South Australian Drug Trends 2018

Key findings from the Ecstasy and Related Drugs Reporting System (EDRS) Interviews

SOUTH AUSTRALIAN DRUG TRENDS 2018: KEY FINDINGS FROM THE 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), UNSW Australia, coordinated the EDRS. The following researchers and research institutions contributed to EDRS 2018 across all jurisdictions:

- Dr Rachel Sutherland, Ms Antonia Karlsson, Ms Julia Uporova, Ms Daisy Gibbs, Professor Louisa Degenhardt, Professor Michael Farrell, Professor Alison Ritter and Dr Amy Peacock, National Drug and Alcohol Research Centre, University of New South Wales;
- Ms Amy Kirwan and Professor Paul Dietze, Burnet Institute Victoria;
- Ms Ellie Bucher and Associate Professor Raimondo Bruno, School of Medicine, University of Tasmania;
- Ms Jodie Grigg and Professor Simon Lenton, National Drug Research Institute, Curtin University, Western Australia; and
- Dr Caroline Salom and Professor Rosa Alati, School of Public Health, 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 assisted with the collection and input of data at a jurisdictional and national level. In particular, we would like to thank Carla Morelli, Madeleine Rose Benton, Hugh Scobie, Amy McQuade and Andriana Tran for conducting the 2018 SA EDRS surveys.

Abbreviations

4-FA	4-Fluoroamphetamine
5-MeO-DMT	5-methoxy-N,N-dimethyltryptamine
4-AcO-DMT	4-Acetoxy-N,N-dimethyltryptamine
BZP	1-Benzylpiperazine(s)
DMT	Dimethyltryptamine
DO-x	Chemical class of substituted amphetamines
EDRS	Ecstasy and Related Drugs Reporting System
GBL	Gamma-butyrolactone
GHB	Gamma-hydroxybutyrate
GP	General Practitioner
IDRS	Illicit Drug Reporting System
IQR	Interquartile range
LSD	*d*-lysergic acid
MDA	3,4-methylenedioxyamphetamine
MDMA	3,4-methylendioxymethamphetamine
MDPV	Methylenedioxypyrovalerone (Ivory wave)
MXE	Methoxetamine
N (or n)	Number of participants
NBOMe	N-methoxybenzyl
NDARC	National Drug and Alcohol Research Centre
NPS	New psychoactive substances
NSW	New South Wales
OTC	Over-the-counter
PMA	Para-methoxyamphetamine
SA	South Australia
STI	Sexually transmitted infection

Executive summary

Sample characteristics

The South Australian (SA) EDRS sample were predominantly young, well-educated males, consistent with the sample characteristics since monitoring began in 2003. Ecstasy and cannabis were the drugs of choice (30% and 27%, respectively) and were also the drugs used most often in the month preceding interview (21% and 41%, respectively) in 2018.

Ecstasy

The ecstasy market has diversified over the past few years, with a shift to greater use of MDMA crystal, and declining use of ecstasy powder and pills (79%, 58%, and 56%, respectively). These changes may be partially explained by differences in perceived purity, with ecstasy crystal reported to be of higher purity than pills and powder. One-third (32%) of consumers reported weekly or more frequent use of ecstasy.

Methamphetamine

Recent use of methamphetamine remained stable in 2018 (45%) though overall has been declining since the commencement of monitoring. Whilst the use of powder and base remained relatively low and stable (15% and 10%), recent use of crystal methamphetamine significantly increased in 2018 (40%) and proved to be the highest percentage reporting recent use since 2011. Thirty-nine per cent of consumers reported weekly or more frequent use of any methamphetamine.

Cocaine

Recent use of cocaine has gradually increased amongst the sample, albeit with some fluctuation, with 55% reporting use in 2018. Most consumers reported very infrequent use of cocaine. Forty-seven per cent of consumers reported cocaine being 'easy' to obtain, the third highest percentage reported since monitoring commenced.

Ketamine & LSD

Recent use of ketamine has declined since monitoring began and significantly so in 2018 (24%) after a steep rise transpired in 2017 (48%). On the other hand, LSD has remained stable throughout the course of monitoring, with 36% of participants reporting recent use, no different to 2017 reports. A tab of LSD has doubled in price from 2003 to 2018.

Cannabis

At least three in four participants have reported recent use of cannabis each year since 2003, although the rate observed in 2018 (85%) dropped to the lowest percentage since 2010. One-third of consumers (36%) reported daily use in 2018.

New psychoactive substances (NPS)

Thirty-nine per cent of the sample reported recent use of at least one form of NPS. DMT, the 2C class and methylone were the most common recently used NPS in 2018 (23%, 12% and 7%, respectively).

Drug-related harms and other risks

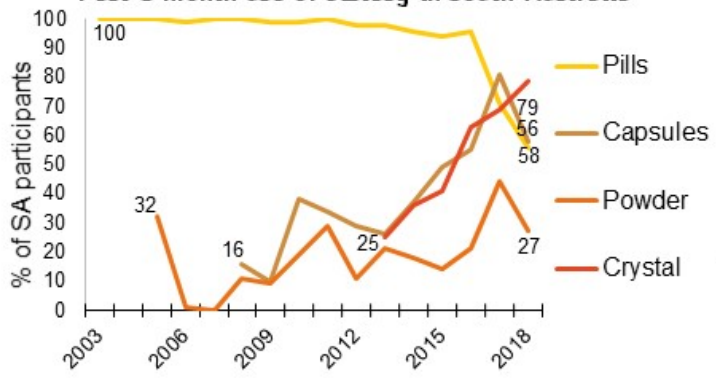
Eighty-three per cent of the sample reported using depressants, cannabis, and/or hallucinogens/dissociatives on their last occasion of stimulant use. Over two-fifths (43%) reported a non-fatal stimulant overdose, and 29% reported a non-fatal depressant overdose (mostly attributed to alcohol) in the past year. The number of participants reporting injecting drug use remained low (n=8). Over two-fifths (44%) self-reported that they had experienced a mental health problem in the preceding six months, and one-third (31%) had sought treatment in the same period. Almost half of the sample (49%) reported engaging in 'any' crime in the past month, whereby 35% reported engaging in drug dealing and 18% reported engaging in property crime.

Key findings from the SA Ecstasy and Related Drugs Reporting System interviews, 2018

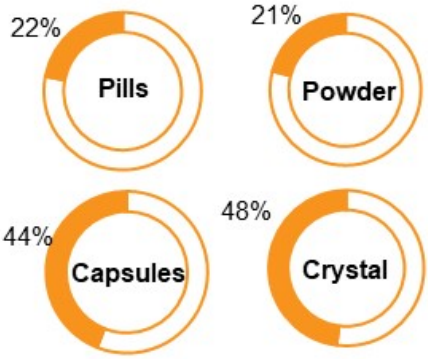
EDRS

Annual cross-sectional interviews from 2003 to 2018 with people who use ecstasy and other stimulants, recruited from Adelaide, South Australia

Past 6 month use of ecstasy in South Australia



Perceived purity as high

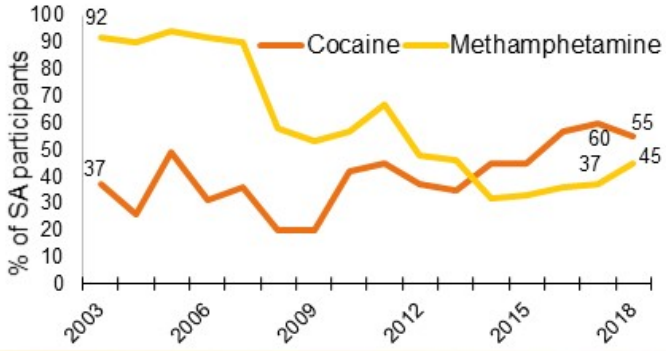


Risks and Harms

44% of the South Australia sample self-reported experiencing a **mental health problem** in the past six months

31% of the South Australia sample self-reported seeking treatment for a **mental health problem**

Recent use of cocaine and methamphetamine, SA



Use of new psychoactive substances (NPS)

39% of the SA sample reported using any NPS in the last six months

Most commonly used NPS

For more information about the IDRS and EDRS, please contact drugtrends@unsw.edu.au

To access the IDRS and EDRS reports, visit our website https://ndarc.med.unsw.edu.au/program/drug-trends and don't forget to subscribe to the Drug Trends email newsletter for latest news.

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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=799 in 2018). A total of 100 participants were interviewed in Adelaide in 2018, as part of the South Australia EDRS. 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 ongoing 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 of the EDRS 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, focussing on data collected in Adelaide, South Australia.

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 799 participants were recruited across capital cities nationally (April-July, 2018), with 100 participants interviewed in Adelaide, during April-May 2018 (100 participants in 2017).

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 2017 and 2018, 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).

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 Adelaide (a capital city), 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, 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 South Australia (see section on 'Additional Outputs' below for details of other outputs providing such profiles).

Additional Outputs

Infographics and key figures from this report are available for download. There is 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.

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Sample characteristics

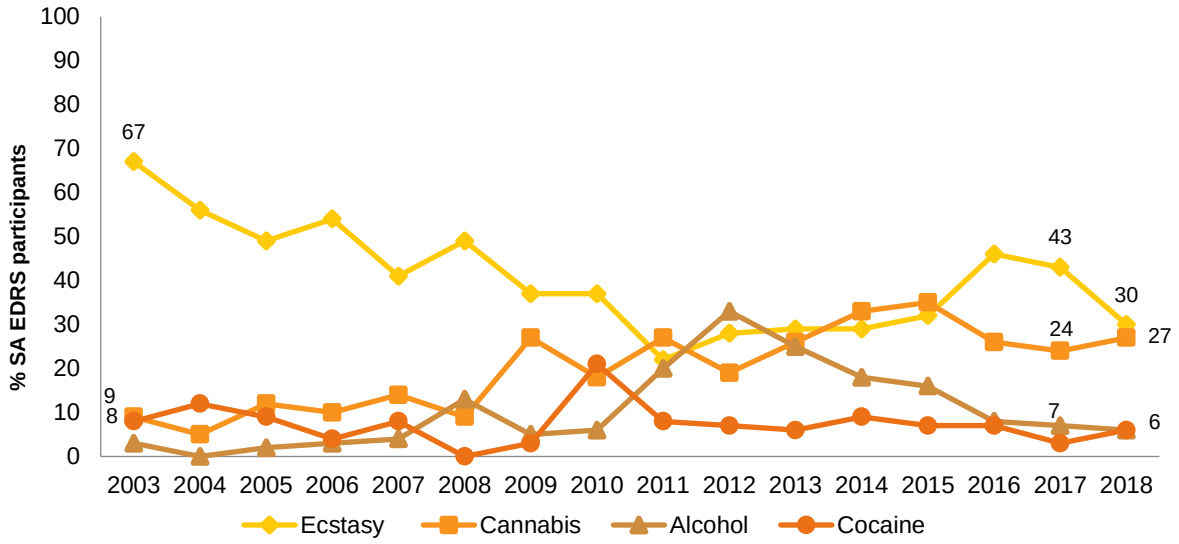
In 2018, the SA EDRS sample was predominantly male (70%) with a median age of 21 (IQR 18-28 years). Over half (53%) reported having received a post-school qualification(s), and less than one-tenth (8%) were current students (34% in 2017; $p<0.001$). Almost one quarter (21%) were employed full time, yet 30% were unemployed at the time of interview, a significant increase from 2017 (7%; $p<0.001$). Participants typically reported that ecstasy was their drug of choice, although cannabis remained the drug used most often in the month preceding interview.

Table 1: Demographic characteristics of the sample, nationally and SA, 2014-2018

	National	SA				
	2018	**2018**	**2017**	**2016**	**2015**	**2014**
	N=799	**N=100**	N=100	N=100	N=100	N=100
Median age (years) (IQR)	21 (19-24)	**21 (18-28)**	20 (19-22)	19 (18-21)	20 (18-24)	21 (19-23)
% Male	59	**70**	60	61	58	62
% Aboriginal and/or Torres Strait Islander	6	**7**	-	-	-	-
% Sexual identity						
Heterosexual	84	**84**	87	80	89	80
Gay male	2	**-**	-	-	0	-
Lesbian	1	**0**	-	-	-	9
Bisexual	10	**10**	11	-	-	7
Other	2	**-**	0	-	-	-
Median years of school education	12	**12**	12	12	12	12
% Post-school qualifications^	42	**53**	40	44	44	31
% Employment status						
Employed full time	22	**21**	18	23	17	15
Students#	18	**8*** **	34	39	35	46
Unemployed	20	**30*** **	7	10	17	10
Mean weekly income $	(N=774) $400	**(N=96) $355**	(N=98) $1118	(N=93) $463	(N=97) $505	(N=96) $491
% Accommodation						
Own house/flat	4	**-**	-	6	0	-
Rented house/flat	44	**41**	39	28	46	48
Family home	48	**47**	53	63	52	45
Boarding house/hostel	1	**-**	0	0	-	-
No fixed address	2	**-**	0	-	-	-
Other	1	**0**	-	-	0	0

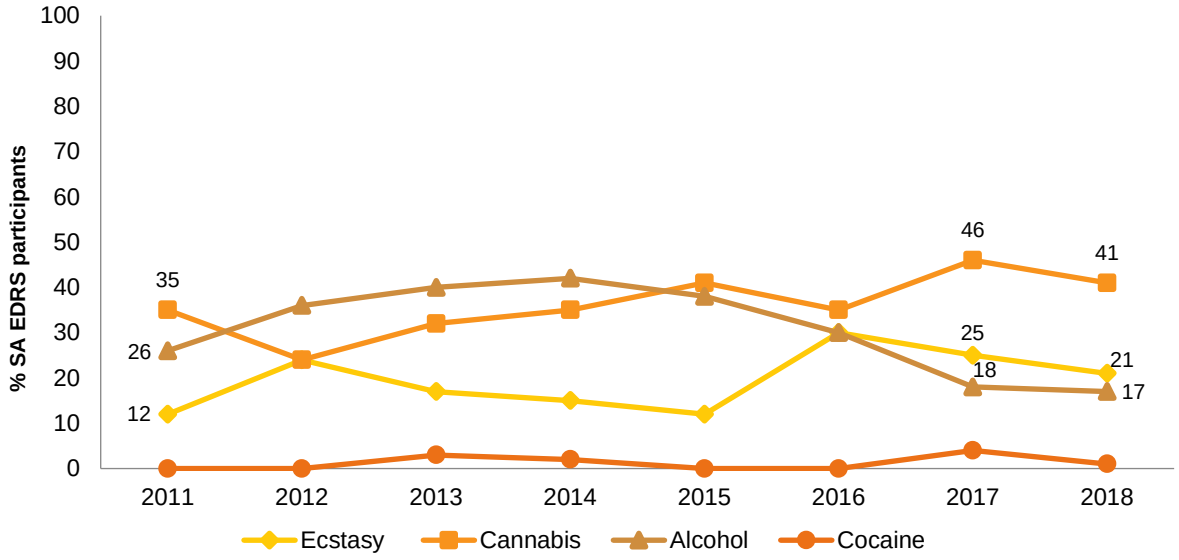
Note. ^Includes trade/technical and university qualifications. # Includes full-time students, part-time students and participants who both work and study. - Percentage suppressed due to small cell size (n≤5 but not 0). *p<0.050; **p<0.010; ***p<0.001 for 2017 versus 2018.

Figure 1: Drug of choice, SA, 2003-2018



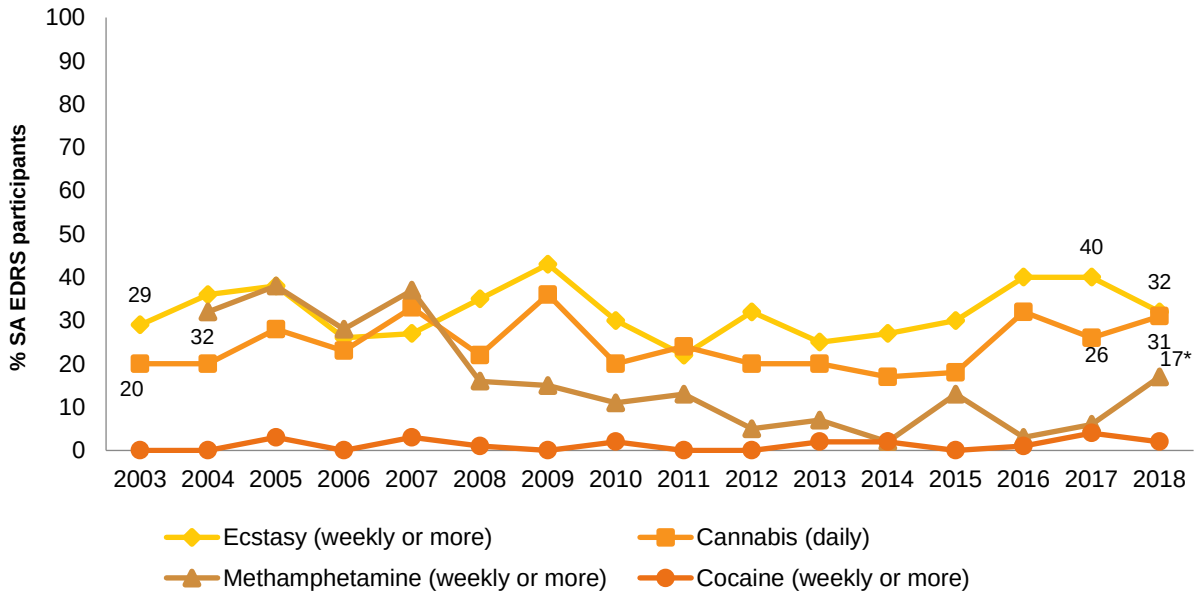
Note. Substances listed in this figure are the primary endorsed; nominal percentages have endorsed other substances. Data labels have been removed from figure in years 2003 and 2017 with small cell size (i.e. n≤5). *p<0.050; **p<0.010; ***p<0.001 for 2017 versus 2018.

