018).



Past 6 month use of any amyl nitrite increased from 22% in 2018 to 38% in the 2019 EDRS sample.

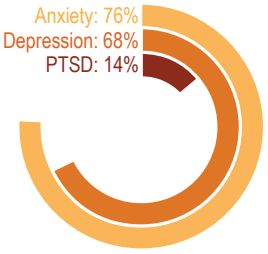


Past 6 month use of any nitrous oxide (nangs) was stable at 53% in the 2019 EDRS sample (50% in 2018).

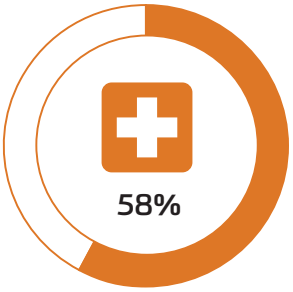
DRUG TREATMENT AND MENTAL HEALTH

Of the 2019 EDRS sample 6% reported that they were currently receiving drug treatment.

Over half of the national sample (57%) self-reported that they had experienced a mental health problem in the previous 6 months.

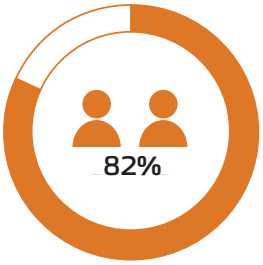


Of those who commented, the most common self-reported mental health concern was anxiety (76%), followed by depression (68%), and PTSD (14%).

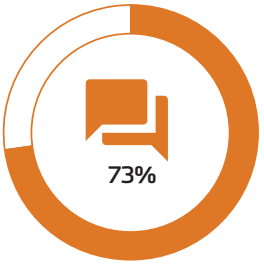


Of those self-reporting a mental health problem, 58% reported seeing a mental health professional in the previous 6 months (24% of the entire sample).

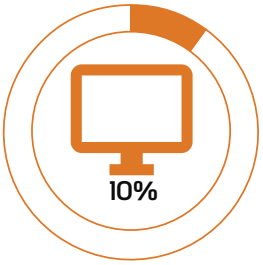
MODES OF PURCHASING



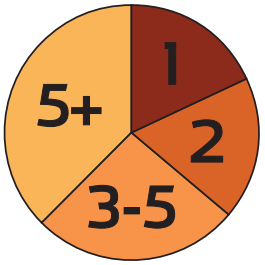
In 2019, 82% of the EDRS sample reported buying drugs face to face in the previous 12 months.



In 2019, 73% of the EDRS sample reported buying drugs off social networking applications in the previous 12 months.

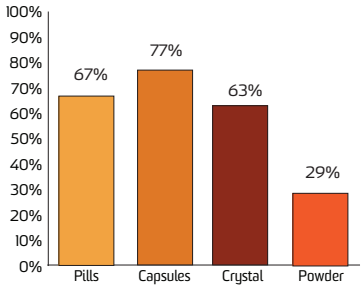


In 2019, 10% of the EDRS sample reported buying drugs off the darknet in the previous 12 months.



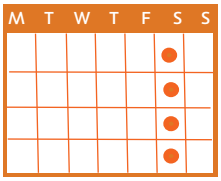
Of those who had purchased drugs via surface net or dark net, 18% had done so once, 18% twice, 26% 3-5 times, and 37% 5 or more times in the previous 12 months.

ECSTASY



Past 6 month use of ecstasy pills, capsules, crystal, and powder in 2019.

28%



Of those who had recently consumed ecstasy, almost 1 in 3 used it weekly.

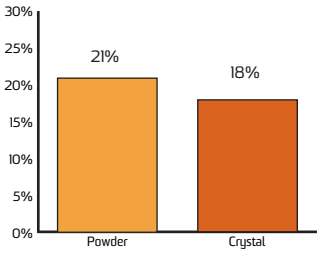
	2018		2019
2 Pills	83%	Pills	81%
2 Capsules	85%	Capsules	92%
0.25 Grams of Crystal	74%	Crystal	81%
0.40 Grams of Powder	68%	Powder	76%

Median amounts of ecstasy consumed in a 'typical' session using each form.

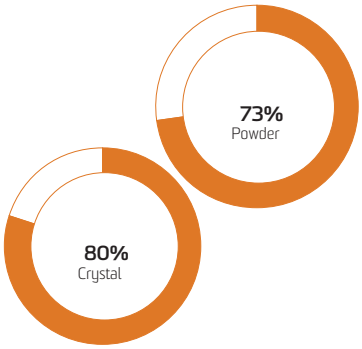
Of those who could comment 92% perceived ecstasy capsules to be 'easy' or 'very easy' to obtain.

METHAMPHETAMINE

Past 6 month use of any methamphetimine was stable at 33% in the 2019 EDRS sample.



Of the entire sample, 21% had recently consumed powder, and 18% crystal methamphetamine.



80% of people who had recently used crystal smoked it. Of those who had recently used powder, 73% snorted it.

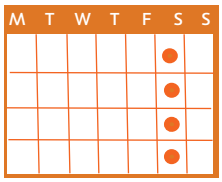
2018		2019
94%	Crystal	94%
65%	Powder	69%

Of those who could comment 94% perceived crystal methmphetamine to be 'easy' or 'very easy' to obtain.

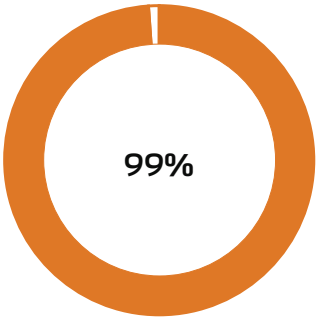
COCAINE

Past 6 month use of any cocaine increased from 59% in 2018 to 67% in 2019 in the EDRS sample.

7%



Of people who had consumed cocaine recently, 7% reported weekly or more frequent use.



Of people who had consumed cocaine in the last 6 months, 99% had snorted it.

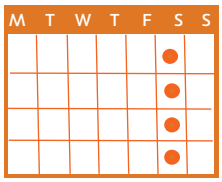
2018		2019
62%	Cocaine	70%

Of those who could comment 70% perceived cocaine to be 'easy' or 'very easy' to obtain.

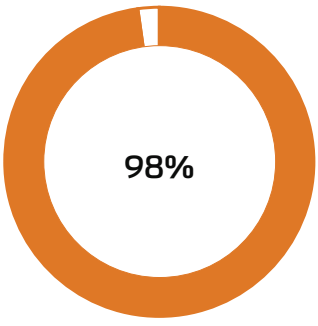
CANNABIS

Past 6 month use of any cannabis decreased from 90% in 2018 to 85% in 2019.

66%



Of those who had consumed cannabis recently, 2 in 3 reported weekly or more frequent use.



Of people who had consumed cannabis in the last 6 months, 98% had smoked it.

2018		2019
84%	Hydro	91%
76%	Bush	78%

Of those who could comment 91% perceived hydro to be 'easy' or 'very easy' to obtain.

1

Background and methods

The EDRS interviews are conducted annually with a sentinel group of people who regularly use ecstasy and other stimulants, recruited from all capital cities of Australia (n=797 in 2019). The results from the EDRS interviews are not representative of all people who consume illicit drugs, nor of illicit drug use in the general population, but this is not the aim of these data, instead intended to provide evidence indicative of emerging issues that warrant further monitoring. These findings should be interpreted alongside analyses of other data sources for a more complete profile of emerging trends in illicit drug use, market features, and harms in Australia.

Background

The Ecstasy and Related Drugs Reporting System (EDRS) is an illicit drug monitoring system which has been conducted in all states and territories of Australia since 2003, and forms part of Drug Trends. The purpose is to provide a coordinated approach to monitoring the use, market features, and harms of ecstasy and related drugs. This includes drugs that are routinely used in the context of entertainment venues and other recreational locations, including ecstasy, methamphetamine, cocaine, new psychoactive substances, LSD (*d*-lysergic acid), and ketamine.

The EDRS is designed to be sensitive to emerging trends, providing data in a timely manner rather than describing issues in extensive detail. It does this by studying a range of data sources, including data from annual interviews with people who regularly use ecstasy and other stimulants and from secondary analyses of routinely-collected indicator data. This report focuses on the key findings from the annual interview component of EDRS.

Methods

Full details of the methods for the annual interviews are available for download. To briefly summarise, participants were recruited primarily via internet postings, print advertisements, interviewer contacts, and snowballing (i.e., peer referral). Participants had to: i) be at least 16 years of age (due to ethical constraints), ii) have used ecstasy or other stimulants (including: MDA, methamphetamine, cocaine, LSD, mephedrone or other NPS) at least six times during the preceding six months; and iii) have been a resident of the capital city in which the interview took place for the past 12 months. Interviews took place in varied locations negotiated with participants (e.g., research institutions, coffee shops or parks). Following provision of informed consent and completion of a structured interview, participants were reimbursed $40 for their time and expenses incurred.

A total of 797 participants were interviewed during April–July 2019 (799 participants in 2018). The sample sizes recruited from the capital city in each jurisdiction were: Sydney, NSW n=100; Melbourne, VIC n=99; Adelaide, SA n=100; Canberra, ACT n=100; Hobart, TAS n=98; Brisbane, QLD n=100; Darwin, NT n=100; and Perth, WA n=100. Please note that for 2010 to 2012, the target sample size (n=100) was not achieved in the NT (2010 n=28; 2011 n=11; 2012=12 2013 n=45); as such, the NT jurisdictional data from these years should be interpreted with caution.

For normally distributed continuous variables, means and standard deviations (SD) are reported; for skewed data (i.e. skewness > ±1 or kurtosis > ±3), medians and interquartile ranges (IQR) are reported. Tests of statistical significance have been conducted between estimates for 2018 and 2019, noting that no corrections for multiple comparisons have been made and thus comparisons should be treated with caution. Values where cell sizes are ≤5 have been suppressed with corresponding notation (zero values are reported). References to 'recent' use and behaviours refers to the past six-month time period.

Interpretation of Findings

Caveats to interpretation of findings are discussed more completely in the methods for the annual interviews but it should be noted that these data are from participants recruited in capital cities, and thus do not reflect trends in regional and remote areas. Further, the results are not representative of all people who consume illicit drugs, nor of illicit drug use in the general population, but rather intended to provide evidence indicative of emerging issues that warrant further monitoring.

This report covers a subset of items asked of participants and does not include jurisdictional-level results beyond estimates of recent use of various substances (included in jurisdiction outputs; see below), nor does it include implications of findings. These findings should be interpreted alongside analyses of other data sources for a more complete profile of emerging trends in illicit drug use, market

features, and harms in Australia (see section on 'Additional Outputs' below for details of other outputs providing such profiles).

Additional Outputs

Infographics and data tables from this report are available for download. There are a range of outputs from the EDRS which triangulate key findings from the annual interviews and other data sources, including jurisdictional reports, bulletins, and other resources available via the Drug Trends webpage. This includes results from Illicit Drug Reporting System (IDRS), which focuses more so on the use of illicit drugs, including injecting drug use.

Please contact the research team at drugtrends@unsw.edu.au with any queries; to request additional analyses using these data; or to discuss the possibility of including items in future interviews.

2

Sample characteristics

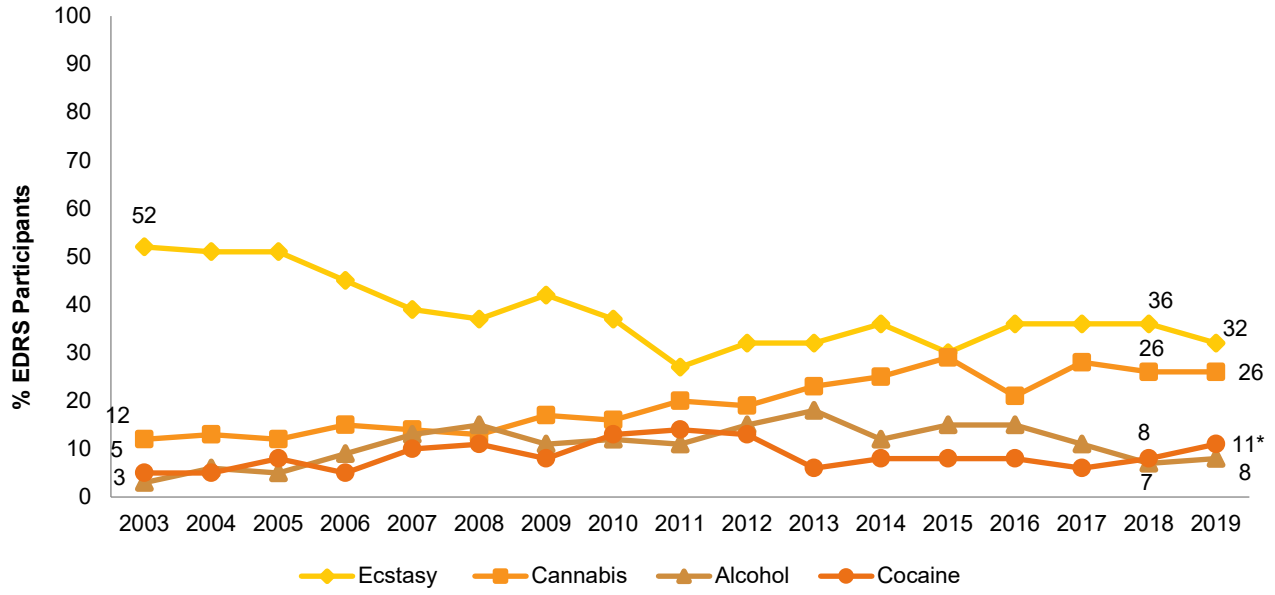
In 2019, the EDRS sample was predominantly male (60%) with a median age of 22 (IQR=19-26). Fifty-four per cent of the sample reported having received a post-school qualification(s), and nearly half (45%) were current students. Participants typically reported that ecstasy or cannabis was their drug of choice, although cannabis and alcohol were the drugs used most often in the month preceding interview. Twenty-eight per cent of the sample reported weekly or more frequent ecstasy use.

Table 1: Demographic characteristics of the sample, nationally and by jurisdiction, 2018-2019

	National		NSW	ACT	VIC	TAS	SA	WA	NT	QLD
	N=799	**N=797**	**N=100**	**N=100**	**N=99**	**N=98**	**N=100**	**N=100**	**N=100**	**N=100**
	2018	**2019**								
Median age (years; IQR)	21 (19-24)	**22 (19-26)**	25 (21-29)	20 (19-23)	21 (19-28)	24 (21-27)	22 (19-25)	19 (18-21)	24 (20-30)	20 (19-23)
% Male	59	**60**	57	62	51	60	69	62	50	66
% Aboriginal and/or Torres Strait Islander	6	**5**	-	12	0	7	-	-	11	-
% Sexual identity										
Heterosexual	84	**81***	63	79	84	86	81	88	88	77
Homosexual	4	**5**	11	-	6	-	6	-	-	-
Bisexual	10	**12**	17	15	10	10	10	8	8	17
Queer	/	**2**	-	-	0	-	-	-	-	-
Different identity	2	**1**	-	-	0	0	-	0	0	0
Mean years of school education (range)	12 (8-12)	**12 (8-12)**	12 (9-12)	11 (8-12)	12 (8-12)	12 (10-12)	11 (8-12)	12 (9-12)	11 (9-12)	12 (9-12)
% Post-school qualification(s)^	42	**54*** **	59	40	57	77	62	30	68	43
% Employment~ status										
Employed full time	22	**22**	37	23	18	21	22	12	30	11
Students#	18	**45*** **	41	44	50	46	36	58	22	65
Unemployed	20	**27****	19	22	25	29	38	20	29	32
Median weekly income $ (IQR)	(N=774) $400 (250-769)	**(N=763) $500*** ** **(257-850)**	**(N=99) $755 (450-1154)**	**(N=90) $600 (300-900**	**(N=95) $450 (231-900)**	**(N=97) $500 (300-800)**	**(N=93) $460 (250-750)**	**(N=97) $300 (150-500)**	**(N=95) $750 (450-962)**	**(N=97) $360 (246-563)**
% Accommodation										
Own house/flat	4	**4**	-	-	7	11	-	-	-	-
Rented house/flat	44	**48**	61	39	50	52	46	27	48	59
Parents'/family home	48	**40*** **	33	46	41	27	48	71	19	34
Boarding house/hostel	1	**5*** **	0	-	-	-	0	0	24	-
No fixed address	2	**1**	0	-	-	-	-	0	-	0
Other	1	**-**	0	0	0	0	0	0	-	0

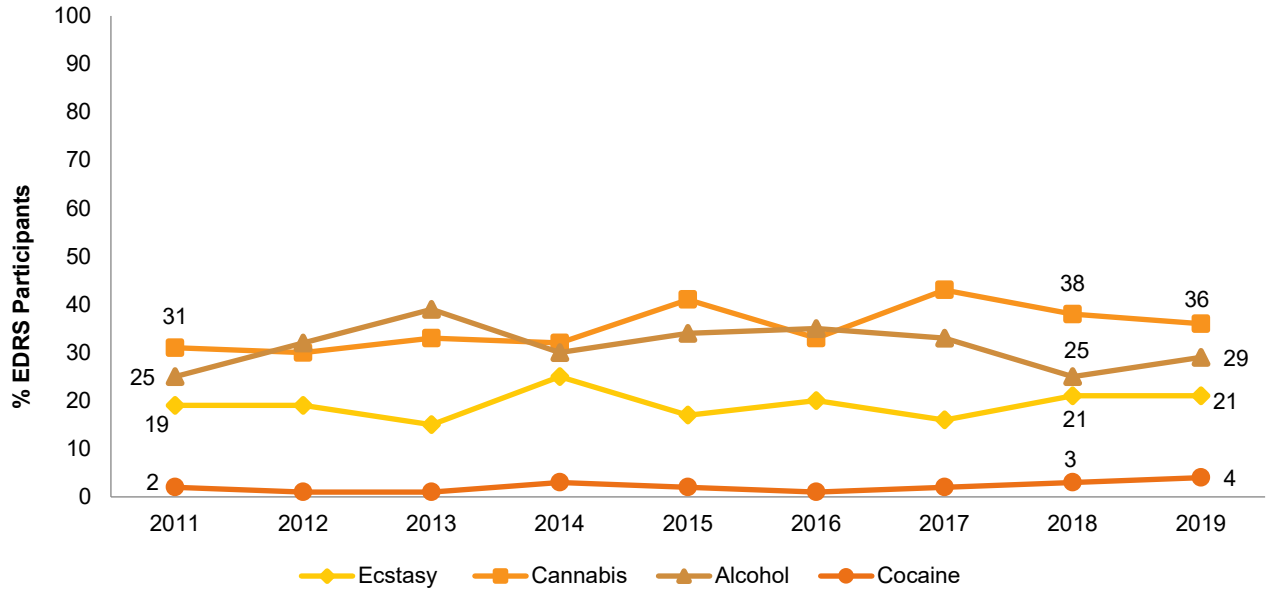
Note. ~Difference in employment and student status may be due to a difference in how the questions was asked in 2018 and 2019. ^Includes trade/technical and university qualifications. # Includes full-time students, part-time students and participants who both work and study. / not asked. – Per cent suppressed due to small cell size (n≤5 but not 0). *p<0.050; **p<0.010; ***p<0.001 for 2018 versus 2019 for the national sample only.

Figure 1: Drug of choice, nationally, 2003-2019



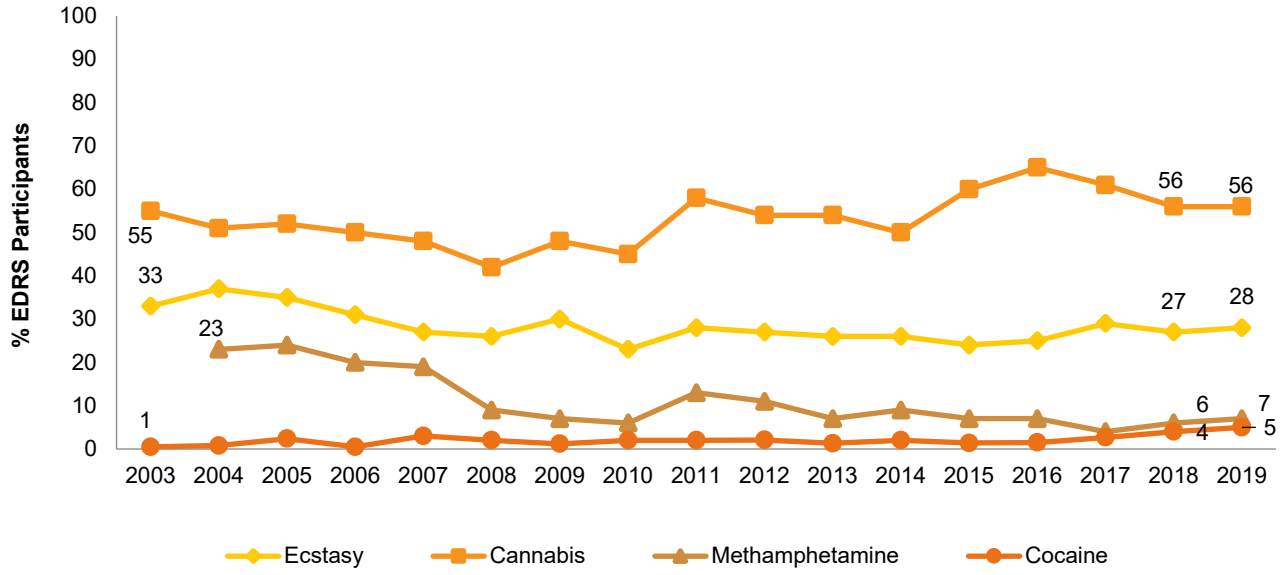
Note. Participants could only endorse one substance. Substances listed in this figure are the primary endorsed; nominal percentages have endorsed other substances. *p<0.050; **p<0.010; ***p<0.001 for 2018 versus 2019.

Figure 2: Drug used most often in the past month, nationally, 2011-2019



Note. Participants could only endorse one substance. Substances listed in this figure are the primary endorsed; nominal percentages have endorsed other substances. Data are only presented for 2011-2019 as this question was not asked in 2003-2010. *p<0.050; **p<0.010; ***p<0.001 for 2018 versus 2019.

Figure 3: Weekly or more substance use in the past six months, nationally, 2003-2019



Note. Computed from the entire sample regardless of whether they had used the substance in the past six months. *p<0.050; **p<0.010; ***p<0.001 for 2018 versus 2019.

3

Ecstasy

Participants were asked about their recent (past six month) use of various forms of ecstasy (3,4-methylenedoxymethamphetamine), including pills, powder, capsules, and crystal. Participants were asked to differentiate between each form according to how the product was sold/marketed to them.

