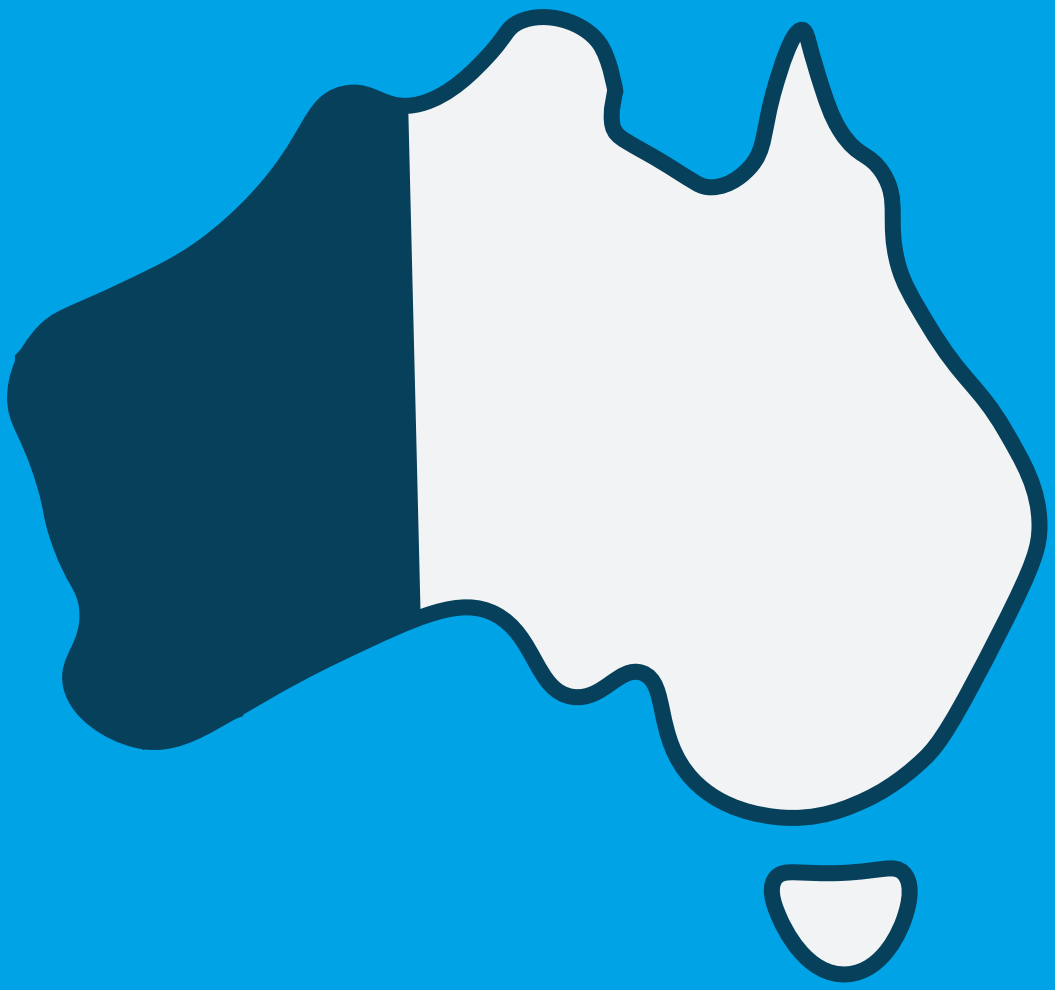
IDRS



WESTERN AUSTRALIA DRUG TRENDS 2019

Key Findings from the Western Australia Illicit Drug Reporting System (IDRS) Interviews

WESTERN AUSTRALIA DRUG TRENDS 2019: KEY FINDINGS FROM THE ILLICIT DRUG REPORTING SYSTEM (IDRS) 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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Acknowledgements

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Research Team

The National Drug and Alcohol Research Centre (NDARC), UNSW Australia, coordinated the IDRS. The following researchers and research institutions contributed to IDRS 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 Aitken and Professor Paul Dietze, Burnet Institute Victoria;
- Callula Sharman and Associate Professor Raimondo Bruno, School of Psychology, University of Tasmania;
- Jodie Grigg, James Fetherston, Dr Seraina Agramunt and Professor Simon Lenton, National Drug Research Institute, Curtin University, Western Australia;
- Chris Moon, Northern Territory Department of Health; 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 IDRS in the present and in previous years.

Contributors

We acknowledge the University of New South Wales Community Reference Panel and all other individuals who contributed to the development of the questionnaire. We thank all the individuals who 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.

We acknowledge the traditional custodians of the land on which the work for this report was undertaken. We pay respect to Elders past, present, and emerging.

Abbreviations

ACT	Australian Capital Territory
ADHD	Attention Deficit Hyperactivity Disorder
AUDIT-C	Alcohol Use Disorders Identification Test-Consumption
CPR	Cardiopulmonary resuscitation
EDRS	Ecstasy and Related Drugs Reporting System
GP	General Practitioner
IDRS	Illicit Drug Reporting System
IQR	Interquartile range
MSIC	Medically Supervised Injecting Centre
N (or n)	Number of participants
NDARC	National Drug and Alcohol Research Centre
NPS	New psychoactive substances
NSP	Needle and syringe program(s)
NSW	New South Wales
OTC	Over-the-counter
SD	Standard deviation
UNSW	University of New South Wales
VIC	Victoria
WA	Western Australia

Executive summary

Sample Characteristics

The WA IDRS sample in 2019 were predominantly males with a mean age of 43 (SD=11), consistent with the WA profile in previous years. Over half of the participants (51%) reported that heroin was their drug of choice and 47% said that it was also the drug they injected most often in the past month.

Heroin

After a steady resurgence in recent (i.e., past six month) heroin use up until 2016, there has been a downward trend that has been observed since 2017. However recent use of heroin has remained constant between 2018 (67%) and 2019 (62%). Twenty-nine per cent of recent consumers reported daily use of heroin in 2019. The median amount of heroin used in a 'typical' day was 0.25 grams.

Methamphetamine

Recent use of any methamphetamine has fluctuated over the years, showing a general downward trend since monitoring began until 2009, which was followed by a slight upward trend until 2012. The use of base and powder methamphetamine significantly decreased throughout the years which was driven by a significant increase in the use of crystal methamphetamine. Sixty-four per cent of recent consumers reported weekly or more frequent use of any methamphetamines in 2019.

Cocaine

Recent use of cocaine has fluctuated over the years in WA, showing a discrepancy of responses among recent consumers. However, the small numbers of IDRS respondents reporting on recent cocaine use since monitoring began in WA, may not reflect the reality of the market.

Cannabis

After a gradual decline in recent cannabis use until 2015, there has been an upward trend since then. However, recent use of cannabis has remained constant between 2018 (77%) and 2019 (72%). Thirty-five per cent of recent consumers reported daily use of cannabis in 2019.

Pharmaceutical Opioids

Use of all forms of pharmaceutical opioids has remained stable or showed a downward trend since monitoring of each opioid first began. There were no differences in terms of recent use of morphine, oxycodone, fentanyl, or codeine between 2018 and 2019. However, there was a significant decline in the number of people who reported recent use of methadone between 2018 (36%) and 2019 (21%) Moreover, there were twice as many participants who reported recent use of buprenorphine-naloxone in 2019 (23%) as in 2018 (11%). There was a significant increase in the number of participants who reported recent use of non-prescribed buprenorphine-naloxone between 2018 (7%) and 2019 (16%).

Other Drugs

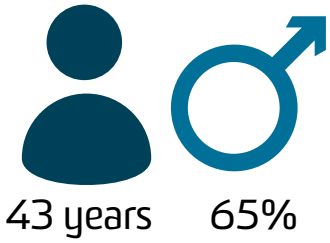
NPS use was uncommon amongst the WA sample. Recent use of non-prescribed benzodiazepines, steroids, pharmaceutical stimulants, and anti-psychotics remained stable between 2018 and 2019. Alcohol and tobacco use have remained consistently high but stable over the period of monitoring, with 67% and 87% reporting recent use, respectively, in 2019. Of recent tobacco consumers, 83% reported daily use.

Drug-Related Harms and Other Risks

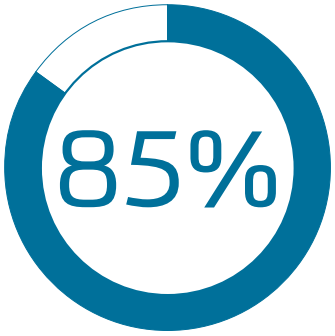
Polysubstance use has remained frequent amongst the WA sample, with 97% of participants reporting using one or more drugs on the day preceding interview. In 2019, over one-tenth (12%) of the WA sample reported overdosing on any drug in the last 12 months, most commonly heroin. Sixty-three per cent of participants who completed the training course reported that they had used naloxone to resuscitate someone following the training. In 2019, 13% of respondents reported receptive needle sharing, while 23% reported distributive needle sharing behaviours.

WESTERN AUSTRALIA 2019 SAMPLE CHARACTERISTICS

In 2019, 96 people from WA participated in IDRS interviews.



The mean age in 2019 was 43, and 65% identified as male.



In the 2019 WA sample, 85% were unemployed.

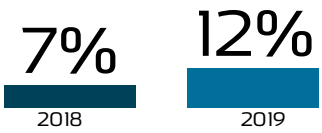
1 Heroin

2 Crystal Methamphetamine

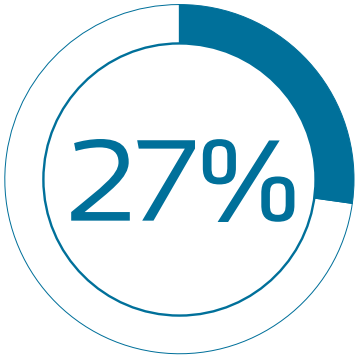
3 Powder methamphetamine

The three most commonly injected drugs were heroin, crystal methamphetamine and powder methmphetamine.

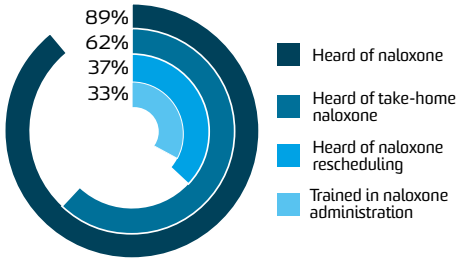
NALOXONE AND SEEKING HELP



One in ten (12%) participants had experienced a non-fatal overdose in the previous 12 months.

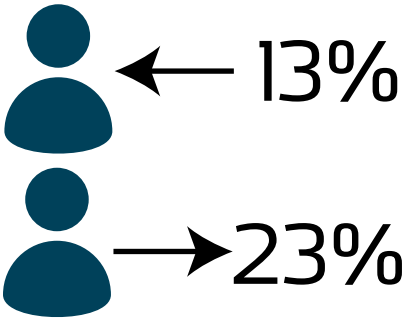


Just under a third of the WA IDRS participants reported that they were currently in drug treatment.

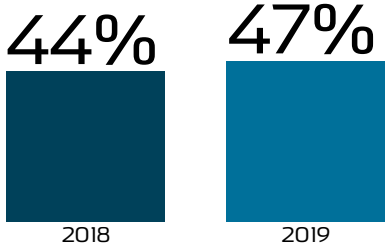


WA IDRS participant's knowledge of the take-home naloxone programe.

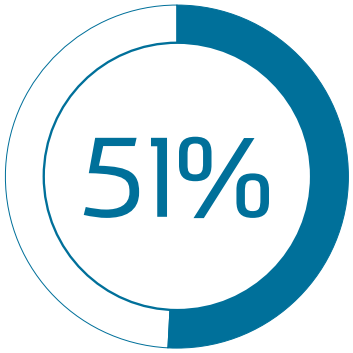
INJECTING RELATED RISKS AND HARMS



In 2019, 13% of the WA IDRS sample reported receptive needle sharing and 23% reported distributive needle sharing.

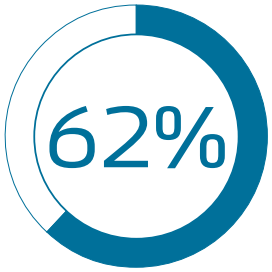


In 2019, just under half (47%) of the sample reported that they had re-used their own needles in the past month (44% in 2018).

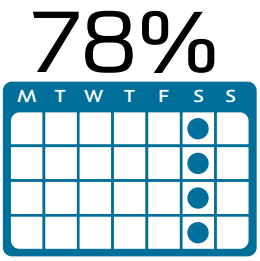


In 2019, half (51%) of the WA sample reported having an injection-related health issue in the month preceding interview.