Figure 2: Drug used most often in the past month, SA, 2011-2018



Note. Substances listed in this figure are the primary endorsed; nominal percentages have endorsed other substances. Data are only presented for 2011-2018 as this question was not asked in 2003-2010. Data labels have been removed from figure in years 2011, 2017 and 2018 with small cell size (i.e. n≤5). *p<0.050; **p<0.010; ***p<0.001 for 2017 versus 2018.

Figure 3: High frequency substance use in the past six months, SA, 2003-2018



Note. Among the entire sample. Data labels have been removed from figure in years 2003, 2017 and 2018 with small cell size (i.e. n≤5). *p<0.050; **p<0.010; ***p<0.001 for 2017 versus 2018.

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.

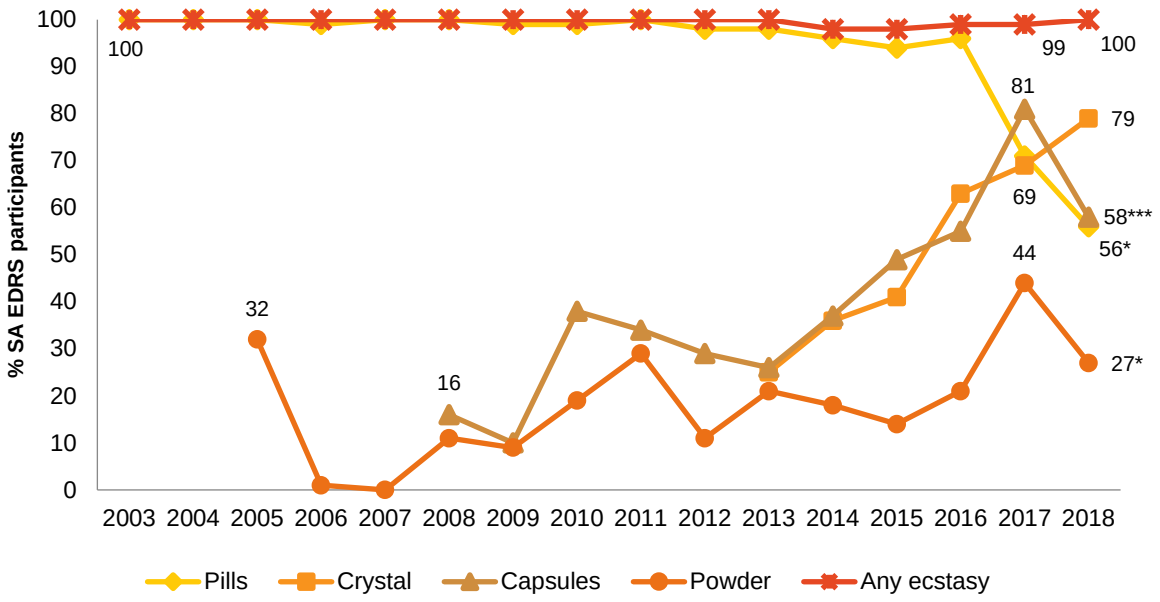
Recent Use

All participants (100%) reported use of any ecstasy in the past six months, consistent with previous years (Figure 4), and reflecting the interview eligibility criteria (see Methods).

A significant decrease was observed in frequency of use (median 15 days in 2018, IQR 7-25 days; median 18 days in 2017; *p*=0.034; Figure 5). Almost one-third (31%) of recent ecstasy consumers reported weekly or more frequent use of ecstasy in the six months preceding interview (40% in 2017; *p*=0.166; Figure 3).

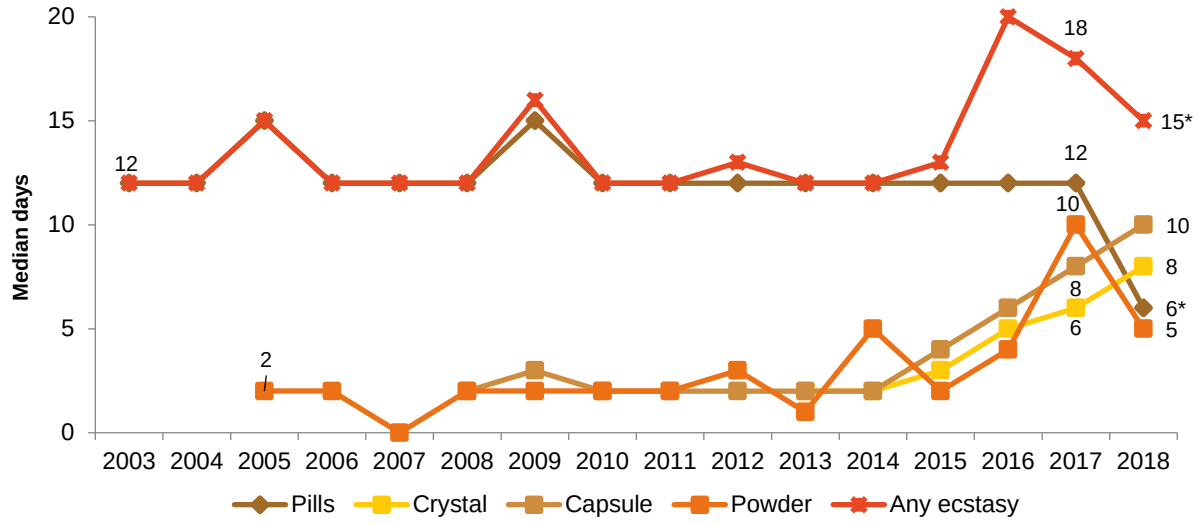
There has been a shift over time to greater use of MDMA crystal, and declining use of ecstasy pills and powder. These changes may be partially explained by differences in perceived purity, with MDMA crystal reported to be of higher purity than pills and powder (see Table 2).

Figure 4: Past six month use of any ecstasy, and ecstasy pills, powder, capsules, and crystal, SA, 2003-2018



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 2017 versus 2018.

Figure 5: Median days of any ecstasy, pills, powder, capsules, and crystal use in the past six months, SA, 2003-2018



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 recent 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 2017 versus 2018.

Ecstasy pills

Ecstasy pills were the dominant form used for most of the years of monitoring, with a more recent decline in use. This includes a decrease in use from 2017 to 2018 (71% to 56%; p=0.028; Figure 4). In accordance, frequency of use also significantly declined, from a median of 12 days in 2017 to a median of six days (IQR 3-14 days) in 2018 (p=0.044; Figure 5). In 2018, 13% of consumers reported using ecstasy pills weekly or more frequently (21% in 2017; p=0.202).

Swallowing continued to be the main route of administration among participants who recently used ecstasy (95%; 99% in 2017; p=0.206). In 2018, the median quantity used in a typical session was three pills (IQR 2-6 pills).

Ecstasy powder

Ecstasy powder has generally been the least commonly endorsed form of ecstasy used, with a significant decrease observed in 2018 (27%) compared with 2017 (44%; p=0.012; Figure 4).

Frequency of powder use remained stable (median 5 days in 2018, IQR 2-14 days; median 10 days in 2017; p=0.287; Figure 5). Eleven per cent of consumers reported using ecstasy powder weekly or more (16% in 2017; p=0.573).

The main route of administration among consumers has consistently been snorting (85% in 2018; 75% in 2017; p=0.307), with declining use via swallowing (41% versus 68% in 2017; p=0.023). In 2018, the median quantity used in a typical session was 0.5 grams (IQR 0.38-3.0 grams; n=9).

Ecstasy capsules

A significant decrease relative to 2017 was observed in recent use of ecstasy capsules (58% in 2018 compared to 81% in 2017; $p<0.001$). Despite this decline, ecstasy capsules were the second most commonly used form of ecstasy (Figure 4).

Frequency of capsule use has remained relatively stable at a median of ten days (IQR 5-15 days versus eight days in 2017; $p=0.345$; Figure 5), though this proved to be the highest frequency of use observed over the course of monitoring. Seventeen per cent of consumers reported using ecstasy capsules weekly or more (12% in 2017; $p=0.417$).

The main route of administration has consistently been swallowing (95% versus 98% in 2017; $p=0.399$), followed by snorting (28% versus 40% in 2017; $p=0.145$). The median quantity used in a typical session was four capsules (IQR 2-8.5 capsules).

Ecstasy crystal

Use of ecstasy crystal has steadily increased since monitoring began, from 25% in 2013 to 79% in 2018 (Figure 4), with 2018 being the first year whereby ecstasy crystal surpassed all other forms to become the main form used.

Frequency of use has remained stable at a median of eight days (IQR 4-14 days; 6 days in 2017; $p=0.843$; Figure 5). Thirteen per cent of consumers reported using ecstasy crystal weekly or more (16% in 2017; $p=0.568$).

The main route of administration amongst consumers has consistently been swallowing (81% versus 87% in 2017; $p=0.328$), with a decline in the percentage reporting snorting (56% versus 72% in 2017; $p=0.035$). The median quantity used in a typical session was four capsules (IQR 3-7.5 capsules; n=16) or one gram (IQR 1-3 grams; n=17).

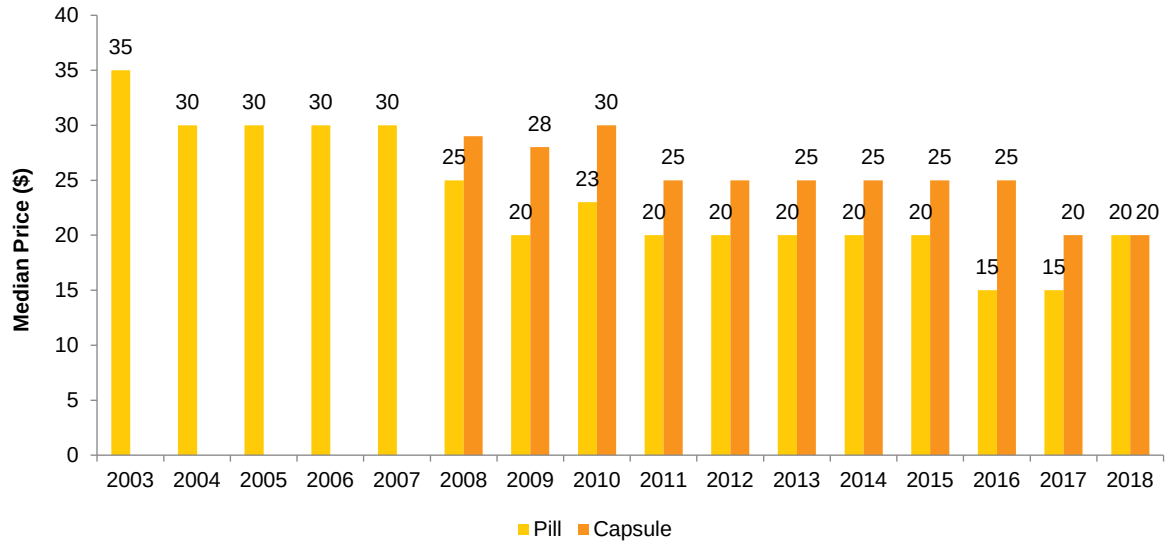
Price, Perceived Purity and Availability

The median price per ecstasy pill (n=44) was $20, an increase from $15 reported in 2017, ($p=0.065$), although comparable with estimates from 2011-2015 (Figure 6). The median price per capsule (n=50) and per point (n=19) of crystal was also $20 in 2018. The price per gram of crystal had decreased significantly from $200 in 2017 to $150 in 2018 (IQR $100-$200; $p=0.042$; Figure 6 and Figure 7).

Reports of perceived pill (n=49), powder (n=14), and capsule (n=55) purity have remained relatively stable in 2018 relative to 2017 (Table 2). Perceived purity has always been highest for crystal ecstasy (n=67 commenting in 2018), with 84% of recent consumers reporting purity as ‘high’ or ‘medium’ between 2017-2018.

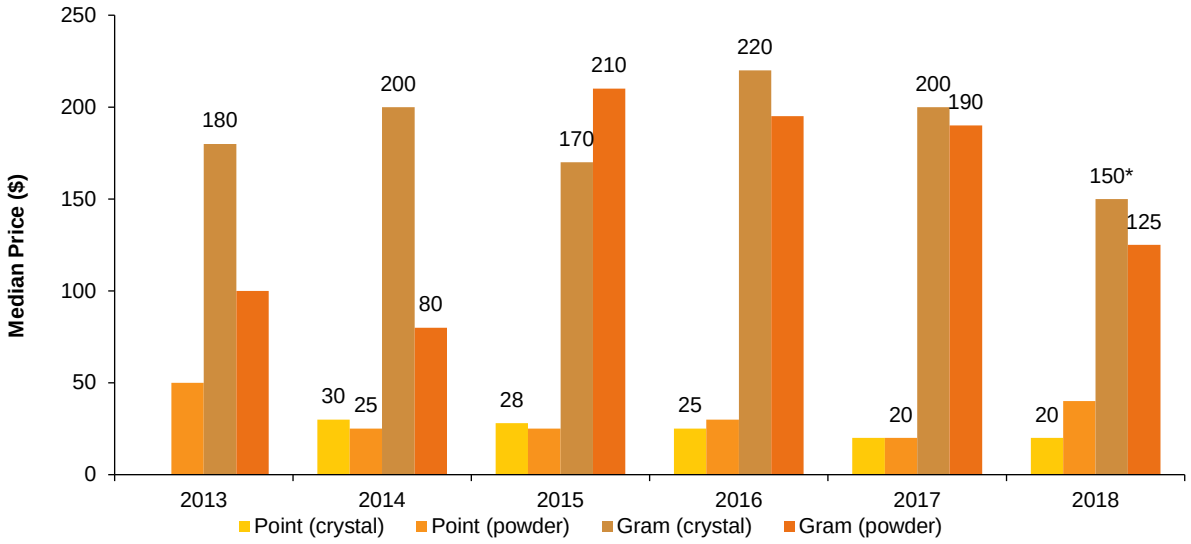
Many participants who had recently consumed capsules, crystal and powder reported it to be ‘easy’ to ‘very easy’ to obtain in 2018 (98%, 92% and 86%, respectively). However, those reporting pills as ‘very easy’ to obtain declined significantly in 2018 (33% versus 58% in 2017; $p=0.008$). Furthermore, participants reporting pills as ‘difficult’ to obtain increased, from five per cent in 2017 to 27% in 2018 ($p<0.001$) (Table 2).

Figure 6: Median price of ecstasy pill and capsule, SA, 2003-2018



Note. Among those who commented. Data collection for price of ecstasy capsules started in 2008. Data labels have been removed from figure throughout all years with small cell size (i.e. n≤5). *p<0.050; **p<0.010; ***p<0.001 for 2017 versus 2018.

Figure 7: Median price of ecstasy crystal and powder per point and gram, SA, 2013-2018



Note. Among those who commented. Data collection for price of ecstasy crystal gram and point started in 2013 and 2014 respectively. Data labels have been removed from figure throughout all years with small cell size (i.e. n≤5). *p<0.050; **p<0.010; ***p<0.001 for 2017 versus 2018.

Table 2: Perceived purity of ecstasy pills, powder, capsules and crystal, SA, 2016-2018

	SA		
Current Purity	**2018**	**2017**	**2016**
% Pills (n)	**(n=49)**	(n=65)	(n=83)
Low	**35**	35	29
Medium	**33**	34	30
High	**22**	14	18
Fluctuates	**-**	17	23
% Powder (n)	**(n=14)**	(n=26)	(n=2)
Low	**-**	-	0
Medium	**50**	58	-
High	**-**	31	-
Fluctuates	**-**	-	0
% Capsules (n)	**(n=55)**	(n=77)	(n=12)
Low	**-***	-	0
Medium	**38**	31	-
High	**44**	56	-
Fluctuates	**-**	12	-
% Crystal (n)	**(n=67)**	(n=63)	(n=53)
Low	**-**	-	-
Medium	**36**	24	42
High	**48**	60	45
Fluctuates	**10**	13	11
Current Availability			
% Pills (n)	**(n=49)**	(n=66)	(n=84)
Very easy	**33****	58	76
Easy	**31**	38	24
Difficult	**27*****	-	0
Very difficult	**-****	0	0
% Powder (n)	**(n=14)**	(n=27)	(n=2)
Very easy	**43**	41	-
Easy	**43**	26	0
Difficult	**-**	30	-
Very difficult	**-**	-	0
% Capsules (n)	**(n=55)**	(n=76)	(n=12)
Very easy	**58**	50	50
Easy	**40**	32	-
Difficult	**-****	17	-
Very difficult	**0**	-	0
% Crystal (n)	**(n=69)**	(n=64)	(n=54)
Very easy	**51**	48	28
Easy	**41**	31	52
Difficult	**-****	19	20
Very difficult	**-**	-	0

Note. The response option 'Don't know' was excluded from analysis. - Percentage suppressed due to small cell size (n≤5 but not 0). *p<0.050; **p<0.010; ***p<0.001 for 2017 versus 2018.