Patterns of Consumptions (any ecstasy)

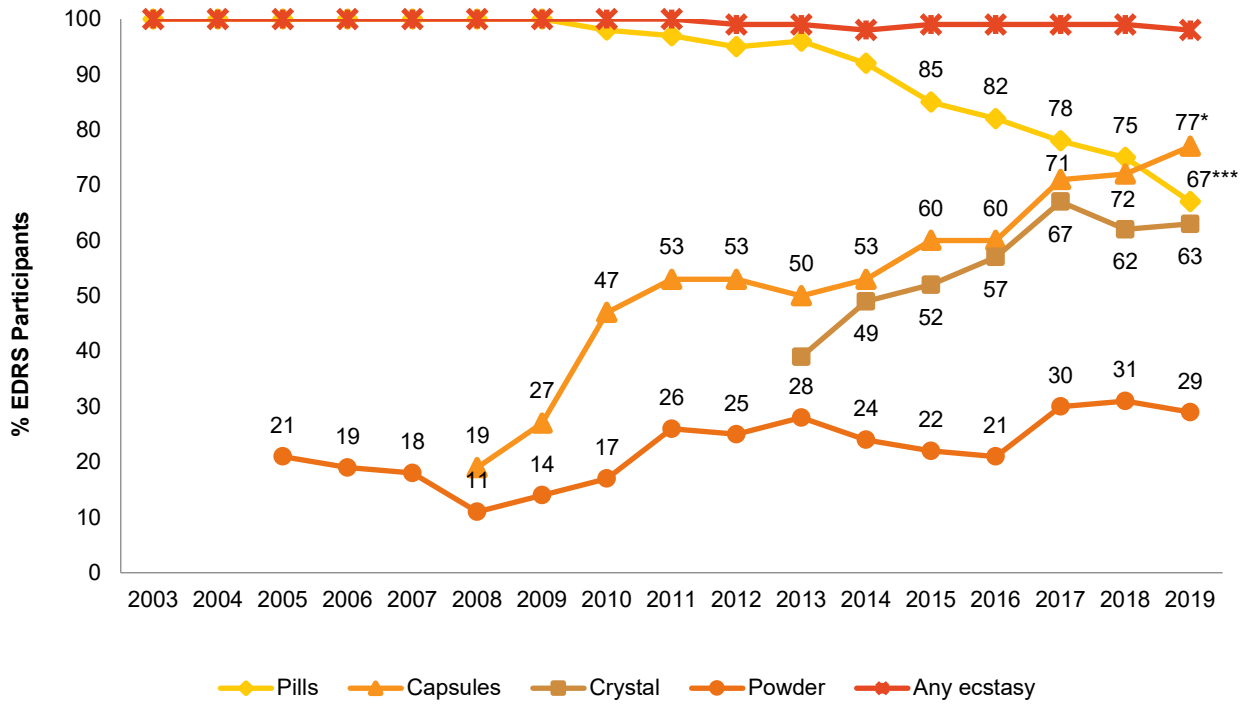
Recent Use (past 6 months)

For the first time since EDRS reporting began, capsules were the most common form of ecstasy used in the past six months (77%), increasing from 72% reporting recent use in 2018 (p=0.026). The per cent reporting recent use of ecstasy pills reduced from 75% in 2018 to 67% in 2019 (p<0.001), and crystal use was relatively stable between 2018 and 2019 (62% and 63%, respectively). Under one-third (29%) of participants reported recent use of ecstasy powder in 2019 (Figure 4).

Frequency of Use

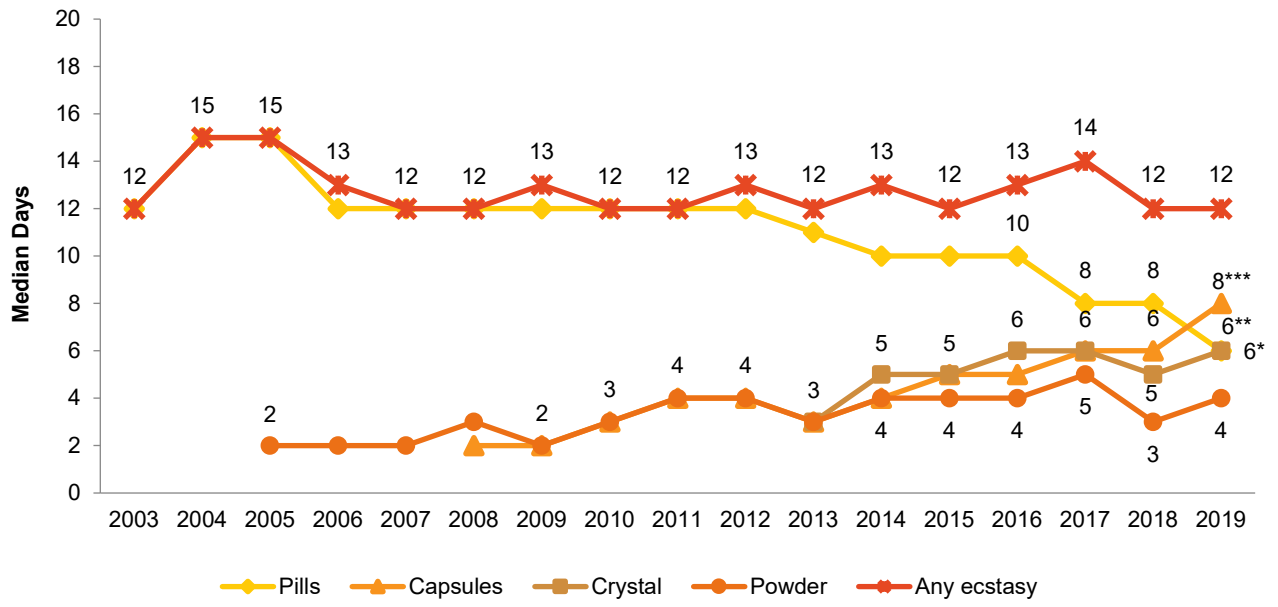
Participants reported using ecstasy (in any form) on a median of 12 days (IQR=7-24; n=779), equivalent to fortnightly use in the preceding six months (12 days in 2018, p=0.597). Among those that reported recent use (n=783), weekly or more frequent use of any form of ecstasy remained stable at 28% (27% in 2018; p=0.735; Figure 5).

Figure 4: Past six month use of any ecstasy, and ecstasy pills, capsules, crystal, and powder, nationally, 2003-2019



Note. Up until 2012, participant eligibility was determined based on any recent ecstasy use; subsequently it has been expanded to broader illicit stimulant use. Data collection for powder started in 2005, capsules in 2008 and crystal in 2013. *p<0.050; **p<0.010; ***p<0.001 for 2018 versus 2019.

Figure 5: Median days of any ecstasy, pills, capsules, crystal, and powder use in the past six months, nationally, 2003-2019



Note. Up until 2012, participant eligibility was determined based on any recent ecstasy use; subsequently it has been expanded to broader illicit stimulant use. Data collection for powder started in 2005, capsules in 2008 and crystal in 2013. Median days computed among those who reported past 6 month use (maximum 180 days). Median days rounded to the nearest whole number. Y axis reduced to 20 days to improve visibility of trends. *p<0.050; **p<0.010; ***p<0.001 for 2018 versus 2019.

Table 2: Past six month use of ecstasy pills, by jurisdiction, 2003-2019

%	NSW	ACT	VIC	TAS	SA	WA	NT	QLD
2003	100	100	100	100	100	100	100	100
2004	100	100	100	100	100	100	100	100
2005	100	100	100	100	100	100	100	100
2006	100	100	100	100	100	100	100	100
2007	100	100	100	100	100	99	100	100
2008	100	100	100	100	100	100	100	100
2009	100	100	100	100	99	100	100	100
2010	99	99	98	96	99	100	100	98
2011	99	100	90	95	100	100	100	99
2012	99	94	92	92	98	100	67	95
2013	99	96	86	93	98	99	96	99
2014	89	91	90	92	96	98	99	81
2015	69	56	84	99	94	99	98	86
2016	52	70	93	95	96	98	90	67
2017	42	79	83	93	71	93	86	78
2018	41	80	77	88	56	92	90	76
2019	**40**	**70**	**74**	**74****	**62**	**68*****	**92**	**56****

Note. *p<0.050; **p<0.010; ***p<0.001 for 2018 versus 2019.

Table 3: Past six month use of ecstasy capsules, by jurisdiction, 2008-2019

%	NSW	ACT	VIC	TAS	SA	WA	NT	QLD
2008	24	23	18	18	16	28	9	17
2009	33	6	48	48	10	15	31	27
2010	35	37	65	81	38	14	89	42
2011	55	39	64	80	34	11	64	57
2012	57	61	67	75	29	32	25	52
2013	59	43	69	53	26	48	27	67
2014	76	56	66	49	37	51	32	53
2015	64	69	76	50	49	65	44	62
2016	68	72	84	40	55	54	44	64
2017	76	67	90	60	81	61	57	72
2018	77	74	87	62	58	76	74	72
2019	**82**	**81**	**90**	**62**	**64**	**84**	**76**	**78**

Note. Data collection for capsules started in 2008. *p<0.050; **p<0.010; ***p<0.001 for 2018 versus 2019.

Table 4: Past six month use of ecstasy crystal, by jurisdiction, 2013-2019

%	NSW	ACT	VIC	TAS	SA	WA	NT	QLD
2013	28	71	51	48	25	34	50	23
2014	61	54	64	29	36	58	43	45
2015	68	57	54	36	41	51	65	42
2016	81	52	59	33	63	59	43	68
2017	75	75	43	47	69	78	71	78
2018	64	60	57	53	79	51	69	67
2019	**68**	**72**	**52**	**48**	**78**	**64**	**54***	**65**

Note. Data collection for crystal started in 2013. *p<0.050; **p<0.010; ***p<0.001 for 2018 versus 2019.

Table 5: Past six month use of ecstasy powder, by jurisdiction, 2005-2019

%	NSW	ACT	VIC	TAS	SA	WA	NT	QLD
2005	15	24	27	11	31	27	14	20
2006	8	19	35	13	27	9	8	31
2007	20	8	38	5	28	11	11	18
2008	15	7	27	6	11	9	-	6
2009	11	14	24	12	9	10	20	17
2010	7	14	34	21	19	6	15	20
2011	21	23	30	26	29	7	27	32
2012	20	35	31	30	11	26	17	31
2013	29	20	51	20	16	25	18	36
2014	15	13	43	20	18	20	26	36
2015	19	22	46	15	14	18	15	22
2016	15	12	51	28	21	13	22	34
2017	21	32	34	24	44	36	20	28
2018	18	23	45	41	27	24	42	27
2019	**18**	**30**	**20*****	**28***	**41***	**30**	**42**	**22**

Note. Data collection for powder started in 2005. *p<0.050; **p<0.010; ***p<0.001 for 2018 versus 2019.

Patterns of Consumption (by form)

Ecstasy Pills

Recent (past 6 months) Use: Reported recent use was at its lowest in 2019 (67%), down from 75% in 2018 (p<0.001). The decline was most prominent in WA, TAS and QLD (Table 2).

Frequency of Use: Use declined from a median of 8 days in 2018 to 6 days (IQR=3-12) in 2019 (p=0.005) (Figure 5), and the proportion reporting weekly or greater use was 14% in 2019 among those that reported recent use of ecstasy pills (17% in 2018; p=0.104).

Routes of Administration: The most common route of administration remained swallowing (97% versus 98% in 2018; p=0.490) followed by snorting (37%; 37% in 2018). Few people reported recent smoking (2%) or shelving/shafting (3%).

Quantity: In a 'typical' session, the median number of pills used was 2 (IQR=1-3) in 2019 (2 in 2018). The median maximum number of pills used remained stable at 4 (IQR=2-6; 4 in 2018).

Ecstasy Capsules

Recent (past 6 months) Use: Capsules were the most common form used in 2019, with 77% of the total sample reporting recent use (72% in 2018; p=0.026; Table 3).

Frequency of Use: There was a significant increase in median days of use from 2018 (6 days) to 2019 (8 days, IQR=4-12, p<0.001) in 2019 (Figure 5). Thirteen per cent of consumers reported weekly or more frequent use, an increase from 2018 (8%; p=0.003).

Routes of Administration: Swallowing remained the main route of administration (98% of consumers in 2019 versus 97% in 2018; p=0.278). Almost a third (29%) reported snorting capsules, an increase from 22% in 2018 (p=0.006). Smaller numbers reported shelving/shafting and smoking (3% and 1%, respectively).

Quantity: The median number of capsules used in a 'typical' session in 2019 was 2 (IQR=2-3), and the median for the maximum capsules used in a session was 4 (IQR=2-6).

Ecstasy Crystal

Recent (past 6 months) Use: Recent use of crystal was 63% in 2019, similar to the 62% who reported recent use in 2018 (Table 4).

Frequency of Use: Participants reported using crystal use on a median of 6 days (IQR=3-12) in 2019, a significant increase from 5 days in 2018 (p=0.031) (Figure 5). Among recent consumers, 12% reported weekly or greater use of ecstasy crystal, increasing from 7% in 2018 (p=0.016).

Routes of Administration: The main route of administration among consumers was swallowing (80% versus 81% in 2018) followed by snorting (53% versus 49% in 2018). Few people who had used crystal reported smoking (4%) or shafting/shelving (2%).

Quantity: The median amount of crystal used in a 'typical' session was 0.25 grams (IQR=0.20-0.50), and the median for maximum used was 0.50 grams (IQR=0.25-1.00).

Ecstasy Powder

Recent (past 6 months) Use: As in previous years, powder was the least used form in 2019, with 29% of respondents having used this form (31% in 2018; p=0.366; Table 5).

Frequency of Use: Powder was used on a median of 4 days (IQR=2-10) in the previous 6 months (Figure 5). This remained stable from 2018 (3 days; p=0.562). Weekly or more frequent use of powder was reported by 11% of respondents among those that reported recent use (5% in 2018; p=0.020).

Routes of Administration: Snorting has consistently been the most common route of administration for powder (81%; 80% in 2018), followed by swallowing (40%; 43% in 2018).

Quantity: In 2019, the median quantity of powder used in a 'typical' session was 0.40 grams (IQR=0.20-0.50). The median for maximum used was 0.50 grams (IQR=0.30-1.00).

Price, Perceived Purity and Availability

Ecstasy Pills

Price: The reported median price of a pill in 2019 remained at $25 (IQR=20-30; n=542), consistent with previous years (Figure 6).

Perceived Purity: Of those who responded (n=555), 30% reported purity of ecstasy pills to be 'high' (Table 6), an increase from 23% in 2018 (p=0.003).

Perceived Availability: Of those who responded (n=561), 81% reported pills as 'easy' or 'very easy' to obtain (Table 6), similar to 2018 results (83%).

Ecstasy Capsules

Price: The median cost of an ecstasy capsule decreased from $25 in 2018 to $20 (IQR=20-25; n=625) in 2019 (p=0.001). This is the lowest median reporting price since reporting began in 2008 (Figure 6).

Perceived Purity: Of those who responded (n=651), purity of capsules was reported to be 'high' by 39% (Table 6). In 2019, there was an increase of those reporting that the purity had fluctuated (22% versus 15% in 2018; p<0.001).

Perceived Availability: Of those who responded (n=653), 92% of participants reported capsules 'easy' or 'very easy' to obtain. This was an increase from 85% in 2018 (p<0.001; Table 6).

Ecstasy Crystal

Price: The median price of a gram of crystal decreased (although not significantly) from $200 in 2018 to $180 (IQR=120-200; n=258; p=0.081) in 2019. This is the lowest median price since reporting began in 2013 (Figure 7).

Perceived Purity: Of those who responded (n=444), 62% endorsed crystal to be 'high' in purity (versus 54% in 2018; p=0.017; Table 6). As in previous years, this was the greatest per cent reporting 'high' purity across all forms of ecstasy.

Perceived Availability: Of those who responded (n=422), crystal was rated as 'easy' or 'very easy' to obtain by 81% (Table 6), up from 74% in 2018 (p=0.007).

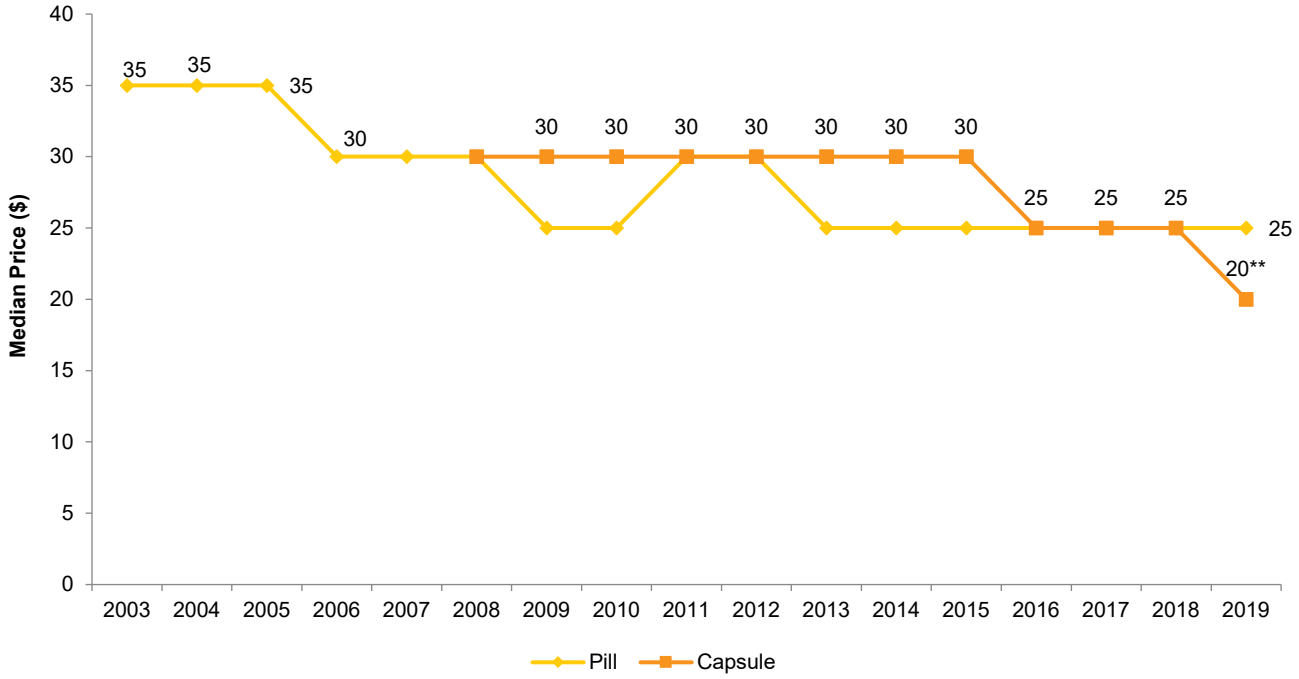
Ecstasy Powder

Price: A gram of ecstasy powder had a median price of $160 in 2019 (IQR=100-200; n=92; $150 in 2018; p=0.622).

Perceived Purity: Of those who responded in 2019 (n=147), fewer perceived powder to be of 'low' purity than in 2018 (7% versus 16% in 2018; p=0.016; Table 6).

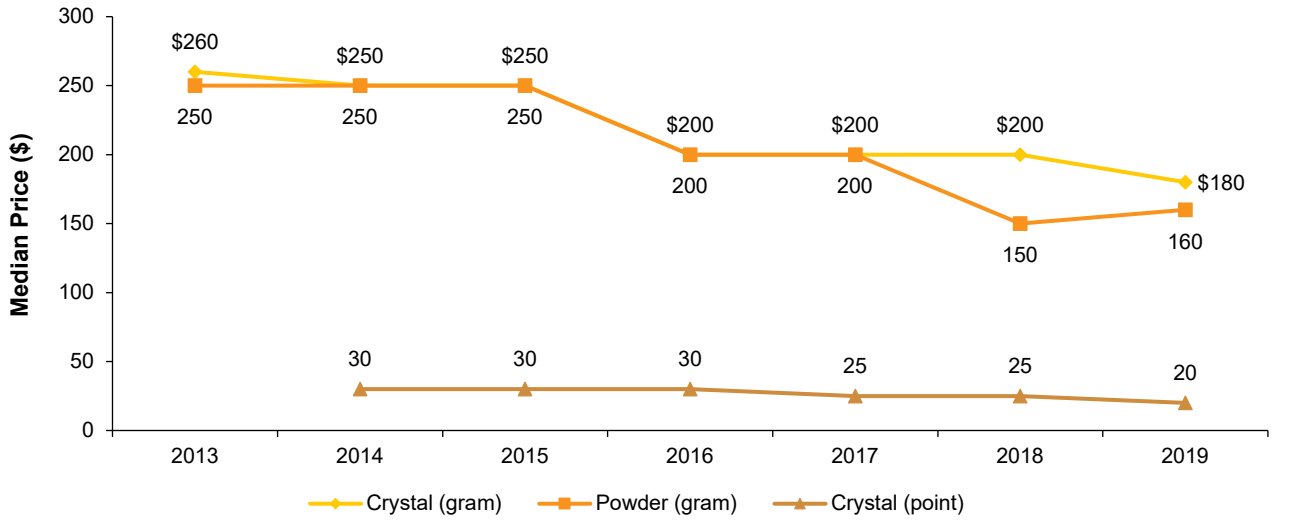
Perceived Availability: Of those who responded (n=148), 76% said powder was 'easy' or 'very easy' to obtain (68% in 2018; p=0.124; Table 6).

Figure 6: Median price of ecstasy pills and capsules, nationally, 2003-2019



Note. Among those who commented. Data collection for price of ecstasy capsules started in 2008. *p<0.050; **p<0.010; ***p<0.001 for 2018 versus 2019.

Figure 7: Median price of ecstasy crystal (per gram and point) and powder (per point only), nationally, 2013-2019



Note. Among those who commented. Data collection for price of ecstasy crystal started in 2013. *p<0.050; **p<0.010; ***p<0.001 for 2018 versus 2019.

Table 6: Current perceived purity and availability of different forms of ecstasy, nationally, 2017-2019

	2017	2018	2019
Current Purity			
% Pills	*(n=566)*	(*n=592*)	(***n=555***)
Low	17	18	**12***
Medium	37	33	**28**
High	18	23	**30****
Fluctuates	28	26	**29**
% Capsules	*(n=563)*	(*n=581*)	(***n=651***)
Low	11	11	**7***
Medium	37	37	**33**
High	34	38	**39**
Fluctuates	18	15	**22*****
% MDMA crystal	*(n=430)*	(*n=394*)	(***n=444***)
Low	5	5	**3**
Medium	30	32	**26***
High	50	54	**62***
Fluctuates	15	9	**10**
% Powder	*(n=122)*	(*n=111*)	(***n=147***)
Low	14	16	**7***
Medium	51	42	**49**
High	27	33	**30**
Fluctuates	8	8	**14**
Current Availability			
% Pills	*(n=576)*	(*n=597*)	(***n=561***)
Very easy	50	43	**40**
Easy	38	40	**41**
Difficult	10	16	**16**
Very difficult	1	2	**3**
% Capsules	*(n=567)*	(*n=588*)	(***n=653***)
Very easy	43	38	**55*****
Easy	43	47	**37*****
Difficult	13	14	**8*****
Very difficult	1	1	**-**
% Crystal	*(n=433)*	(*n=392*)	(***n=442***)
Very easy	38	30	**37***
Easy	40	44	**44**
Difficult	20	23	**18**
Very difficult	2	4	**-****
% Powder	*(n=122)*	(*n=115*)	(***n=148***)
Very easy	30	20	**29**
Easy	40	48	**47**
Difficult	27	30	**22**
Very difficult	3	2	**-**

Note. The response option 'Don't know' was excluded from analysis. – Per cent suppressed due to small cell size ($n \leq 5$ but not 0). Market questions were only asked for all forms of ecstasy from 2017 onwards. *$p<0.050$; **$p<0.010$; ***$p<0.001$ for 2018 versus 2019.

4

Methamphetamine

Participants were asked about their recent (past six month) use of various forms of methamphetamine, including powder (white particles, described as ‘speed’), base (wet, oily powder), and crystal (clear, ice-like crystals).