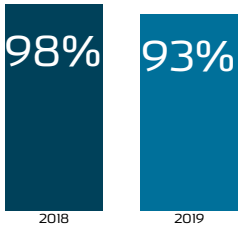
HEROIN



62% of WA IDRS participants reported using heroin in the past 6 months.



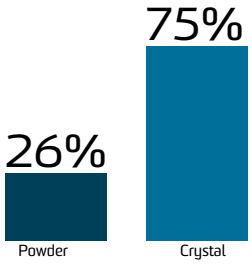
Of those who had recently consumed heroin 78% used it weekly or more.



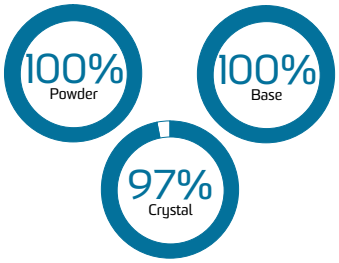
Of those who could comment 93% perceived heroin to be 'easy' or 'very easy' to obtain in 2019.

METHAMPHETAMINE

Four in five (79%) WA 2019 IDRS participants reported past 6 month use of any methamphetamine.



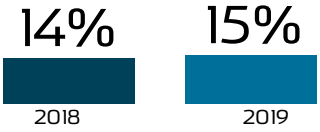
Of the entire sample, 27% had recently consumed powder, and 77% crystal methamphetamine.



Injection was the main route of administration for powder, crystal and base among those who had consumed each form.

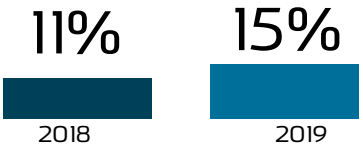
Of those who could comment 99% perceived crystal methamphetamine to be 'easy' or 'very easy' to obtain in 2019.

PHARMACEUTICAL OPIOIDS



Past 6 month use of non-prescribed morphine remained low at 15% in 2019 (14% in 2018)

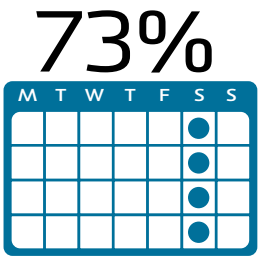
10% of WA IDRS participants reported using non-prescribed fentanyl in the past 6 months.



in 2019, 15% of WA IDRS participants reported using non-prescribed oxycodone in the past 6 months.

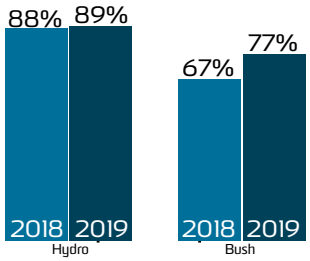
CANNABIS

Three in four (72%) of WA participants in the 2019 IDRS sample reported past 6 month use of cannabis.



Of those who had consumed cannabis recently, 73% reported weekly or more frequent use.

Of people who had consumed cannabis in the last 6 months, 93% had smoked it.



Of those who could comment, high percentages perceived bush and hydro to be 'easy' or 'very easy' to obtain.

Background

The Illicit Drug Reporting System (IDRS) is an ongoing illicit drug monitoring system which has been conducted in all states and territories of Australia since 2000, and forms part of Drug Trends. The purpose of the IDRS is to provide a coordinated approach to monitoring the use, market features, and harms of illicit drugs.

The IDRS 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 inject drugs. This report focuses on the key results from the annual interview component of IDRS.

Methods

Full details of the methods for the annual interviews are available for download. To briefly summarise, participants were recruited using multiple methods (e.g., needle and syringe programs (NSP) and peer referral) and needed to: i) be at least 17 years of age (due to ethical requirements); ii) have injected at least monthly during the six months preceding interview; and iii) have been a resident for at least 12 months in the capital city in which they were interviewed. Following provision of informed consent and completion of a structured interview, participants were reimbursed $40 for their time and expenses incurred. A total of 902 participants were recruited across capital cities nationally (May-July 2018), with 96 participants interviewed in Perth, WA (100 participants in 2018). Approximately a third of participants (35%) disclosed that they had participated in the WA IDRS in 2018.

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. Note 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 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 analysis of market and drug use trends among sentinel groups of drug injectors and indications 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 (past 6 months) 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 WA (see section on ‘Additional Outputs’ below for details of other outputs providing such profiles).

Additional Outputs

Infographics from this report is available for download. There is a range of outputs from the IDRS triangulating key results from the annual interviews and other data sources and considering the implications of these findings, including jurisdictional reports, bulletins, and other resources available via the Drug Trends webpage. This includes results from the Ecstasy and Related Drugs Reporting System (EDRS), which focuses on the use of ecstasy and other stimulants.

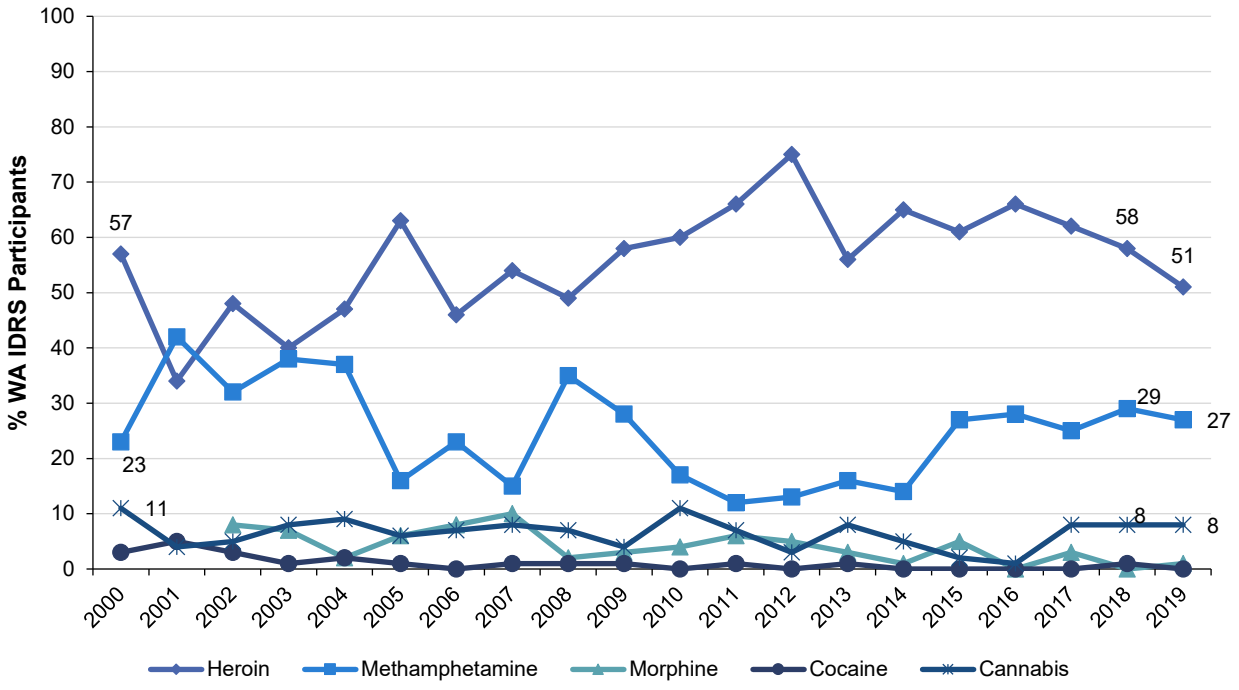
Please contact the research team at drugtrends@unsw.edu.au with any queries; to request additional analyses using these data; or to discuss the possibility of including items in future interviews.

1

Sample Characteristics

The demographic characteristics of the WA IDRS sample in 2019 are summarised in Table 1. The majority of participants were mainly males (65%) and were aged 18 to 66 years with a mean age of 43 (SD=11). The majority of the sample (92%) were non–indigenous and identified as heterosexuals (73%) and had obtained a trade/tech qualification (55%). Eighty-five per cent were currently unemployed and more than half of the sample (56%) lived in their own home/flat. Participants on government pension, allowance or benefit accounted for 81% of the sample, while 12% of participants received a wage or salary. The median weekly income was $325 ranging from $290 to $410 per week. In terms of drug use, slightly more than half of the participants (51%) reported that heroin was their drug of choice, followed by methamphetamine (27%), and cannabis (8%) (Figure 1). Heroin and methamphetamine were the drugs injected most often in the month prior to the interview, (47% and 34%, respectively) (Figure 2). Figure 3 illustrates weekly or more frequent substance use in the past six months.

Figure 1: Drug of choice, WA, 2000-2019



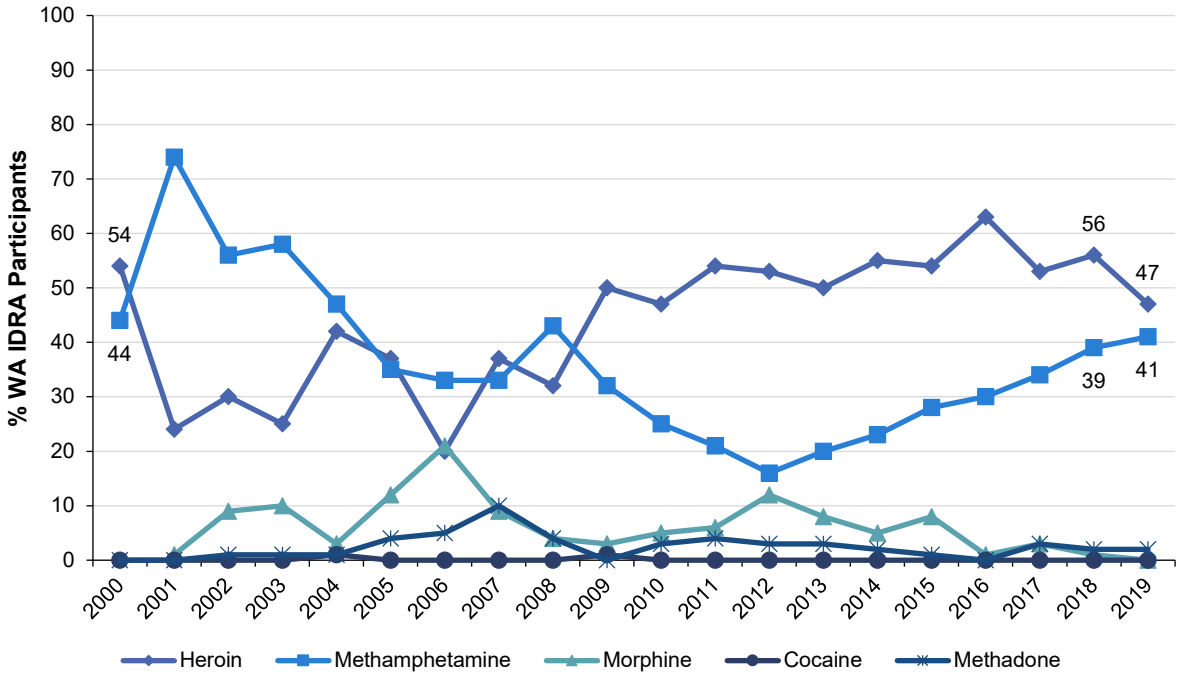
Note. Substances listed in this figure are the primary endorsed; nominal percentages have endorsed other substances. In 2000 and 2001 methamphetamine went under the response option of amphetamine and thus is not reported here. Data labels have been removed from figures with small cell size (i.e. n≤5 but not 0) and to improve visibility. *p<0.050; **p<0.010; ***p<0.001 for 2018 versus 2019.