4

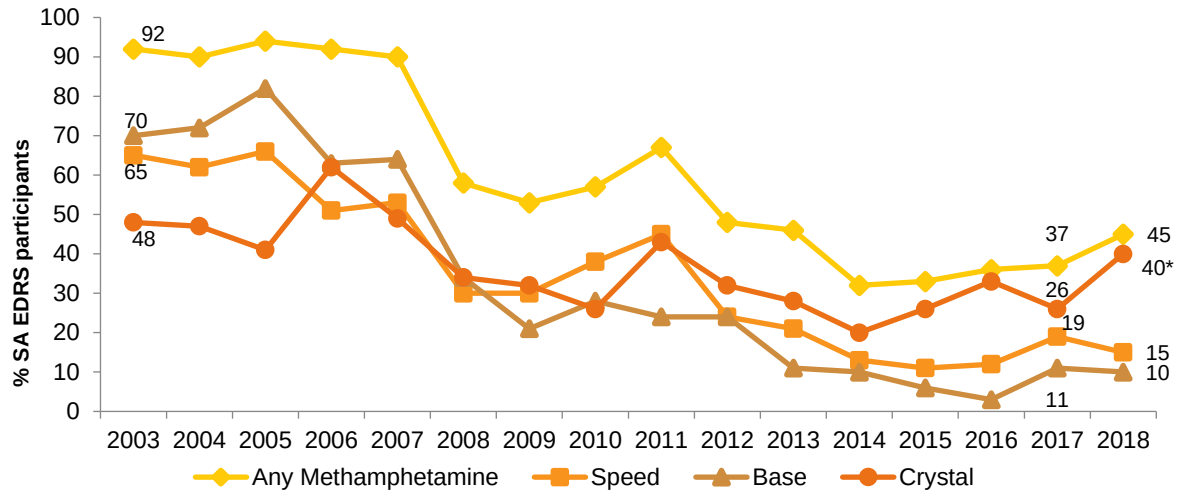
Methamphetamine

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).

Recent Use

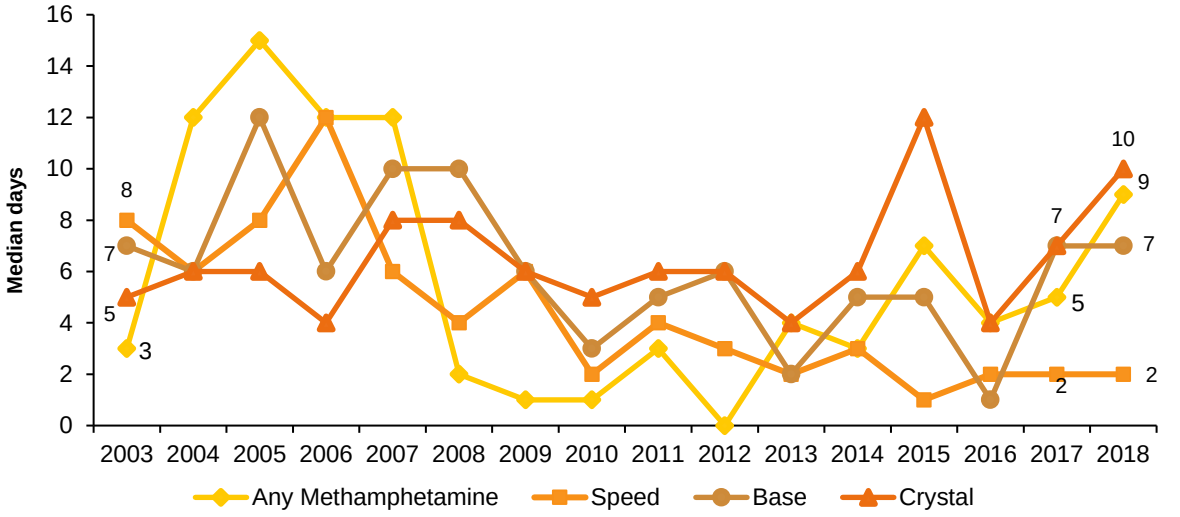
Recent use of methamphetamine has been declining over time, from 92% in 2003 to 45% in 2018 (37% in 2017; *p*=0.258; Figure 8). Frequency of use has remained stable in recent years at a median of nine days (IQR 2-50 days; 5 days in 2017; *p*=0.152; Figure 9). Indeed, 39% of recent consumers reported using methamphetamine weekly or more in 2018 (17% in 2017; *p*=0.031; Figure 3).

Figure 8: Past six month use of any methamphetamine, powder, base, and crystal, SA, 2003-2018



Note. *p<0.050; **p<0.010; ***p<0.001 for 2017 versus 2018.

Figure 9: Median days of any methamphetamine, powder, base, and crystal use in the past six months, SA, 2003-2018



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 16 days to improve visibility of trends. *p<0.050; **p<0.010; ***p<0.001 for 2017 versus 2018.

Methamphetamine powder

Past six month use of powder has declined substantially from 2003 to 2018, though remained stable in recent years with 15% of participants reporting recent use in 2018 (19% in 2017; *p*=0.491; Figure 8). Frequency of use remained stable at a median of two days (IQR 1-30 days; 2 days in 2017; Figure 9). Twenty-seven per cent of consumers reported using powder weekly or more (0 in 2017; *p*=0.017).

In 2018, the main route of administration among consumers was snorting (60%), followed by swallowing (47%) and smoking (40%), with small numbers reporting injecting. The median intake in a typical session was 0.25 grams (IQR 0.1-0.6 grams).

Methamphetamine base

Base has been the least used form since 2011, with 10% of participants reporting use in 2018 (11% in 2017; Figure 8). Frequency of recent use remained stable at a median of seven days (IQR 4-110 days; 7 days in 2017) (Figure 9). Forty per cent of consumers reported using base weekly or more (9% in 2017; *p*=0.097).

The most common route of administration among recent consumers in 2018 was smoking (60%; n=11), though this was a significant decrease relative to 2017 (100%; n=11, *p*=0.020). With the caveat that small numbers reported use, 50% of recent consumers reported injecting base, a significant increase relative to 2017 whereby no participants reported injecting (*p*=0.007). The median amount of base used in a typical session was 0.3 grams (IQR 0.2-1 gram).

Methamphetamine crystal

Crystal has been the main form of methamphetamine used in this sample since 2011. Recent use of crystal significantly increased in 2018 relative to 2017 (40% versus 26% in 2017; *p*=0.039) and proved to be the highest percentage reporting recent use since 2011 (43%) (Figure 8). Frequency of use remained stable at a median of 10 days (IQR 2-48 days; 7 days in 2017; *p*=0.401; Figure 9). Thirty-eight per cent of recent consumers reported using crystal weekly or more, a significant increase relative to 15% in 2017 (*p*=0.045).

While smoking remained the main route of administration, the percentage of recent consumers reporting this method declined in 2018 (72% versus 96% in 2017; *p*=0.013). An increase in injecting was observed (21% versus no reports in 2017; *p*=0.014), though snorting (21% versus 12% in 2017; *p*=0.345) and swallowing (21% versus 4% in 2017; *p*=0.057) remained stable. Those who reported recently using crystal had used a median 0.2 grams (IQR 0.2-0.5 grams) in a typical session.

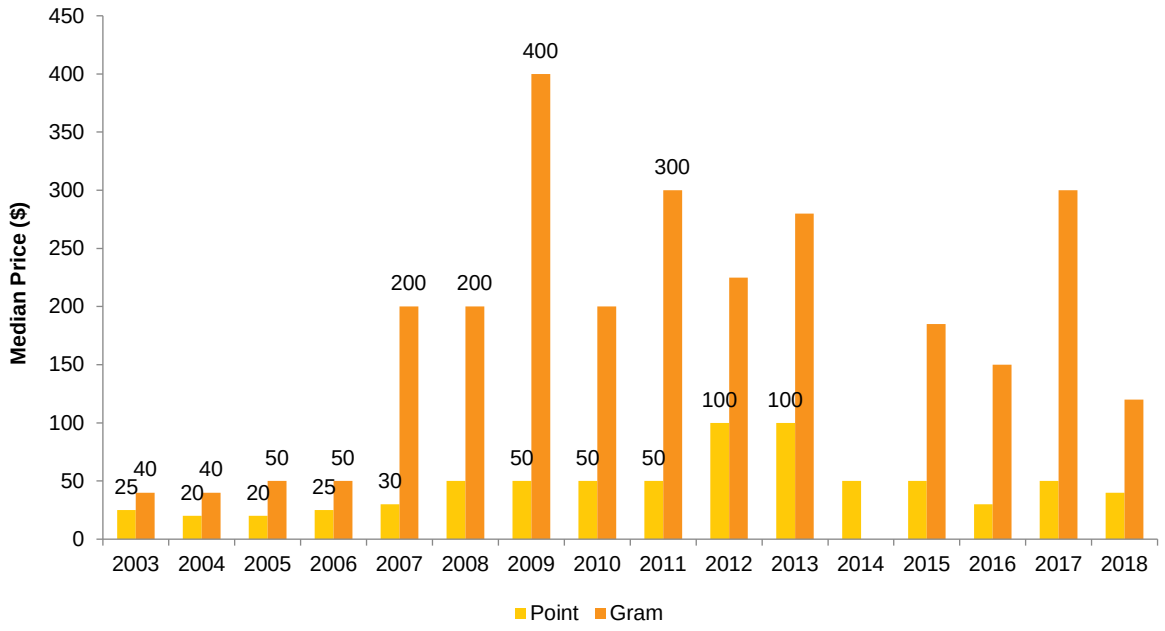
Price, Perceived Purity and Availability

The difference in price between powder and crystal methamphetamine continued to decrease in 2018. The median price for one gram of powder has fluctuated considerably over time (Figure 10), while the median price for crystal has declined since peaking in 2012 (Figure 11). The median price per point of powder and per point of crystal remained stable from previous years. Few participants (n≤5) could comment on the price of base.

When reflecting on recent use, of those commenting on powder (n=8) and crystal (n=31), most participants perceived both forms to be of 'medium' or 'high' purity in 2018 and over previous years, though crystal has consistently had a greater percentage reporting 'high' purity (Figure 12 and Figure 13).

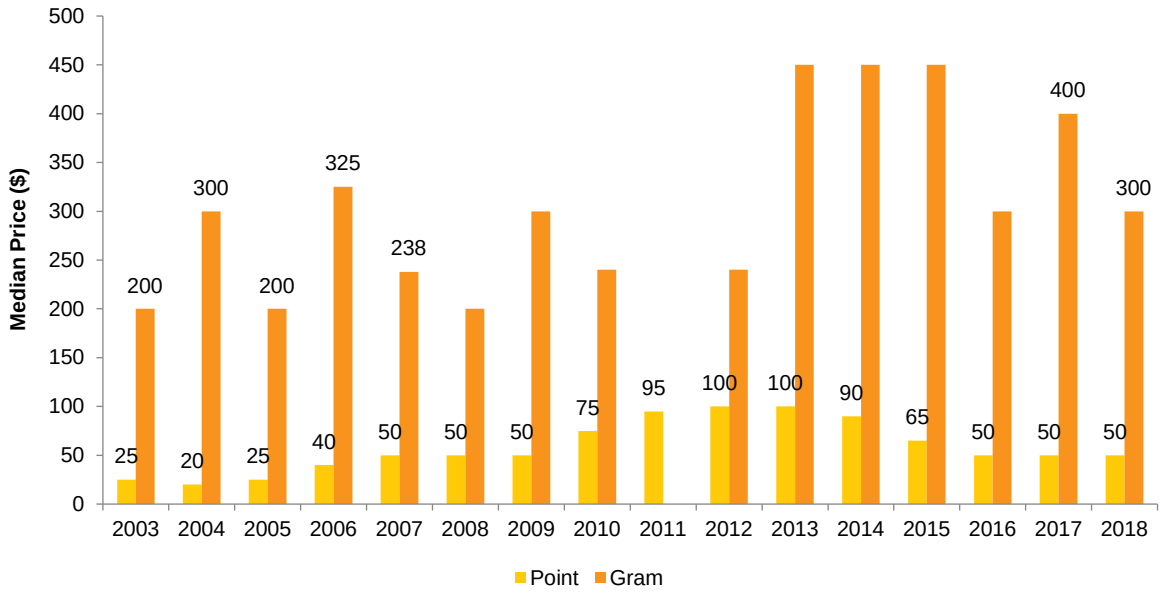
Of those who commented (n=7), almost one-third (29%) of participants who had recently consumed powder reported it to be 'easy' to obtain in 2018, although the percentage of those reporting it as 'difficult' to obtain has increased to the highest percentage since monitoring began (43%) (Figure 14). In contrast, the percentage reporting crystal as 'very easy' to obtain has been consistently high in the last few years (72% in 2018; Figure 15).

Figure 10: Median price of powder methamphetamine per point and gram, SA, 2003-2018



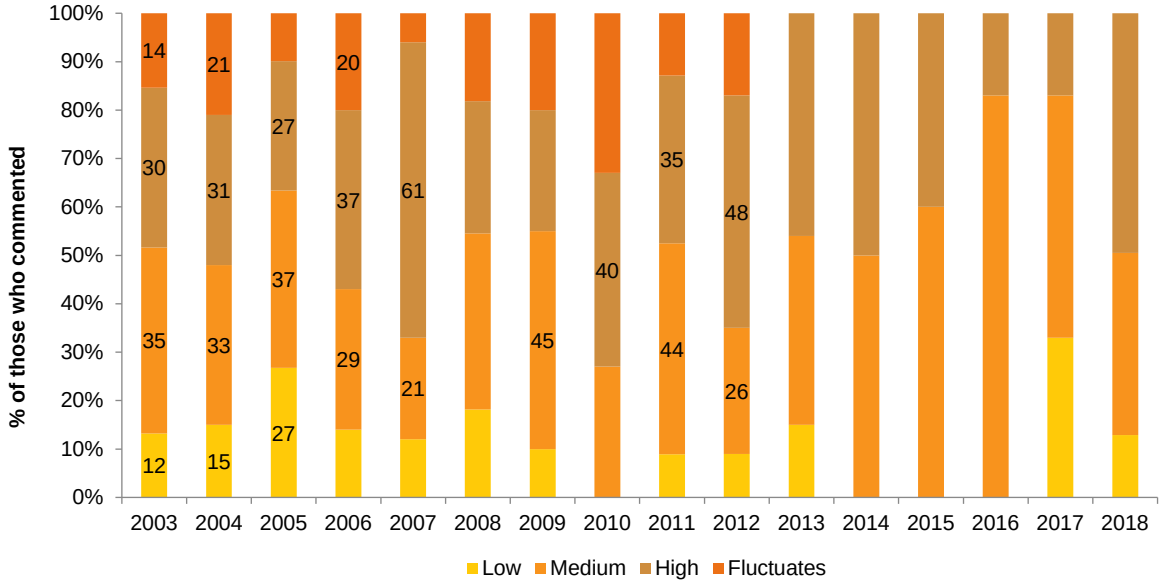
Note. No participants reported purchasing a gram of powder in 2014. Among those who commented. Data labels have been removed from figure throughout all years with small cell size (i.e. n≤5). *p<0.050; **p<0.010; ***p<0.001 for 2017 versus 2018.

Figure 11: Median price of crystal methamphetamine per point and gram, SA, 2003-2018



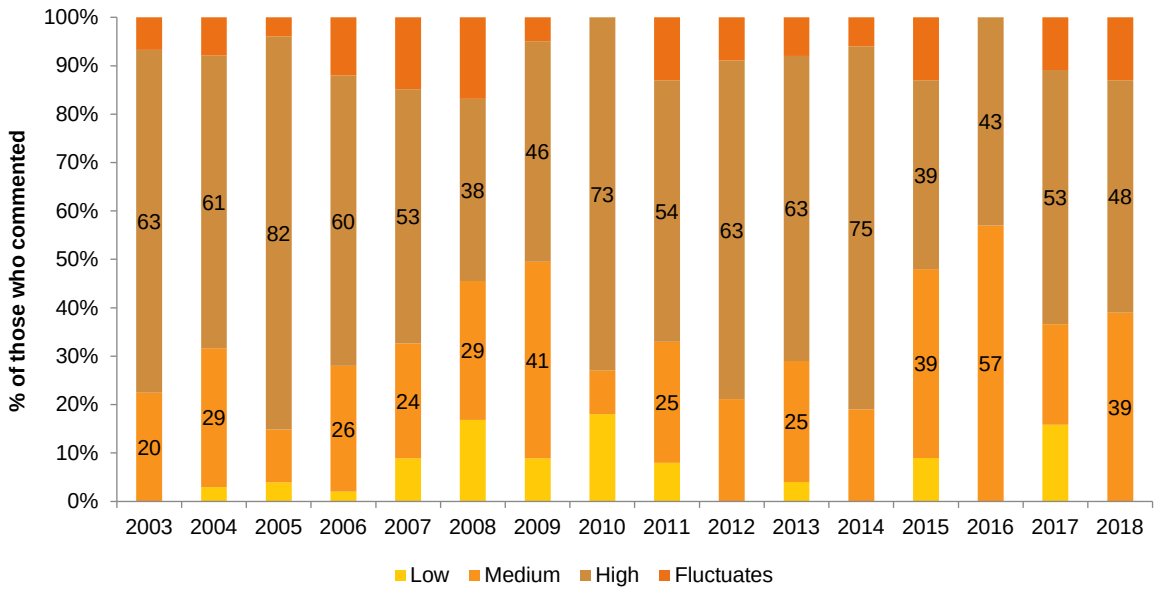
Note. Among those who commented. Data labels have been removed from figure throughout all years with small cell size (i.e. n≤5). *p<0.050; **p<0.010; ***p<0.001 for 2017 versus 2018.