Patterns of Consumptions (any methamphetamine)

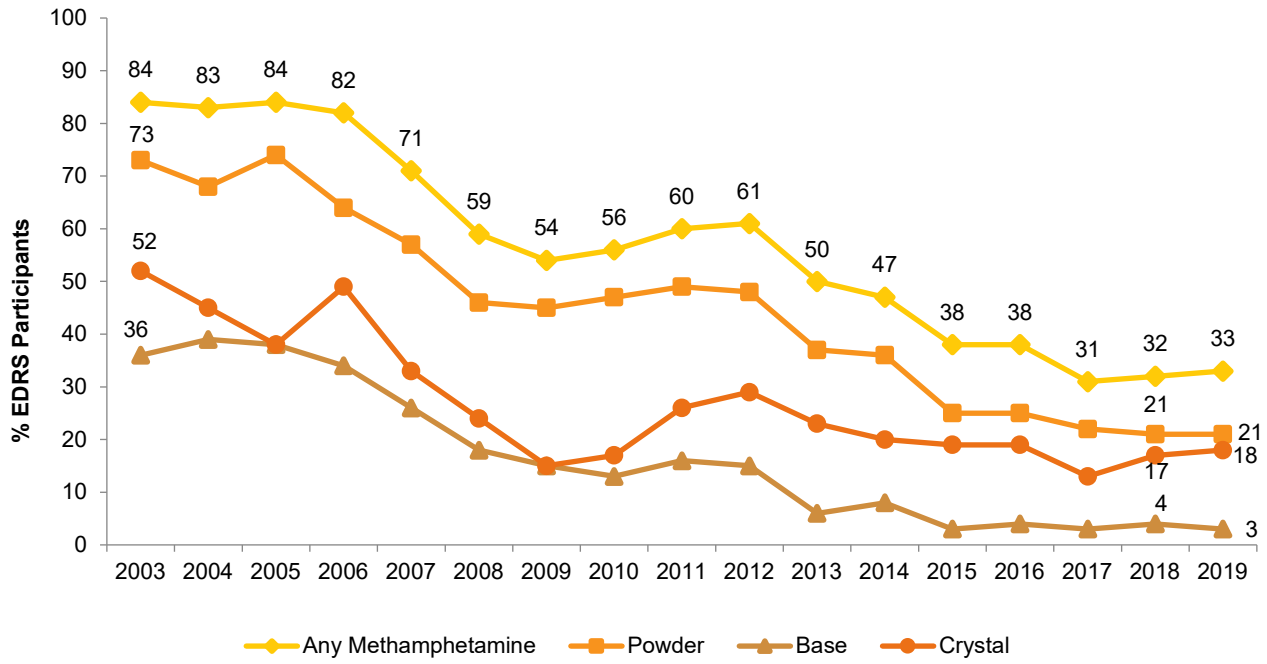
Recent Use (past 6 months)

The per cent reporting recent use of methamphetamine has been declining since monitoring began (Figure 8), from more than four in five participants in 2003 (84%) to one in three participants (33%) in 2019 (p<0.001). It should be noted that use has stabilised in the past three years (32% in 2018; p=0.829).

Frequency of Use

Use has remained relatively infrequent since 2013 at a median of 5 days (IQR=2-15) in 2019 (Figure 9). Indeed, 21% of recent consumers reported using methamphetamine weekly or more frequently in 2019 (18% in 2018; p=0.360).

Figure 8: Past six month use of any methamphetamine, and methamphetamine powder, base, and crystal, nationally, 2003-2019



Note. *p<0.050; **p<0.010; ***p<0.001 for 2018 versus 2019.

Patterns of Consumption (by form)

Methamphetamine Powder

Recent (past 6 months) Use: Powder has consistently been the main form used, although use declined substantially from 2003 to 2015, and then stabilised in the years subsequent (Figure 8), with 21% of participants consuming powder in 2019 (21% in 2018). Use significantly increased in the NT (Table 8).

Frequency of Use: Frequency of use declined over earlier years, then stabilised from 2015 (2019: median of 2 days; IQR=1-6) (Figure 9).

Routes of Administration: In 2019, the main route of administration among consumers was snorting (73%), followed by swallowing (30%), smoking (14%) and injecting (9%).

Quantity: The median intake in a 'typical' session was 0.25 grams (IQR=0.10-0.58)

whereas the median maximum used was 0.40 grams (IQR=0.10-1.00).

Methamphetamine Crystal

Recent (past 6 months) Use: Crystal use has decreased over the period of monitoring, although the decline has not been linear (Figure 8). Eighteen per cent had recently consumed crystal in 2019 (17% in 2018; p=0.922). As in 2018, crystal remained the main form of methamphetamine used in NT, QLD, WA and SA in 2019 (Table 9).

Frequency of Use: Frequency of use showed a trend towards an increase in 2019 (median 10 days; IQR=3-30) relative to 2018 (median 7 days; p=0.065) (Figure 9).

Routes of Administration: Smoking remained the most common route of administration among those who had used crystal, with 80% reporting this method in 2019, followed by snorting (24%), injecting (21%) and swallowing (17%).

Quantity: Those who reported recent crystal use had used a median 0.20 grams (IQR=0.10-0.50) in a 'typical' session and a median of 0.50 grams as maximum used (IQR=0.20-1.00).

Price, Perceived Purity and Availability

Methamphetamine Powder

Price: Participants reported a median price of $175 per gram (IQR=110-200, n=61) and $50 for one point (IQR=30-70; n=43) in 2019.

Perceived Purity: Of those who responded (n=118), the greatest per cent reported perceived purity to be 'high' (38%), followed by 'medium' (32%) purity (Figure 12). Nineteen per cent of participants perceived purity to be 'fluctuating', a significant increase from 5% in 2018 (p=0.003).

Perceived Availability: Of those who responded (n=121), over two-thirds (69%) found methamphetamine powder 'easy' or 'very easy' to obtain, and 22% found it difficult. These findings reflected those observed in 2018 (Figure 14).

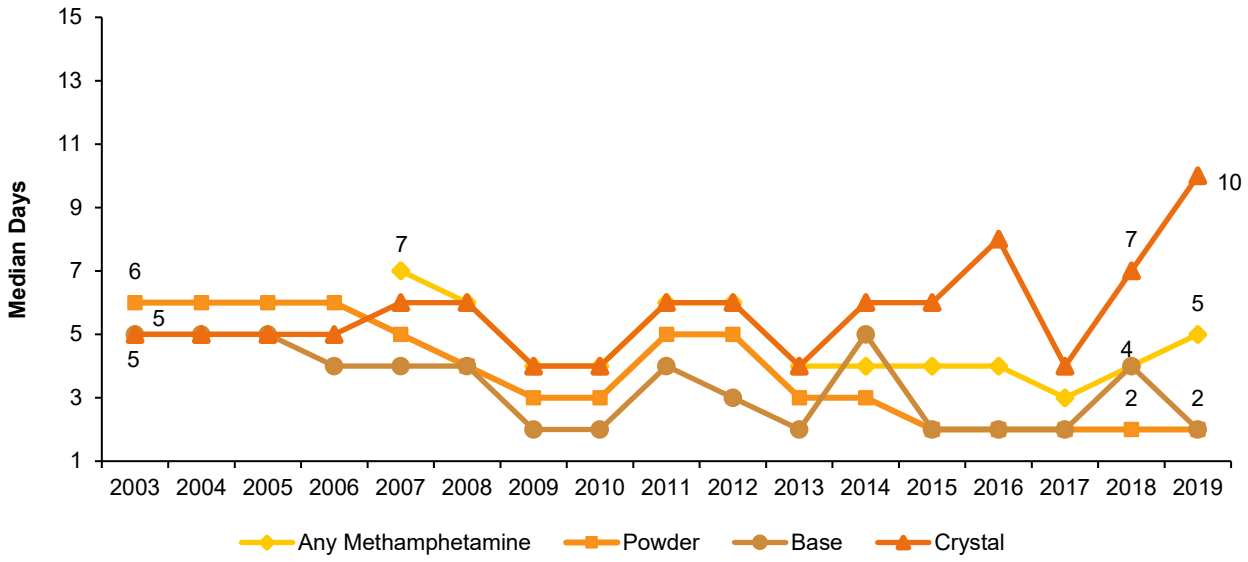
Methamphetamine Crystal

Price: Participants reported a median price of $300 per gram (IQR=250-450; n=50) and $50 per point (IQR=50-80, n=106).

Perceived Purity: Of those who responded (n=145), over half (55%) perceived crystal to be of 'high' purity, with 22% reporting 'fluctuates' and 19% perceiving purity to be 'medium'. These findings reflected those observed in 2018 (Figure 13).

Perceived Availability: Of those who responded (n=153), the vast majority (94%) of regarded crystal as 'easy' or 'very easy' to obtain in 2019 (Figure 15), similar to reports of current availability in 2018.

Figure 9: Median days of any methamphetamine use and of methamphetamine powder, base, and crystal use in the past six months, nationally, 2003-2019



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 15 to improve visibility of trends. *p<0.050; **p<0.010; ***p<0.001 for 2018 versus 2019.

Table 7: Past six month use of any methamphetamine, by jurisdiction, 2003-2019

%	NSW	ACT	VIC	TAS	SA	WA	NT	QLD
2003	87	79	98	82	92	91	82	66
2004	89	77	94	76	90	95	82	70
2005	83	75	86	78	94	92	76	84
2006	76	79	91	78	92	88	67	78
2007	66	60	91	70	90	62	67	58
2008	66	55	77	63	58	50	24	57
2009	49	54	72	52	53	44	64	47
2010	50	70	72	48	57	45	63	51
2011	49	51	75	52	67	64	91	60
2012	42	73	84	64	48	47	75	76
2013	36	65	71	57	46	31	44	48
2014	32	51	68	64	32	31	47	47
2015	33	35	55	45	33	20	49	31
2016	27	26	57	42	36	27	52	39
2017	30	33	46	40	37	12	35	14
2018	19	33	60	46	45	11	27	18
2019	**26**	**33**	**46***	**45**	**34**	**11**	**44***	**24**

Note. *p<0.050; **p<0.010; ***p<0.001 for 2018 versus 2019.

Table 8: Past six month use of methamphetamine powder, by jurisdiction, 2003-2019

%	NSW	ACT	VIC	TAS	SA	WA	NT	QLD
2003	79	64	89	67	65	83	81	57
2004	81	64	92	68	62	78	72	42
2005	76	70	85	77	66	85	73	57
2006	55	66	91	62	51	65	59	58
2007	45	53	90	65	53	46	55	46
2008	48	42	75	59	30	38	24	34
2009	37	44	72	46	30	37	61	41
2010	29	66	70	40	38	38	59	47
2011	32	50	69	47	45	44	91	49
2012	31	63	77	61	24	27	58	58
2013	25	57	58	53	21	17	34	41
2014	21	48	56	58	13	19	39	34
2015	27	31	45	39	11	6	31	11
2016	18	21	50	32	12	18	27	25
2017	18	32	43	29	19	7	20	9
2018	14	25	56	30	15	-	14	10
2019	**17**	**23**	**41***	**33**	**16**	**-**	**28***	**9**

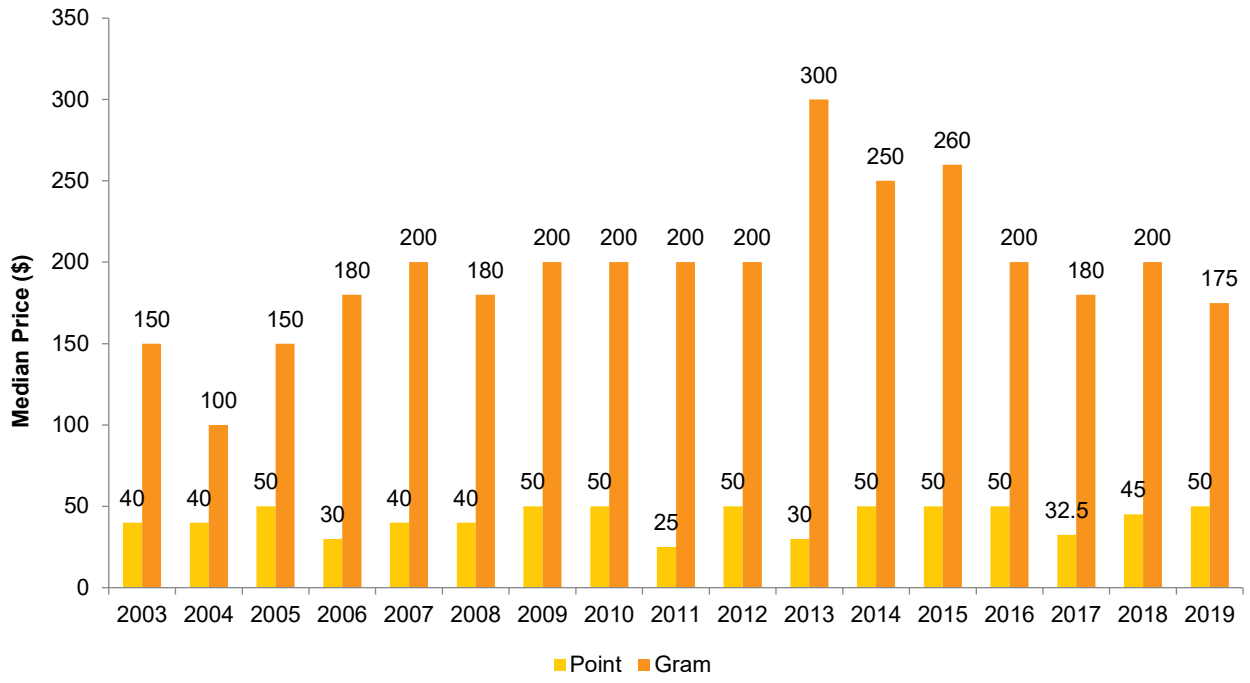
Note. – Per cent suppressed due to small cell size (n≤5 but not 0). *p<0.050; **p<0.010; ***p<0.001 for 2018 versus 2019.

Table 9: Past six month use of methamphetamine crystal, by jurisdiction, 2003-2019

%	NSW	ACT	VIC	TAS	SA	WA	NT	QLD
2003	48	56	64	52	48	77	40	38
2004	46	39	52	16	47	80	35	42
2005	40	26	42	10	41	69	32	50
2006	56	37	49	27	62	77	26	50
2007	42	20	39	7	49	52	24	23
2008	33	24	22	15	34	36	0	26
2009	9	8	13	7	32	20	15	17
2010	21	16	18	-	26	22	22	8
2011	19	9	38	-	43	46	-	32
2012	18	26	48	10	32	33	-	40
2013	11	14	45	17	28	22	21	21
2014	13	8	34	14	20	17	27	26
2015	12	7	19	13	26	16	36	20
2016	15	5	18	21	33	12	32	18
2017	12	8	10	14	26	6	24	7
2018	6	15	14	24	40	8	21	12
2019	**13**	**15**	**12**	**20**	**26***	**8**	**31**	**16**

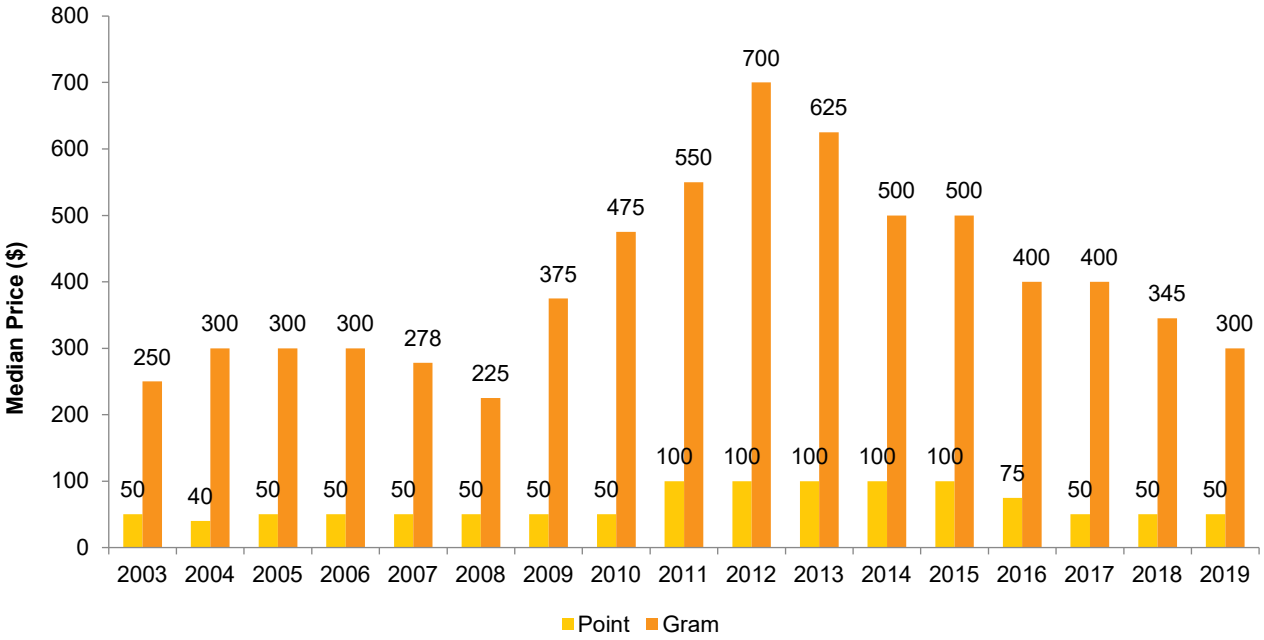
Note. - Per cent suppressed due to low numbers (n≤5 but not 0). *p<0.050; **p<0.010; ***p<0.001 for 2018 versus 2019.

Figure 10: Median price of powder methamphetamine per point and gram, nationally, 2003-2019



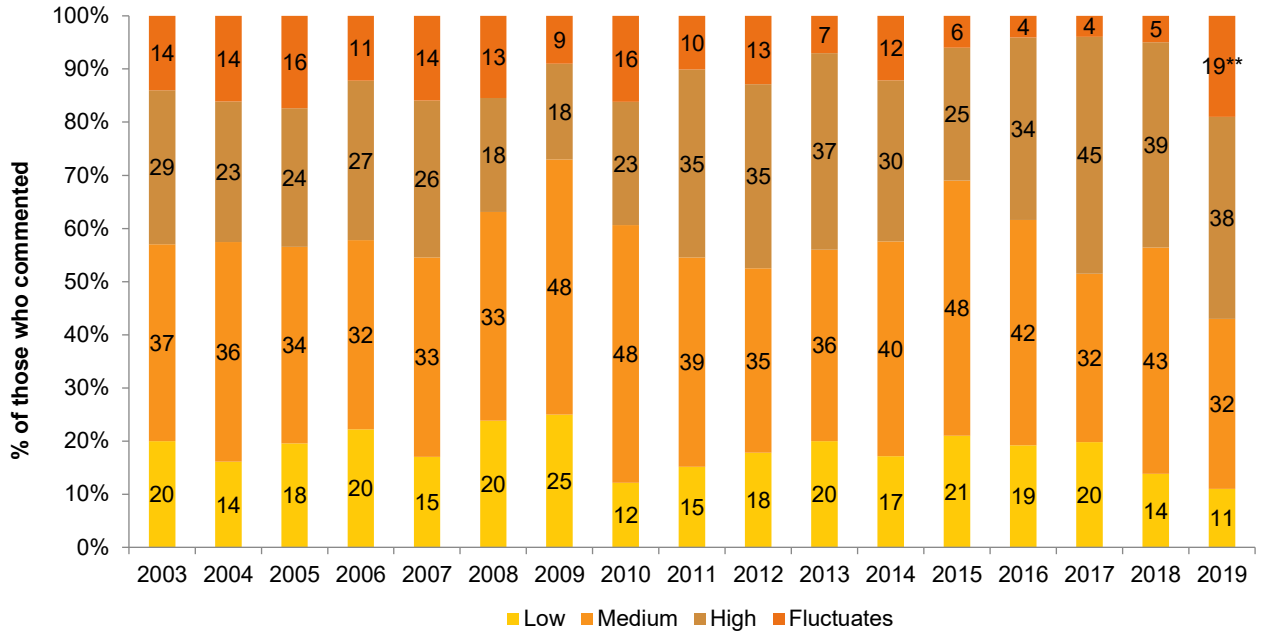
Note. Among those who commented. *p<0.050; **p<0.010; ***p<0.001 for 2018 versus 2019.

Figure 11: Median price of crystal methamphetamine per point and gram, nationally, 2003-2019



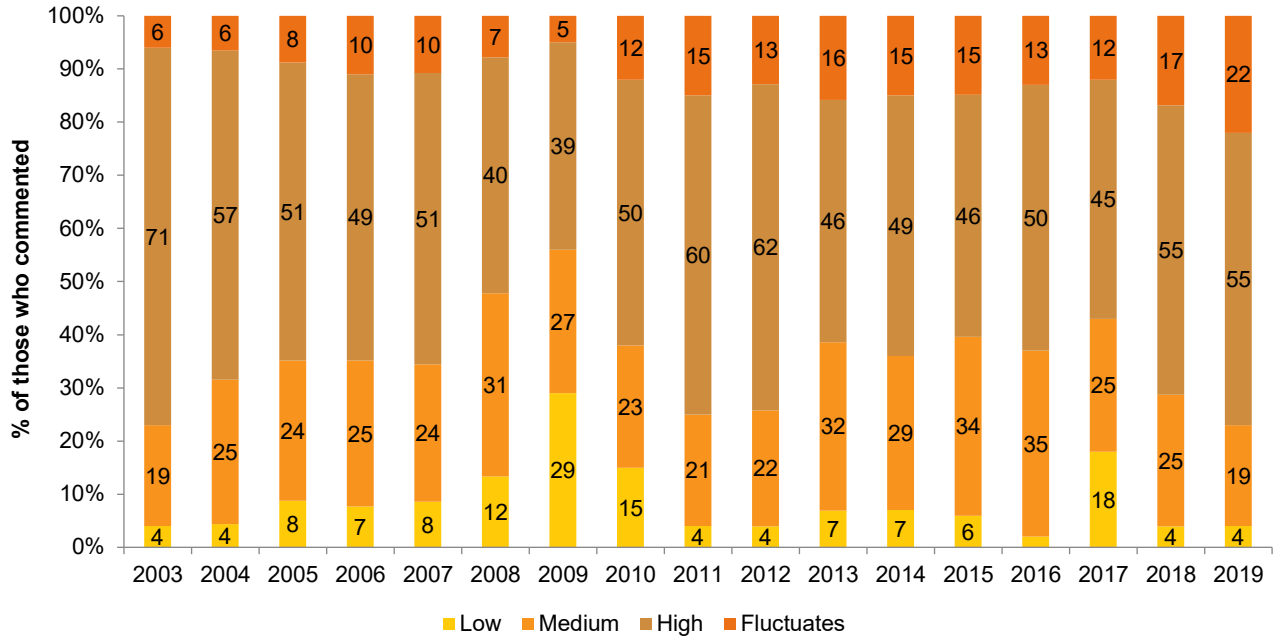
Note. Among those who commented. *p<0.050; **p<0.010; ***p<0.001 for 2018 versus 2019.