Table 1: Demographic characteristics of the sample, nationally and WA, 2015-2019

	National	Western Australia				
	2019	**2019**	**2018**	**2017**	**2016**	**2015**
	N=902	**N=96**	**N=100**	**N=73**	**N=71**	**N=89**
Mean age (years; SD)	44 (9)	**43 (11)**	43 (10)	43 (12)	44 (10)	44 (9)
% Male	68	**65**	60	60	66	63
% Aboriginal and/or Torres Strait Islander	22	**8**	13	10	9	-
% Sexual identity						
Straight or Heterosexual	87	**73**	78	90	90	97
Lesbian, Gay or Homosexual	3	**7**	9	-	-	0
Bisexual	8	**16**	10	-	-	-
Queer	1	**-**	/	/	/	/
Other identity	1	**-**	-	0	0	0
% Education						
Median grade at school completed (IQR)	10 (9-11)	**11 (10-12)**	10 (10-12)	10 (10-12)	10 (10-12)	10 (10-12)
Completed trade/tech qualification	47	**55**	55	47	54	62
Completed university/college	11	**19**	16	8	25	12
% Accommodation						
Own home/flat *(inc. renting)*~	70	**56**	69	75	78	75
Parents'/family home	6	**7**	14	12	11	16
Boarding house/hostel	6	**13**	-	8	-	7
Shelter/refuge	2	**8**	-	0	-	0
No fixed address (includes staying at a friend's home if not boarding there, couch surfing, rough sleeping and squatting)	15	**14**	13	-	-	-
Other	1	**-**	-	0	0	0
% Employment status						
Unemployed	88	**85**	81	81	72	75
Full-time work	1	**-**	-	-	13	8
Part time/ casual	7	**12**	10	7	10	12
Self employed	2	**-**	/	/	/	/
Other	2	**0**	-	8	-	-
Main source of income in the last month						
% Wage or salary	6	**12**	9	11	23	14
% Gov't pension, allowance or benefit main income source	89	**81**	84	77	79	76
% Criminal activity	3	**-**	-	-	11	-
% Other	2	**-**	-	-	-	-
Median income/week ($; IQR)	(N=886) 350 (275-450)	**(N=92) 325 (290-410)**	(N=95) 325 (272-475)	(N=72) 324 (250-450)	(N=71) 400 (290-550)	(N=86) 370 (290-500)

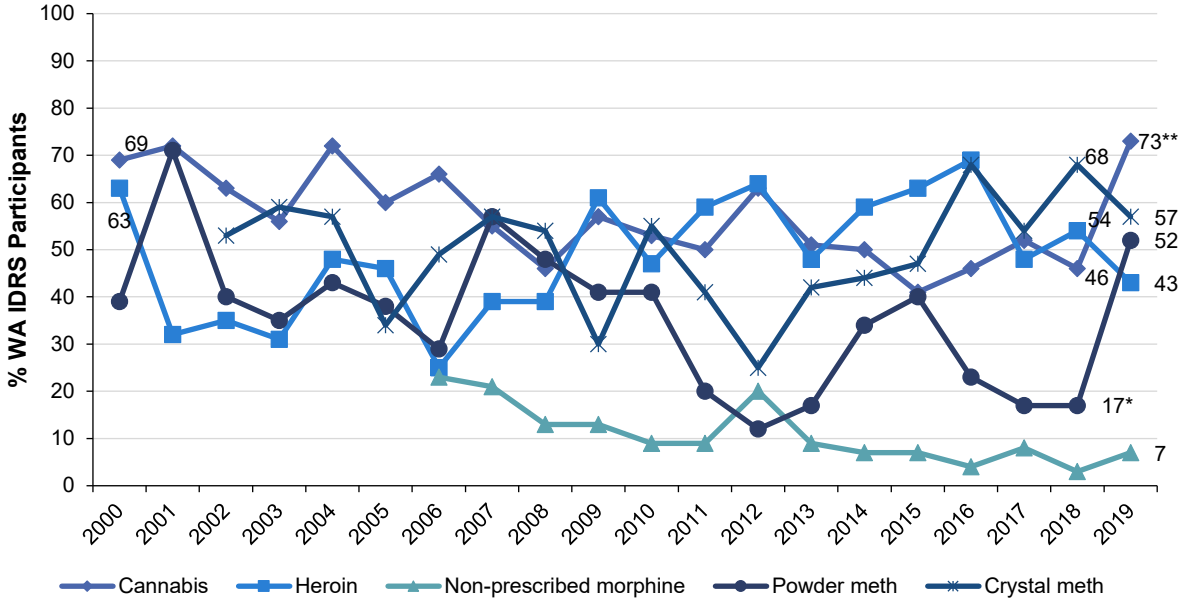
Note. ~ Includes private rental and public housing. - Values suppressed due to small cell size (n≤5 but not 0). / denotes that this item was not asked in these years. *p<0.050; **p<0.010; ***p<0.001 for 2018 versus 2019.

Figure 2: Drug injected most often in the past month, WA, 2000-2019



Note. Substances listed in this figure are the primary endorsed; nominal percentages have endorsed other substances. Data labels have been removed from figures with small cell size (i.e. n≤5 but not =0), and to improve visibility. *p<0.050; **p<0.010; ***p<0.001 for 2018 versus 2019.

Figure 3: Weekly or more frequent substance use in the past six months, WA, 2000-2019



Note. These figures are of the entire sample. Data labels have been removed from figures with small cell size (i.e. n≤5 but not 0), and to improve visibility. *p<0.050; **p<0.010; ***p<0.001 for 2018 versus 2019.

2

Heroin

Participants were asked about their recent (past six month) use of heroin (including homebake). Respondents typically describe heroin as white/off-white rock, brown/beige rock or white/off-white powder. Homebake is a form of heroin made from pharmaceutical products and involves the extraction of diamorphine from pharmaceutical opioids such as codeine and morphine.

Patterns of consumption

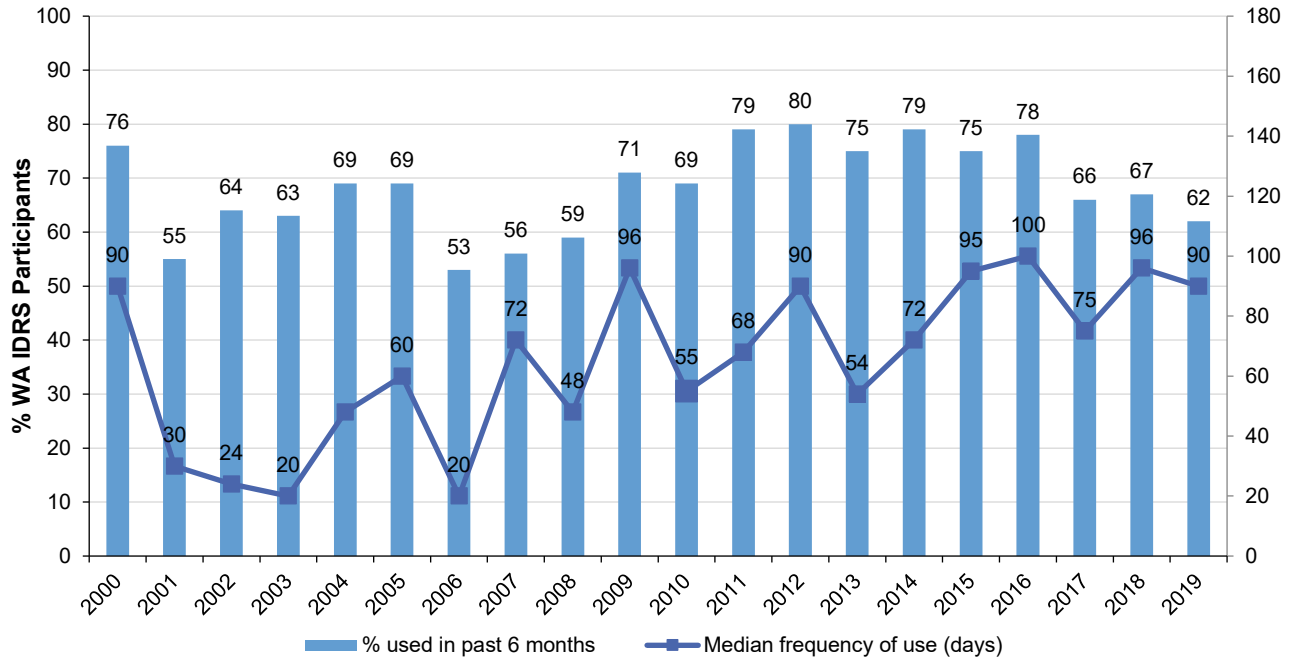
Lifetime and Recent Use (past 6 months): A lifetime history of having ever used heroin was reported by 85% (n=82) of the WA sample (82% in 2018), while 62% (n=59) of participants reported recent use (67% in 2018) (Figure 4). These trends were comparable to 2018 (p=0.573 and p=0.466 respectively).

Frequency of Use: Median days of use in the last six months ranged from one to 180 days in 2019, with a median of 90 days (i.e. equivalent to every second day; IQR: 24-180), which was similar to the values obtained in 2018 (median 96 days; IQR: 29-180; p=0.569) (Figure 4). In 2019, 29% of participants who had recently used heroin reported using it daily (32% in 2018; p=0.717), while 78% reported weekly or more frequent use (80% in 2018; p=0.784).There was no significant differences between the values reported in 2019 and 2018.

Routes of Administration: All participants who used heroin in 2019 reported injecting as the main recent route of administration. The same trend was observed in 2018 (100%). Other less common routes of heroin administration reported by the participants in 2019 was smoking (10%). Small numbers reported snorting and swallowing (n≤5 each).

Quantity: In 2019, the median amount of heroin used in a 'typical' day among recent users was 0.10 grams, ranging from 0.01 to 2.40 grams (IQR: 0.09-0.25; n=58; 0.15 grams in 2018; IQR: 0.10-0.25).

Figure 4: Past six month use and frequency of use of heroin, WA, 2000-2019



Note. Median days computed among those who reported recent use (maximum 180 days). Median days rounded to the nearest whole number. *p<0.050; **p<0.010; ***p<0.001 for 2018 versus 2019.

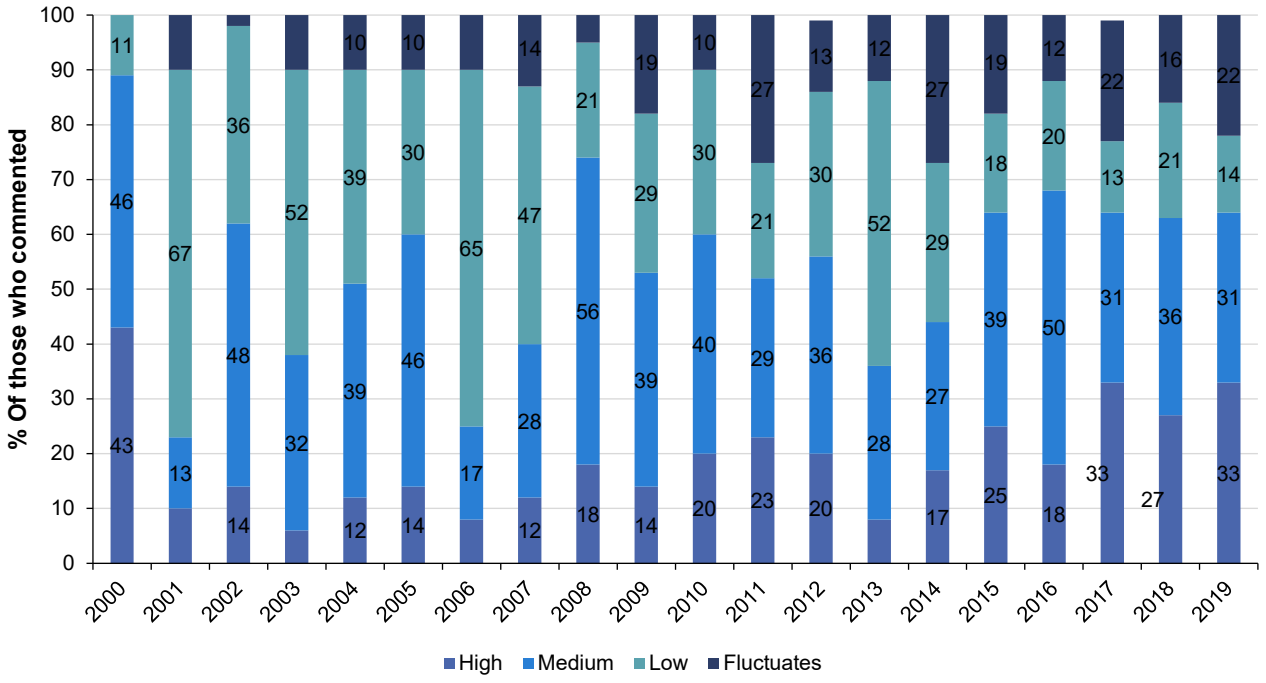
Market Trends

Price: Low numbers were able to comment on the price of a gram of heroin and none of the participants were able to comment on the price per cap in 2019. For further information refer to the national IDRS report or contact the researchers.

Perceived Purity: The was no significant differences between the respondents' perceptions of the purity of heroin between 2018 and 2019 (Figure 5). Amongst the participants who were able to comment (n=51), approximately one in three perceived the current purity of heroin as 'high' (33%; 27% in 2018; p=0.500) or 'medium' (31%; 36% in 2018; p=0.586). Only 14% of the respondents perceived the purity of heroin as 'low' (21% in 2018; p=0.345), while approximately one in five participants (22%) reported that it fluctuated (16% in 2018; p=0.430).