Figure 12: Current perceived purity of powder methamphetamine, SA, 2003-2018



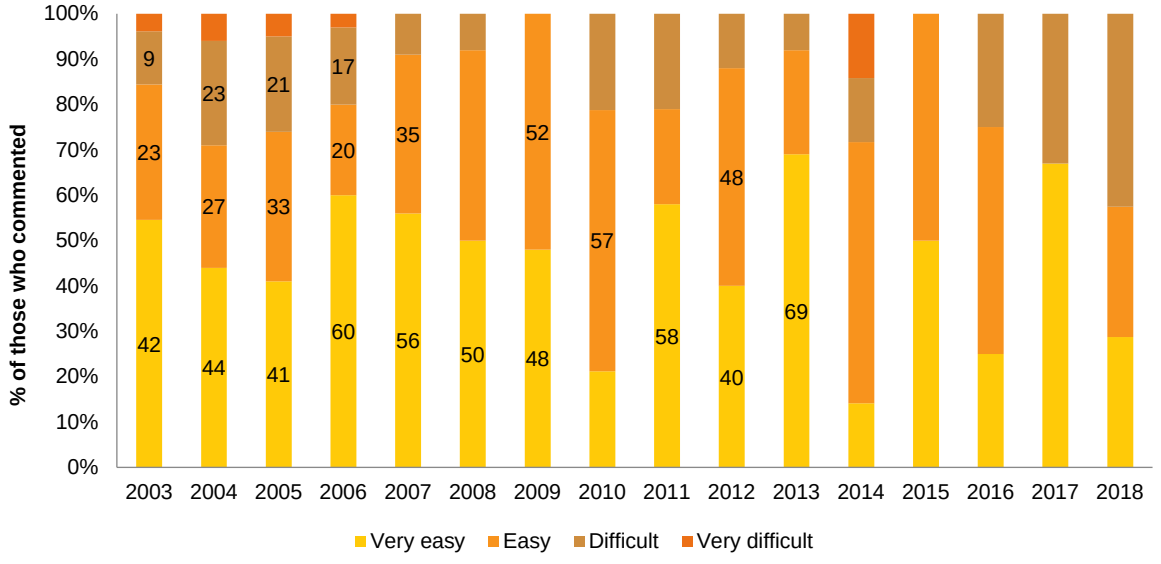
Note. The response 'Don't know' was excluded from analysis. Data labels have been removed from figure throughout all years with small cell size (i.e. n≤5). *p<0.050; **p<0.010; ***p<0.001 for 2017 versus 2018.

Figure 13: Current perceived purity of crystal methamphetamine, SA, 2003-2018



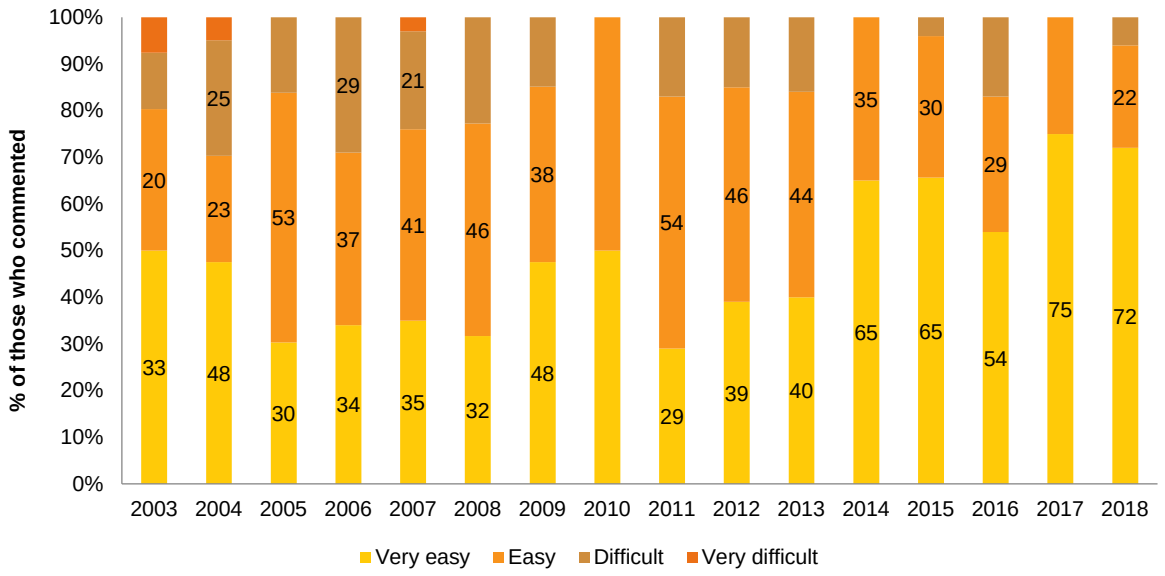
Note. The response 'Don't know' was excluded from analysis. Data labels have been removed from figure throughout all years with small cell size (i.e. n≤5). *p<0.050; **p<0.010; ***p<0.001 for 2017 versus 2018.

Figure 14: Current perceived availability of powder methamphetamine, SA, 2003-2018



Note. The response 'Don't know' was excluded from analysis. Data labels have been removed from figure throughout all years with small cell size (i.e. n≤5). *p<0.050; **p<0.010; ***p<0.001 for 2017 versus 2018.

Figure 15: Current perceived availability of crystal methamphetamine, SA, 2003-2018



Note. The response 'Don't know' was excluded from analysis. Data labels have been removed from figure throughout all years with small cell size (i.e. n≤5). **p*<0.050; ***p*<0.010; ****p*<0.001 for 2017 versus 2018.

5

Cocaine

Participants were asked about their recent (past six months) 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.

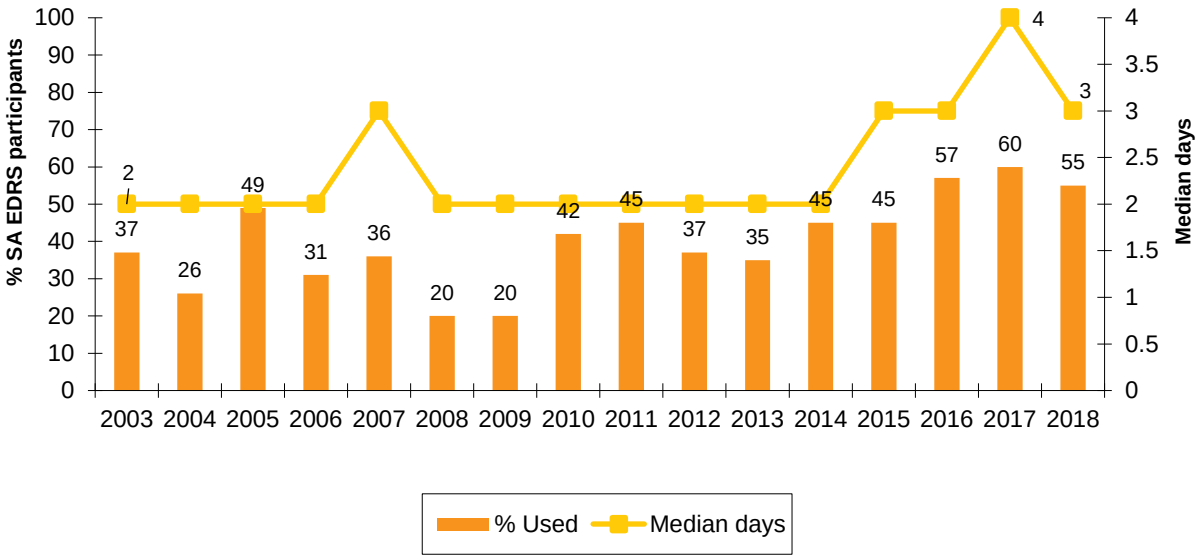
Recent Use

Recent cocaine use has gradually increased over the years, remaining relatively stable in recent years (55% in 2018 compared with 60% in 2017; *p*=0.475; Figure 16).

Frequency of cocaine use has also remained stable over the course of monitoring, with consumers reporting use on a median of three days in 2018 (IQR 2-5 days; 4 days in 2017; *p*=0.405; Figure 16). Four per cent of consumers reported using cocaine weekly or more (7% in 2017; *p*=0.465; Figure 3).

Among recent consumers of cocaine, 93% reported 'snorting' as the main route of administration (100% in 2017; *p*=0.034). The median amount of cocaine used in a typical session was one gram (IQR 0.4-2 grams).

Figure 16: Past six month use and frequency of use of cocaine, SA, 2003-2018



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 for days of use. *p<0.050; **p<0.010; ***p<0.001 for 2017 versus 2018.

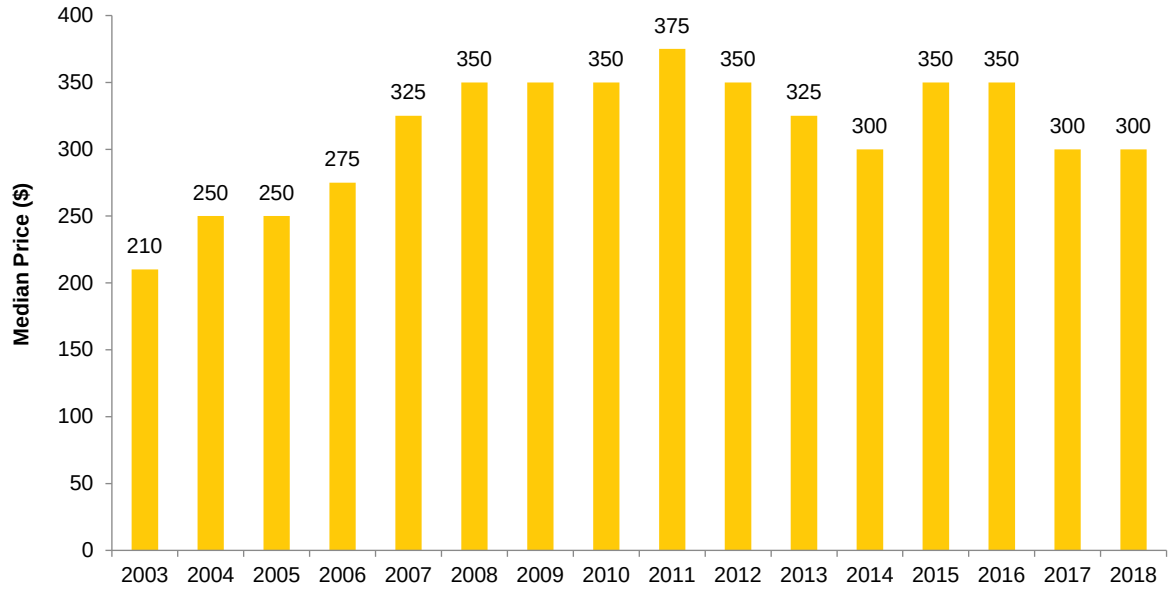
Price, Perceived Purity and Availability

Consistent with 2017, the median price per gram of cocaine was $300 (IQR $300-$350, n=24; Figure 17). This is largely consistent with the median price reported over the past decade (≥$300 per gram).

Among those able to comment (n=33), 63% of participants perceived cocaine to be of 'medium' or 'high' purity, consistent with historical estimates of perceived purity (Figure 18).

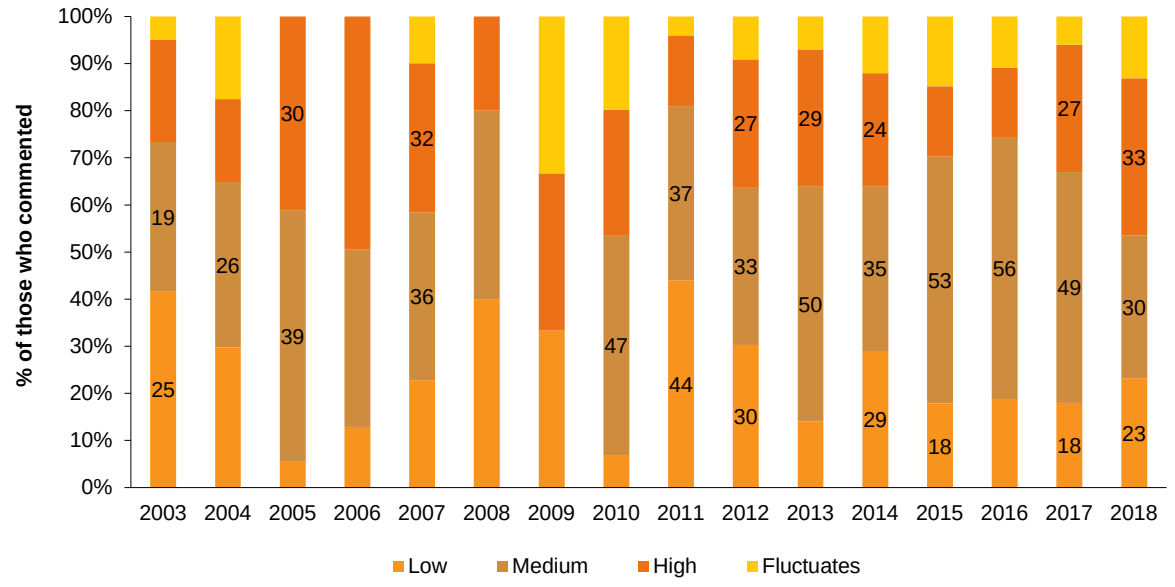
Reports of perceived availability of cocaine as 'difficult' (29%) to obtain in 2018 was the second lowest percentage observed since monitoring began (Figure 19), with no participants reporting cocaine as being 'very difficult' to obtain in 2018. Indeed, most participants reported cocaine as 'easy' (47%) or 'very easy' (24%) to obtain in 2018.

Figure 17: Median price of cocaine per gram, SA, 2003-2018



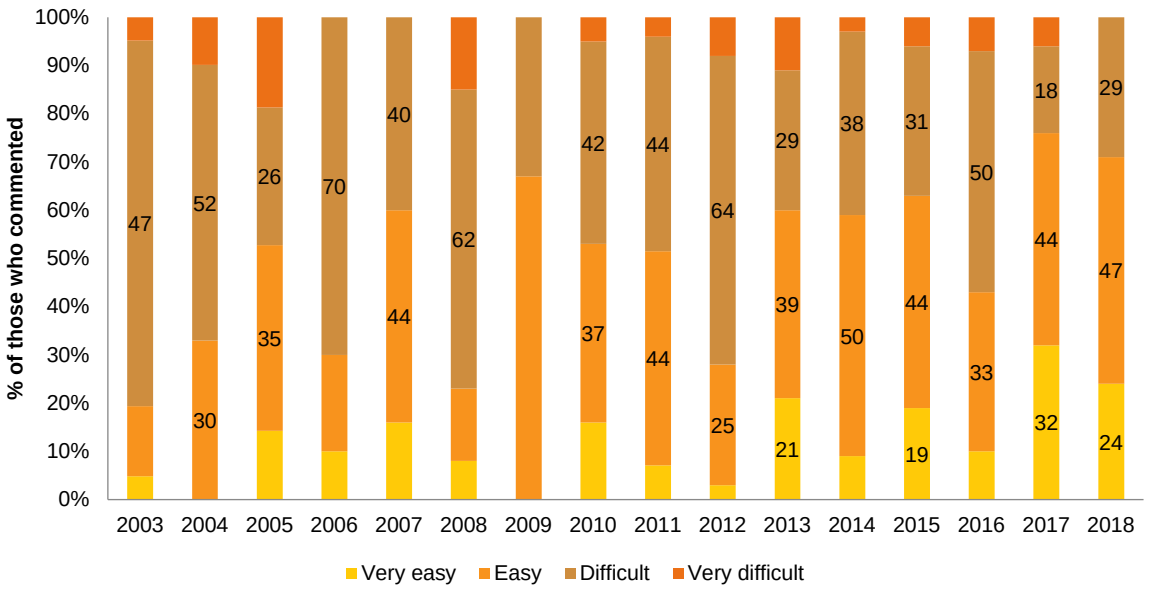
Note. Among those who commented. Data labels have been removed from figure throughout all years with small cell size (i.e. n≤5). *p<0.050; **p<0.010; ***p<0.001 for 2017 versus 2018.

Figure 18: Current perceived purity of cocaine, SA, 2003-2018



Note. The response 'Don't know' was excluded from analysis. Data labels have been removed from figure throughout all years with small cell size (i.e. n≤5). *p<0.050; **p<0.010; ***p<0.001 for 2017 versus 2018.

Figure 19: Current perceived availability of cocaine, SA, 2003-2018



Note. The response 'Don't know' was excluded from analysis. Data labels have been removed from figure throughout all years with small cell size (i.e. n≤5). *p<0.050; **p<0.010; ***p<0.001 for 2017 versus 2018.

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.

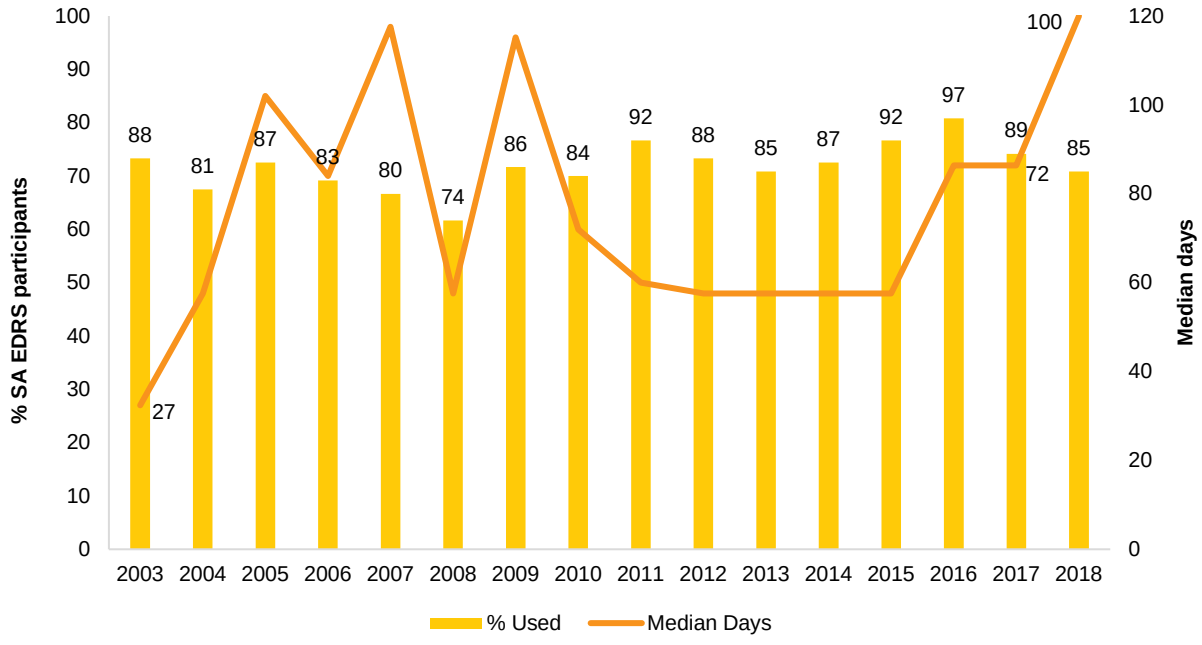
Recent Use

At least three in four participants have reported recent use of cannabis each year since 2003 (85% in 2018 versus 89% in 2017; *p*=0.400) (Figure 20). Frequency of use in the past six months has varied between weekly and several times a week over the course of monitoring. In 2018, consumers reported use on a median of 100 days (IQR 2-48 days; 72 days in 2017; *p*=0.500; Figure 20). Almost three-quarters (71%) of recent consumers reported using cannabis weekly or more frequently in 2018 (74% in 2017; *p*=0.599), and 36% of consumers had used cannabis daily (29% in 2017; *p*=0.308; Figure 3).