Figure 12: Current perceived purity of powder methamphetamine, nationally, 2003-2019



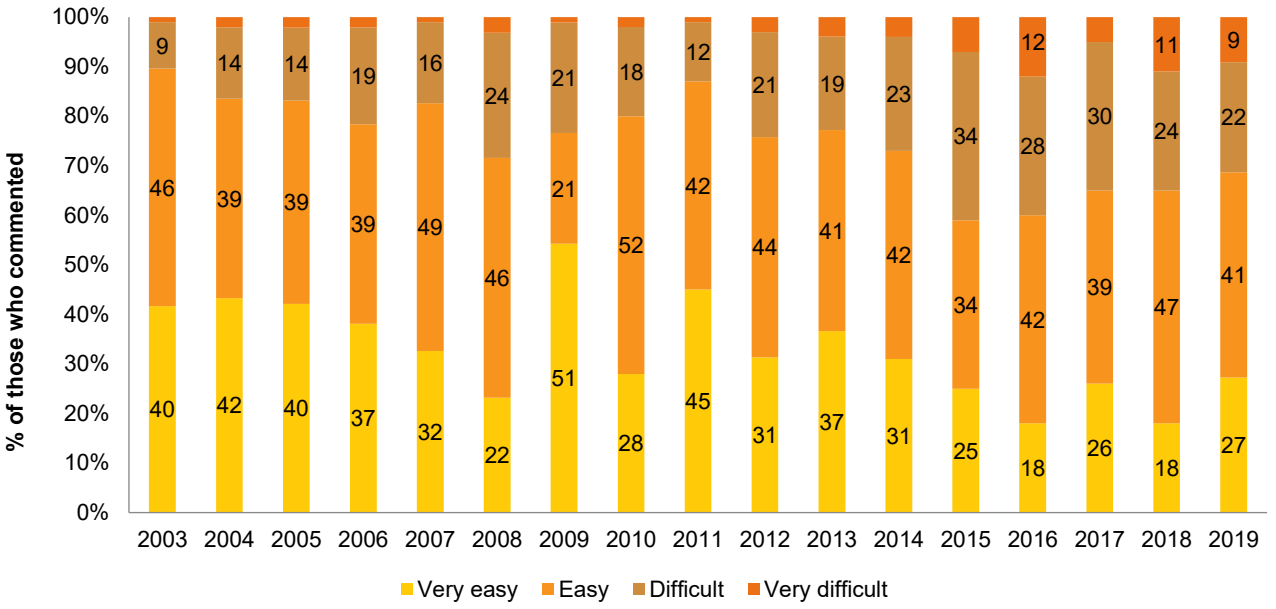
Note. The response 'Don't know' was excluded from analysis. *p<0.050; **p<0.010; ***p<0.001 for 2018 versus 2019.

Figure 13: Current perceived purity of crystal methamphetamine, nationally, 2003-2019



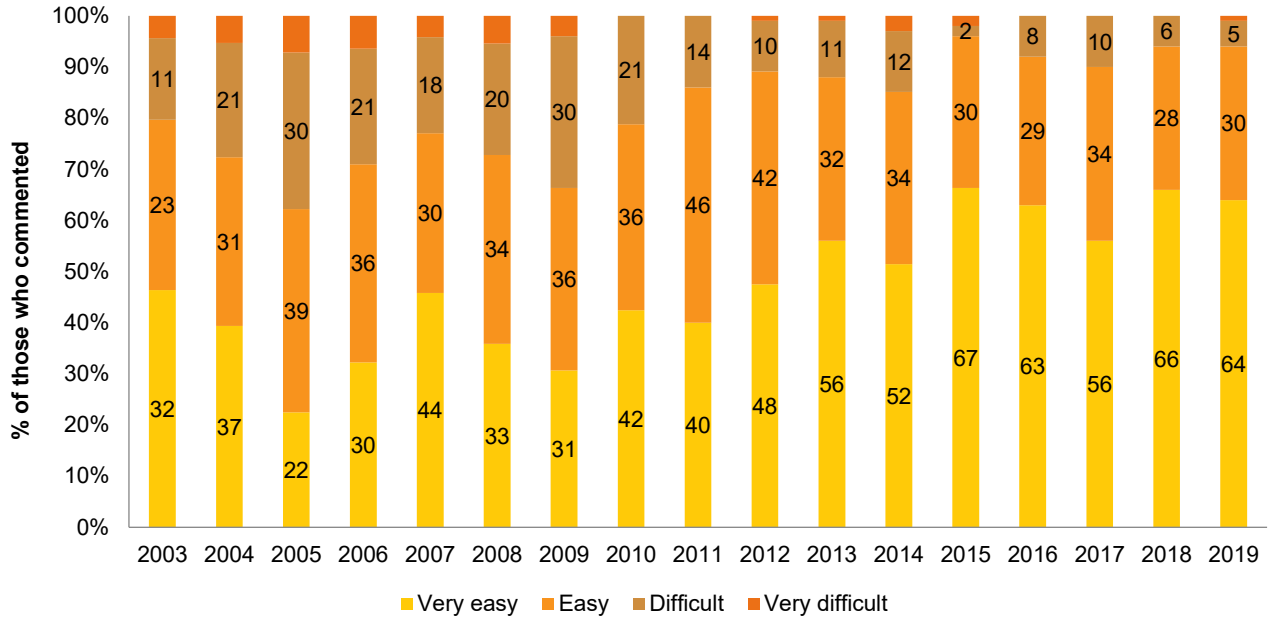
Note. The response 'Don't know' was excluded from analysis. *p<0.050; **p<0.010; ***p<0.001 for 2018 versus 2019.

Figure 14: Current perceived availability of powder methamphetamine, nationally, 2003-2019



Note. The response 'Don't know' was excluded from analysis. *p<0.050; **p<0.010; ***p<0.001 for 2018 versus 2019.

Figure 15: Current perceived availability of crystal methamphetamine, nationally, 2003-2019



Note. The response 'Don't know' was excluded from analysis. *p<0.050; **p<0.010; ***p<0.001 for 2018 versus 2019.

5

Cocaine

Participants were asked about their recent (past six month) use of various forms of cocaine. Cocaine hydrochloride, a salt derived from the coca plant, is the most common form of cocaine available in Australia. ‘Crack’ cocaine is a form of freebase cocaine (hydrochloride removed), which is particularly pure. ‘Crack’ is most prevalent in North America and infrequently encountered in Australia.

Patterns of Consumption

Recent Use (past 6 months)

Recent cocaine use has gradually increased over the years. This has been particularly evident in the last two years: the per cent reporting recent use increased from 48% to 59% from 2017 to 2018 (p<0.001), and then increased to 67% in 2019 (p=0.002; Figure 16). At the jurisdiction level, significant increases in use were observed relative to 2018 in NSW, SA and the NT (Table 10), with samples from capital cities in two of these jurisdictions (NSW and the NT), as well from the ACT, SA, WA and QLD recording the highest per cent of people reporting recent cocaine use over the period of monitoring.

Frequency of Use

Frequency of use has fluctuated between a median of two and three days over the course of monitoring. In 2019, the median days of use amongst consumers was 4 days (IQR=2-7; median 3 days in 2018; p=0.073) (Figure 16). This is equivalent to less than monthly use. Of those who had recently consumer cocaine (n=533), 7% reported using cocaine weekly or more frequent (7% in 2018; p=0.899).

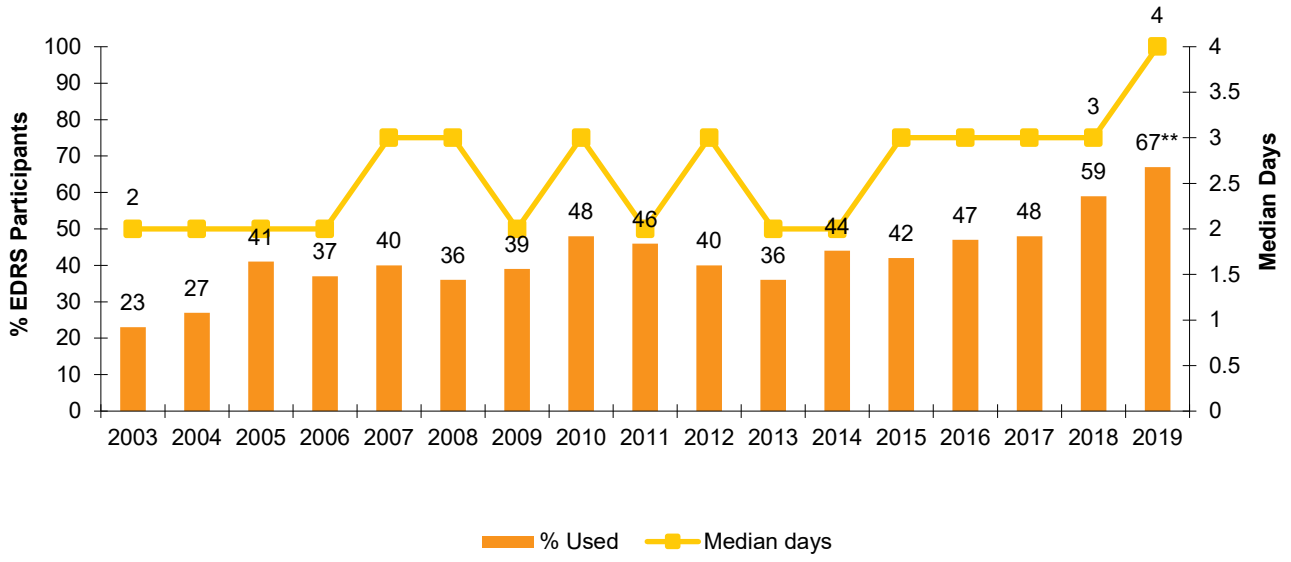
Routes of Administration

Among people who had recently consumed cocaine (n=533), the main route of administration was snorting (99%; 96% in 2018; p=0.007), followed by swallowing (10%; 10% in 2018; p=0.676).

Quantity

The median intake in a typical session in 2019 was 0.5 grams (IQR=0.2 - 1) and the median maximum intake was 1 gram (IQR=0.5 - 2).

Figure 16: Past six month use and frequency of use of cocaine, nationally, 2003-2019



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 4 to improve visibility of trends. *p<0.050; **p<0.010; ***p<0.001 for 2018 versus 2019.

Table 10: Past six month use of cocaine, by jurisdiction, 2003-2019

%	NSW	ACT	VIC	TAS	SA	WA	NT	QLD
2003	46	26	35	7	37	17	-	18
2004	46	34	48	10	26	16	16	21
2005	55	44	63	20	49	35	11	41
2006	45	44	55	33	31	29	-	36
2007	62	46	54	35	36	27	-	41
2008	51	45	51	35	20	40	-	30
2009	64	44	48	31	20	24	23	55
2010	59	58	54	49	42	26	52	51
2011	59	43	43	39	45	32	-	52
2012	57	37	54	26	37	31	-	34
2013	42	38	46	17	35	34	34	40
2014	67	51	58	22	45	30	39	42
2015	61	41	46	17	45	29	52	39
2016	70	44	56	24	57	38	42	41
2017	62	48	53	24	60	31	57	50
2018	71	75	84	42	55	47	40	60
2019	**83***	**75**	**80**	**38**	**71****	**47**	**74*****	**67**

Note. – Data not published due to small numbers commenting (n<10). *p<0.050; **p<0.010; ***p<0.001 for 2018 versus 2019.

Price, Perceived Purity and Availability

Price

The median price per point of cocaine was reported to be $50 (IQR=30-83; n=22) in 2019 ($50 in 2018; p=0.725). Consistent since 2006, the median price per gram of cocaine was $300 (IQR=300-350; n=389 in 2019; Figure 17).

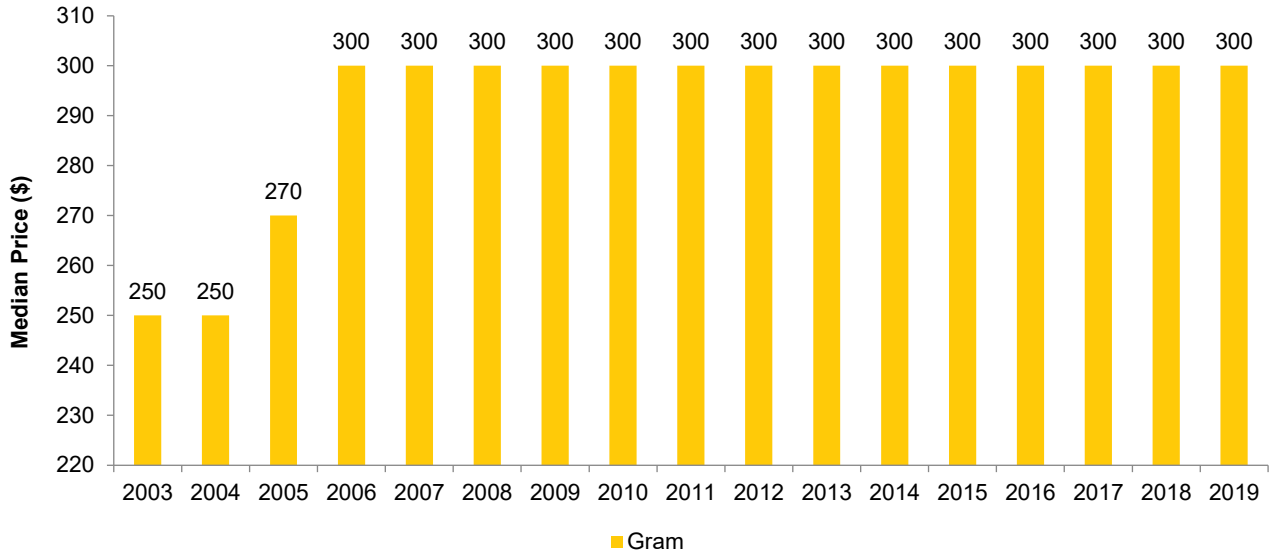
Perceived Purity

Among those able to comment (n=444), 57% of participants perceived cocaine to be of 'medium' or 'high' purity, consistent with historical estimates of perceived purity (Figure 18).

Perceived Availability

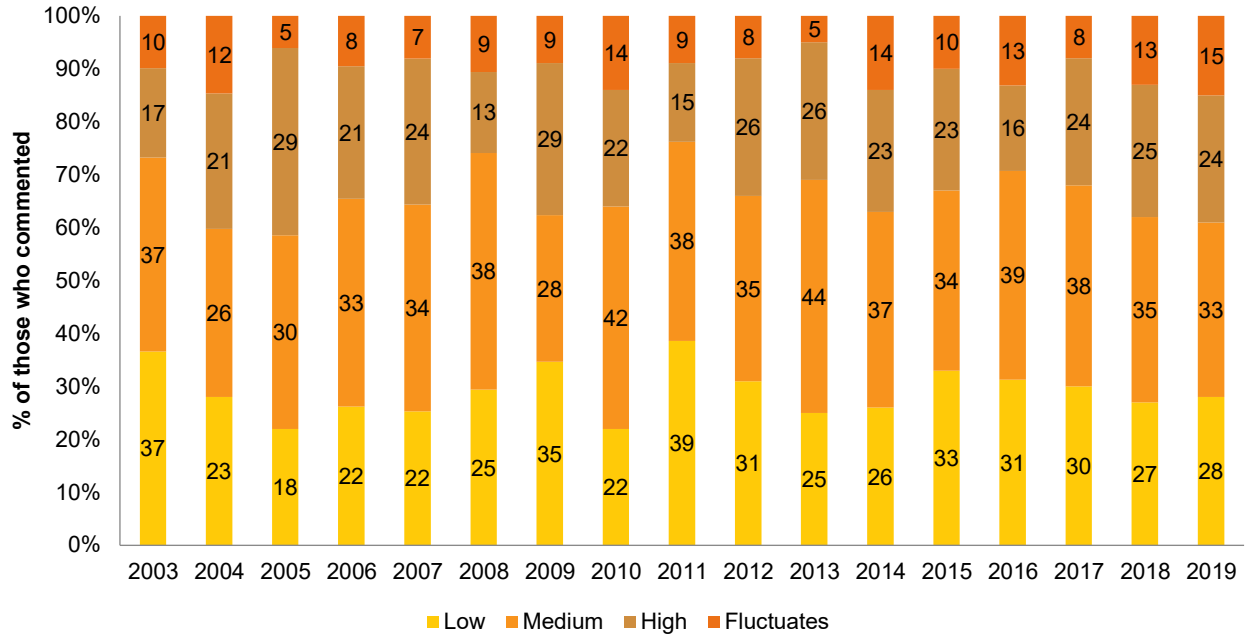
Among those able to comment (n=460), 27% reported cocaine as being 'difficult' to obtain, the lowest per cent since monitoring commenced (34% in 2018; p=0.031) (Figure 19). The majority of participants able to comment reported cocaine to be 'easy' or 'very easy' to obtain (70%).

Figure 17: Median price of cocaine per gram, nationally, 2003-2019



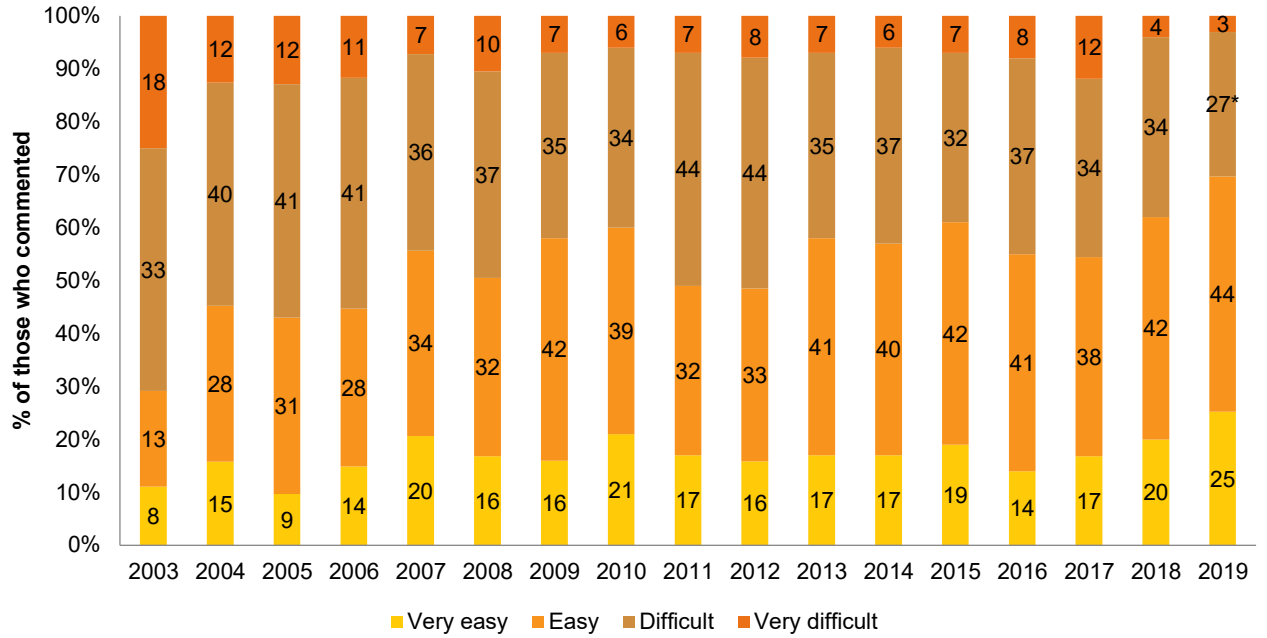
Note. Among those who commented. *p<0.050; **p<0.010; ***p<0.001 for 2018 versus 2019.

Figure 18: Current perceived purity of cocaine, nationally, 2003-2019



Note. The response 'Don't know' was excluded from analysis. *p<0.050; **p<0.010; ***p<0.001 for 2018 versus 2019.

Figure 19: Current perceived availability of cocaine, nationally, 2003-2019



Note. The response 'Don't know' was excluded from analysis. *p<0.050; **p<0.010; ***p<0.001 for 2018 versus 2019.

6

Cannabis

Participants were asked about their recent (past six month) use of indoor-cultivated cannabis via a hydroponic system ('hydroponic') and outdoor-cultivated cannabis ('bush'), as well as hashish and hash oil.

Patterns of Consumption

Recent Use (past 6 months)

At least three in four participants have reported recent use of cannabis each year since 2003, although the rate observed in 2019 (85%) decreased in comparison to 2018 (90%; *p*=0.006; Figure 20). Recent use decreased in the NSW and the NT samples from 2018 to 2019 (*p*=0.042 and *p*=0.032, respectively; Table 11).

Frequency of Use

Typical frequency of use has varied between weekly and several times a week over the course of monitoring (2019: median 60 days; IQR=10-180; Figure 20). Indeed, two in three (66%) recent consumers reported using cannabis weekly or more frequently (63% in 2018; *p*=0.220), including over one-quarter (27%) who reported using cannabis daily (24% in 2018; *p*=0.209).

Routes of Administration

Across all years, nearly all consumers reported smoking cannabis (98% in 2019; 99% in 2018). In 2019, 26% reported swallowing (an increase from 12% in 2018; *p*<0.001) and 19% reported inhaling/vaporising cannabis (16% in 2018).

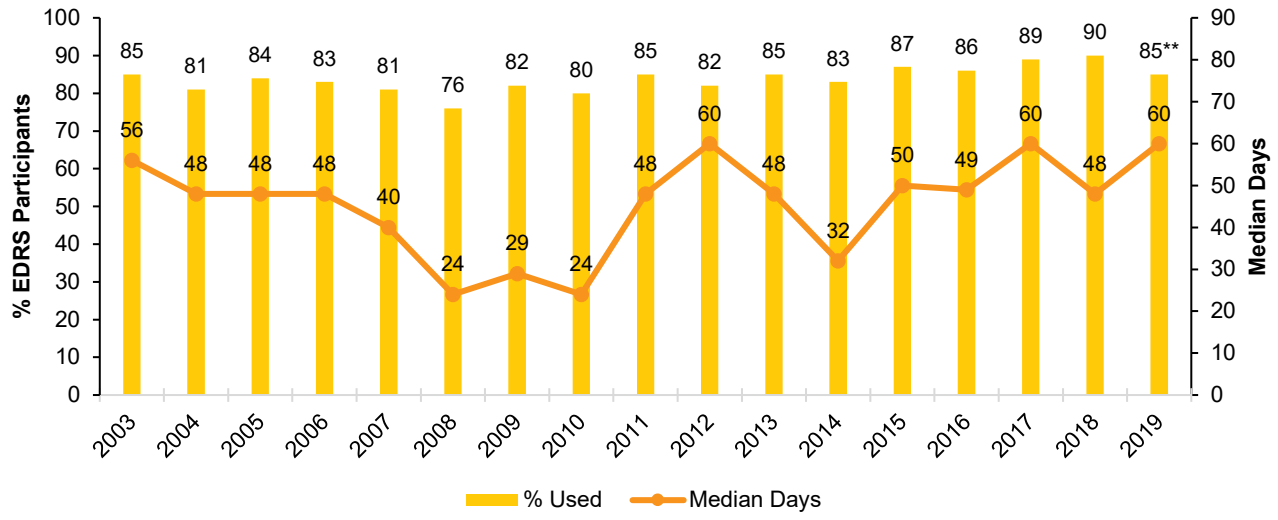
Quantity

The median amount used by those who commented (n=238) on the last occasion of use was three cones (IQR=2-5; n=235) or 1.2 grams (IQR=1.0-2.0; n=207).