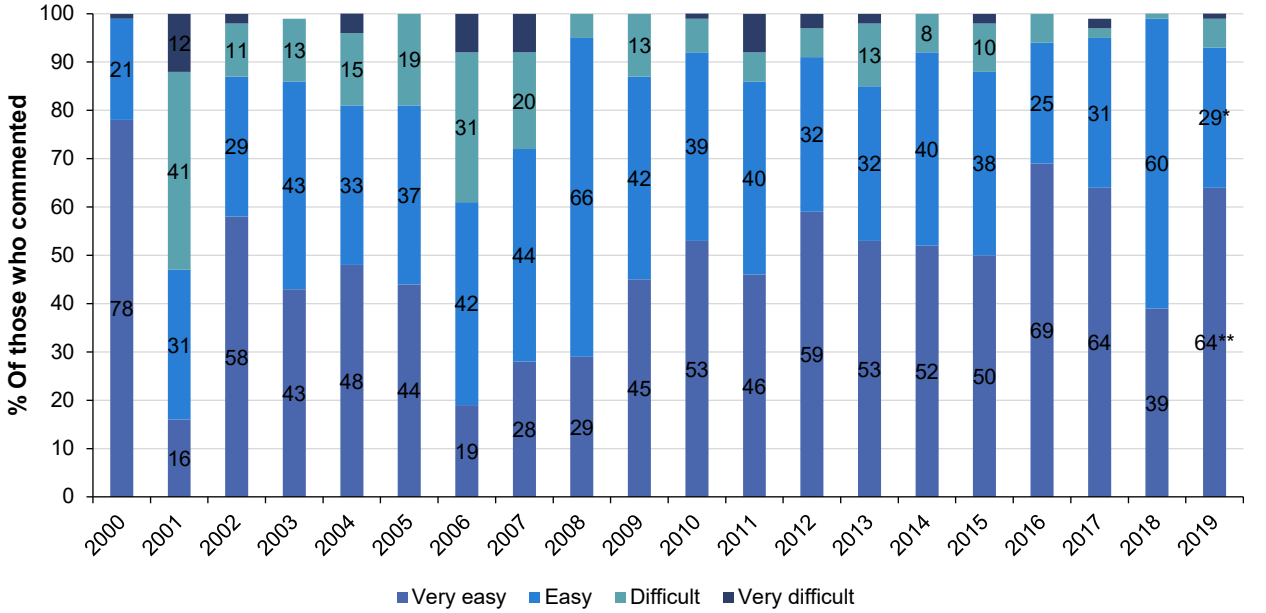
Perceived Availability: Among those who were able to comment in 2019 (n=55), six out of ten participants (64%) perceived current availability as 'very easy' (39% in 2018; p=0.008) and less than a third as 'easy' (29%) to obtain (60% in 2018; p=0.010) (Figure 6). Small numbers perceived that it was 'difficult' or 'very difficult' to obtain heroin.

Figure 5: Current perceived purity of heroin, WA, 2000-2019



Note. The response 'Don't know' was excluded from analysis. Data labels have been removed from figures with small cell size (i.e. n≤5).
*p<0.050; **p<0.010; ***p<0.001 for 2018 versus 2019.

Figure 6: Current perceived availability of heroin, WA, 2000-2019



Note. The response 'Don't know' was excluded from analysis. Data labels have been removed from figures with small cell size (i.e. n≤5).
*p<0.050; **p<0.010; ***p<0.001 for 2018 versus 2019.

3

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), crystal (clear, ice-like crystals), and liquid.

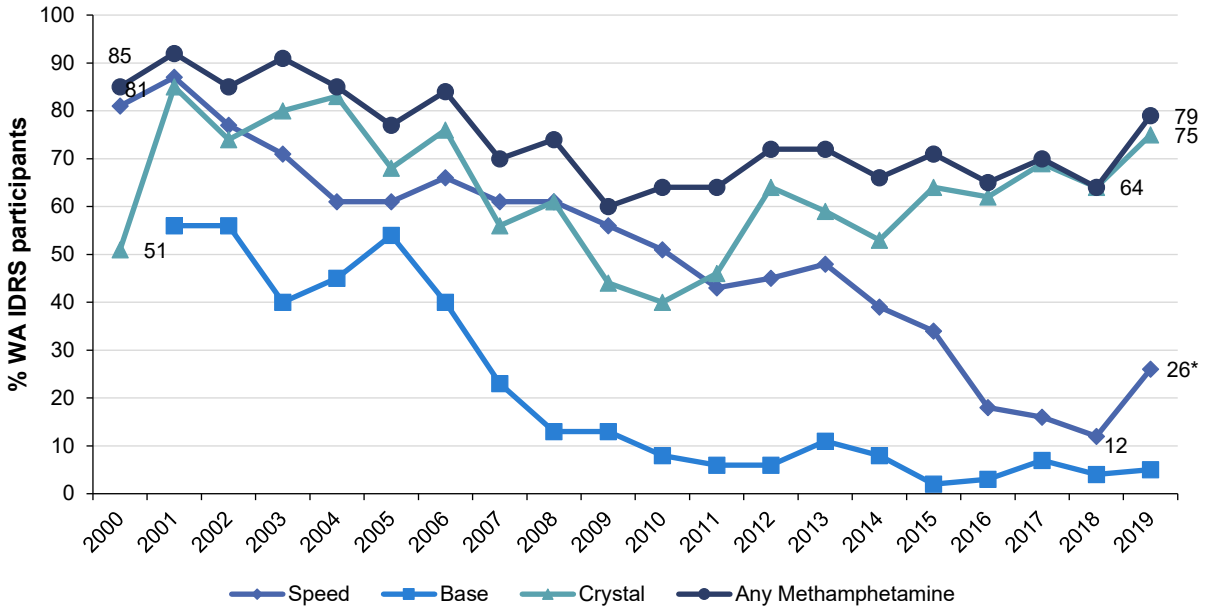
Lifetime and Recent Use (past 6 months)

A lifetime history of having ever used any type of methamphetamine was reported by 96% (n=91) of the WA sample (91% in 2018; *p*=0.158), while 79% (n=75) of participants reported recent use (64% in 2018; *p*=0.060) (Figure 7).

Frequency of Use

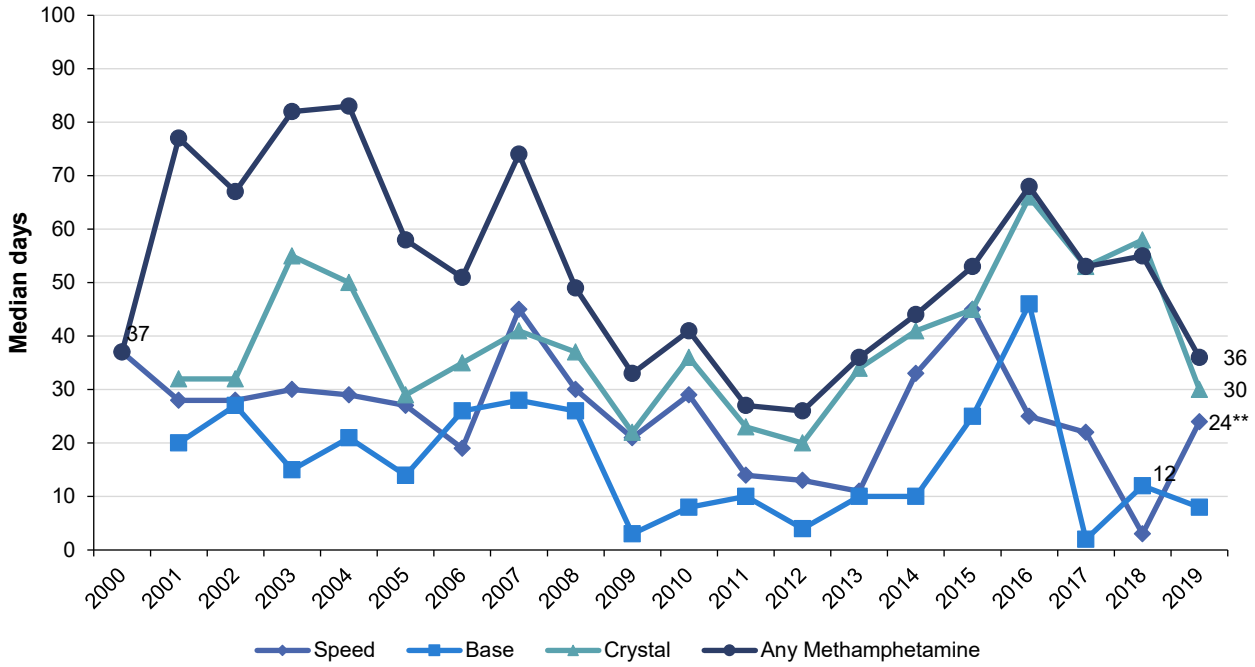
Frequency of use for any methamphetamine in 2019 was reported at a median of 36 days (IQR: 7-96), stable from 2018 (55 days; *p*=0.377) (Figure 8). In 2019, 11% of participants who had recently used methamphetamine reported using it daily (19% in 2018; *p*=0.196), while 64% reported weekly or more frequent consumption (67% in 2018; *p*=0.718). There were no significant differences between the values reported in 2019 and 2018.

Figure 7: Past six month use of any methamphetamine, powder, base, and crystal, WA, 2000-2019



Note. # Base asked separately from 2001 onwards. 'Any methamphetamine' includes crystal, powder, base and liquid methamphetamine combined. Figures for liquid not reported historically due to small numbers. Data labels have been removed from figures with small cell size (i.e. n≤5 but not 0). *p<0.050; **p<0.010; ***p<0.001 for 2018 versus 2019.

Figure 8: Frequency of use of any methamphetamine, powder, base, and crystal, WA, 2000-2019



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 100 days to improve visibility of trends. Median days used base and crystal not collected in 2000-2001. Data

labels have been removed from figures with small cell size (i.e. n≤5) and to improve visibility. *p<0.050; **p<0.010; ***p<0.001 for 2018 versus 2019.

Patterns of consumption

Powder Methamphetamine

Lifetime and Recent Use (past 6 months): A lifetime history of powder methamphetamine was reported by 76% of the 2019 sample, similar to 2018 (76%). There has been an increase in the recent use of powder methamphetamine in WA between 2018 and 2019 (Figure 7). Twenty-six per cent of participants reported recent use in 2019, while only 12% of respondents reported recent use in 2018 (p=0.013).

Frequency of Use: There was a significant increase in the median frequency of use of powder methamphetamine between 2018 and 2019 (Figure 8). The median days of use of powder methamphetamine was 24 (IQR: 8-60) in 2019 compared with 3 in 2018 (IQR: 1-7; p=0.010).

Routes of Administration: Injecting was reported as the main route of administration for 100% of the sample (83% in 2018; p=0.036), followed by smoking (40%; 25% in 2018; p=0.376). Snorting (12%; 17% in 2018; p=0.682) and swallowing (8% in 2019 and 2018) were less common routes of administration.

Quantity: In 2019, the median amount of powder methamphetamine used on a 'typical' day in the past six months was 0.20 grams (IQR: 0.10-0.21; n= 22; 0.20 grams in 2018; IQR: 0.10-0.50).

Base methamphetamine

Lifetime Use: A lifetime history of base methamphetamine was reported by 44% of the 2019 sample. Similar trends were observed in 2018 (36%; p=0.257).

Low numbers reported recent use of base methamphetamine and therefore information on recent use, frequency, routes of administration and quantity is not reported

Please refer to the National IDRS Report for further information or contact the researchers.

Crystal Methamphetamine

Lifetime and Recent Use (past 6 months): A lifetime history of having ever used crystal methamphetamine was reported by 88% (n=95) of the WA sample (36% in 2018), while 75% (n=92) of participants reported recent use (64% in 2018) (Figure 7). These trends were comparable to the 2018 figures (p=0.542 and p=0.100 respectively).

Frequency of Use: Frequency of use remained stable at a median of 30 days in 2019 (IQR: 6-96; median; 58 in 2018; IQR: 14-161; p=0.123) (Figure 8).

Routes of Administration: The most common route of administration was injecting (97%; 95% in 2018; p=0.556), followed by smoking (36%; 56% in 2018; p=0.021).

Quantity: The median amount of crystal methamphetamine used on an average day of consumption in the past six months was 0.20 grams (IQR: 0.10-0.20; n=67; 0.10 grams in 2018; IQR: 0.10-0.25).

Market trends

Methamphetamine Powder

Price: The median price for a point (0.1 gram) of powder methamphetamine was $50 in 2019 (n=8; IQR: 50-50) (Figure 9). In 2019, low numbers were able to comment on the median price of powder methamphetamine per gram. Please refer to the National IDRS Report for further information.