Across all years, nearly almost all consumers reported smoking cannabis (99% in 2018). In 2018, 25% reported swallowing (a decline from 47% in 2017; *p*=0.002) and 11% reported inhaling/vaporising cannabis (a decline from 43% in 2017; *p*<0.001). The median amount used by those who commented (n=60) on the last occasion of use was four cones (IQR 1.5-8 cones; n=33) or two grams (IQR 1-4 grams; n=25).

Similar proportions of consumers reported recent use of hydroponic cannabis (81%) and outdoor-grown 'bush' cannabis (72%). Smaller percentages reported having used hash oil (24%) and hashish (23%) in the preceding six months. Hydroponic cannabis remained the form most commonly used in the preceding six months (68%), followed by bush cannabis (30%).

Figure 20: Past six month use and frequency of use of cannabis, SA, 2003-2018



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 120 days to improve visibility of trends in days of use. *p<0.050; **p<0.010; ***p<0.001 for 2017 versus 2018.

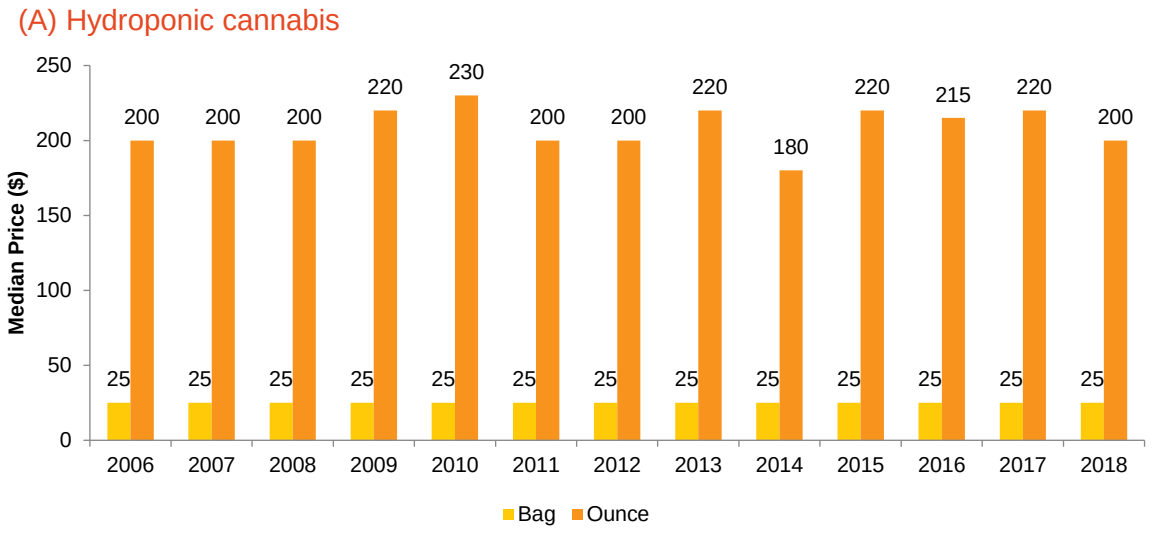
Price, Perceived Potency and Availability

The median price per bag (2-3 grams) of hydroponic cannabis has consistently been $25 (2018 n=16; IQR $10-$20), with the same price recorded for bush cannabis across all years (2018: n=11; $25, IQR $25-$25). In 2018, the median price paid per ounce of hydroponic cannabis was $200 (n= 12; IQR $200-$235) and $200 (n=11; IQR $200-$200) for bush (Figure 21).

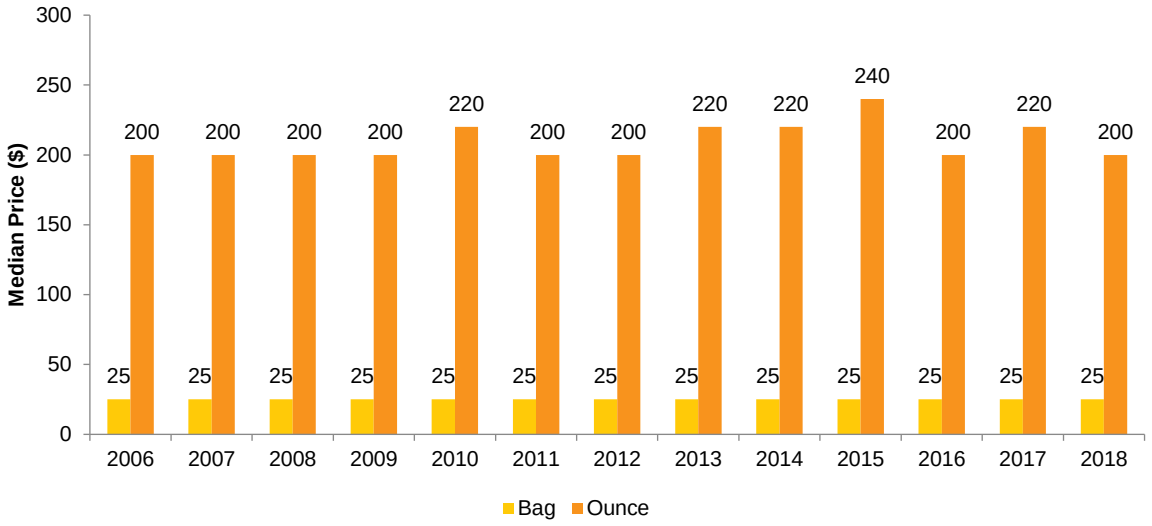
Consistent with previous years, two-thirds (66%) of those able to comment (n=41) perceived hydroponic cannabis to be of 'high' potency. In contrast, an increased percentage of those able to comment (n=29) considered bush cannabis as 'high' in potency (52% versus 21% in 2017; *p*=0.007), with a corresponding decline in reports of bush cannabis as 'medium' in potency (28% versus 51% in 2017; *p*=0.050) (Figure 22).

Reports of hydroponic cannabis as 'very easy' to obtain decreased significantly in 2018 (46% versus 68% in 2017; *p*=0.045). Fifty-two per cent of recent consumers reported bush cannabis as 'easy' to obtain, the highest percentage observed since the commencement of monitoring (Figure 23).

Figure 21: Median price of hydroponic (A) and bush (B) cannabis per bag and ounce, SA, 2006-2018



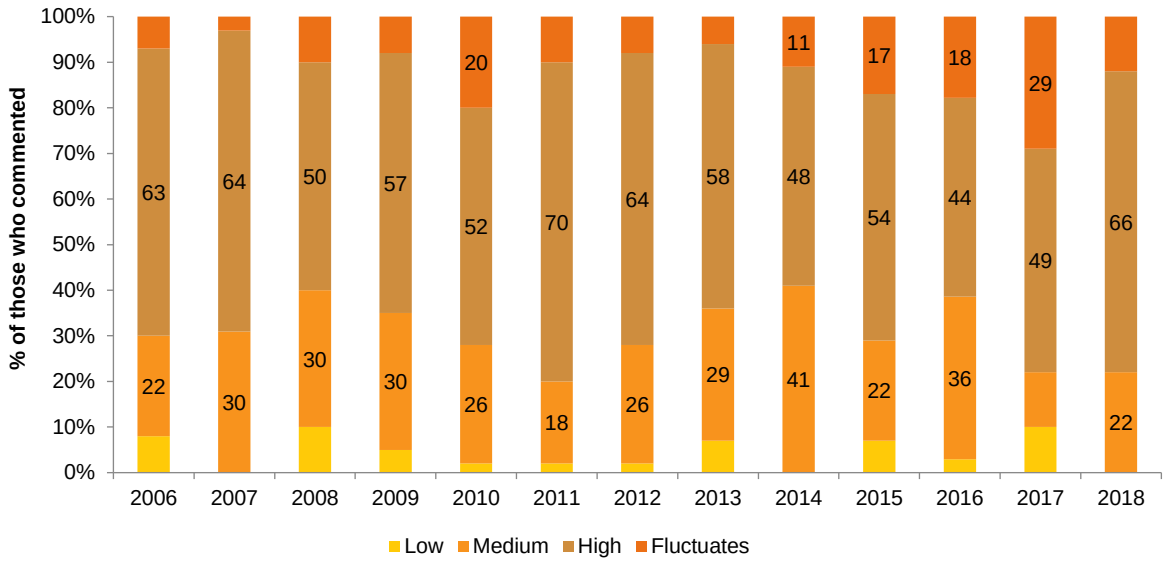
(B) Bush cannabis



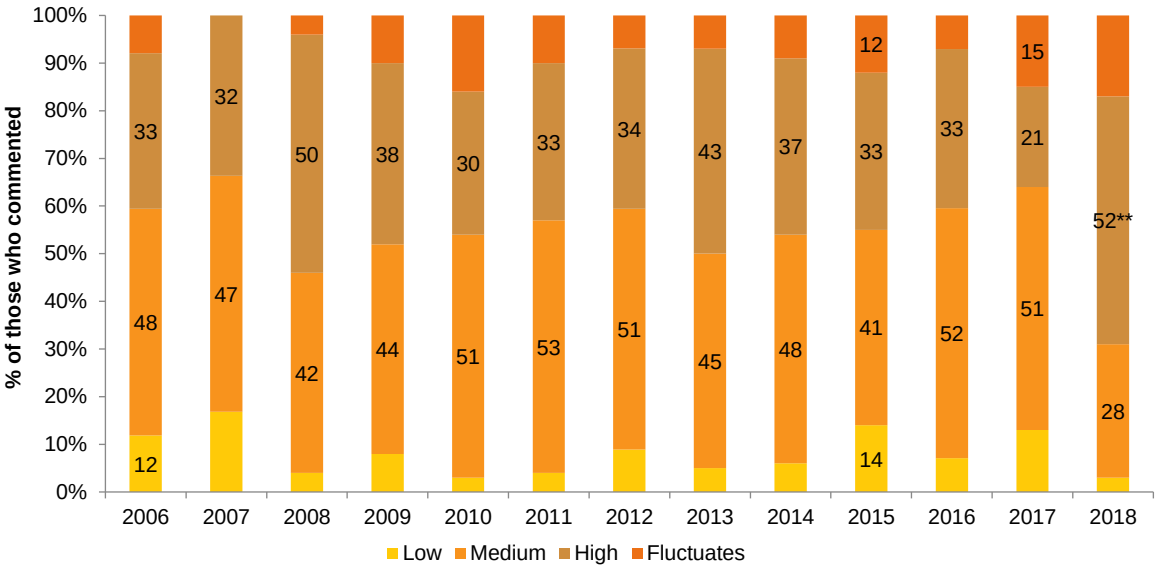
Note. From 2006 onwards hydroponic and bush cannabis data collected separately. *p<0.050; **p<0.010; ***p<0.001 for 2017 versus 2018.

Figure 22: Current perceived potency of hydroponic (A) and bush (B) cannabis, SA, 2006-2018

(A) Hydroponic cannabis



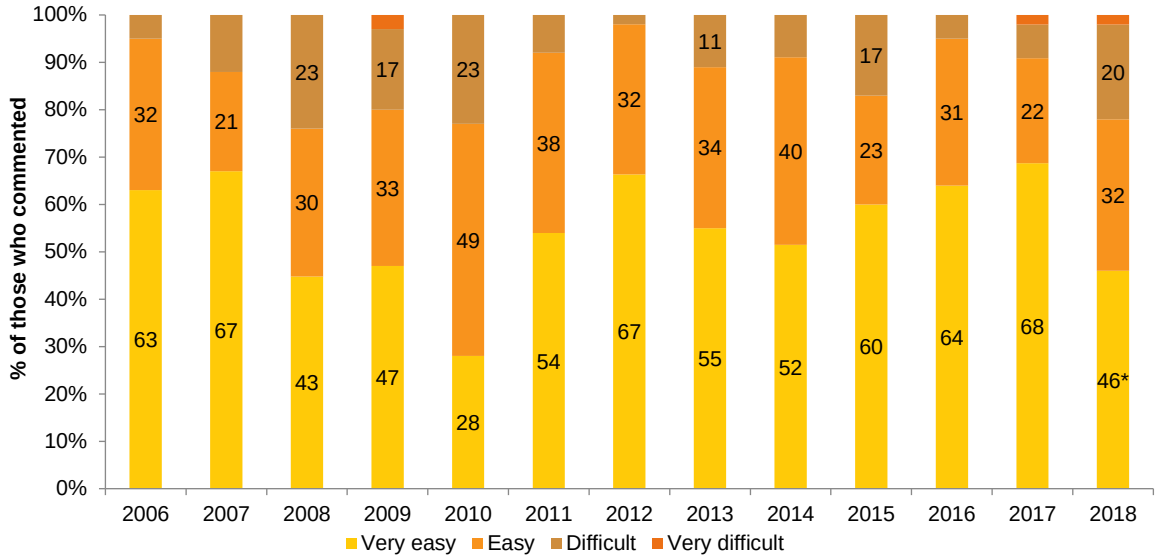
(B) Bush cannabis



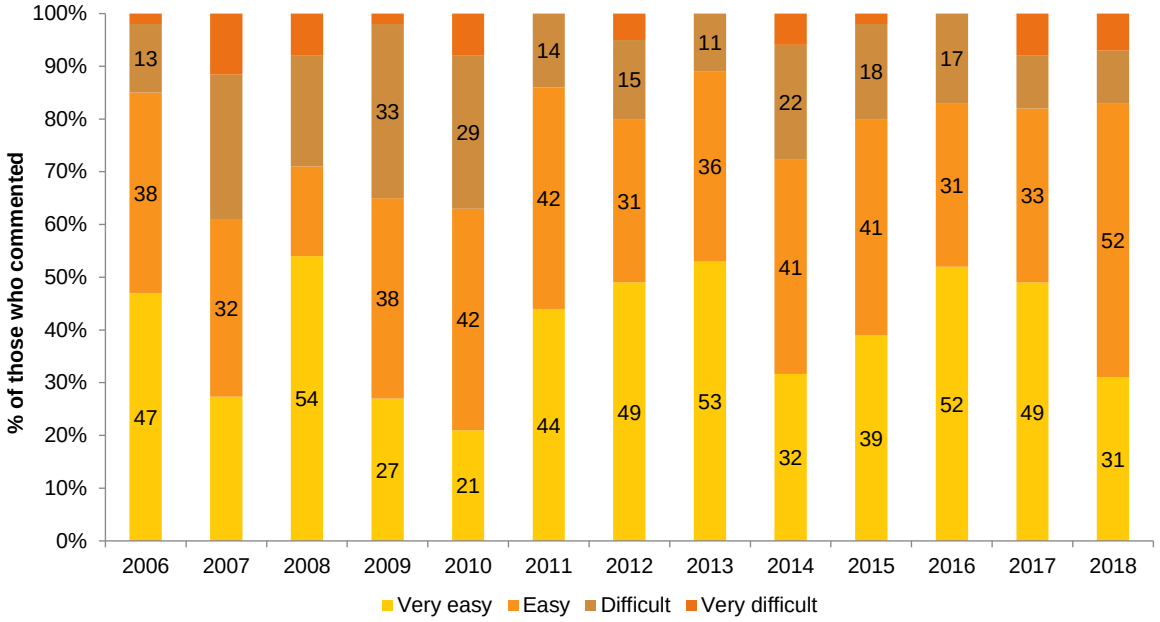
Note. The response 'Don't know' was excluded from analysis. From 2006 onwards hydroponic and bush cannabis data collected separately. Data labels have been removed from figure throughout all years with small cell size (i.e. n≤5). *p<0.050; **p<0.010; ***p<0.001 for 2017 versus 2018.

Figure 23: Current perceived availability of hydroponic (A) and bush (B) cannabis, SA, 2006-2018

(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. Data labels have been removed from figure throughout all years with small cell size (i.e. n≤5). *p<0.050; **p<0.010; ***p<0.001 for 2017 versus 2018.

7

Ketamine and LSD

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

Recent Use

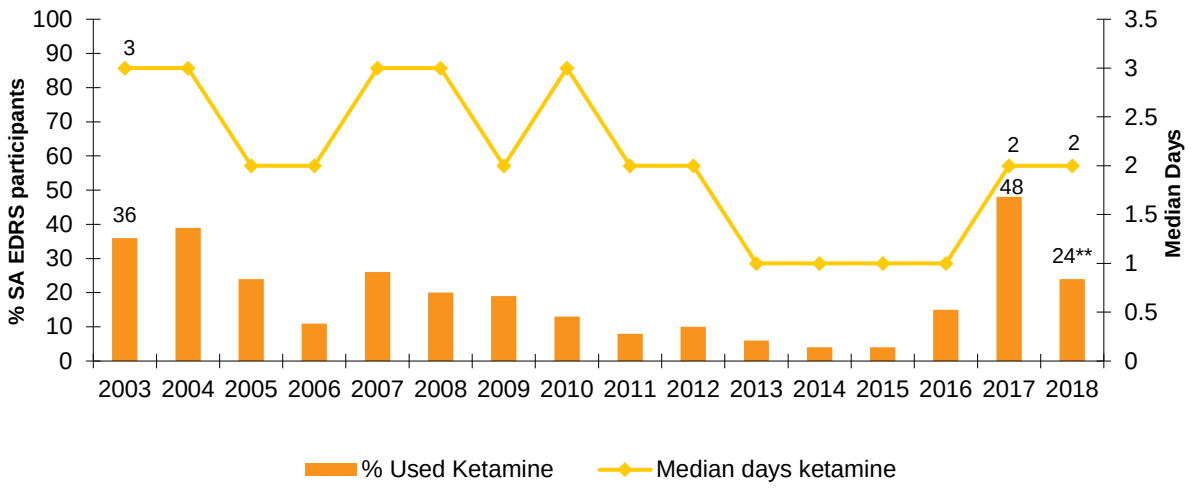
Ketamine

Ketamine use had been declining since the commencement of monitoring up until 2017, at which point half of the sample (48%) reported recent use of ketamine. This rate was not sustained in 2018, with 24% reporting recent use (p<0.001; Figure 24).