Forms Used

Among EDRS participants, the majority reported recent use of hydroponic cannabis (69%; 72% in 2018) and over half also reported recent use of outdoor-grown 'bush' cannabis (59%; 67% in 2018; *p*=0.001). Smaller percentages reported having used hashish (16%; 17% in 2018) and hash oil (12%; 14% in 2018) in the preceding six months. Hydroponic cannabis remained the form most commonly used in the preceding six months among recent cannabis consumers (64%; 63% in 2018), followed by bush cannabis (33%; 36% in 2018).

Figure 20: Past six month use and frequency of use of cannabis, nationally, 2003-2019



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 0-90 days to improve visibility of trends. *p<0.050; **p<0.010; ***p<0.001 for 2018 versus 2019.

Price, Perceived Purity and Availability

Hydroponic Cannabis

Price: The median price per gram of hydroponic cannabis nationally has consistently been $20 (2019: IQR=15-25; n=156). The median price paid per ounce of hydroponic cannabis nationally was $280 (IQR=250-350; n=164) in 2019, consistent with reporting in the preceding three years (Figure 21).

Perceived Potency: Of those able to comment (n=404), the majority perceived hydroponic cannabis to be 'high' potency (50%), consistent with previous years (Figure 22).

Perceived Availability: Of those able to comment (n=409), reports of hydroponic cannabis as being 'very easy' to obtain increased to 65% compared to 48% in 2018 (p<0.001). Overall, nine in ten of those who commented reported hydroponic cannabis as 'easy' or 'very easy' to access in 2019 (Figure 23).

Bush Cannabis

Price: The median price per gram for bush cannabis was similar across most years (2019: $20; IQR=10-20; n=125). In 2019, median price for an ounce was $250 (IQR=200-300; n=132) (Figure 21).

Perceived Potency: Among those that were able to comment (n=326), two in five participants perceived bush cannabis to be of 'medium' potency (40%). In 2019, 31% perceived it to be of 'high' potency (Figure 22).

Perceived Availability: Of those able to comment (n=327) in 2019, reports of bush cannabis as being 'very easy' to obtain increased relative to 2018 (45% versus 37%; p=0.044) (Figure 23). Nearly eight in ten (78%) of those commenting reported bush cannabis as 'easy' or 'very easy' to access in 2019.

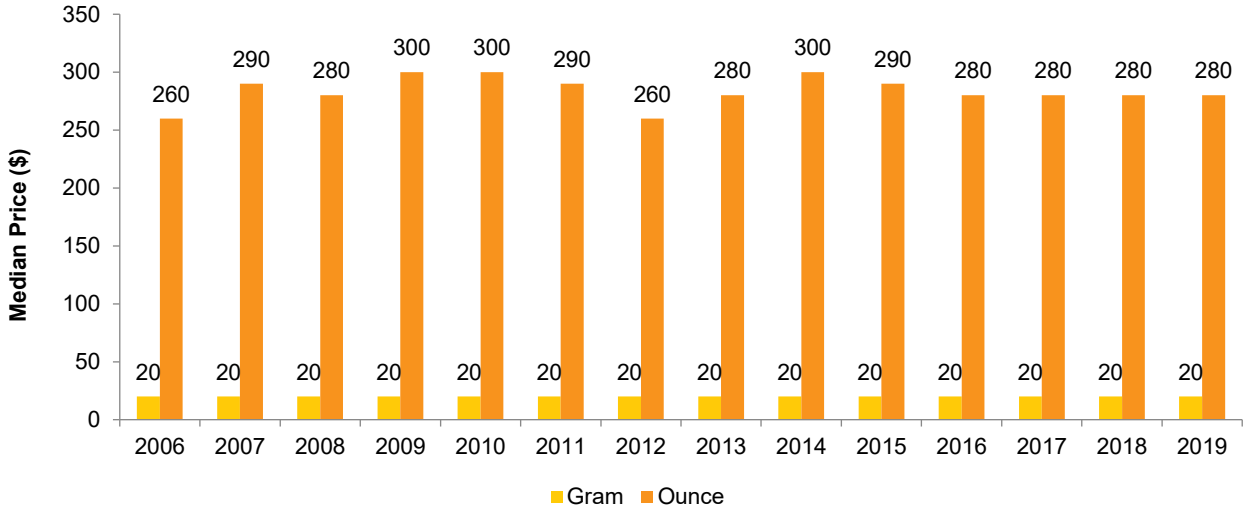
Table 11: Past six month use of cannabis (any form), by jurisdiction, 2003-2019

%	NSW	ACT	VIC	TAS	SA	WA	NT	QLD
2003	82	82	82	90	88	91	95	73
2004	85	83	78	91	81	84	87	70
2005	82	81	88	89	87	83	79	83
2006	73	83	79	82	83	85	84	92
2007	74	85	82	68	80	80	96	87
2008	71	86	84	74	74	85	40	81
2009	83	89	85	76	86	85	60	84
2010	78	89	89	72	84	81	70	72
2011	83	89	86	67	92	86	73	93
2012	86	92	85	69	88	77	83	81
2013	90	87	87	78	85	92	73	84
2014	85	74	81	76	87	86	84	87
2015	91	82	90	80	92	86	82	93
2016	85	85	86	77	97	87	82	86
2017	93	95	88	84	89	82	88	93
2018	91	88	84	94	85	86	93	95
2019	**81***	**81**	**86**	**88**	**82**	**86**	**83***	**92**

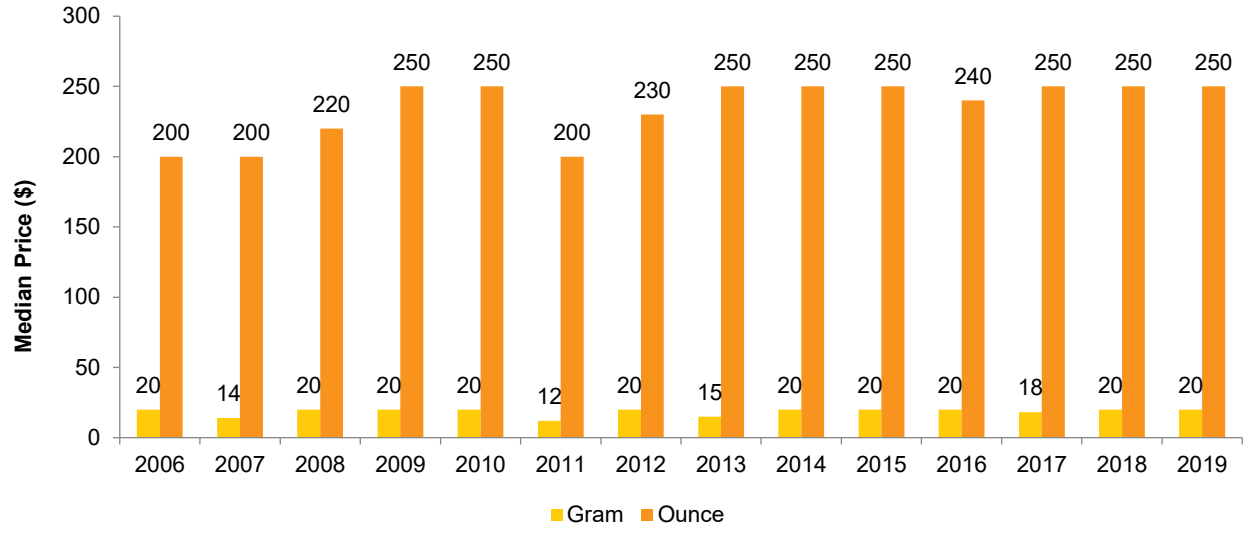
Note. *p<0.050; **p<0.010; ***p<0.001 for 2018 versus 2019.

Figure 21: Median price of hydroponic (a) and bush (b) cannabis per ounce and gram, nationally, 2006-2019

(A) Hydroponic cannabis



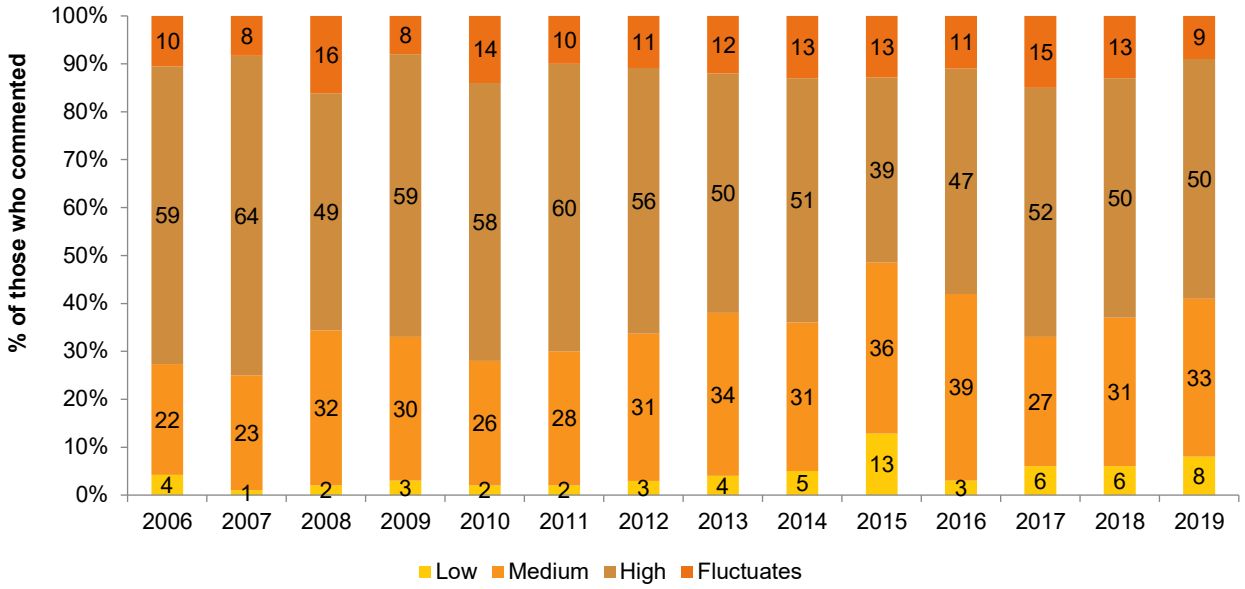
(B) Bush cannabis



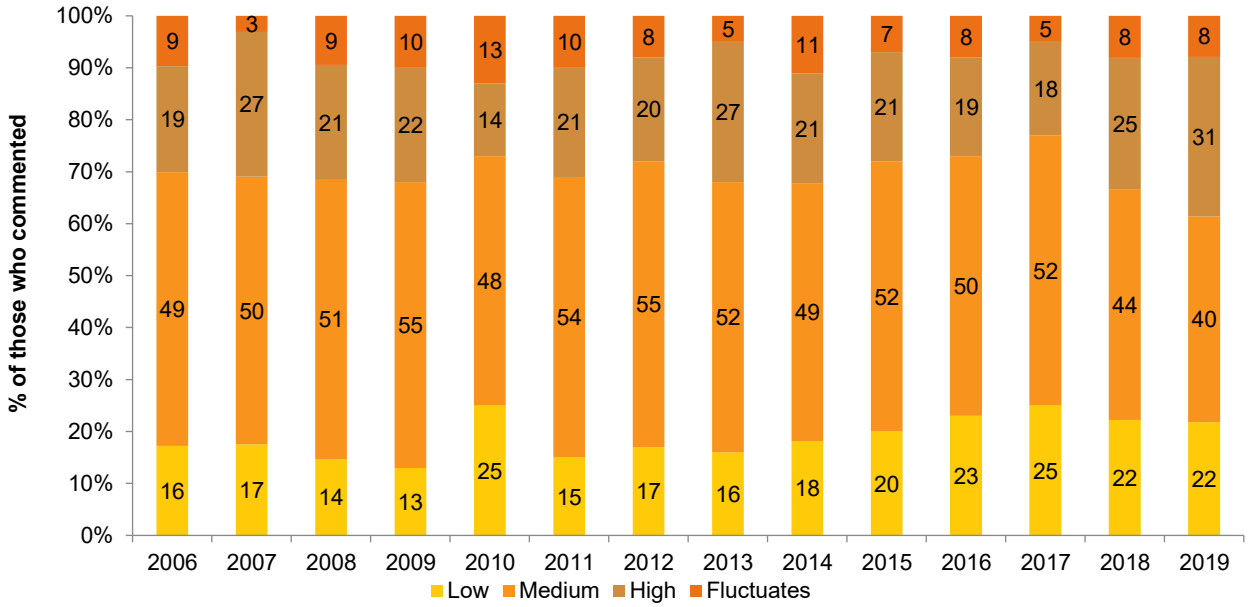
Note. From 2006 onwards hydroponic and bush cannabis data collected separately. *p<0.050; **p<0.010; ***p<0.001 for 2018 versus 2019.

Figure 22: Current potency of hydroponic (a) and bush (b) cannabis, nationally, 2006-2019

(A) Hydroponic cannabis



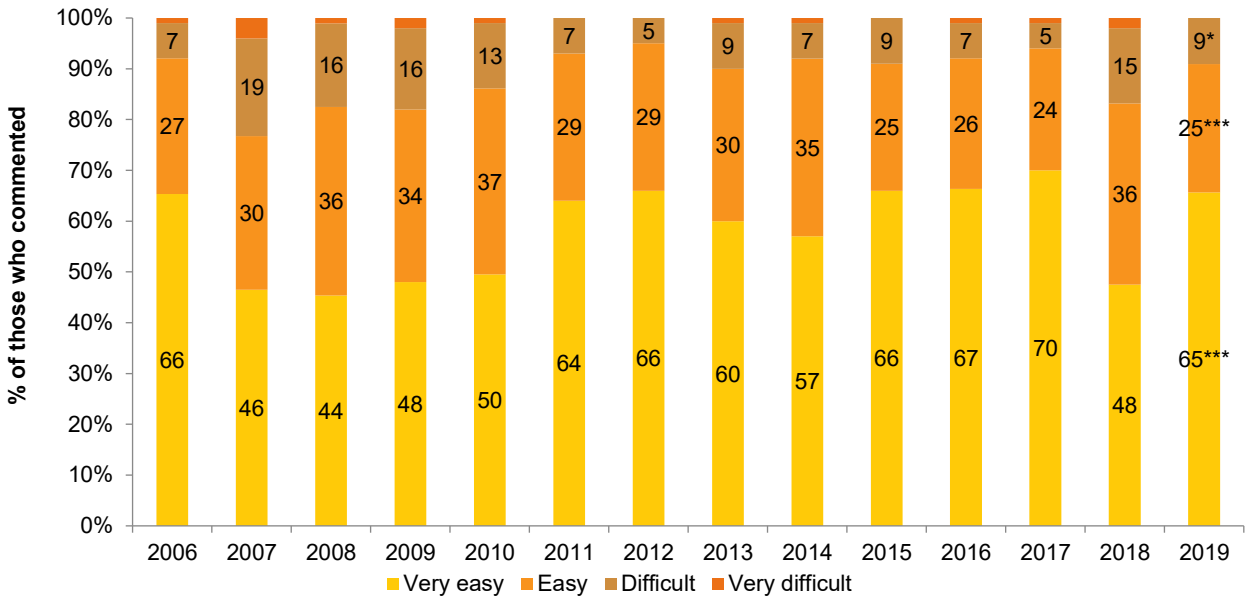
(B) Bush cannabis



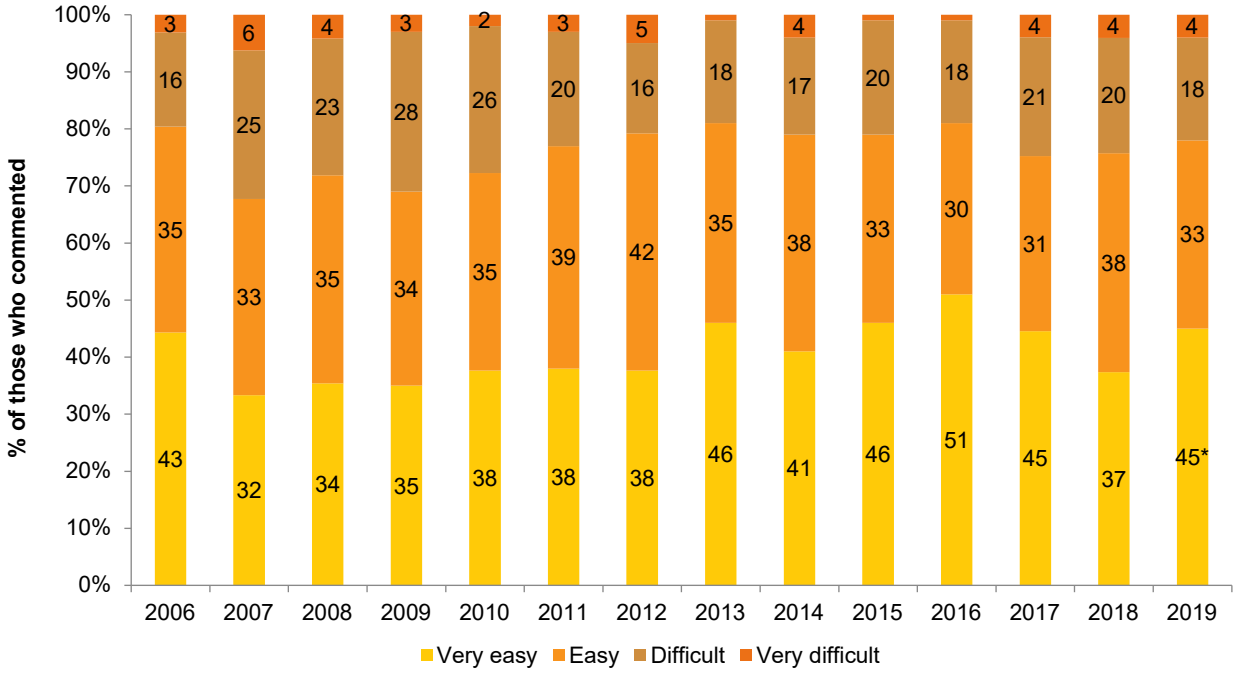
Note. The response 'Don't know' was excluded from analysis. From 2006 onwards hydroponic and bush cannabis data collected separately.
*p<0.050; **p<0.010; ***p<0.001 for 2018 versus 2019.

Figure 23: Current perceived availability of hydroponic (a) and bush (b) cannabis, nationally, 2006-2019

(A) Hydroponic cannabis



(B) Bush cannabis



Note. The response 'Don't know' was excluded from analysis. From 2006 onwards hydroponic and bush cannabis data collected separately.
*p<0.050; **p<0.010; ***p<0.001 for 2018 versus 2019.

7

Ketamine and LSD

Participants were asked about their recent (last six month) use of various forms of ketamine and lysergic acid diethylamide (LSD).

Ketamine

Patterns of Consumption

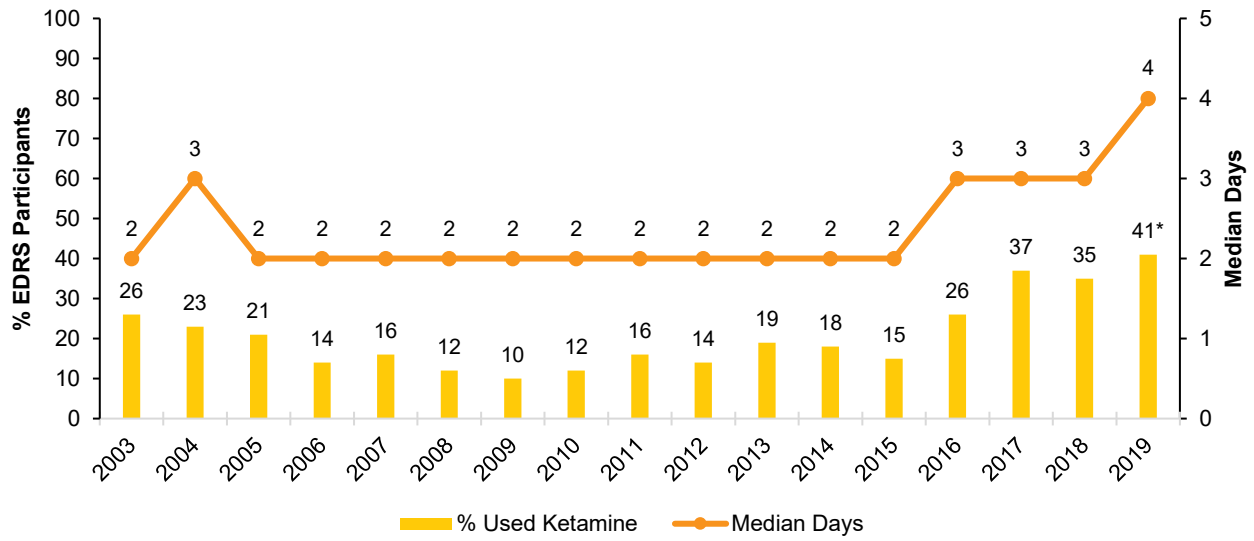
Recent Use (past 6 months): The per cent of the sample reporting recent use of ketamine declined from the beginning of monitoring to 2009, with an increase observed from then onwards. In 2019, 41% of participants reported recent use, an increased from 35% in 2018 (p=0.025) (Figure 24). In 2019, jurisdictional estimates ranged from almost one-fifth (17%) of the TAS sample reporting recent use to over four-fifths (84%) of the VIC sample. Recent use increased significantly from 2018 to 2019 in NSW (p=0.038) and the NT (p<0.001) samples (Table 12).

Frequency of Use: Frequency of use remained relatively stable in 2019 relative to 2018 (median 4 days; IQR=2-10; 3 days in 2018; p=0.181) (Figure 24). Indeed, the per cent of recent consumers that reported weekly or more use also remained stable at 6% (versus 7% in 2018; p=0.422).

Routes of Administration: Among consumers, the most common route of administration was snorting (93% versus 90% in 2018; p=0.330) followed by swallowing (11% versus 11% in 2018; p=0.926). Smaller percentages reported smoking, injecting and shelving/shafting (1%, respectively).

Quantity: The median quantity used in a typical session was 0.30 grams (IQR=0.20-0.50; n=204), two lines (IQR=1-3; n=23) or 3 bumps (IQR=2-5; n=51).

Figure 24: Past six month use and frequency of use of ketamine, nationally, 2003-2019



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 5 days to improve visibility of trends. *p<0.050; **p<0.010; ***p<0.001 for 2018 versus 2019.

Table 12: Past six month use of ketamine, by jurisdiction, 2003-2019

%	NSW	ACT	VIC	TAS	SA	WA	NT	QLD
2003	49	21	51	24	36	12	7	14
2004	39	15	45	-	39	10	18	16
2005	39	17	35	11	24	11	7	20
2006	27	15	29	6	11	-	-	12
2007	36	10	25	14	26	-	-	-
2008	30	6	20	6	20	-	0	-
2009	19	-	21	-	19	6	0	6
2010	24	6	23	6	13	-	-	8
2011	39	14	26	8	8	0	0	-
2012	24	14	35	-	10	-	-	7
2013	24	33	46	9	6	7	-	13
2014	23	6	63	14	-	11	15	-
2015	24	9	50	-	-	-	18	-
2016	50	20	72	-	15	18	11	22
2017	50	49	80	17	48	16	11	21
2018	54	29	90	23	24	22	11	28
2019	**68***	**33**	**84**	**17**	**33**	**25**	**39*****	**27**

Note. – Data not published due to small numbers commenting (n≤5). *p<0.050; **p<0.010; ***p<0.001 for 2018 versus 2019.