Perceived Purity: The was no significant differences between the respondents' perceptions of the purity of powder methamphetamine between 2018 and 2019. Approximately four in ten participants who were able to comment perceived the current purity of powder methamphetamine as 'medium' (41%; 17% in 2018; *p*=0.299). A quarter of respondents perceived the purity of powder methamphetamine as 'high' (24%; 67% in 2018; *p*=0.064) or 'low' (24%; 17% in 2018; *p*=0.729), while approximately one in ten participants (12%; 0% in 2018; *p*=0.385) reported that it fluctuated (Figure 10).

Perceived Availability: Among those who were able to comment in 2019 (n=17), nearly two thirds of participants (65%; 83% in 2018; *p*=0.420) perceived current availability as 'very easy' to obtain (Figure 11).

Methamphetamine Base

Price, perceived purity and availability: Due to low numbers reporting use, no details will be provided about the price, perceived purity, and availability of base. Please refer to the National IDRS Report for further information.

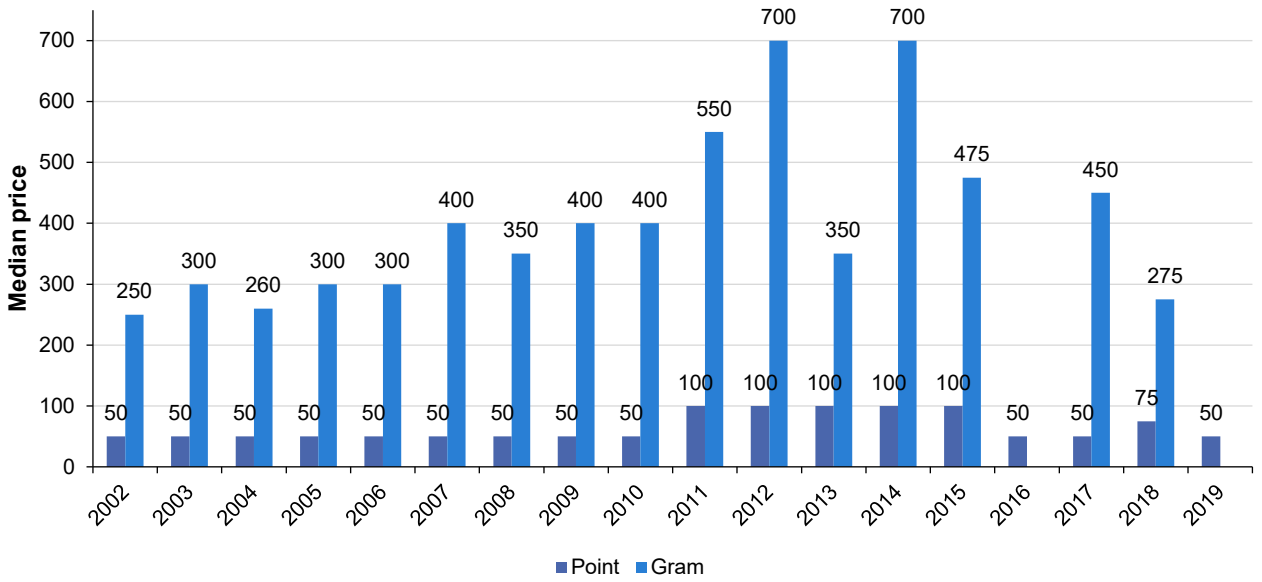
Methamphetamine Crystal

Price: The median price for a point (0.1 gram) of crystal methamphetamine remained identical at $50 between 2018 ($50; n=30; IQR: 50-100) and 2019 ($50; n=42; IQR: 50-100) (Figure 12). In 2019, only two participants were able to comment on the median price of crystal methamphetamine per gram. Please refer to the National IDRS Report for further information.

Perceived Purity: Perceived purity of crystal methamphetamine remained constant between 2018 and 2019. Among those who were able to comment in 2019 (n=67), nearly six in ten participants (57%; 45% in 2018; *p*=0.193) perceived purity as 'high', followed by 'medium' (19%; 32% in 2018; *p*=0.103), and 'low' (15%; 9% in 2018; *p*=0.323). Only 9% of the sample (13% in 2018; *p*=0.485) considered that purity fluctuated (Figure 13).

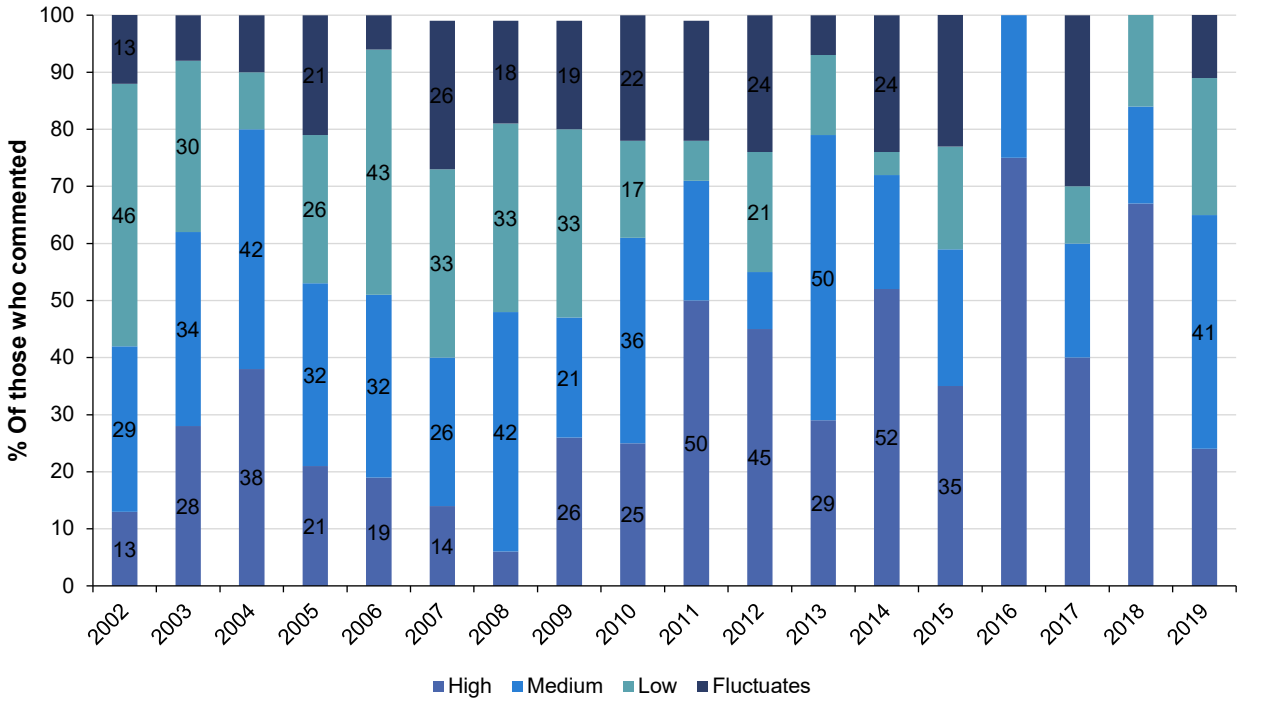
Perceived Availability: Among those who were able to comment in 2019 (n=67), the majority of respondents (85%) perceived current availability as 'very easy'. There were less participants (67%) that perceived availability as 'very easy' in 2018 than in 2019 (*p*=0.020). Thirteen per cent of the sample perceived availability as 'easy' (24% in 2018; *p*=0.120) (Figure 14).

Figure 9: Median price of powder methamphetamine per point and gram, WA, 2002-2019



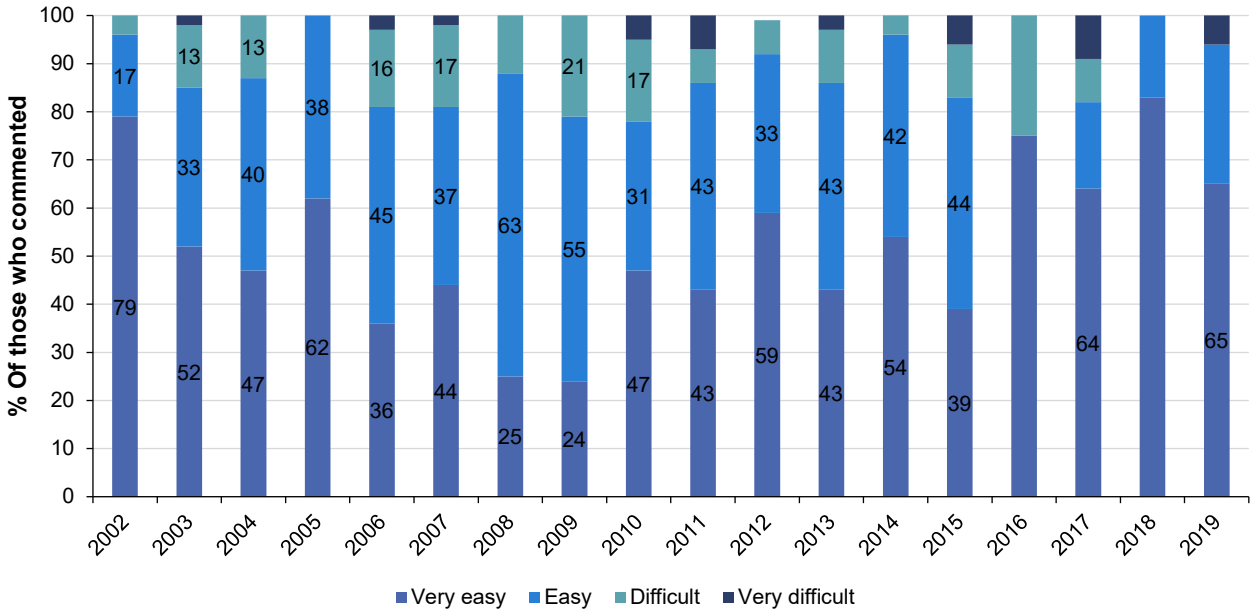
Note. Among those who commented. Data labels have been removed from figures with small cell size (i.e. n≤5). *p<0.050; **p<0.010; ***p<0.001 for 2018 versus 2019. In 2019 only one participant was able to comment on the price of powder methamphetamine per gram.

Figure 10: Current perceived purity of powder methamphetamine, WA, 2002-2019



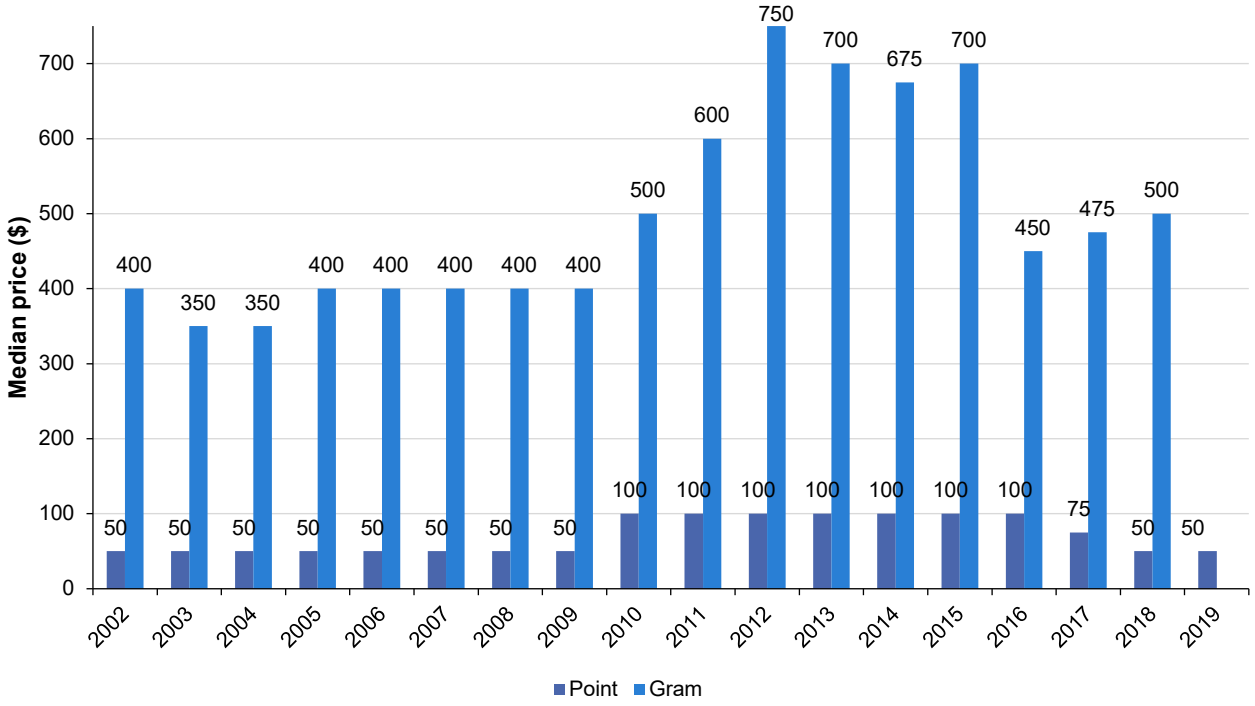
Note. Methamphetamine asked separately for the three different forms from 2002 onwards. The response 'Don't know' was excluded from analysis. Data labels have been removed from figures with small cell size (i.e. n≤5). *p<0.050; **p<0.010; ***p<0.001 for 2018 versus 2019.