In 2018, frequency of use remained stable at two days (IQR 1-4 days; 2 days in 2017; Figure 24). No recent consumers of ketamine reported weekly or more use.

Among consumers, the most common route of administration was snorting, though this significantly declined in 2018 (71% versus 92% in 2017; p=0.021), followed by swallowing (25% versus 15% in 2017; p=0.279). A smaller percentage reported smoking (13%). The median quantity used in a typical session was 0.2 grams (IQR 0.1-0.5 grams; n=14).

Figure 24: Past six month use and frequency of use of ketamine, SA, 2003-2018



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 3.5 days to improve visibility of trends for days of use. *p<0.050; **p<0.010; ***p<0.001 for 2017 versus 2018.

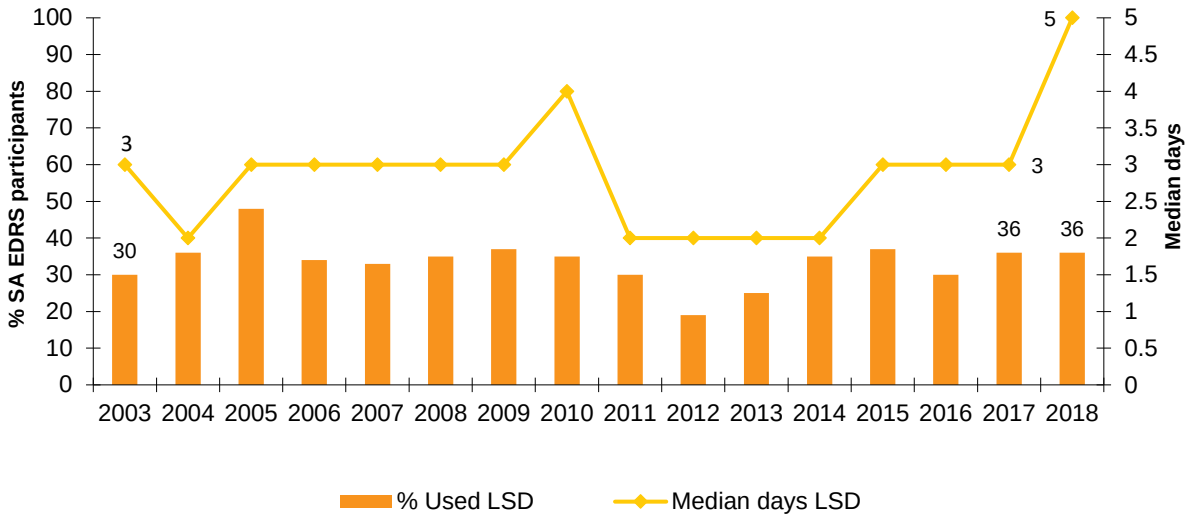
LSD

Recent use of LSD has generally remained stable over the course of monitoring, with 36% reporting use in 2018 (36% in 2017; Figure 25).

Use across the years has shown to be infrequent, ranging from two to five days since the commencement of monitoring (2018: median 5 days, IQR 2-10 days; 3 days in 2017; p=0.216; Figure 25). In addition, eight per cent of consumers reported weekly or more use of LSD, stable from 2017 (6%; p=0.6429).

Among consumers, the most common route of administration was swallowing (97% versus 100% in 2017; *p*=0.314). The median quantity used in a typical session was two tabs (IQR 1-4.5 tabs; n=26) or 225 micrograms (IQR 150-400mcg; n=6).

Figure 25: Past six month use and frequency of use of LSD, SA, 2003-2018



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 in days of use. *p<0.050; **p<0.010; ***p<0.001 for 2017 versus 2018.

Price, Perceived Purity and Availability

Ketamine

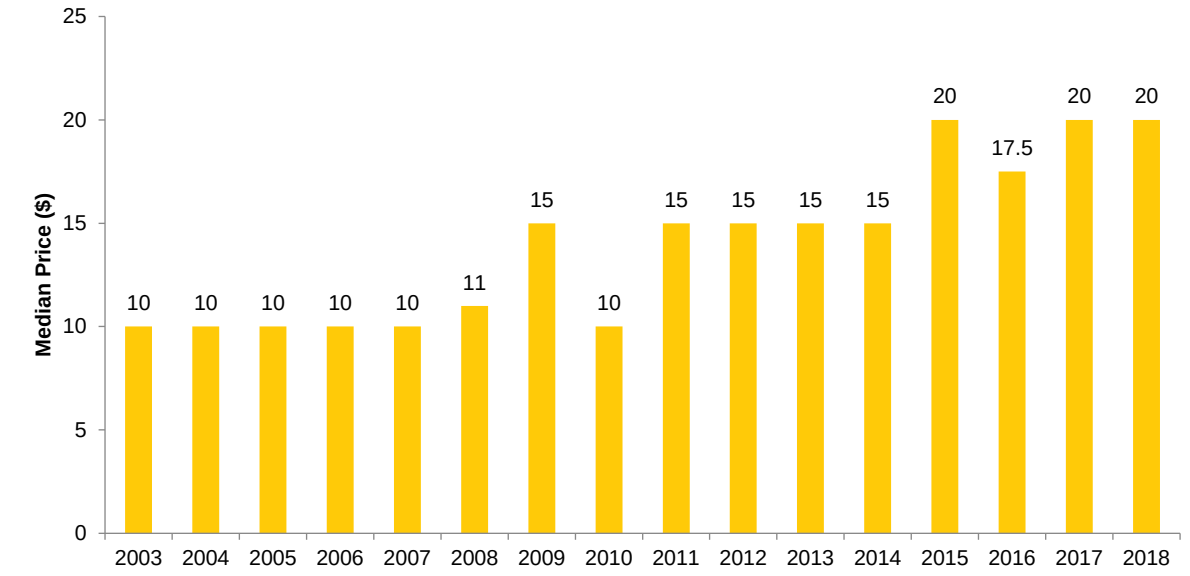
No more than eight participants were able to comment on the price, perceived purity and availability of ketamine; therefore, figures and significance testing will not be presented. Please refer to the National EDRS Report for further information.

LSD

Price per tab has doubled over the course of monitoring, yet remained consistent in more recent years, with a median price of $20 in 2018 (IQR $14.25-$21.25; $20 in 2017; (Figure 26).

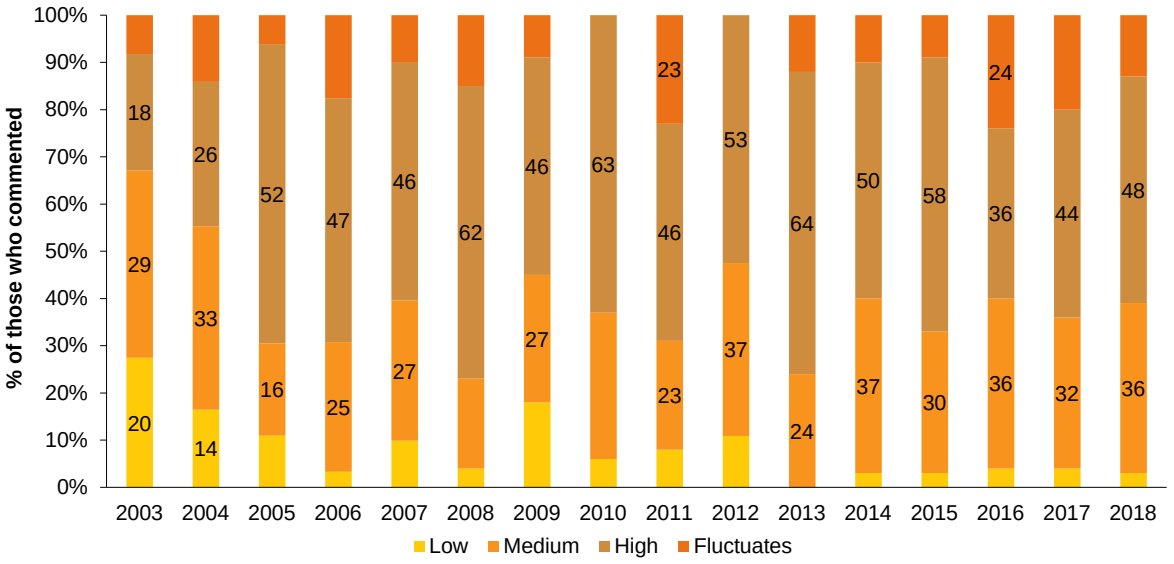
Of those who commented (n=31), almost half perceived purity to be ‘high’ (48%), followed by 36% reporting purity as ‘medium’ (Figure 27). Consistent with previous years, 58% perceived LSD to be ‘easy’ to obtain (Figure 28).

Figure 26: Median price of LSD per tab, SA, 2003-2018



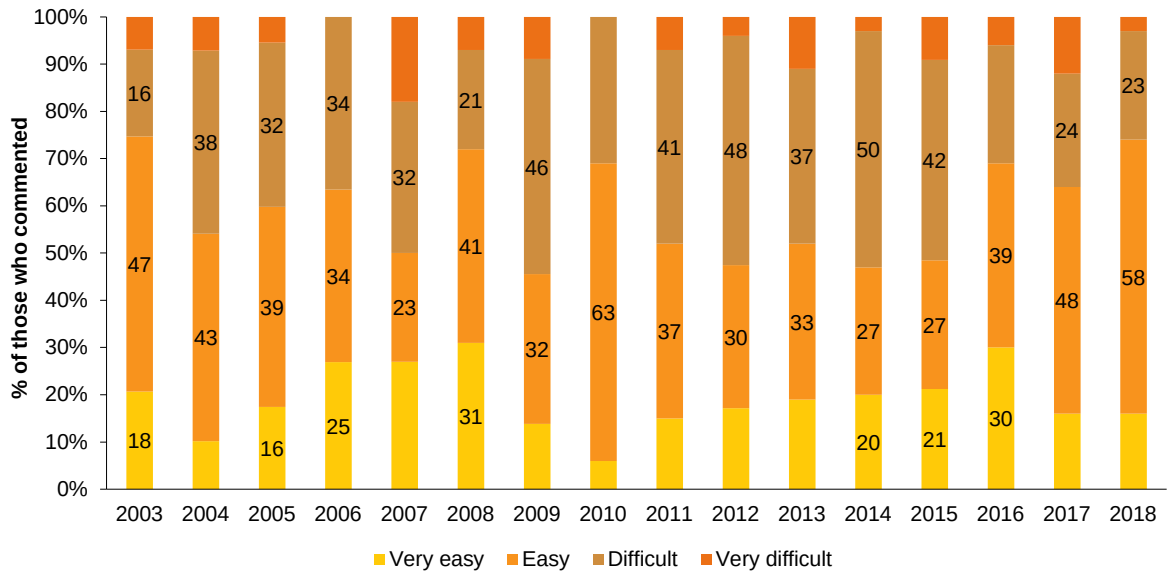
Note. Among those who commented. *p<0.050; **p<0.010; ***p<0.001 for 2017 versus 2018.

Figure 27: Current perceived purity of LSD, SA, 2003-2018



Note. The response 'Don't know' was excluded from analysis. Data labels have been removed from figure throughout all years with small cell size (i.e. n≤5). *p<0.050; **p<0.010; ***p<0.001 for 2017 versus 2018.

Figure 28: Current perceived availability of LSD, SA, 2003-2018



Note. The response 'Don't know' was excluded from analysis. Data labels have been removed from figure throughout all years with small cell size (i.e. n≤5). **p*<0.050; ***p*<0.010; ****p*<0.001 for 2017 versus 2018.

8

New psychoactive substances

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.

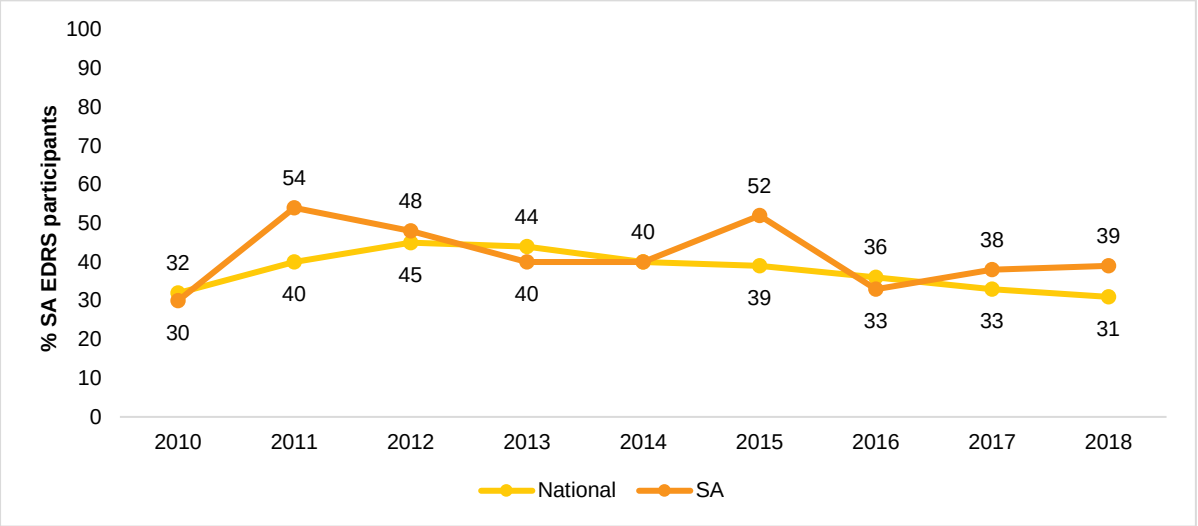
New Psychoactive Substances

Recent use of NPS has fluctuated since NPS monitoring first began in 2010. Recent use in 2018 remained stable in the SA EDRS sample (39% versus 38% in 2017; *p*=0.885; Figure 29), and similar to the rate in the national EDRS sample (31%).

DMT has consistently been one of the most commonly endorsed NPS (peaking at 23% in 2018; Table 3). The 2c class has also been highly endorsed, although use has declined yet stabilised in recent years (12% in 2018). Similarly, use of mephedrone has decreased, being reported by ≤5 participants in 2018.

Frequency of use of NPS has generally been low, with recent DMT consumers reporting use on a median of two days in the past six months (IQR 1-3 days).

Figure 29: Use of any NPS in the past six months, nationally and SA, 2010-2018



Note. *p<0.050; **p<0.010; ***p<0.001 for 2017 versus 2018.

Table 3: Use of NPS in the past six months, SA, 2010-2018

	2010 N=92 %	2011 N=76 %	2012 N=92 %	2013 N=100 %	2014 N=100 %	2015 N=100 %	2016 N=100 %	2017 N=100 %	2018 N=100 %
Phenethylamines									
Any 2C substance#	11	18	10	19	15	29	9	9	**12**
NBOMe	/	/	/	/	16	18	9	8	**-**
Mescaline^	-	-	-	-	-	-	6	6	**-**
DO-x	-	7	0	-	0	0	0	-	**0**
4-FA	/	/	/	/	/	/	0	0	**0**
PMA	0	-	7	-	-	-	-	-	**-**
Tryptamines									
DMT	-	-	-	14	10	11	10	22	**23**
5-MeO-DMT	-	-	-	-	0	0	0	0	**-**
4-AcO-DMT	/	/	/	/	/	/	0	-	**/**
Synthetic cathinones									
Mephedrone	9	8	-	-	-	0	0	0	**-**
Methylone/bk MDMA	/	-	-	-	-	-	-	-	**7**
MDPV/Ivory wave	-	-	-	-	0	-	0	0	**0**
Alpha PVP	/	/	/	/	/	/	0	0	**-**
Other substituted cathinone	/	/	0	0	0	0	0	0	**0**
Piperazines									
BZP	0	-	-	0	0	0	0	0	**/**
Dissociatives									
Methoxetamine (MXE)	/	/	0	/	/	0	0	-	**-**
Plant-based NPS									
Ayahuasca	/	/	/	/	/	0	-	-	**0**
Salvia	/	-	-	-	0	-	-	-	**-**
Benzodiazepines									
Etizolam	/	/	/	/	/	/	0	-	**-**
Synthetic cannabinoids	0	0	10	/	/	0	/	/	**/**
Synthetic opioids	/	/	/	/	/	/	/		**/**
Herbal high#	/	/	17	10	6	7	-	-	**-**
Other drugs that mimic the effect of opioids	/	/	/	/	/	/	/	/	**-**
Other drugs that mimic the effect of ecstasy	/	/	/	/	/	/	/	0	**-**
Other drugs that mimic the effect of amphetamine or cocaine	/	/	/	/	/	/	/	-	**-**
Other drugs that mimic the effect of psychedelic drugs like LSD	/	/	/	/	/	/	/	0	**0**

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 three forms of 2C were asked whereas in the other years four forms were asked. ^ Mescaline can also fall under the phenethylamines category. *p<0.050; **p<0.010; ***p<0.001 for 2017 versus 2018.

9

Other drugs

Participants were asked about their recent (past six month) use of various forms of 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

Over-the-counter (OTC) 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.