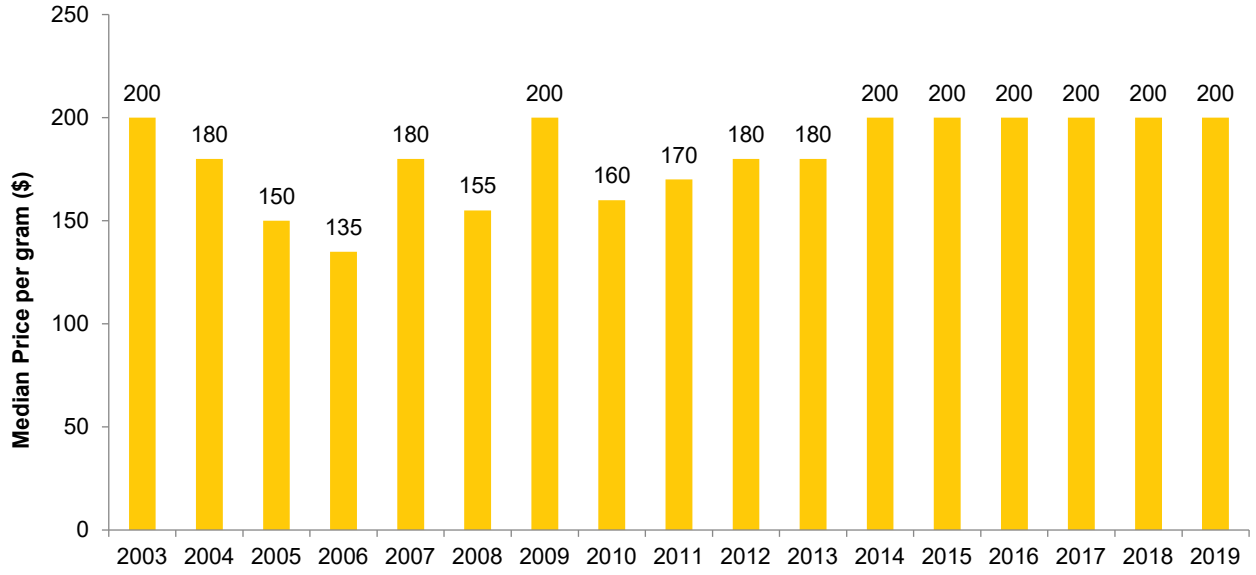
Price, Perceived Purity and Availability

Price: Historically, the median reported price of ketamine per gram decreased from $200 in 2003 to $135 in 2006, returning to the same median price from 2014 (2019: median $200, IQR=180-235; n=197; Figure 25).

Perceived Purity: Among those able to comment (n=254), over three-fifths (61%) perceived purity as being 'high', followed by 26% reporting 'medium' perceived purity in 2019 (Figure 26).

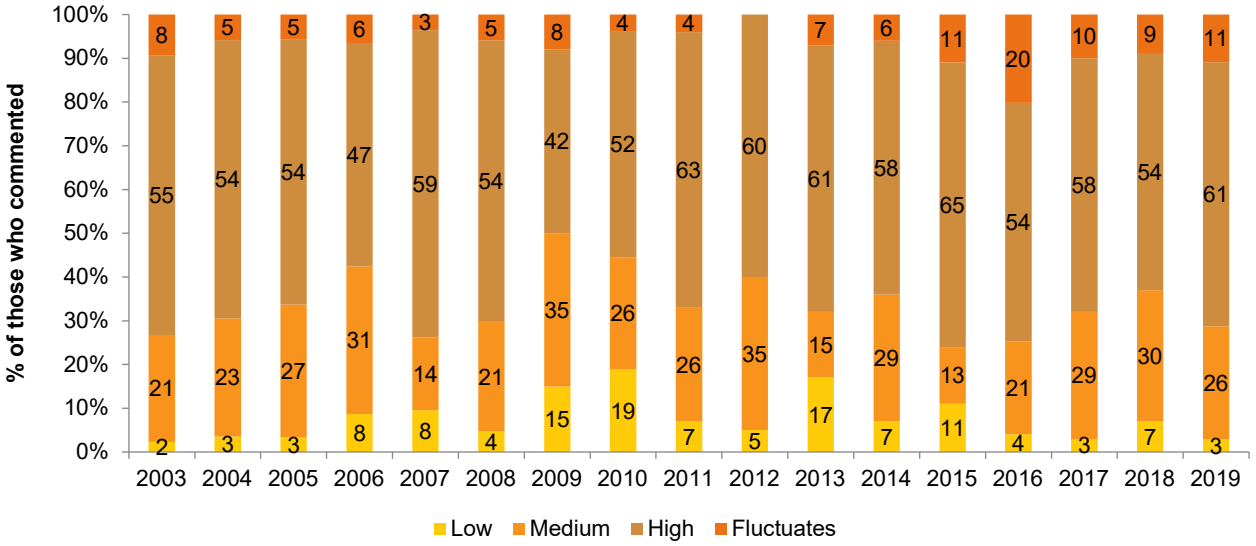
Perceived Availability: Of those who commented (n=265), almost one-third (31%) perceived ketamine to be 'easy' to obtain, a significant decrease relative to 2018 (44%; p=0.007; Figure 27).

Figure 25: Median price of ketamine per gram, nationally, 2003-2019



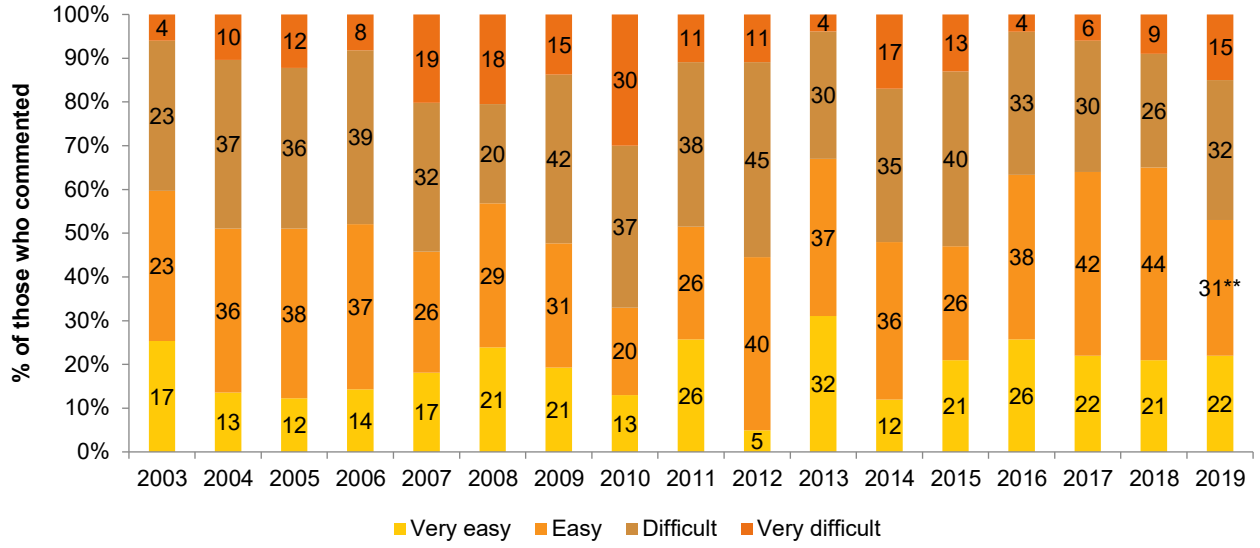
Note. Among those who commented. *p<0.050; **p<0.010; ***p<0.001 for 2018 versus 2019.

Figure 26: Current perceived purity of ketamine, nationally, 2003-2019



Note. The response 'Don't know' was excluded from analysis. *p<0.050; **p<0.010; ***p<0.001 for 2018 versus 2019.

Figure 27: Current perceived availability of ketamine, nationally, 2003-2019



Note. The response 'Don't know' was excluded from analysis. *p<0.050; **p<0.010; ***p<0.001 for 2018 versus 2019.

LSD

Patterns of Consumption

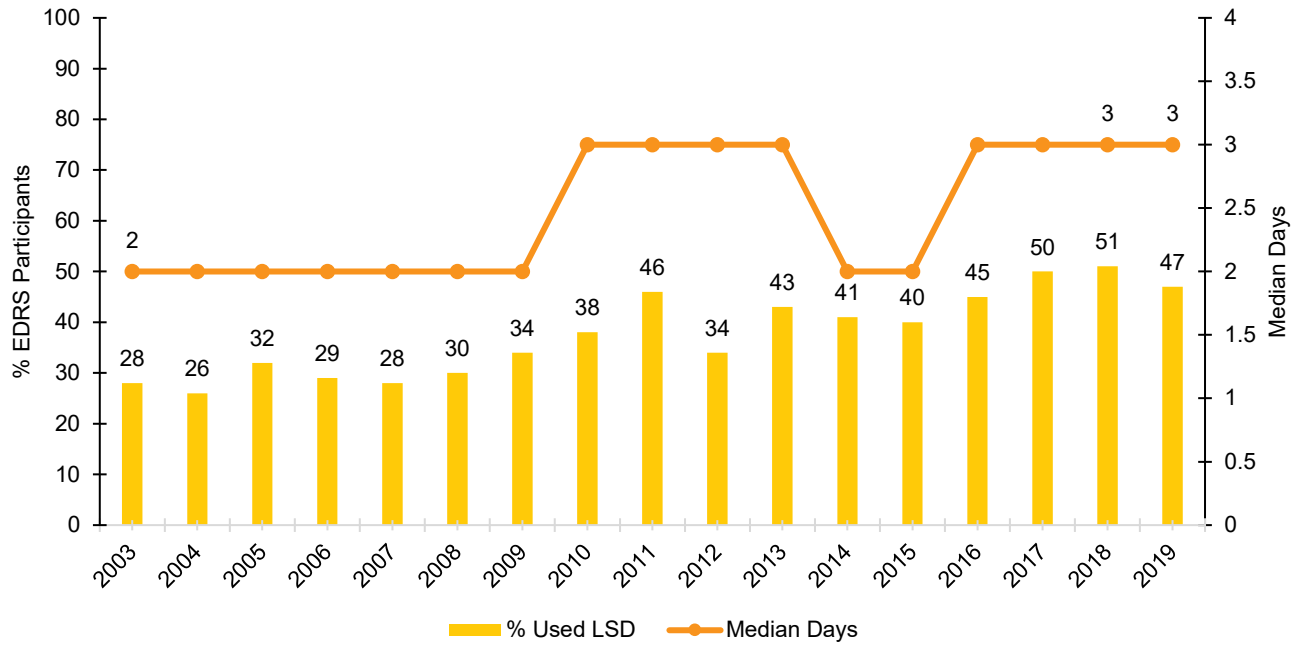
Recent Use (past 6 months): The per cent reporting recent use of LSD has been gradually increasing over the course of monitoring, from 28% in 2003 to 51% in 2018, with a similar per cent reporting use in 2019 (47%; *p*=0.184; Figure 28). Slight variation in use was observed across jurisdictions in 2019, ranging from 42% in the ACT sample to 55% in the VIC sample (Table 13). NSW was the only jurisdiction that showed a significant decline in recent use of LSD amongst this subsample from 2018 to 2019 (71% to 48%; *p*<0.001).

Frequency of Use: Use across the years has shown to be infrequent and stable (2019: median 3 days, IQR=1-5). In addition, 5% of recent consumers reported weekly or more frequent use of LSD, stable from 2018 (3%; *p*=0.455).

Routes of Administration: Among consumers, the most common route of administration was swallowing (100% versus 99% in 2018; *p*=0.462).

Quantity: The median quantity used in a typical session was one tab (IQR=1-2; n=257) or 200 micrograms (IQR=140-250; n=102). The maximum used in a session was also one tab (IQR=1-2; n=259) and 250 micrograms (IQR=150-450; n=101).

Figure 28: Past six month use and frequency of use of LSD, nationally, 2003-2019



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 4 days to improve visibility of trends. *p<0.050; **p<0.010; ***p<0.001 for 2018 versus 2019.

Table 13: Past six month use of LSD, by jurisdiction, 2003-2019

%	NSW	ACT	VIC	TAS	SA	WA	NT	QLD
2003	27	44	48	24	30	22	25	18
2004	20	23	40	32	36	11	31	18
2005	33	30	38	31	48	35	15	23
2006	17	18	37	29	34	25	41	38
2007	22	24	39	20	33	23	33	28
2008	18	37	29	41	35	21	16	32
2009	37	35	46	34	37	31	11	30
2010	44	41	49	27	35	35	26	38
2011	46	39	57	43	30	36	60	52
2012	43	38	38	30	19	33	-	34
2013	51	53	52	38	25	41	40	41
2014	43	19	49	35	35	45	43	57
2015	60	37	46	41	37	24	32	41
2016	65	40	52	39	30	50	32	55
2017	73	64	52	39	36	33	47	52
2018	71	43	64	41	36	39	52	61
2019	**48*** **	**42**	**55**	**44**	**43**	**43**	**52**	**53**

Note. – Data not published due to small numbers commenting (n<10). *p<0.050; **p<0.010; ***p<0.001 for 2018 versus 2019.
***p<0.001 for 2018 versus 2019.

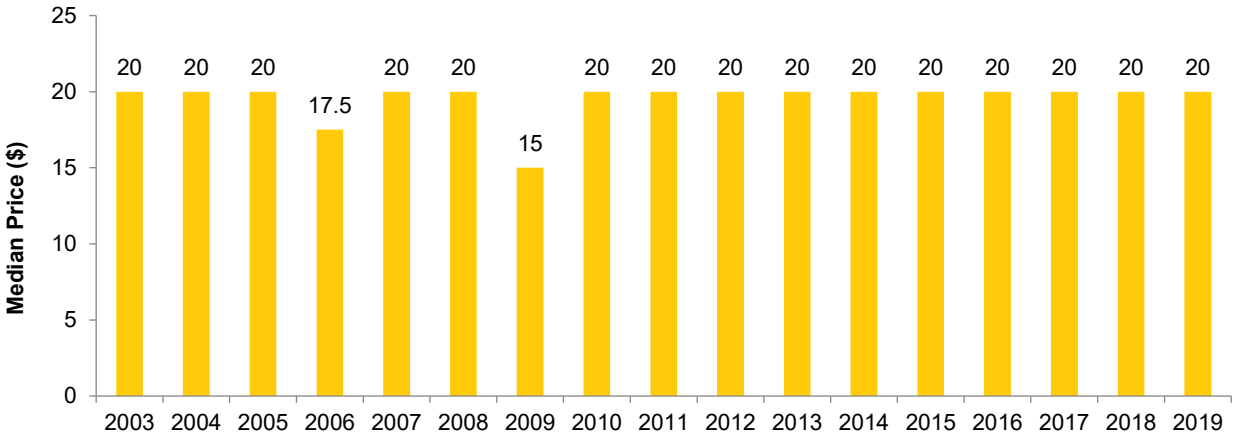
Price, Perceived Purity and Availability

Price: In 2019, the median price for one tab was reported as $20 (IQR=20-25; n=390), consistent with estimates since 2010 (Figure 29).

Perceived Purity: Of those who commented (n=412), over half reported the perceived purity as 'high' (58%), followed by 25% reporting 'medium' purity (Figure 30).

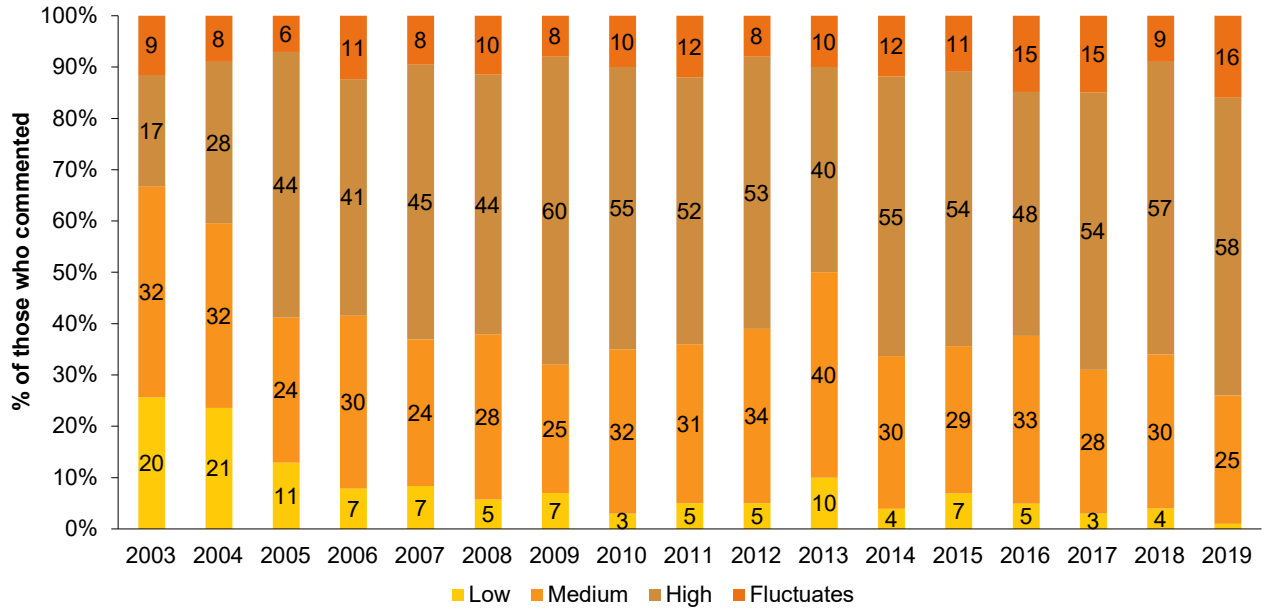
Perceived Availability: Of those able to comment (n=424), 39% perceived LSD to be 'easy' to obtain, whilst 38% perceived it to be 'difficult' (Figure 31). These findings are consistent with previous years.

Figure 29: Median price of LSD per tab, nationally, 2003-2019



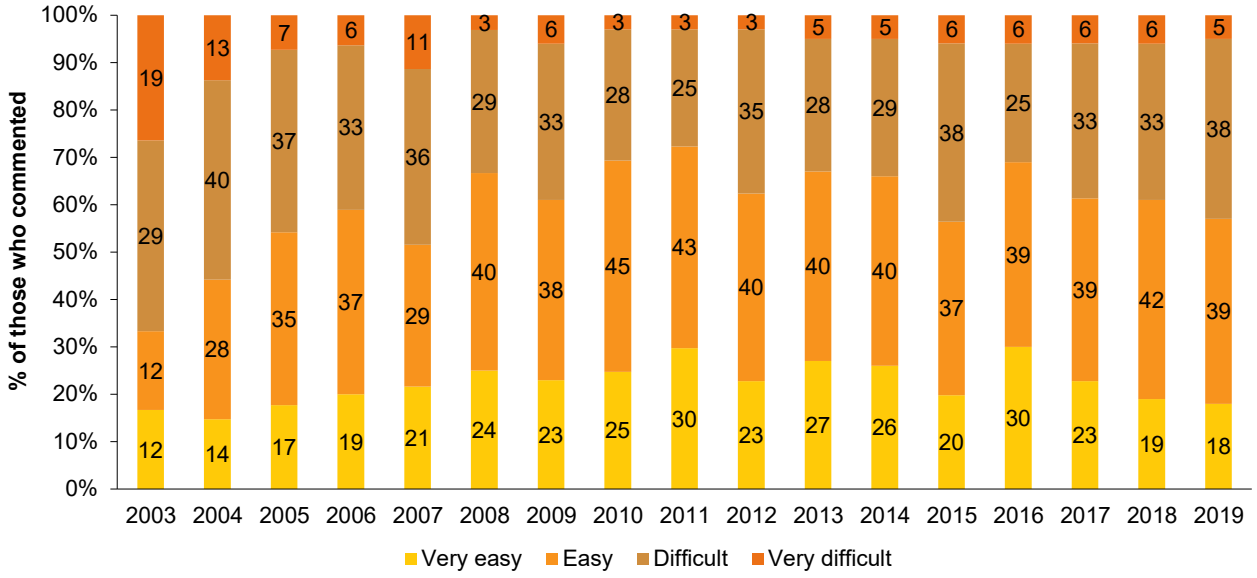
Note. Among those who commented. *p<0.050; **p<0.010; ***p<0.001 for 2018 versus 2019.

Figure 30: Current perceived purity of LSD, nationally, 2003-2019



Note. The response 'Don't know' was excluded from analysis. *p<0.050; **p<0.010; ***p<0.001 for 2018 versus 2019.

Figure 31: Current perceived availability of LSD, nationally, 2003-2019



Note. The response 'Don't know' was excluded from analysis. *p<0.050; **p<0.010; ***p<0.001 for 2018 versus 2019.

8

New psychoactive substances

NPS are often defined as substances which do not fall under international drug control, but which may pose a public health threat. However, there is no universally accepted definition, and in practicality the term has come to include drugs which have previously not been well-established in recreational drug markets. Participants were asked about their recent (past six month) use of various NPS.

Patterns of Consumption

Recent Use (past 6 months)

One-third (32%) of the national sample reported recent use of NPS when monitoring began in 2010, rising to nearly half the sample (45%) in 2012 (Table 14). Since then, use has returned to earlier levels (30% in 2019 versus 31% in 2018; p=0.856). NPS use has varied across jurisdictions over time. In 2019, use was lowest in the TAS sample (21%) and highest in the SA, NT and QLD samples (34%, respectively; Table 14).

Frequency of Use

Frequency of NPS use has consistently been low (i.e., typically a median of 2 days or fewer for each form used; see below).

Forms Used

Participants are asked about a range of NPS each year, updated to reflect key emerging substances of interest. DMT has consistently been one of the most commonly endorsed NPS (16% in 2019; Table 15), at a median of 2 days in 2019 (IQR=1-3; 2 days in 2018). The 2C-x class and synthetic cannabinoids have also been highly endorsed, although the per cent reporting recent use has declined in recent years. Similarly, use of mephedrone (the most commonly reported NPS in 2010) has decreased, being reported by 1% of participants in 2019.

Less than five participants reported use of new drugs that mimic opioids (e.g., acetylfentanyl), and 1% reported use of new drugs that mimic benzodiazepines (e.g., etizolam) in 2019.

Table 14: Past six month use of NPS, nationally and by jurisdiction, 2010-2019

%	National	NSW	ACT	VIC	TAS	SA	WA	NT	QLD
2010	32	19	19	36	54	30	37	-	31
2011	40	35	34	47	43	54	57	-	26
2012	45	46	51	53	28	48	41	50	53
2013	44	48	49	47	37	40	47	27	49
2014	40	39	20	47	41	40	43	29	57
2015	39	43	34	47	22	52	36	37	39
2016	36	43	31	42	16	33	32	35	53
2017	33	36	35	38	17	38	32	29	38
2018	31	32	30	41	26	40	22	24	29
2019	**30**	**27**	**30**	**32**	**21**	**34**	**28**	**34**	**34**

Note. *p<0.050; **p<0.010; ***p<0.001 for 2018 versus 2019.