Figure 11: Current perceived availability of powder methamphetamine, WA, 2002-2019



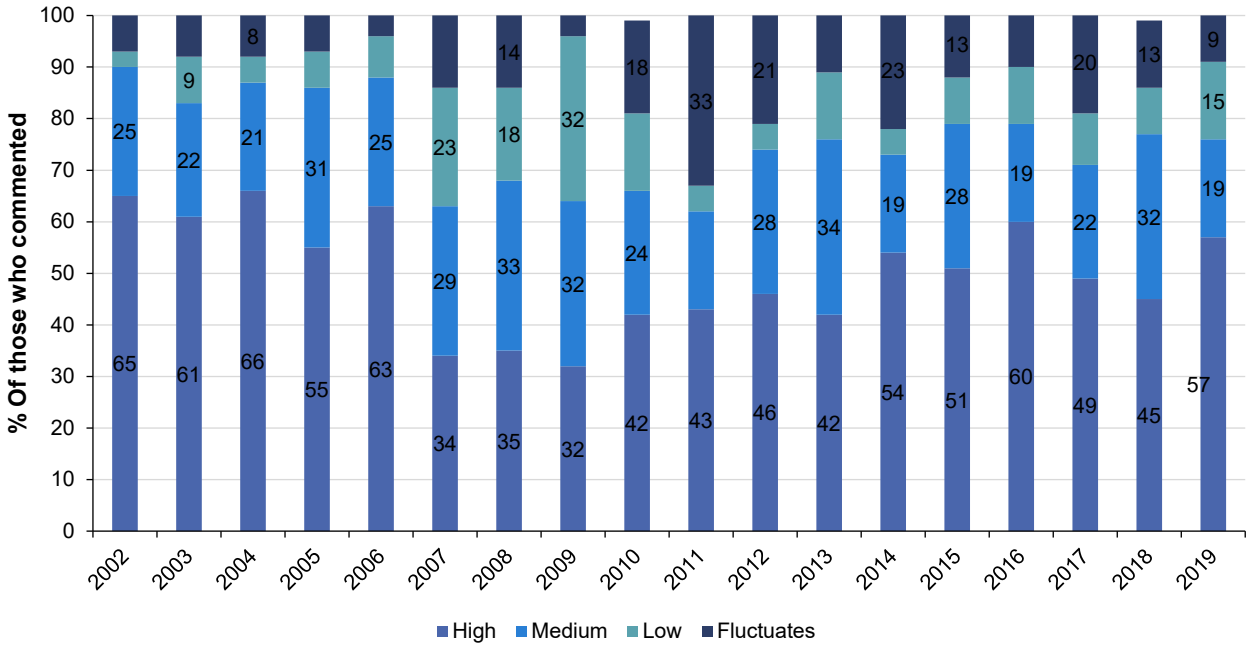
Note. Methamphetamine asked separately for the three different forms from 2002 onwards. The response 'Don't know' was excluded from analysis. Data labels have been removed from figures with small cell size (i.e. n≤5). *p<0.050; **p<0.010; ***p<0.001 for 2018 versus 2019.

Figure 12: Median price of crystal methamphetamine per point and gram, WA, 2002-2019



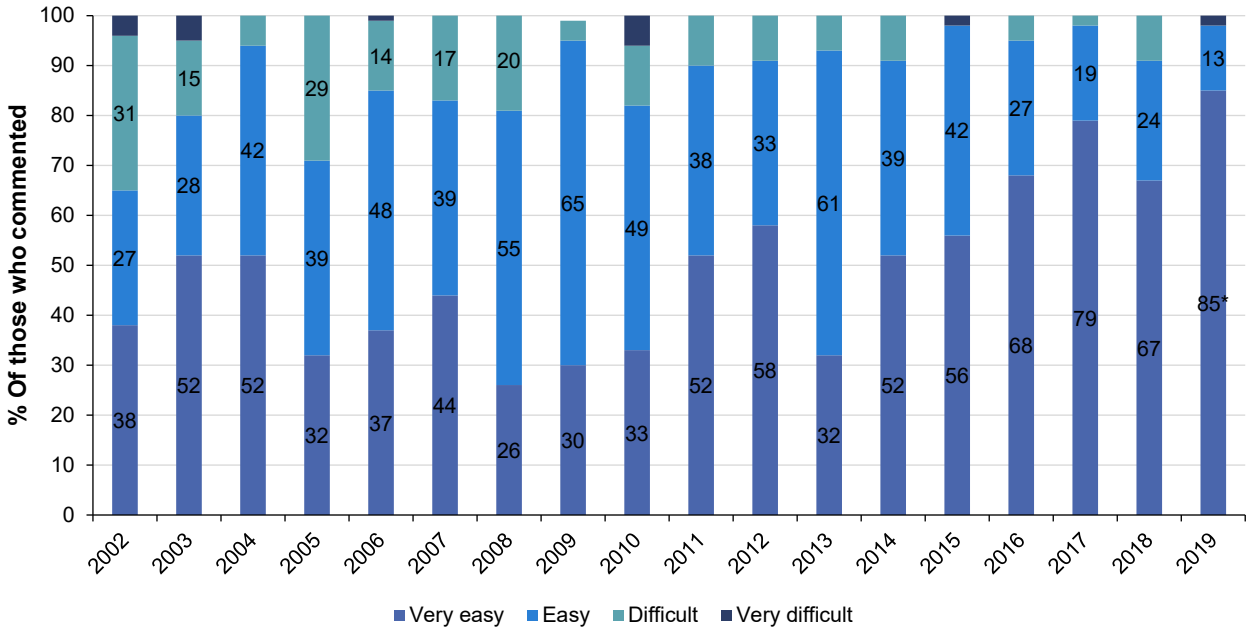
Note. Among those who commented. Data labels have been removed from figures with small cell size (i.e. n≤5). *p<0.050; **p<0.010; ***p<0.001 for 2018 versus 2019. In 2019 only two participants were able to comment on the price of crystal methamphetamine per gram.

Figure 13: Current perceived purity of crystal methamphetamine, WA, 2002-2019



Note. Methamphetamine asked separately for the three different forms from 2002 onwards. The response 'Don't know' was excluded from analysis. Data labels have been removed from figures with small cell size (i.e. n≤5). *p<0.050; **p<0.010; ***p<0.001 for 2018 versus 2019.

Figure 14: Current perceived availability of crystal methamphetamine, WA, 2002-2019



Note. Methamphetamine asked separately for the three different forms from 2002 onwards. The response 'Don't know' was excluded from analysis. Data labels have been removed from figures with small cell size (i.e. n≤5). *p<0.050; **p<0.010; ***p<0.001 for 2018 versus 2019.

4

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.

Recent Use (past 6 months)

The percentage of cocaine use has remained relatively stable over time in WA. Recent use of cocaine was reported by 12% of the sample in 2019 and in 2018 (Figure 15). The main form of cocaine used among the WA sample in 2019 was rock (46%), followed by powder (36%) and crack (18%).

Frequency of Use

Frequency of cocaine use in the last 6 months ranged from one to 30 days in 2019, with a median of two days (IQR: 1-6), which was similar to the values obtained in 2018 (median=1 day; IQR: 1-4; p=0.379). In 2019, the majority of participants who used cocaine in the last 6 months (91%) reported using cocaine less than weekly (100% in 2018) (p=0.299) (Figure 15).

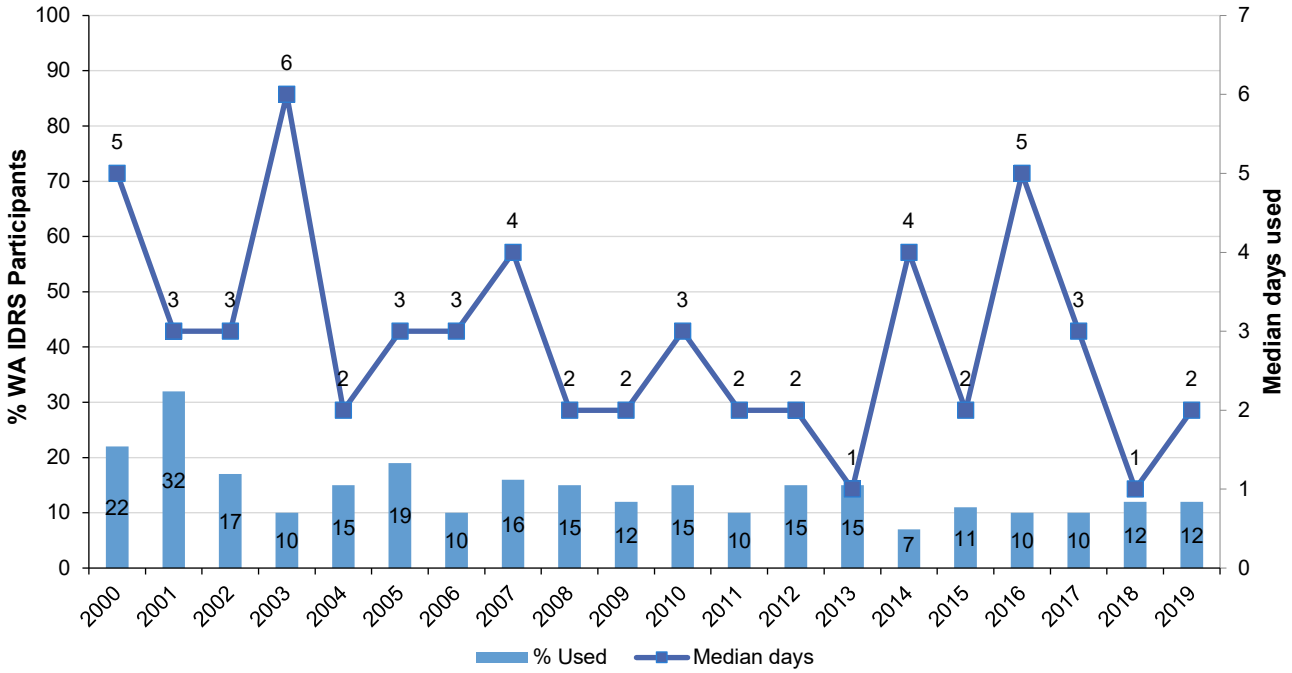
Routes of Administration

In 2019, injecting remained the main recent route of cocaine administration amongst recent users (64%; 50% in 2018; p=0.508), followed by snorting (55%; 57% in 2018; p=0.933).

Quantity

The median amount of cocaine used on an average day of consumption in the past six months was 0.20 grams (IQR: 0.08-0.75; n=9; 0.30 grams in 2018; IQR: 0.15-0.50).

Figure 15: Past six month use and frequency of use of cocaine, WA, 2000-2019



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 7 days to improve visibility of trends. Data labels have been removed from figures with small cell size (i.e. n≤5). *p<0.050; **p<0.010; ***p<0.001 for 2018 versus 2019.

Market Trends

Low numbers reported recent use of cocaine and therefore information on the price, perceived purity and availability of cocaine will not be presented. Despite this, disparity of responses among recent users suggest that cocaine use amongst people who inject drugs in WA remains infrequent and sporadic. Please refer to the National IDRS Report and National EDRS report for further information. Alternatively, contact the researchers.