In 2018, 37% of consumers reported any use of low-dose codeine (31% OTC, 2% prescribed and 4% non-prescribed[1]). This includes 18% who reported having used OTC low-dose codeine (<30mg codeine) for non-pain purposes in the six months preceding interview (noting that participants could only report use occurring prior to rescheduling in February 2018), stable from 24% in 2017 (p=0.315; Figure 30).

Twenty per cent of the sample reported recent high-dose codeine (≥30mg codeine) use (7% prescribed; 14% non-prescribed) on a median of three days (IQR 2-6 days) in the six months preceding interview.

Pharmaceutical opioids

The rate of past six month use of non-prescribed pharmaceutical opioids (e.g., methadone and buprenorphine) significantly decreased from 2017 to 2018 (33% to 13%; p<0.001), noting that high-dose codeine was excluded from this classification for the first time in 2018 (Figure 30).

Pharmaceutical stimulants

The rate of recent non-prescribed pharmaceutical stimulant (e.g., dexamphetamine, methylphenidate, modafinil) use decreased significantly in 2018, from 45% in 2017 to 12% (p<0.001; Figure 30). Despite the significant decrease in reported recent use, median days of use were consistent for 2017 and 2018 (3 days, respectively; 2018: IQR 1-9 days).

Benzodiazepines

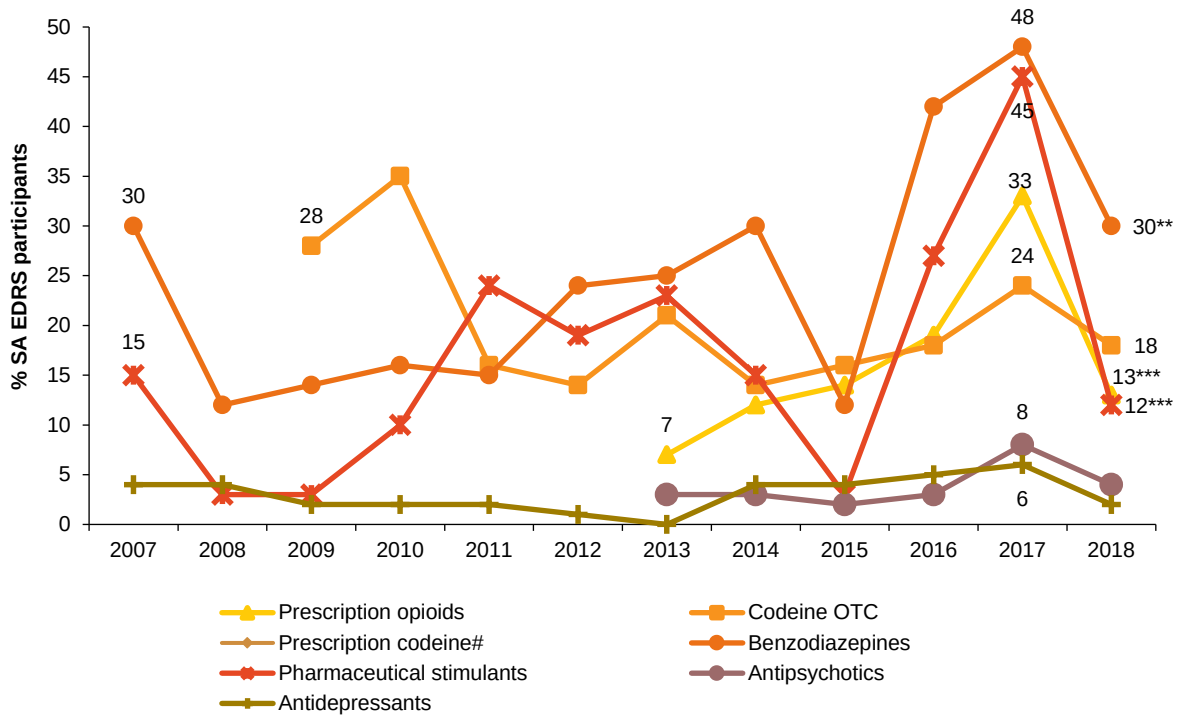
Recent use of non-prescribed benzodiazepines has, for the most part, fluctuated since monitoring began, with almost one-third (30%) of the sample reporting such use in 2018, a significant decrease relative to 2017 (48%; p=0.009; Figure 30). Frequency of use was reported to be a median of five days (IQR 2-13 days versus 4 days in 2017; p=0.749).

Antidepressants and antipsychotics

Very small numbers (n≤5) reported recent use of non-prescribed antipsychotics (8% in 2017; p=0.234) and non-prescribed antidepressants (6% in 2017; p=0.157); these values have remained stable since 2007 for antidepressants and 2013 for antipsychotics when monitoring commenced (Figure 30).

[1] OTC=use of codeine that had been purchased over the counter prior to 1 February 2018; prescribed=use of codeine that had been purchased with their own prescription from 1 February onwards; non-prescribed=use of codeine that was purchased with a prescription by a third party from 1 February onwards.

Figure 30: Non-prescribed use of pharmaceutical drugs in the past six months, SA, 2007-2018



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. Note that estimates of codeine OTC use refer to use for non-pain purposes. Y axis has been reduced to 50% to improve visibility of trends. Data labels have been removed from figure in years 2007 and 2018 with small cell size (i.e. n≤5). *p<0.050; **p<0.010; ***p<0.001 for 2017 versus 2018.

Other Illicit Drugs

Hallucinogenic mushrooms

Twenty-eight per cent of the sample had used hallucinogenic mushrooms in the six months preceding interview, the highest percentage observed since the commencement of monitoring (26% in 2017; p=0.750) (Figure 31). Recent use has been typically infrequent and stable (median 2 days, IQR 1-4 days in 2018 versus 2 days in 2017).

MDA

MDA (3,4-methylenedioxyamphetamine) has fluctuated since monitoring commenced in 2003, though recent use remained stable at 16% in 2018 (14% in 2017; p=0.749) (Figure 31). MDA was used on a median of one day (IQR 1-2 days versus 3 days in 2017; p=0.172), indicating very occasional use.

Capsules with unknown contents

Recent use of capsules with unknown contents has almost doubled since monitoring first commenced, with eight per cent reporting recent use in 2013, increasing to 15% in 2018 (11% in 2017; p=0.385) (Figure 31). Capsules with unknown contents were used on a median of one day (IQR 1-3 days versus one day in 2017).

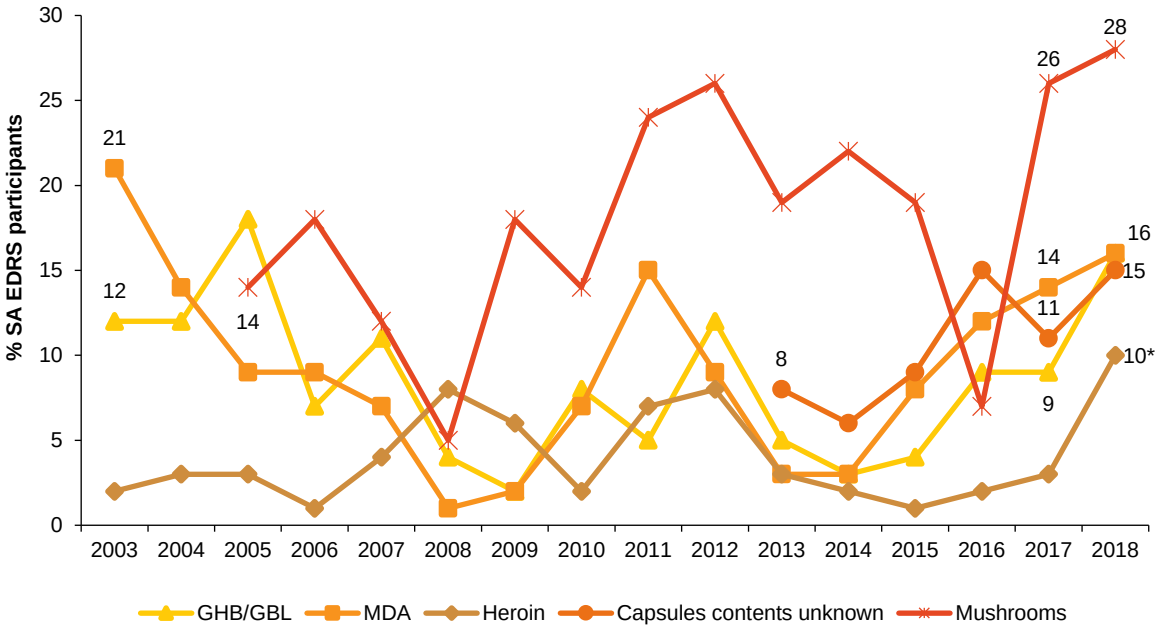
GHB/GBL

Historically, recent use of GHB/GBL has fluctuated over the years, though the percentage had increased somewhat in 2018. Recent use of GHB was reported by 16% of the sample (9% in 2017; *p*=0.128), the highest percentage of recent use reported since 2005. Median days of use was infrequent for GHB/GBL, with a median of four days reported (IQR 1-10 days; one day in 2017; *p*=0.357).

Heroin

Ten per cent of consumers reported recent use of heroin, the highest percentage since monitoring first commenced, and a significant increase from 2017 (*p*=0.045; Figure 31). Frequency of use was low at a median of two days in the past six months (IQR 1-5 days; one day in 2017; *p*=0.217).

Figure 31: Other illicit drug use in the past six months, SA, 2003-2018



Note. Monitoring of capsules contents unknown commenced in 2013. Y axis has been reduced to 30% to improve visibility of trends. Data labels have been removed from figure in years 2003 and 2017 with small cell size (i.e. n≤5). **p*<0.050; ***p*<0.010; ****p*<0.001 for 2017 versus 2018.

Licit and Other Drugs

Alcohol

The vast majority of the sample reported recent alcohol use (95%), consistent with rates observed since monitoring began in 2003 (Figure 32). Recent consumers of alcohol reported a median of 48 days of use in the past six months (IQR 24-72 days; 40 days in 2017; *p*=0.329). Eighty-three per cent of consumers used alcohol once a week or more (78% in 2017; *p*=0.345); this includes three per cent who reported daily use (3% in 2017; *p*=0.959).

Tobacco

Tobacco use has gradually increased amongst the sample, from 72% in 2003 to 88% in 2018 (*p*=0.005; Figure 32). Median frequency of use was 175 days (IQR 48-180 days versus 180 days in 2017; *p*=0.540), with 49% of recent consumers reporting daily use (52% in 2017; *p*=0.705).

E-cigarettes

Almost half the sample (49%) reported recent use of e-cigarettes in the six months preceding interview, consistent with 2017 reports (49%; Figure 32). Median days of use was reported at twelve days in 2018 (i.e. fortnightly; IQR 3-54 days), a significant increase compared to three days in 2017 (*p*=0.003).

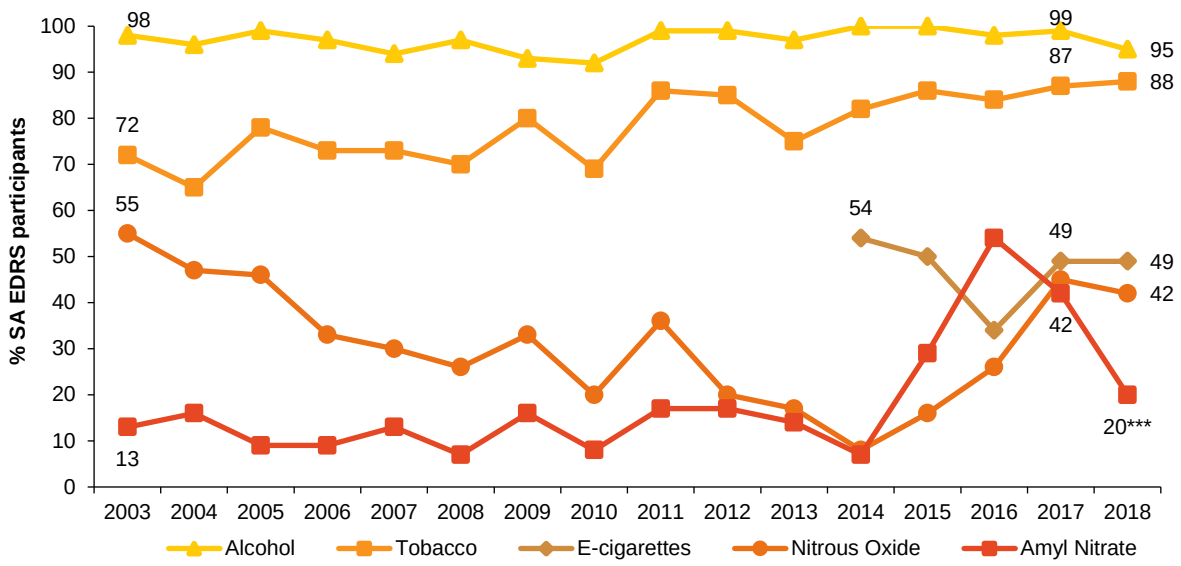
Nitrous oxide

Recent use of nitrous oxide continued a downward trend from 55% in 2003 to eight per cent in 2014, rising subsequently to 42% in 2018 (45% in 2017; p=0.669; Figure 32). Frequency of use remained stable at a median of seven days (i.e. less than monthly; IQR 3-15 days; 6 days in 2017; *p*=0.250).

Amyl nitrite

Amyl nitrite is an inhalant listed as a Schedule 4 substance in Australia (i.e. available only with prescription) yet is often sold under-the-counter in sex shops. Use of amyl nitrite has varied over the course of monitoring, ranging from seven per cent in 2008 and 2014 to 54% in 2016 (Figure 32). In 2018, one-fifth (20%) reported recent use of amyl nitrite, a significant decrease relative to 2017 (42% in 2017; *p*<0.001). Frequency of amyl nitrite use was generally low, with participants reporting a median of six days in the preceding six months (IQR 2-15 days; median five days in 2017; *p*=0.670).

Figure 32: Licit drug use in the past six months, SA, 2003-2018



Note. Monitoring of e-cigarettes commenced in 2014. *p<0.050; **p<0.010; ***p<0.001 for 2017 versus 2018.

10

Drug-Related Harms and Other Risk Factors

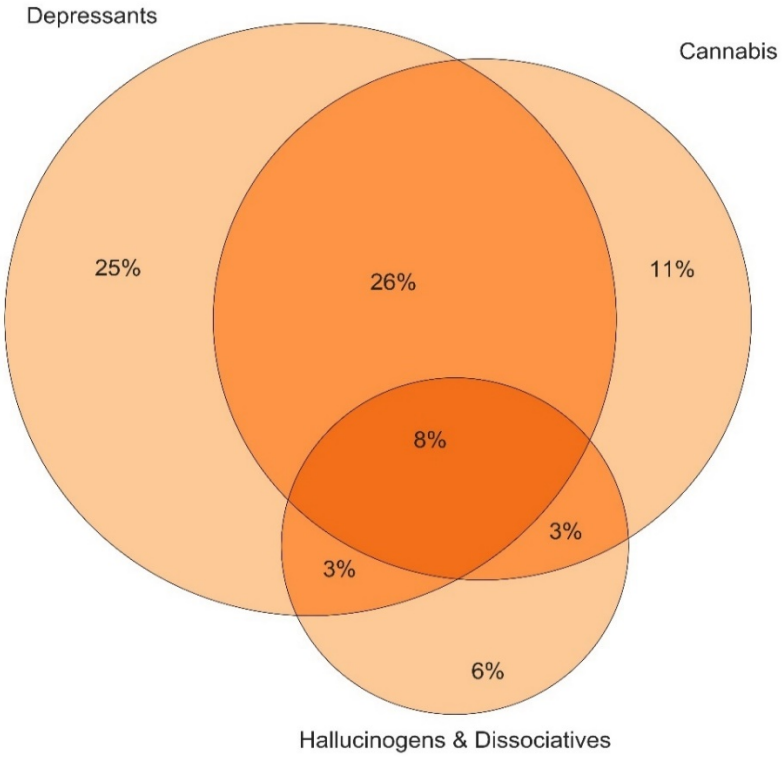
Participants were asked about various drug-related harms, including **stimulant overdose** (e.g. nausea and vomiting, chest pains, tremors, increased body temperature or heart rate, seizure, extreme paranoia, hallucinations, anxiety or panic) or symptoms consistent with a **depressant overdose** (e.g. reduced level of consciousness, respiratory depression, turning blue, collapsing, and being unable to be roused). Participants were also asked about: polysubstance use, injecting drug use, drug treatment, sexual risk-taking, mental health and crime. It should be noted that the following data refer to participants' understandings of these behaviours (i.e., do not necessarily represent medical diagnoses in the case of reporting on health conditions).

Polysubstance Use

The majority (86%) of the sample reported simultaneous polysubstance use (i.e., use of two or more substances within the same session) on their last occasion of stimulant use. The most commonly used substances (in addition to stimulant use) were alcohol (62%), cannabis (48%), tobacco (47%), and LSD (15%).

Eighty-three per cent of the sample reported using a combination of depressants, cannabis and/or hallucinogens/dissociatives on their last occasion of stimulant use, with the most common combinations being stimulants, depressants and cannabis (26%), and stimulants and depressants (25%). Eight per cent of the sample reported using depressants, cannabis and hallucinogens/dissociatives on their last occasion of stimulant use (Figure 33).

Figure 33: Poly subtance use on occasion of last stimulant use, SA, 2018



Note. This figure captures those who had also used hallucinogens/dissociatives (GHB, ketamine, LSD, and/or hallucinogenic mushrooms), depressants (alcohol and/or benzodiazepines) and/or cannabis on their last occasion of stimulant use (83% of the sample).

Overdose

Non-fatal stimulant overdose

Self-reported lifetime non-fatal stimulant overdose has remained stable over time (52% in 2018 versus 49% in 2017; *p*=0.671), as has past 12-month experience of non-fatal stimulant overdose (43% in 2018 compared to 40% in 2017; *p*=0.683; Figure 34). Those who reported lifetime stimulant overdose reported overdosing on a median of two occasions (IQR 1-5 occasions).