Table 15: Past six month use of NPS by drug type, nationally, 2010-2019

	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
	N=693	N=574	N=607	N=686	N=800	N=763	N=795	N=785	N=799	N=797
% Phenethylamines	**8**	**16**	**15**	**21**	**21**	**19**	**14**	**14**	**11**	**9**
Any 2C substance~	6	14	12	20	15	14	11	9	8	**6**
NBOMe	/	/	/	/	9	7	4	5	2	**2**
Mescaline^	2	4	2	3	2	2	2	3	2	**2**
DO-x	1	1	0	-	-	0	0	1	-	**-**
4-FA	/	/	/	/	/	/	-	-	0	**0**
PMA	-	-	2	1	2	1	2	2	1	**-**
% Tryptamines	**8**	**14**	**14**	**15**	**15**	**11**	**16**	**18**	**18**	**16**
DMT	7	13	12	14	14	11	15	18	18	**16**
5-MeO-DMT	-	5	-	1	1	-	1	1	1	**2**
4-AcO-DMT	/	/	/	/	/	/	-	-	/	**/**
% Synthetic cathinones	**19**	**18**	**11**	**9**	**8**	**8**	**3**	**5**	**4**	**5**
Mephedrone	16	13	5	6	5	3	1	1	-	**1**
Methylone/bk MDMA	/	5	5	3	3	4	2	4	3	**3**
MDPV/Ivory wave	-	2	3	1	1	1	0	-	0	**-**
Alpha PVP	/	/	/	/	/	/	-	-	-	**-**
Other substituted cathinone	/	/	-	0	-	-	0	-	-	**/**
N-ethylpentylone	/	/	/	/	/	/	/	/	/	**0**
N-ethylhexedrone	/	/	/	/	/	/	/	/	/	**0**
% Piperazines	**5**	**2**	**1**	**-**	**-**	**0**	**0**	**-**	**/**	**/**
BZP	5	2	1	-	-	0	0	-	/	**/**
% Dissociatives	**/**	**/**	**1**	**2**	**2**	**2**	**3**	**2**	**0**	**2**
Methoxetamine (MXE)	/	/	1	2	2	2	3	2	0	**2**
% Plant-based NPS	**2**	**7**	**8**	**6**	**4**	**5**	**5**	**5**	**3**	**3**
Ayahuasca	/	/	/	/	/	0	-	1	-	**1**
Mescaline	2	4	2	3	2	2	2	3	2	**2**
Salvia	/	2	3	2	2	1	2	2	1	**1**
% Benzodiazepines	**/**	**/**	**/**	**/**	**/**	**/**	**1**	**1**	**1**	**1**
Etizolam	/	/	/	/	/	/	1	1	1	**1**
% Synthetic cannabinoids	**/**	**6**	**15**	**16**	**7**	**6**	**4**	**2**	**3**	**3**
% Herbal high#	/	/	12	8	4	5	4	2	2	**2**
% Phenibut	/	/	/	/	/	/	/	/	/	**2**
% Other drugs that mimic the effect of opioids	/	/	/	/	/	/	/	-	-	**-**
% Other drugs that mimic the effect of ecstasy	/	/	/	/	/	/	/	-	**1**	**1**
% Other drugs that mimic the effect of amphetamine or cocaine	/	/	/	/	/	/	/	1	-	**1**
% Other drugs that mimic the effect of psychedelic drugs	/	/	/	/	/	/	/	-	**1**	**2**
% Other drugs that mimic the effect of benzodiazepines	/	/	/	/	/	/	/	/	-	**1**

Note. / not asked. # The terms 'herbal highs' and 'legal highs' appear to be used interchangeably to mean drugs that have similar effects to illicit drugs like cocaine or cannabis but are not covered by current drug law scheduling or legislation. - not reported, due to small numbers (n≤5 but not 0). ~ In 2010 and between 2017-2019 three forms of 2C were asked whereas between 2011-2016 four forms were asked. **p*<0.050; ***p*<0.010; ****p*<0.001 for 2018 versus 2019.

9

Other drugs

Participants were asked about their recent (past six month) use of various other drugs, including non-prescribed use of pharmaceutical drugs (i.e., use of a prescribed drug obtained from a prescription in someone else's name) and use of licit substances (e.g., alcohol, tobacco, e-cigarettes).

Non-Prescribed Pharmaceutical Drugs

Codeine

Before the 1st February 2018, people could access low-dose codeine products (<30mg, e.g., Nurofen Plus) over-the-counter (OTC), while high-dose codeine (≥30mg, e.g., Panadeine Forte) required a prescription from a doctor. On the 1st February 2018, legislation changed so that all codeine products, low- and high-dose, require a prescription from a doctor to access.

Up until 2017, participants were only asked about use of OTC codeine for non-pain purposes. Additional items on use of prescription low-dose and prescription high-dose codeine were included in IDRS 2018 and 2019.

Recent Use (past 6 months): In 2019, 27% of the national sample reported any recent use of codeine. Fourteen per cent of the national sample had used prescribed codeine, whereas 15% had reported using non-prescribed codeine (Figure 32).

Recent Use for Non-Pain Purposes: Forty-two per cent of consumers who had used any low dose codeine (<30mg codeine) reported using it for non-pain purposes (6% of the total sample).

Frequency of Use: Participants who had recently used non-prescribed codeine (n=117) reported use on a median of 4 days (IQR=2-10) in the past six months.

Forms Used: Of consumers who had recently used non-prescribed codeine, 63% had used low dose codeine (<30mg codeine) and 43% had used high dose (≥30mg codeine). Seven per cent (n=53) of the national sample reported using lean ('purple drank'/'sizzurp'/'lean') in the past six months.

Pharmaceutical Opioids

Recent Use (past 6 months): The per cent of participants reporting past six month use of non-prescribed pharmaceutical opioids (e.g., methadone, buprenorphine, oxycodone, morphine) remained stable from 2018 to 2019 (13% to 12%; *p*=0.391), noting that high-dose codeine was excluded from this classification for the first time in 2018 (Figure 32).

Frequency of Use: Consumers reported a median of 3 days of non-prescribed opioid use (IQR=1-10; n=91) in the six months leading up to interview.

Pharmaceutical Stimulants

Recent Use (past 6 months): The per cent of participants reporting recent non-prescribed pharmaceutical stimulant (e.g., dexamphetamine, methylphenidate, modafinil) use increased amongst the national sample from 2007 (17%) to 2017 (42%) (Figure 32). There was a decline in use from 2017 to 2018 (34%), with a similar estimate to 2018 observed in 2019 (33%; *p*=0.478).

Frequency of Use: Median days of use remained consistent between 2018 and 2019 (4 days in 2019: IQR=2-8, n=258; 4 days in 2018).

Benzodiazepines

Recent Use (past 6 months): Recent use of non-prescribed benzodiazepines has, for the most part, been increasing since monitoring began, with two-fifths (41%) of the sample reporting such use in 2019, stable from 2018 (41%; Figure 32). In 2019, we asked participants for the first time about non-prescribed alprazolam use versus other non-prescribed benzodiazepine use, with 26% and 30% of the total sample reporting recent non-prescribed use, respectively.

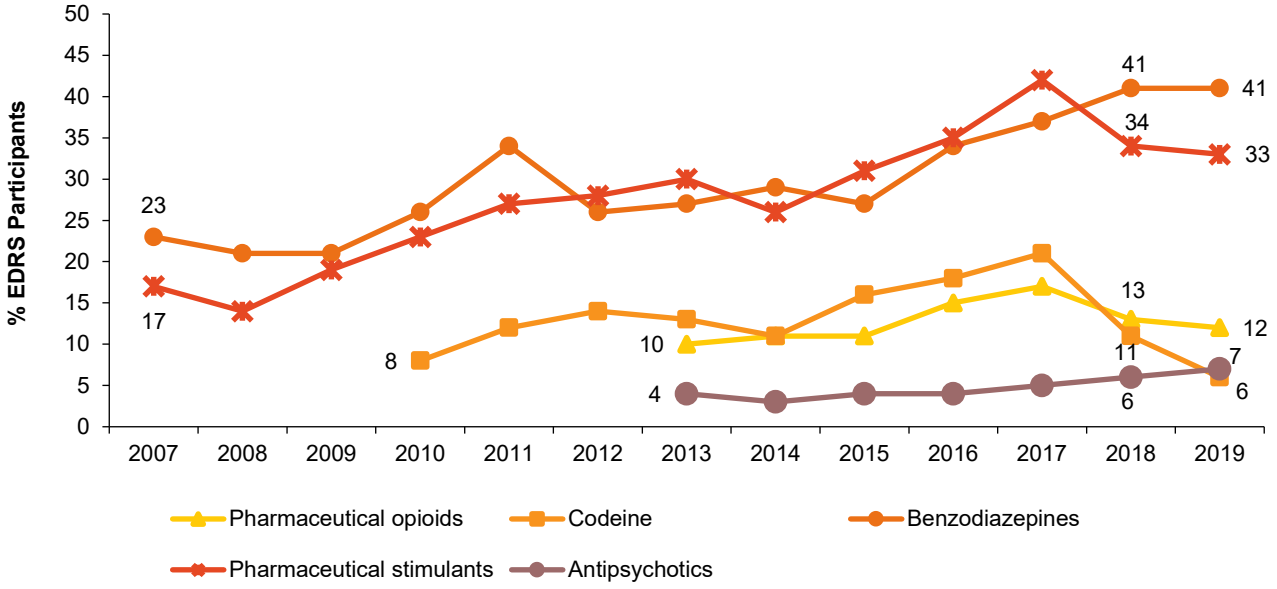
Frequency of Use: Consumers reported a median of 3 days (IQR=1-7 n=209) and 4 days (IQR=2-10, n=242) of alprazolam and 'other benzodiazepine' non-prescribed use in the past six months, respectively.

Antipsychotics

Recent Use (past 6 months): Small numbers reported recent use of non-prescribed antipsychotics (7% in 2019 versus 6% in 2018; *p*=0.617).

Frequency of Use: A median of 5 days of use (IQR=1-14, n=52) was reported by participants who had recently used non-prescribed antipsychotics.

Figure 32: Non-prescribed use of pharmaceutical drugs in the past six months, nationally, 2007-2019



Note. Non-prescribed use is reported for prescription medicines (i.e., benzodiazepines, antipsychotics, and pharmaceutical stimulants). In February 2018, the scheduling for codeine changed such that low-dose codeine formerly available over-the-counter (OTC) was required to be obtained via a prescription. High-dose codeine was excluded from pharmaceutical opioids from 2018. The time series here represents low-dose codeine used for non-pain purposes. Y axis has been reduced to 50% to improve visibility of trends. *p<0.050; **p<0.010; ***p<0.001 for 2018 versus 2019.

Other Illicit Drugs

Hallucinogenic Mushrooms

Recent Use (past 6 months): Twenty-seven per cent of the national sample had used hallucinogenic mushrooms in the six months preceding interview (26% in 2018; *p*=0.647; Figure 33).

Frequency of Use: Recent use was infrequent (2019: median 2 days, IQR=1-4 days, n=213; 2018: median 2 days).

MDA

Recent Use (past 6 months): In 2019, 10% of the sample reported use of MDA in the six months preceding interview, a decrease compared to 2018 (14%; *p*=0.008) (Figure 33).

Frequency of Use: MDA was used on a median of two days in 2019 (IQR=1-4, n=74; 2 days in 2018), indicating infrequent use.

Substance with Unknown Contents

Capsules: Around one in ten participants reported recent use of capsules with unknown contents over the first three years of monitoring (2013-2015). In 2018, the per cent reporting use increased to 18% (Figure 33), with a subsequent decrease in 2019 (9%; *p*<0.001).

Other Unknown Substances: In 2019, we asked participants about their use more broadly of substances with 'unknown contents'. These questions were asked by substance form, comprising capsules (as per previous years), pills, powder, crystal and 'other' form. Twenty-five per cent reported use of any substance with 'unknown contents' in 2019. However, 14% of the sample reporting using pills with unknown contents in the previous six months on a median of two days (IQR=1-5). Eight per cent of the national sample had recently used powder with unknown contents on a median of one day (IQR=1-3) and 3% had recently consumed crystal with unknown contents on a median of two days (IQR=1-6).

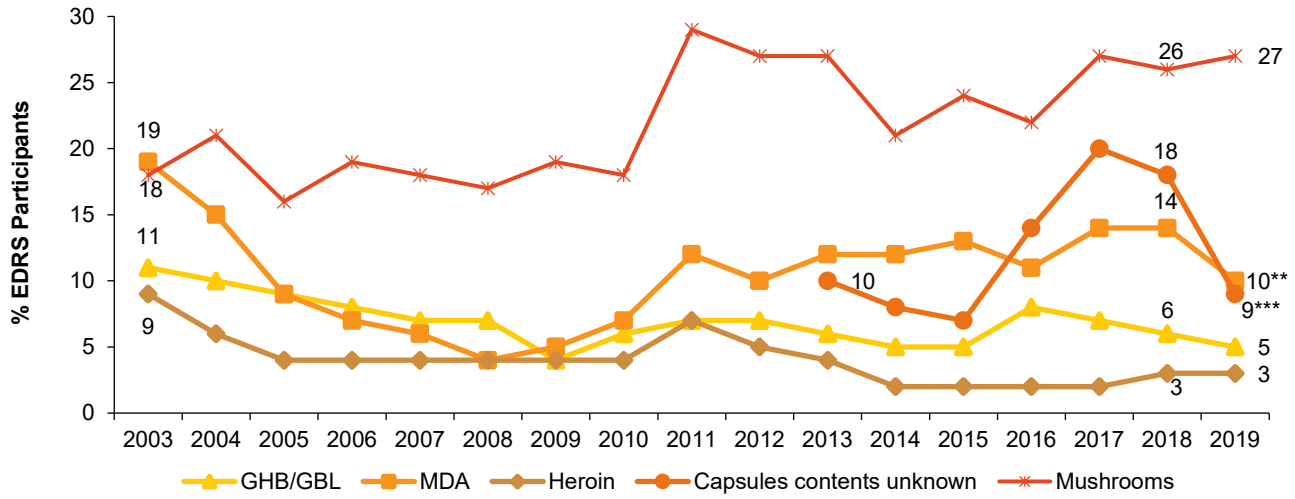
Heroin

Recent Use (past 6 months): Consistently small numbers have reported recent use of heroin (3% in 2019; Figure 33).

GHB/GBL

Recent Use (past 6 months): Consistently small numbers have reported recent use of GHB/GBL (5% in 2019; Figure 33).

Figure 33: Past six month use of other illicit drugs, nationally, 2003-2019



Note. Monitoring of capsules contents unknown commenced in 2013; note that in 2019, participants were asked more broadly about 'substances contents unknown' (with further ascertainment by form) which may have impacted the estimate for 'capsules contents unknown'. Y axis has been reduced to 30% to improve visibility of trends. *p<0.050; **p<0.010; ***p<0.001 for 2018 versus 2019

Licit and Other Drugs

Alcohol

Recent Use (past 6 months): Nearly the entire national sample reported alcohol use in the past six months (97%), consistent with the per cent observed since monitoring began in 2003 (Figure 34) and also consistent across the jurisdictions.

Frequency of Use: Consumers reported a median of 48 days of use in the past six months (n=772, IQR=24-72; 36 days in 2018; p=0.191). Seventy-five per cent of consumers drank alcohol once a week or more (74% in 2018; p=0.458); this includes 4% who reported daily use (4% in 2018; p=0.872).

Tobacco

Recent Use (past 6 months): The per cent reporting tobacco use has ranged between 75% and 86%, with 83% reporting past six month use in 2019 (Figure 34).

Frequency of Use: Median frequency of use was 167 days (IQR=24-180, n=664; 140 days in 2018; *p*=0.363), with 49% of recent consumers reporting daily use (44% in 2018; *p*=0.076). In 2019, daily use amongst those reporting any use was highest in the NT (66%) and lowest in NSW (34%).

E-cigarettes

Recent Use (past 6 months): Forty per cent of the 2019 sample had used e-cigarettes in the six months preceding interview (34% in 2018; *p*=0.007) (Figure 34). The highest per cent of recent use was observed in the NSW sample (51%) and the lowest per cent was observed in the TAS sample (26%).

Frequency of Use: Median days of use was reported at ten days in 2019 (IQR=3-40, n=319), a significant increase compared to 5 days in 2018 (*p*<0.001).

Forms Used: Among recent consumers (n=308), the majority (69%; n=213) reported using e-cigarettes containing nicotine whereas 3% (n=10) reported cannabis. Sixteen per cent (n=50) reported using e-cigarettes containing both nicotine and cannabis whereas 11% (n=35) reported using neither cannabis nor nicotine in 2019.

Nitrous Oxide

Recent Use (past 6 months): The per cent of the sample reporting recent use of nitrous oxide was stable from 2003 (26%) to 2014 (23%), and since then has more than doubled (53% in 2019; 50% in 2018; *p*=0.200; (Figure 34). The national estimate belies high jurisdictional variation, ranging from 34% in the TAS sample to 72% in the NSW sample in 2019.

Frequency of Use: Frequency of use remained stable at a median of six days (i.e. monthly use) (IQR=2-15, n=422; 5 days in 2018; *p*=0.082).

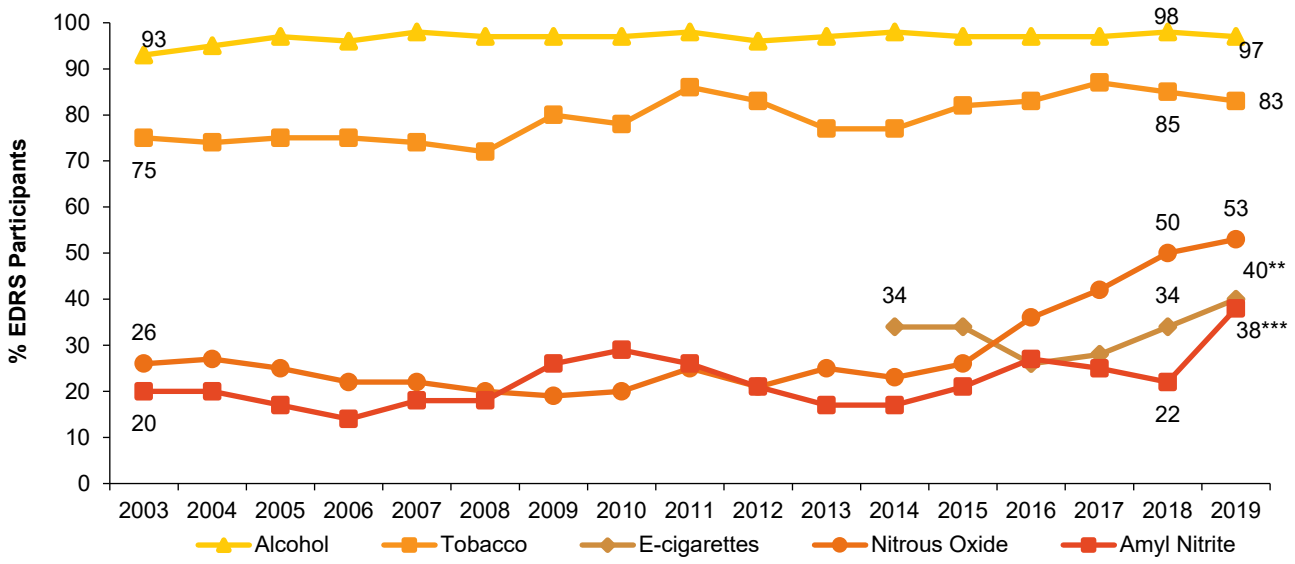
Amyl Nitrite

Amyl nitrite is an inhalant which is currently listed as Schedule 4 substance in Australia (i.e. available only with prescription) yet is often sold under-the-counter in sex shops. Following a review by the Therapeutic Goods Administration, amyl nitrite will be listed as Schedule 3 (i.e., for purchase over-the-counter) from 1 February 2020 when sold for human therapeutic purpose.

Recent Use (past 6 months): Use of amyl nitrite has varied over the course of monitoring, ranging from 14% in 2006 to 29% in 2010 (Figure 34). In 2019, nearly two in five participants (38%) reported recent used amyl nitrite: an increase from one in five participants (22%) in 2018 (*p*<0.001). There was variation in the per cent reporting recent use between jurisdictions, from 24% in the NT sample to 57% in the NSW sample.

Frequency of Use: Frequency of amyl nitrite use was generally low, with participants reporting a median of four days of use in the last six months (IQR=2-10, n=295; median 4 days in 2018).

Figure 34: Past six month use of licit drugs, nationally, 2003-2019



Note. Monitoring of e-cigarettes commenced in 2014. *p<0.050; **p<0.010; ***p<0.001 for 2018 versus 2019.

10

Drug-related harms and other associated behaviours

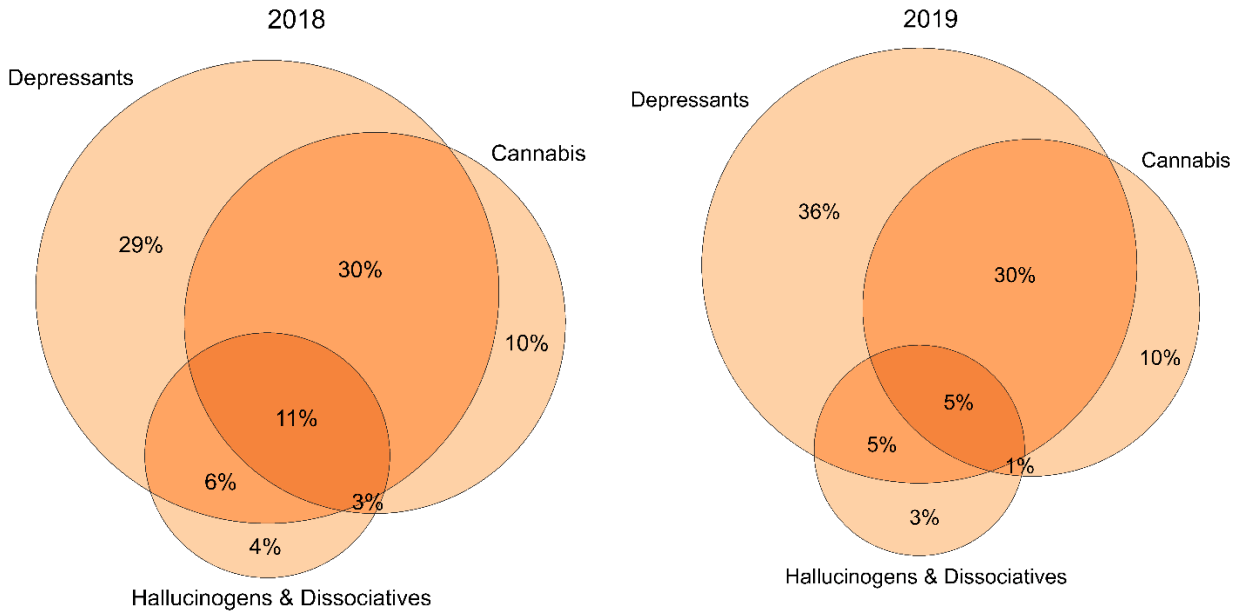
Participants were asked about various drug-related harms and associated behaviours, including polysubstance use, hazardous alcohol use, non-fatal overdose following drug use, injecting drug use, drug treatment, sexual health behaviours, mental health, crime and modes of purchasing drugs. It should be noted that the following data refer to participants' understanding of these behaviours (e.g., may not necessarily represent medical diagnoses in the case of reporting on health conditions).