5

Cannabis

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

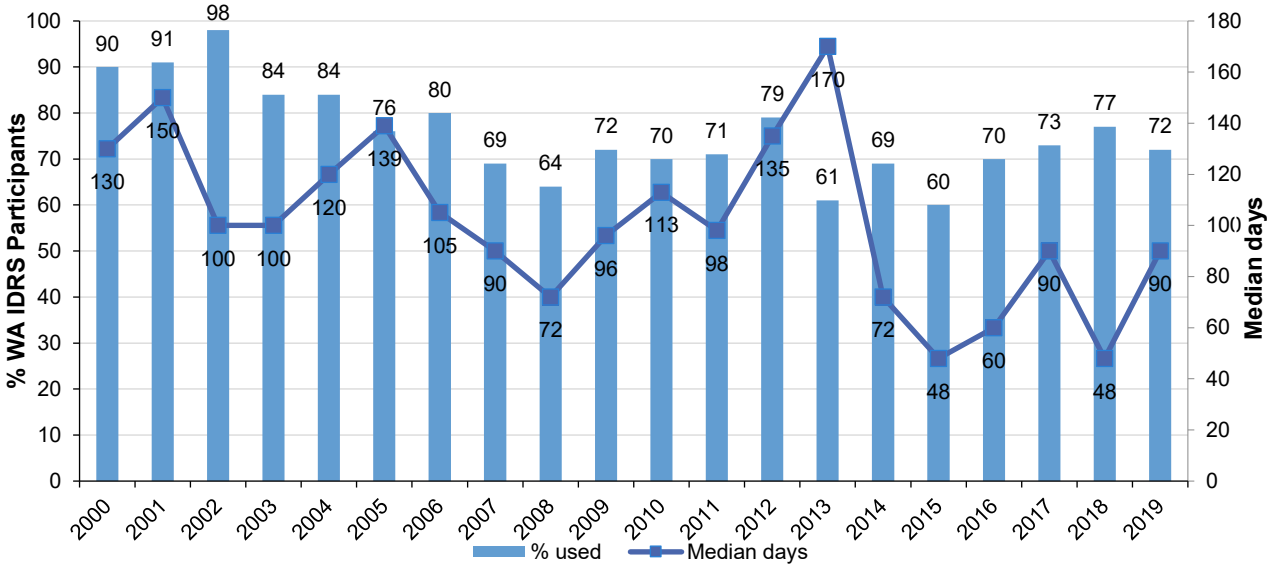
Lifetime and Recent Use (past 6 months)

A lifetime history of having ever used cannabis was reported by 95% (n=91) of the WA sample (96% in 2018; *p*=0.736), while recent use of cannabis was reported by approximately three in four participants (72%) in 2019 (Figure 16). This remains similar to the 77% participants reporting recent use in 2018 (*p*=0.423).

Frequency of Use

The median frequency of recent use of cannabis in 2019 was 90 days (i.e. every second day; IQR: 12-180), which is similar to the values reported in 2018 (48 days; twice weekly; IQR: 6.5-173; *p*=0.175) (Figure 16). In 2019, 35% of participants who had recently used cannabis reported using it daily (25% in 2018; *p*=0.188), while 73% reported to have consumed cannabis weekly or more frequent (60% in 2018; *p*=0.099). There were no significant differences between the values reported in 2019 and 2018.

Figure 16: Past six month use and frequency of use of cannabis, WA, 2000-2019



Note. Median days computed among those who reported recent use (maximum 180 days). Median days rounded to the nearest whole number. *p<0.050; **p<0.010; ***p<0.001 for 2018 versus 2019.

Routes of Administration

The majority of participants who used cannabis in 2019 reported smoking as the main recent route of administration (93%; 100% in 2018*;* p=0.019). Another common route of administration reported by the participants in 2019 was inhaling/vaporising (20%; 5% in 2018; p<0.01).

Quantity

In 2019, the median quantity of cannabis used in a 'typical' day was one gram (IQR: 0.50-1.00; n=25; 1 gram in 2018; IQR: 1.00-2.00), or 2 cones (IQR: 1.25-4.75; n= 28; 2 in 2018; IQR: 1.00-2.00).

Forms Used

Among the respondents who had used cannabis recently (n=66), 96% of participants reported recent use of hydroponic cannabis (74% in 2018; p=0.250), while slightly less than half of the sample (49%) reported use of outdoor-grown bush cannabis (50% in 2018; p=0.906). Another common form of cannabis used in the last six months was hashish (14%) (11% in 2018; p=0.592). Hydroponic cannabis was the most frequently form consumed in the last six months (88%; 93% in 2018; p=0.316), followed by outdoor-grown bush cannabis (12%; 7% in 2018; p=0.316).

Hydroponic Cannabis

Price: The median price of hydroponic cannabis per gram remained unchanged between 2018 and 2019 ($25 per gram; IQR: $25-$25). Similarly, the price per ounce of hydroponic cannabis remained unchanged from 2018 to 2019 ($300 per ounce; IQR: 300-$350) (Figure 17a).

Perceived Potency: Among the respondents who were able to comment in 2019 (n=47), the majority perceived purity as 'high' (66%; 82% in 2018; p=0.075) followed by 'medium' (26%; 12% in 2018; p=0.081). There were no significant statistical differences with the trends obtained in 2018 (Figure 18a).

Perceived Availability*:* Among those who were able to comment in 2019 (n=47), slightly more than half of respondents perceived hydroponic cannabis availability as 'very easy' (55%; 46% in 2018; p=0.383) or 'easy' (34%; 42% in 2018; p=0.424) to obtain, while 11% (13% in 2018; p=0.766) reported it as 'difficult'. None of the participants indicated that it was 'very difficult' in 2019 and 2018 (Figure 19a).

Bush Cannabis

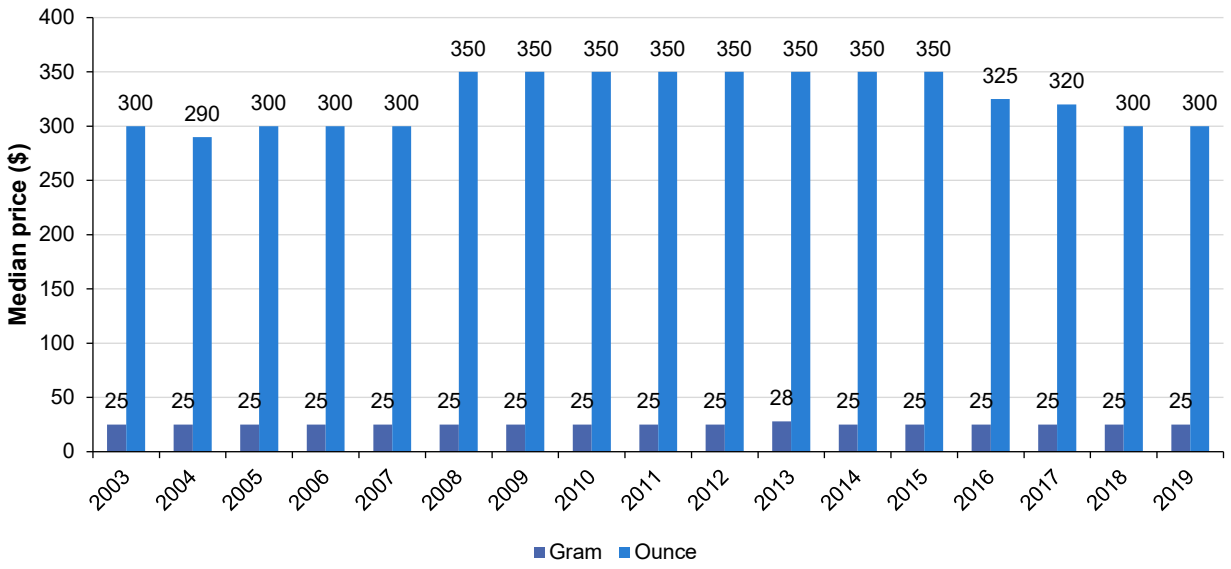
Price: The median price of bush cannabis per gram remained unchanged between 2018 and 2019 ($25 per gram; IQR: 20-25). Similarly, the price per ounce of bush cannabis remained relatively stable from 2018 to 2019 ($200 per ounce; IQR: 175-300) (Figure 17b).

Perceived Potency: Among the participants who were able to comment in 2019 (n=33), the majority perceived bush cannabis purity as 'medium' (42%; 41% in 2018; p=0.942) or 'high' (39%; 36% in 2018; p=0.082) (Figure 18b).

Availability*:* Among the participants who were able to comment in 2019 (n=35), slightly more than half of respondents perceived bush cannabis availability as 'very easy' (51%; 14% in 2018; p=0.006) or 'easy' (26%; 52% in 2018; p=0.528) to obtain, while 20% (33% in 2018; p=0.280) reported it as 'difficult'. In 2019, small numbers of participants perceived bush cannabis availability as 'very difficult', while none of the participants in the 2018 WA sample did (p=0.427) (Figure 19b).

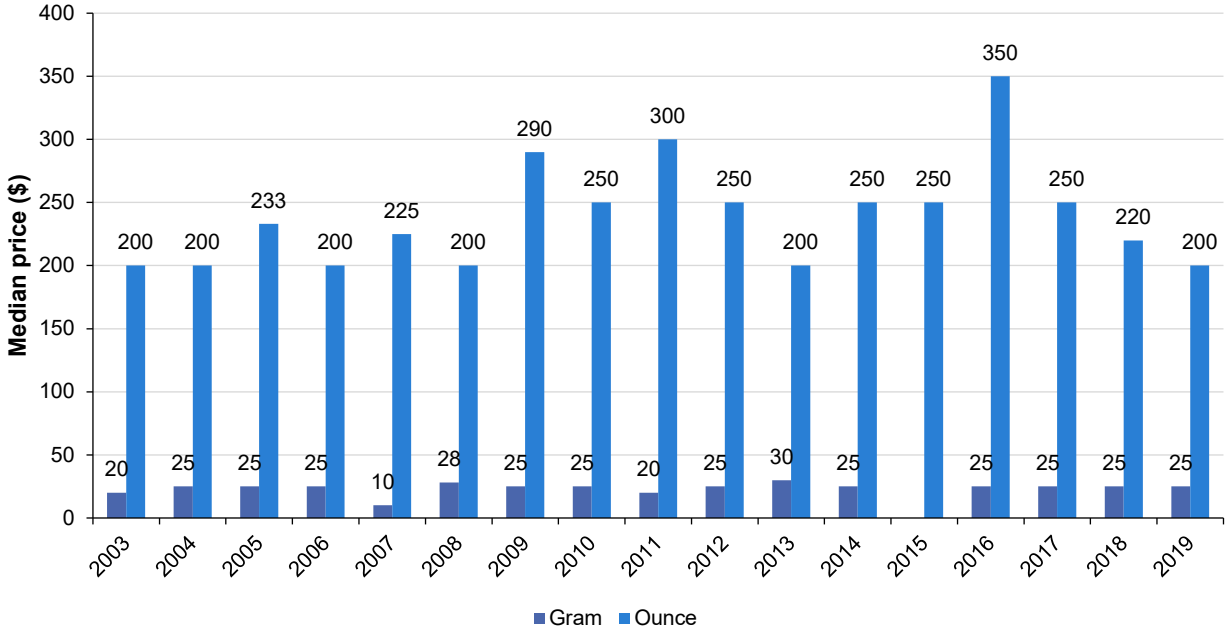
Figure 17: Median price of hydroponic (A) and bush (B) cannabis per ounce and gram, WA, 2003-2019

(A) Hydroponic cannabis



Note. Among those who commented. From 2003 onwards hydroponic and bush cannabis data collected separately. Data labels have been removed from figures with small cell size (i.e. n≤5). *p<0.050; **p<0.010; ***p<0.001 for 2018 versus 2019.

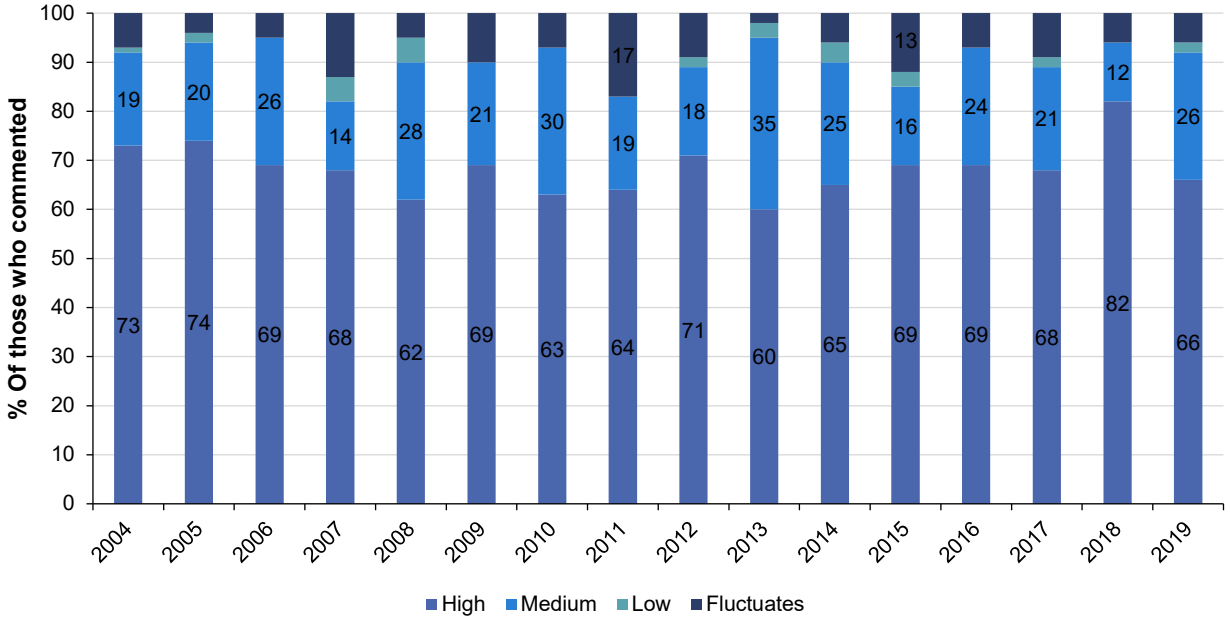
(B) Bush cannabis



Note. Among those who commented. From 2003 onwards hydroponic and bush cannabis data collected separately. *p<0.050; **p<0.010; ***p<0.001 for 2018 versus 2019.