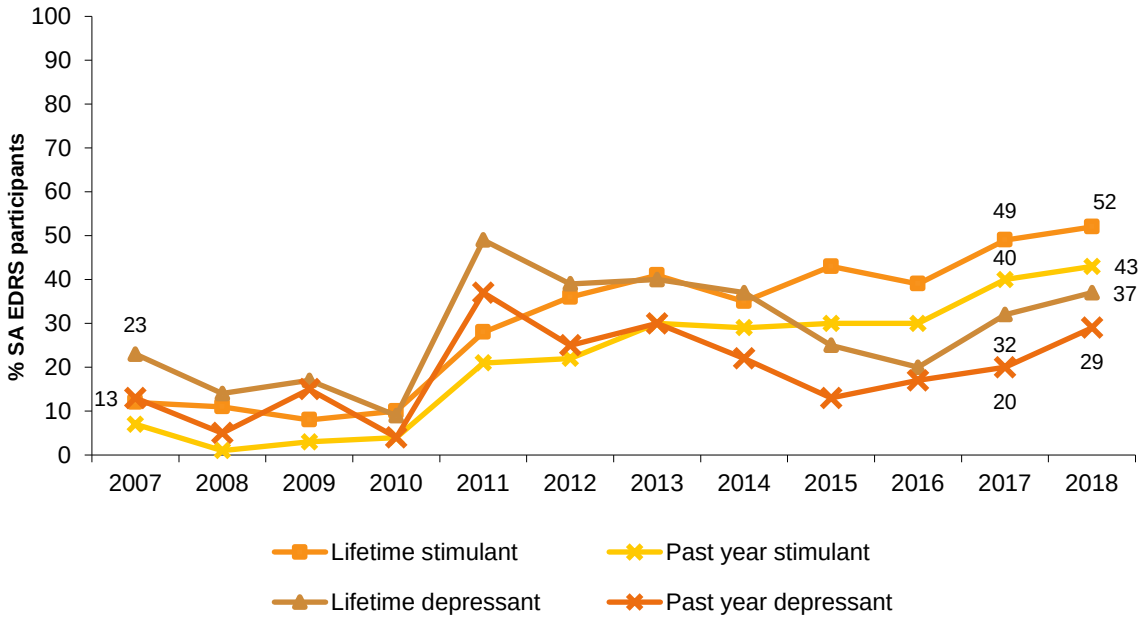
In 2018, participants reporting a non-fatal overdose in the past 12 months who commented (n=30) mainly nominated ecstasy (60%) as causing their last stimulant overdose, with a smaller percentage nominating crystal methamphetamine (13%). Most (93%) reported that they had also been under the influence of one or more additional drugs (stimulants or depressants). On their last stimulant overdose occasion, of those who commented on receiving treatment (n=31), 77% did not receive treatment or assistance. Of those that did report receiving treatment or assistance (n=7), small numbers reported ambulance attendance, GP attendance and emergency department attendance.

Non-fatal depressant overdose

The rate of self-reported lifetime non-fatal depressant overdose has remained stable (32% in 2017 to 37% in 2018; *p*=0.457). Similarly, past 12-month experience of non-fatal depressant overdose has also remained stable (29% in 2018 versus 20% in 2017; *p*=0.128) (Figure 34). Those who reported lifetime depressant overdose reported overdosing on a median of three occasions (IQR 2-9 occasions).

Participants who reported a depressant overdose in the last year were asked to report the main drug to which they attributed their last overdose (n=23). The majority of participants reported alcohol (83%) and a smaller percentage reported benzodiazepines (9%). Of those who commented (n=22), polydrug use was common at the time of their last overdose (82%). Less than half (44%) of those who had overdosed in the past 12 months reported that there was a sober person who was able to assist on the last occasion.

Figure 34: Lifetime and past year non-fatal stimulant and depressant overdose, SA, 2007-2018



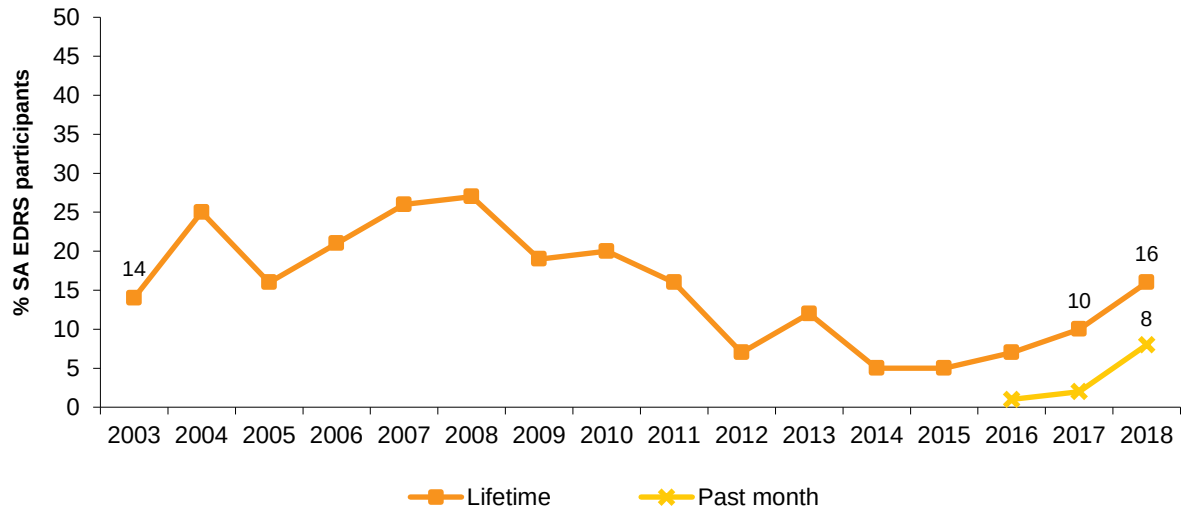
Note. Data labels have been removed from figure in 2007 with small cell size (i.e. n≤5). *p<0.050; **p<0.010; ***p<0.001 for 2017 versus 2018.

Injecting Drug Use and Associated Risk Behaviours

The percentage of participants reporting lifetime injection has remained stable (16% in 2018 versus 10% in 2017; p=0.207), as has those who report injecting in the month preceding interview (8% in 2018; Figure 35).

In 2018, the median age of first injection was 20 years (IQR 17-24 years). The majority (75%) of the sample who had injected in the past month (n=8) reported that they had not used a needle after somebody else. Nevertheless, 88% (n=7) reported that they had injected a partner or friend after injecting themselves in the past month with a new needle.

Figure 35: Lifetime and past month drug injection, SA, 2003-2018



Note. Past 6-month injection asked of participants prior to 2016.Y axis has been reduced to 50% to improve visibility of trends. Data labels have been removed from figure in 2017 with small cell size (i.e. n≤5). *p<0.050; **p<0.010; ***p<0.001 for 2017 versus 2018.

Drug Treatment

Eight per cent reported currently receiving drug treatment (Table 4), consistent with previous years' reports (6% in 2017; p=0.566). Due to low numbers reporting forms of drug treatment, significance testing will not be presented. Please refer to the National EDRS Report for further information.

Table 4: Current drug treatment, nationally and SA, 2014-2018

	National 2018	SA 2018	SA 2017	SA 2016	SA 2015	SA 2014
	N=799	N=100	N=100	N=100	N=100	N=100
% Current treatment	-	**8**	6	-	-	0
Methadone	-	-	0	0	0	0
Buprenorphine	-	-	0	0	0	0
Buprenorphine-naloxone	-	-	0	0	0	0
Drug counselling	-	-	-	-	-	-
Other	-	-	-	-	-	0

Note. Numbers calculated from entire sample. - not reported, due to small numbers (n≤5 but not 0). *p<0.050; **p<0.010; ***p<0.001 for 2017 versus 2018.

Sexual Risk Behaviours

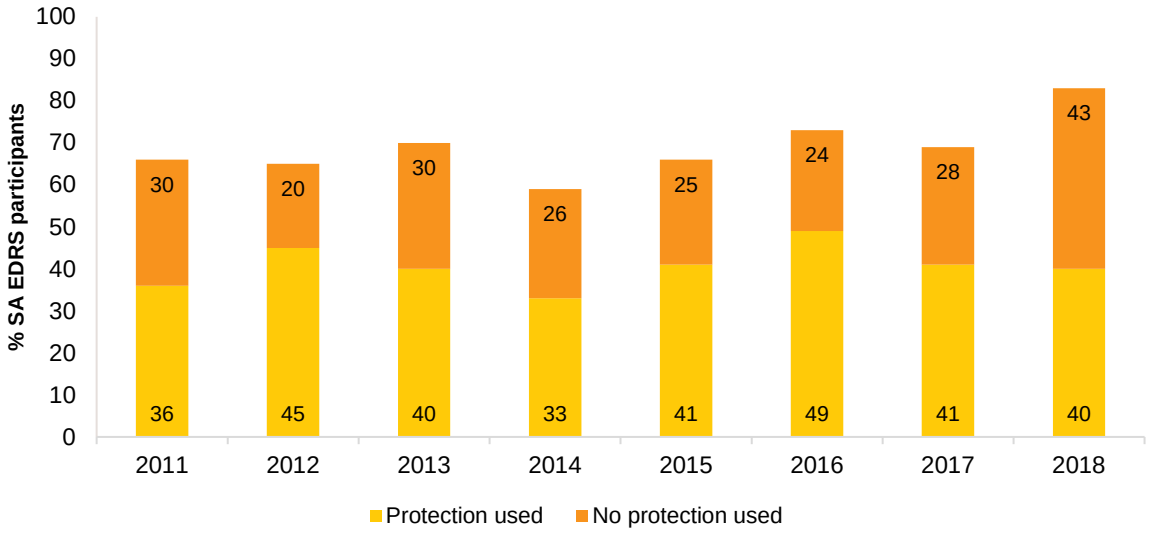
The percentage of the SA sample reporting having sex with at least one causal partner in the six months preceding interview has increased significantly, from 69% in 2017 to 85% in 2018 (p=0.007). Penetrative sex was defined as 'penetration by penis or hand of the vagina or anus'.

Given the sensitive nature of these questions, participants were given the option of self-completing this section of the interview.

Forty per cent of consumers reported using a barrier method on the last occasion of penetrative sex with a causal partner (Figure 36). The majority (90%) of those reporting recent penetrative sex with a casual partner (n=81) reported having sex while using drugs in the previous six months (94% in 2017; *p*=0.359). The most commonly used drugs used during sex were alcohol (81%; 80% in 2017), ecstasy (68%; 48% in 2017, *p*=0.015), and cannabis (57%; 37% in 2017, *p*=0.016). Over one-quarter (27%) had not used a barrier (condom/glove/dental dam) on any occasion when having penetrative sex with a casual partner while using drugs in the six months preceding interview (51% in 2017; *p*=0.003).

Over half (57%) of the sample reported having a sexual health check-up in the past year, significantly higher than 41% in 2017 (*p*=0.016). Fourteen per cent had done so more than one year ago and 29% had never had a sexual health check-up. Amongst the former group, the majority (78%) reported that they had not received a positive diagnosis for a sexually transmitted infection (STI); eight per cent had received a positive diagnosis in the past year; and 14% had received a positive diagnosis over a year ago.

Figure 36: Sex with a casual partner in the last six months and use of any protection/barrier on the last occasion, SA, 2011-2018



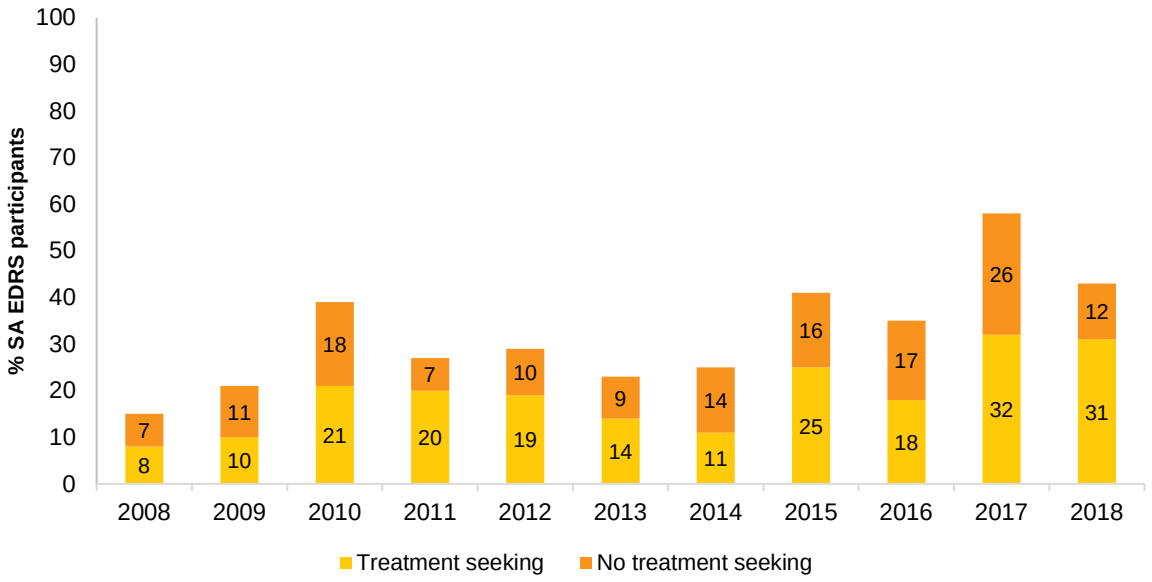
Note. Don't know and did not respond responses excluded. The combination of the percentage who report protection used and no protection used is the percentage who reported penetrative sex with a causal partner in the past six months. **p*<0.050; ***p*<0.010; ****p*<0.001 for 2017 versus 2018.

Mental Health

Over two-fifths (44%) of the sample self-reported that they had experienced a mental health problem in the preceding six months (other than drug dependence), a lower rate relative to 2017 (58%; *p*=0.056; Figure 39). Of those who commented (n=43), the most common mental health problem was depression (77%), followed by anxiety (70%), and post-traumatic stress disorder (19%). Almost three-quarters (72%) of those who reported a mental health problem

(or 31% of the SA sample) reported seeing a mental health professional during the past six months, stable relative to 2017 (55%; *p*=0.083). Of these people (n=31), 68% reported being prescribed medication for this problem in this period (59% in 2017; *p*=0.490).

Figure 37: Self-reported mental health problems and treatment seeking in the past six months, SA, 2008-2018



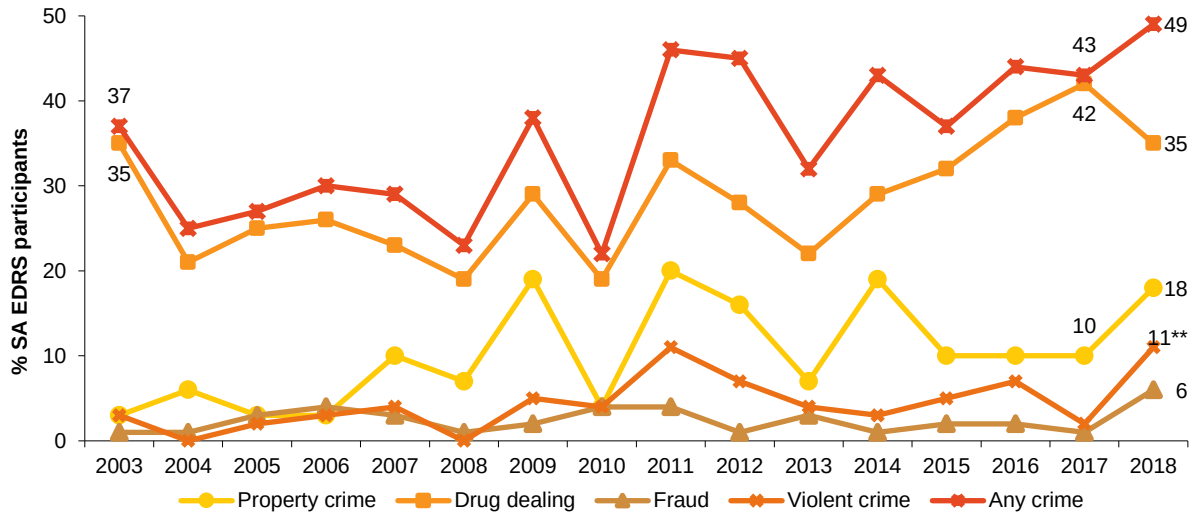
Note. The combination of the percentage who report treatment seeking and no treatment is the percentage who reported experiencing a mental health problem in the past six months. **p*<0.050; ***p*<0.010; ****p*<0.001 for 2017 versus 2018.

Crime

Rates of past month criminal activity have fluctuated over time, with drug dealing and property crime consistently the two main forms of criminal activity (35% and 18% in 2018; Figure 38). Nevertheless, violent crime significantly increased in 2018 (11%) from two per cent in 2017 (*p*=0.009).

Seven per cent of the sample reported having a history of imprisonment, a significant increase from 2017 (n≤5; *p*=0.029), and 13% of the 2018 sample reported having been arrested in the 12 months preceding interview, also a significant increase relative to 2017 (n≤5; *p*=0.021). In 2018, the main reasons for arrest among the latter group were drunk and disorderly (46%), violent crime (31%) and drugs and driving (23%).

Figure 38: Self-reported criminal activity in the past month, SA, 2003-2018



Note. Any crime is comprised of the percentage who endorse any property crime, drug dealing, fraud and/or violent crime in the past month. Y axis has been reduced to 50% to improve visibility of trends. Data labels have been removed from figure in years 2003 and 2017 with small cell size (i.e. n≤5). *p<0.050; **p<0.010; ***p<0.001 for 2017 versus 2018.