Polysubstance Use

The majority (95%) of the sample reported use of one or more other drugs (including alcohol) on their last occasion of stimulant use (98% in 2018). The most commonly used substances (in addition to stimulant use) were alcohol (75%), tobacco (53%), cannabis (47%), energy drinks (7%), ketamine (9%), LSD (5%) and nitrous oxide (5%).

Ninety per cent of the sample reported using depressants, cannabis or hallucinogens/dissociatives on their last occasion of stimulant use (90% in 2018), with the most common combinations being stimulants and depressants (76%), and stimulants and cannabis (47%). Five per cent of the sample reported using depressants, cannabis and hallucinogens/dissociatives on their last occasion of stimulant use (Figure 35).

Figure 35: Polysubstance use on occasion of last stimulant use among the total sample, nationally, 2018-2019



Note. This figure captures those who had also used hallucinogens/dissociatives (LSD and/or hallucinogenic mushrooms), depressants (alcohol, GHB and/or benzodiazepines) and/or cannabis on their last occasion of stimulant use. Note that 7% of the sample in 2018 and 10% of the sample in 2019 (not depicted here) did not report use of hallucinogens/dissociatives, depressants or cannabis on their last occasion of stimulant use. Figure not to scale.

Alcohol Use Disorders Identification Test

The Alcohol Use Disorders Identification Test (AUDIT) was designed by the World Health Organisation (WHO) as a brief screening scale to identify individuals with problematic alcohol use in the past 12 months.

The mean score on the AUDIT for the total sample (including people who had not consumed alcohol in the past six months) was 13.5 (SD 7.0) in 2019. AUDIT scores are divided into four 'zones' which indicate risk level. Nearly four in five (79%) of participants obtained a score of eight or more, indicative of hazardous use (Table 16).

Table 16: AUDIT total scores and per cent of participants scoring above recommended levels, nationally, 2014-2019

	2014	2015	2016	2017	2018	2019
	N=790	**N=756**	**N=789**	**N=780**	**N=787**	**N=791**
Mean AUDIT total score (SD)	13.3 (6.5)	13.1 (6.3)	12.3 (6.8)	12.4 (8.5)	12.8 (6.8)	**13.5 (7.0)**
Score 8 or above (%)	82	79	73	77	75	**79**
Score 0-8: low risk drinking or abstinence	18	21	27	23	25	**21**
Score 8-15: alcohol use in excess of low-risk guidelines	48	45	43	48	43	**45**
Score 16-19: harmful or hazardous drinking	17	18	15	14	15	**17**
Score 20 or higher: possible alcohol dependence	17	17	15	15	17	**18**

Note. *p<0.050; **p<0.010; ***p<0.001 for 2018 versus 2019.

Overdose Events

Non-Fatal Overdose

Previously, participants had been asked about their experience in the past 12-months of i) **stimulant overdose**, and ii) **depressant overdose**.

In 2019, changes were made to this module. Participants were asked about the following, prompted by the definitions provided:

- **Alcohol overdose:** experience of symptoms (e.g., reduced level of consciousness, respiratory depression, turning blue and collapsing) where professional assistance would have been helpful.
- **Opioid overdose** same definition as above.
- **Stimulant overdose:** experience of symptoms (e.g., nausea, vomiting, chest pain, tremors, increased body temperature, increased heart rate, seizure, extreme paranoia, extreme anxiety, panic, extreme agitation, hallucinations, excited delirium) where professional assistance would have been helpful.
- **Other drug overdose:** similar definition to above.

It is important to note that events reported on for each drug type may not be unique given high rates of polysubstance use.

For the purpose of comparison with previous years, we computed the per cent reporting any depressant overdose, comprising any endorsement of alcohol or opioid overdose, or other drug overdose where a depressant (e.g., GHB, benzodiazepines) was listed.

Non-Fatal Stimulant Overdose

One-fifth of the national sample (22%) reported a stimulant overdose in the last 12 months on a median of one occasion (IQR=1-3). This per cent was similar to that observed in 2018 (25%; *p*=0.176).

Of those who had experienced a stimulant event in the last year (n=176), most nominated some form of MDMA/ecstasy (capsules: 47%; pills: 27%; crystal: 15%), cocaine (15%) and/or crystal methamphetamine (14%) in any of these events in the last 12 months. The majority (84%) reported that they had also consumed one or more additional drugs on the last occasion. On the last occasion, 82% did not receive treatment or assistance. Of those that did report receiving treatment or assistance (n=29), most reported emergency department attendance (48%) and ambulance attendance (45%).

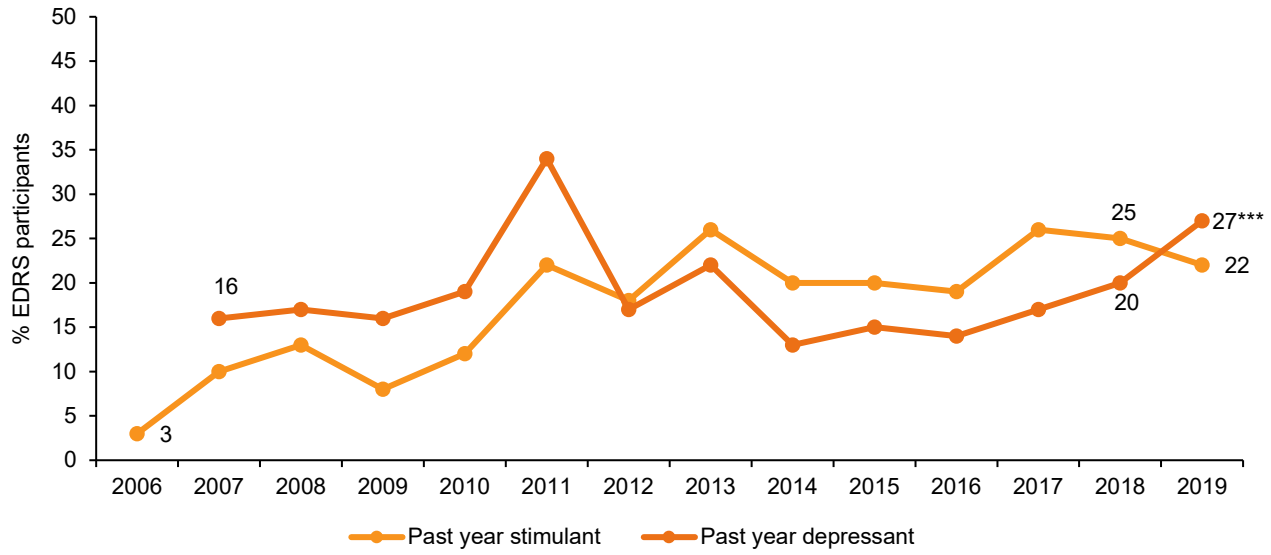
Non-Fatal Depressant Overdose

Alcohol: One-quarter (24%) of the national sample reported having experienced a non-fatal alcohol overdose in the past 12 months on a median of 2 occasions (IQR=1-3). Of those who had experienced an alcohol overdose in the past year (n=188), the majority (82%) reported not receiving treatment on the last occasion. Of those who reported receiving treatment (n=28), the majority reported hospital emergency department admission (89%), with smaller numbers reporting ambulance attendance (50%).

Any depressant (including alcohol): Past 12-month experience of any non-fatal depressant overdose has remained relatively stable over time, however there was a significant increase in 2019 (27% versus 20% in 2018; *p*<0.001; Figure 36). This increase may be due to greater nuance in asking about overdose following various depressant drugs (see above).

Of those who had experienced any depressant overdose in the last year (n=214), the majority reported alcohol (88%; 76% in 2018; *p*=0.003), with a smaller per cent reporting opioids (10%) and benzodiazepines (4%, respectively), followed by GHB/GBL (3%).

Figure 36: Past 12 month non-fatal stimulant and depressant overdose, nationally, 2006-2019



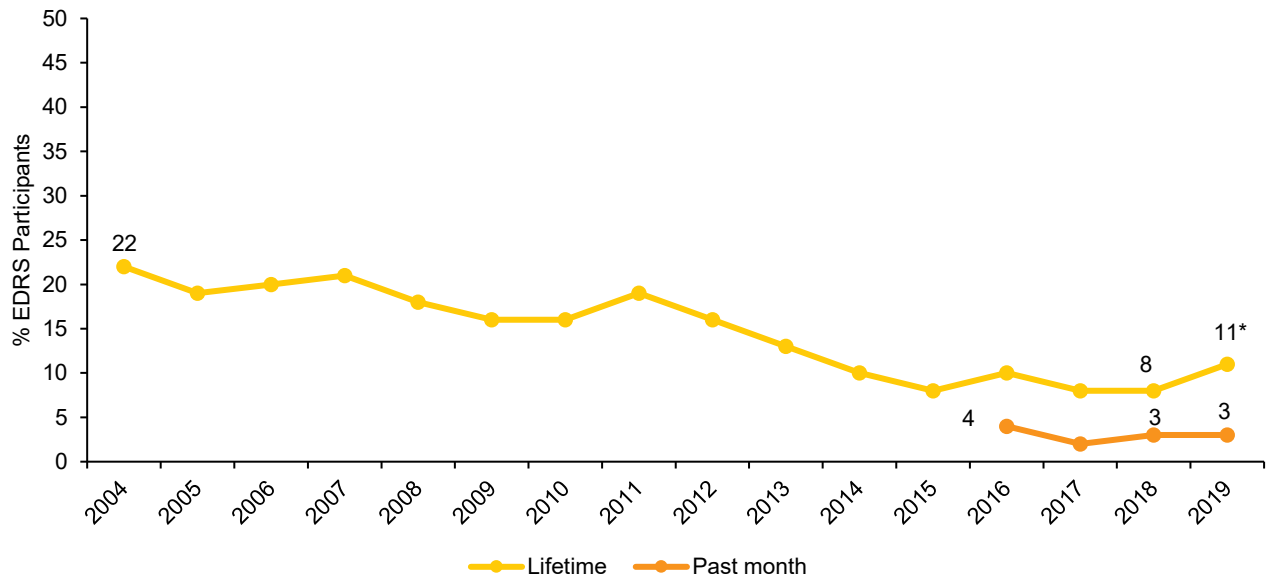
Note. Y axis has been reduced to 50% to improve visibility of trends. In 2019, items about overdose were revised, and changes relative to 2018 may be a function of greater nuance in capturing depressant events. *p<0.050; **p<0.010; ***p<0.001 for 2018 versus 2019.

Injecting Drug Use and Associated Risk Behaviours

In the past four years, approximately one in ten participants have reported ever injecting drugs. The per cent who report injecting drugs in the past month over this period has been low (3% in 2019) (Figure 37). Lifetime injection increased to 11% in 2019 compared to 8% in 2018 (p=0.036; Figure 37).

In 2019, the median age of first injection was 18 years (IQR=16-22) and the drugs reported to be first injected were mainly crystal methamphetamine (27%), powder methamphetamine (24%), and heroin (20%). Of the sample who had injected in the past month (n=27), 89% reported that they had not used a needle after somebody else.

Figure 37: Lifetime and past month drug injection, nationally, 2004-2019



Note. Y axis has been reduced to 50% to improve visibility of trends. Items assessing whether participants had injected drugs in the past month were first asked in 2016. *p<0.050; **p<0.010; ***p<0.001 for 2018 versus 2019.

Drug Treatment

A nominal per cent reported currently receiving drug treatment; this is consistent with reporting in previous years (6% in 2019 versus 6% in 2003; p=0.250). Of those who have reported being in treatment (n=44), the majority reported drug counselling as their main form of treatment (71% of those who reported receiving treatment in 2019 versus 59% in 2018; p=0.284).

Sexual Health Behaviours

In 2019, 92% of the sample had penetrative sex in the last six months. Penetrative sex was defined as 'penetration by penis or hand of the vagina or anus'. Given the sensitive nature of these questions, participants were given the option of self-completing this section of the interview.

Of those who responded and had penetrative sex with one or more people (n=683), 35% reported penetrative sex without a barrier where they did not know the HIV/STI status of their partner in the past six months (Table 17). Almost one-third (28%) of those who reported having penetrative sex

reported that alcohol and/or other drugs had impaired their ability to negotiate their wishes during sexual intercourse.

Just over half (57%) of the sample reported having a sexual health check-up in the past year. A further 19% had done so more than one year ago, and 25% had never had a sexual health check-up. Of the total sample, 81% reported that they had not received a positive diagnosis for a sexually transmitted infection (STI); 7% had received a positive diagnosis in the past year; and 12% had received a positive diagnosis over a year ago.

Table 17: Sexual health behaviours, nationally and by jurisdiction, 2019

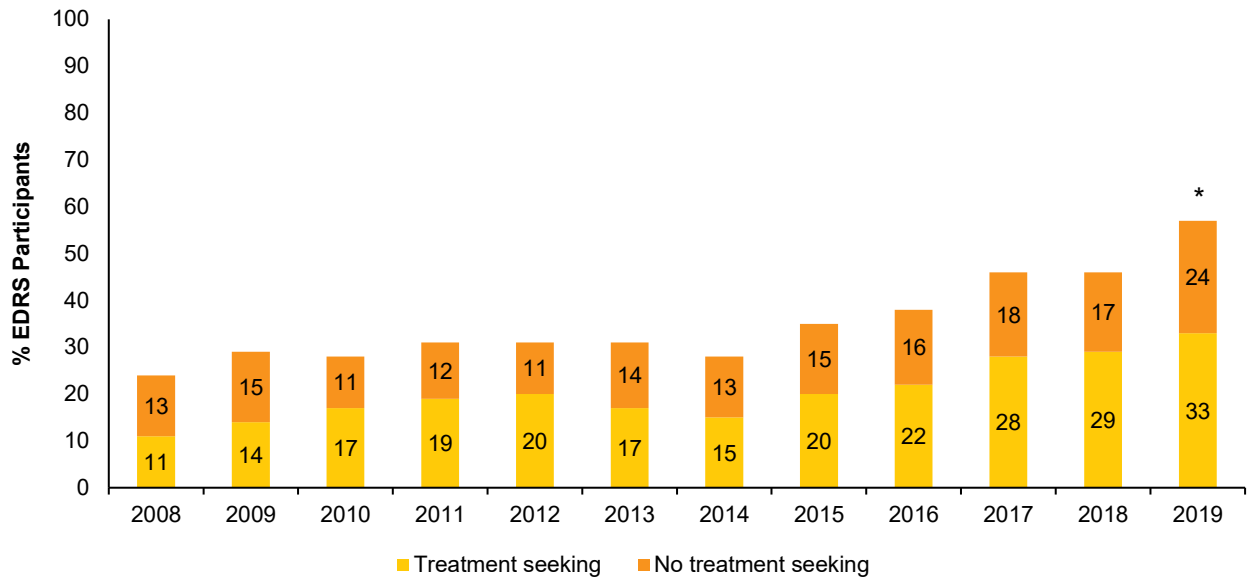
	National	NSW	ACT	VIC	TAS	SA	WA	NT	QLD
	N=782	**N=100**	**N=100**	**N=97**	**N=97**	**N=97**	**N=100**	**N=91**	**N=100**
% Any penetrative sex in the past six months (n)	92 (722)	94 (94)	88 (88)	92 (89)	94 (91)	91 (88)	86 (86)	97 (88)	98 (98)
Of those who responded[#]:	N=683	N=86	N=75	N=87	N=89	N=85	N=85	N=78	N=98
% Had penetrative sex without a barrier and did not know HIV/STI status of partner	35	37	35	30	30	41	28	36	43
Of those who responded[#]:	N=703	N=91	N=86	N=87	N=89	N=86	N=84	N=83	N=97
% Drugs and/or alcohol impaired their ability to negotiate their wishes during sexual intercourse	28	31	23	33	27	26	33	23	31
Of the total sample (past 12 months):	N=782	N=100	N=100	N=97	N=97	N=97	N=100	N=91	N=100
% Had a sexual health check	57	62	62	54	53	56	46	69	51
% Diagnosed with a sexually transmitted infection	7	12	7	10	-	10	-	8	-

Note. Don't know and did not respond responses excluded. [#]Due to the sensitive nature of these items there is missing data for some participants who chose not to respond.

Mental health

Over half (57%) of the national sample self-reported that they had experienced a mental health problem in the preceding six months (other than drug dependence), a significant increase from 2018 (47%; *p*=0.003; Figure 38). Of those who reported a mental health problem (n=435), the most common mental health problem was anxiety (76%), followed by depression (68%) and post-traumatic stress disorder (14%) in 2019. Of those that reported experiencing a mental health problem (n=445), 58% reported seeing a mental health professional during the past six months (33% of the total sample). Of these people (n=259), 54% reported being prescribed medication for this problem in this period (56% in 2018; *p*=0.592).

Figure 38: Self-reported mental health problems and treatment seeking in the past six months, nationally, 2008-2019



Note. The combination of the per cent who report treatment seeking and no treatment is the per cent who reported experiencing a mental health problem in the past six months. **p*<0.050; ***p*<0.010; ****p*<0.001 for 2018 versus 2019.

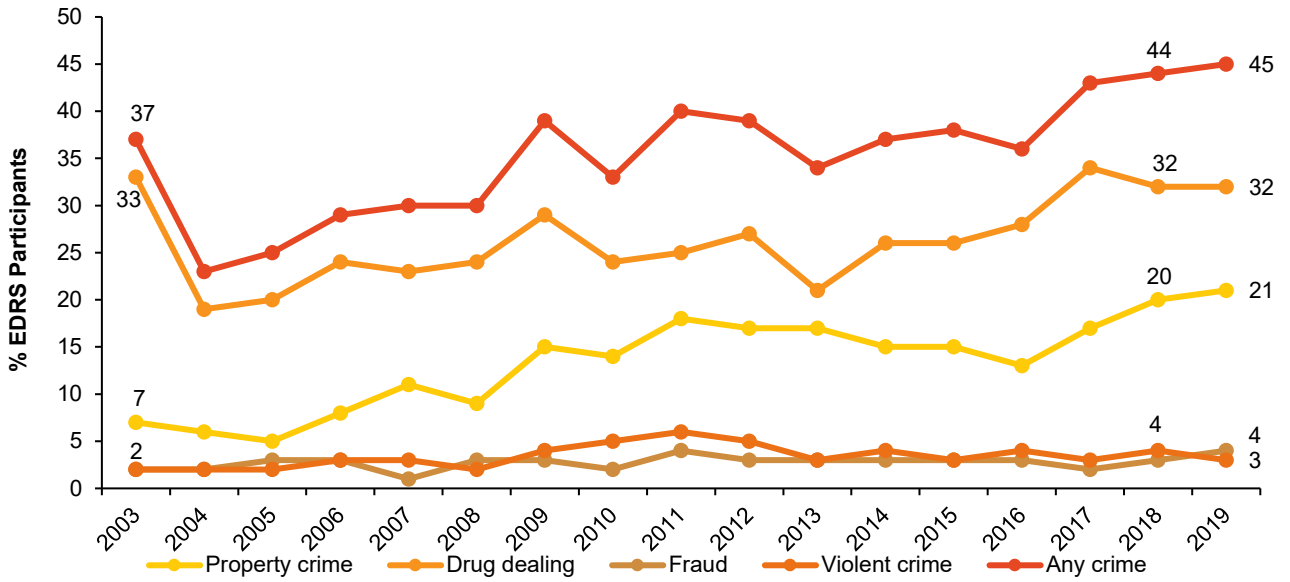
Crime

Past month self-reported criminal activity has fluctuated over time, with drug dealing and property crime being consistently the two main forms of criminal activity (32% and 21%, respectively, in 2019; Figure 39). In 2019, 12% reported being a victim of a crime involving violence (e.g., assault).

Eleven per cent of the 2019 national sample reported having been arrested in the 12 months preceding interview, ranging from 4% in the VIC sample to 15% in the ACT, NT and QLD samples, respectively. This has remained relatively stable since 2003 (11%; *p*=0.860). Of those who commented (n=86), the main reasons for arrest in 2019 were public order (drunk and disorderly; 28%), drug use or possession (21%), violent crime (20%), and property crime (19%).

Five per cent of the national sample reported lifetime prison history in 2019, ranging from <5% in the VIC sample to 9% in the NT sample.

Figure 39: Self-reported criminal activity in the past month, nationally, 2003-2019



Note. Y axis has been reduced to 50% to improve visibility of trends. *p<0.050; **p<0.010; ***p<0.001 for 2018 versus 2019.

Modes of Purchasing Illicit or Non-Prescribed Drugs Non-Prescribed Drugs

In interviewing and reporting, 'online sources' were defined as either surface or darknet marketplaces.

In 2019, the most popular means of arranging the purchase of illicit or non-prescribed drugs in the 12 months preceding interview in 2019 were face-to-face (82%) and via social networking applications (e.g. Facebook, Wickr, WhatsApp, Snapchat, Grindr, Tinder) (73%). Ten per cent had obtained drugs via the darknet in the past year and 5% had purchased drugs on the surface web.

When asked to choose their main purchasing approach in the previous 12 months, the largest per cent chose via social networking (43%), followed by face-to-face (34%; Table 18).

When asked about how they had received illicit drugs on any occasion in the last 12 months, the majority of participants reported face-to-face (98%), with smaller numbers reported receiving illicit drugs via post (12%), and via a collection point (10%; defined as a predetermined location where a drug will be dropped for later collection).

Buying Drugs Online

Twelve per cent of participants reported ever purchasing drugs on the darknet. We asked the remaining participants (n=694) about their knowledge of the darknet. Among those that responded (n=664), 4% had not heard of the darknet, while over half (53%) had heard of it but had never accessed or researched it, 18% had researched it but never accessed it, and 26% had accessed it, but had never purchased from it.

Of those that had purchased drugs via surface or darknet markets in the past 12 months (n=106), 18% had done so once, 18% twice, 26% 3-5 times and 37% more than five times during this period. Of those who had purchased drugs online, the most commonly reported purchased drugs via online sources in the past 12 months was any form of ecstasy (68%), followed by LSD (37%), and cannabis (35%). Of those who reported purchasing drugs via the surface or darknet in the last 12 months, 60% reported doing so for later supply to others.

Selling Drugs Online

In 2019, a minority of participants reported to have sold illicit drugs on the surface or darknet, with 1% reporting selling drugs online in the 12 months preceding interview and a further 1% reporting doing so at least once in their lifetime.

Table 18: Means of purchasing illicit drugs in the past 12 months, nationally and by jurisdiction, 2019

	National	NSW	ACT	VIC	TAS	SA	WA	NT	QLD
	n=792	n=100	n=98	n=99	n=97	n=100	n=99	n=100	n=99
% Purchasing approaches in the last 12 months^									
Face-to-face	82	85	81	82	88	79	72	90	82
Surface web	5	8	6	-	-	-	-	-	8
Darknet market	10	13	14	9	7	8	-	6	21
Social networking applications	73	79	70	77	68	74	75	56	83
Text messaging	53	70	55	51	43	44	48	71	43
Phone call	39	43	54	34	35	37	18	54	35
Other	-	0	0	-	0	-	0	0	0
% Main purchasing approach in the last 12 months									
Face-to-face	34	28	37	37	34	38	23	42	29
Surface web	0	0	0	0	0	0	0	0	0
Darknet market	2	-	-	-	-	-	-	-	-
Social networking applications	43	37	36	43	49	46	58	21	57
Text messaging	15	27	14	11	10	7	14	23	9
Phone call	6	-	11	-	-	7	-	13	-

Note. - not reported, due to small numbers (n≤5 but not 0). ^ participants could endorse multiple responses.