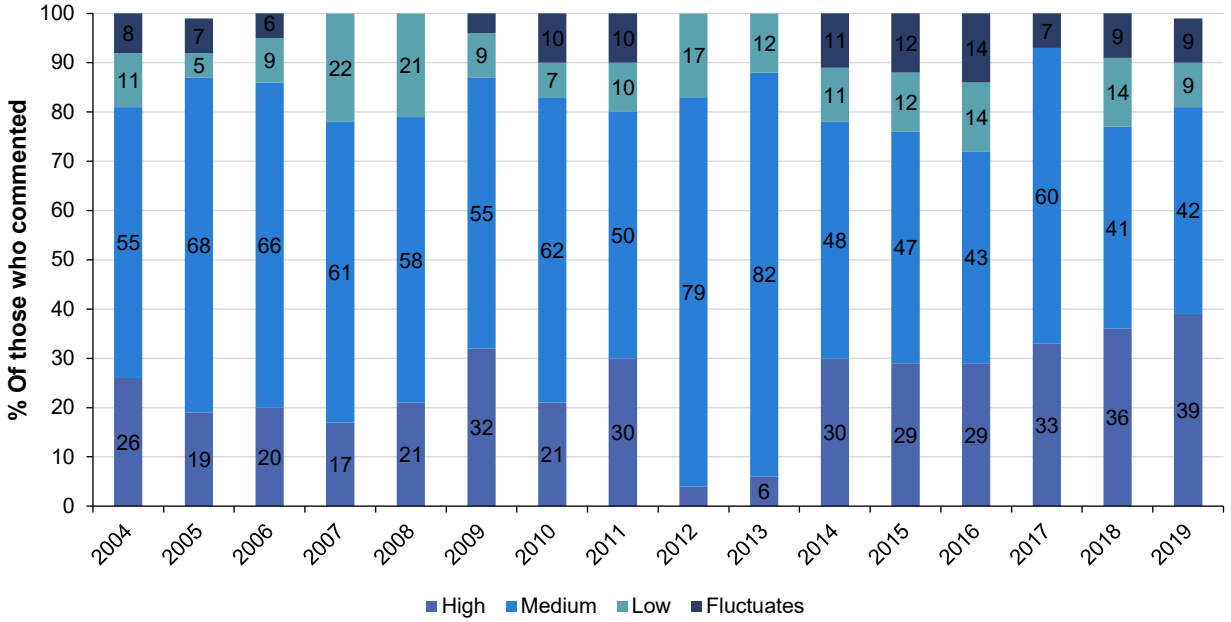
Figure 18: Current perceived potency of hydroponic (a) and bush (b) cannabis, WA, 2004-2019

(A) Hydroponic cannabis



Note. The response 'Don't know' was excluded from analysis. Hydroponic and bush cannabis data collected separately from 2004 onwards. Data labels have been removed from figures with small cell size (i.e. n≤5). *p<0.050; **p<0.010; ***p<0.001 for 2018 versus 2019.

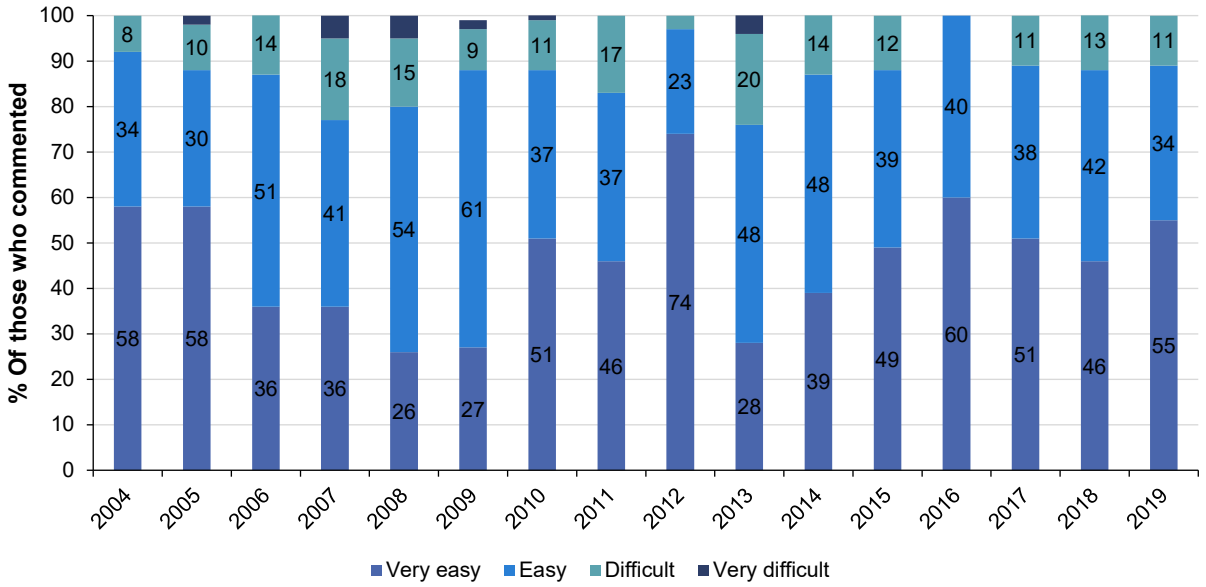
(B) Bush cannabis



Note. The response 'Don't know' was excluded from analysis. Hydroponic and bush cannabis data collected separately from 2004 onwards. Data labels have been removed from figures with small cell size (i.e. n≤5). *p<0.050; **p<0.010; ***p<0.001 for 2018 versus 2019.

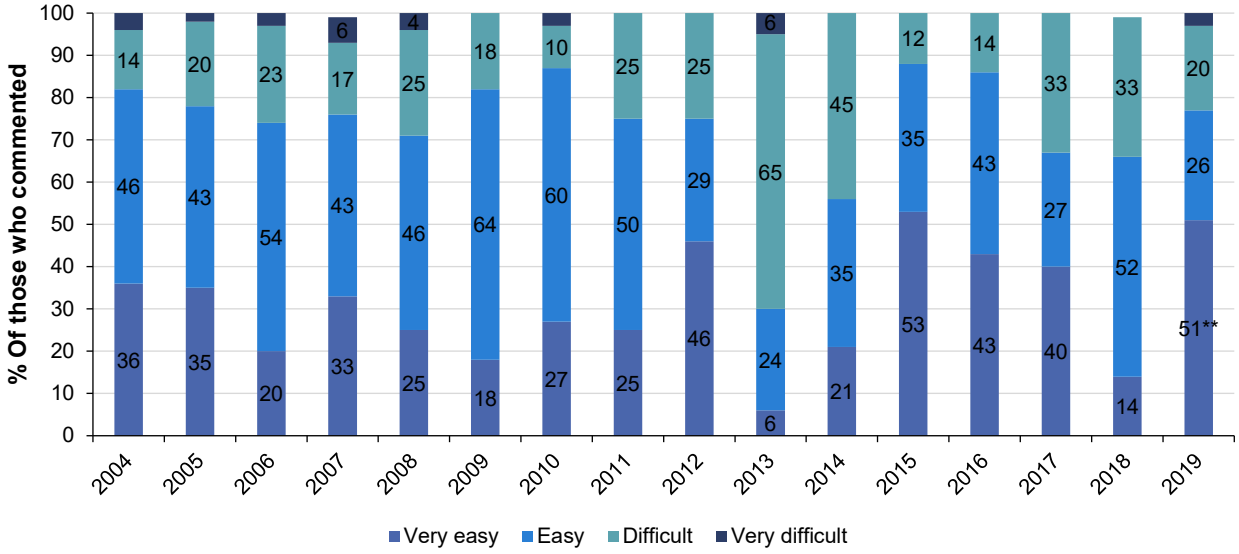
Figure 19: Current perceived availability of hydroponic (a) and bush (b) cannabis, WA, 2004-2019

(A) Hydroponic cannabis



Note. The response 'Don't know' was excluded from analysis. * Hydroponic and bush cannabis data collected separately from 2004 onwards. Data labels have been removed from figures with small cell size (i.e. n≤5). *p<0.050; **p<0.010; ***p<0.001 for 2018 versus 2019.

(B) Bush cannabis



Note. The response 'Don't know' was excluded from analysis. * Hydroponic and bush cannabis data collected separately from 2004 onwards. Data labels have been removed from figures with small cell size (i.e. n≤5). *p<0.050; **p<0.010; ***p<0.001 for 2018 versus 2019.

6

Pharmaceutical opioids

The following section describes rates of recent (past six month) use of pharmaceutical opioids amongst the sample. Terminology throughout refers to:

- **prescribed use**: use of pharmaceutical opioids obtained by a prescription in the person's name;
- **non-prescribed use**: use of pharmaceutical opioids obtained from a prescription in someone else's name; and
- **any use**: use of pharmaceutical opioids obtained through either of the above means.

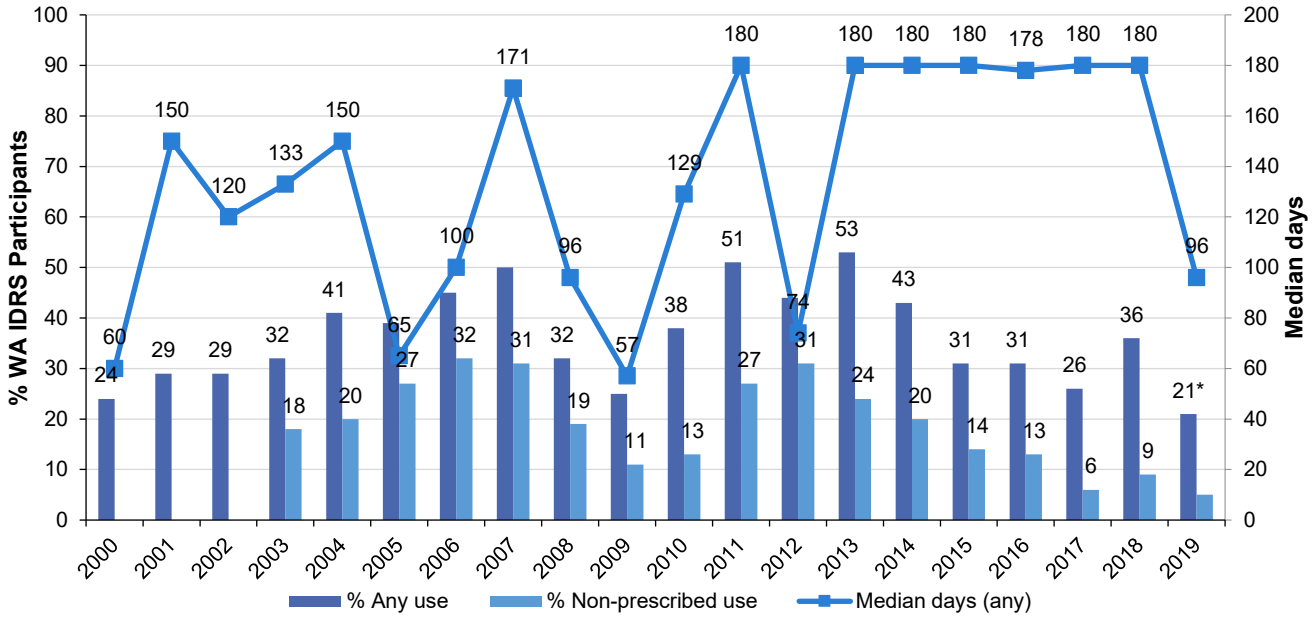
For information on price and perceived availability for non-prescribed pharmaceutical opioids, contact the Drug Trends team.

Methadone

Lifetime and Recent Use (past 6 months): A lifetime history of having ever used any methadone (prescribed and non-prescribed) was reported by 60% (n=58) of the WA sample (58% in 2018; *p*=0.806), while there was a significant decline in the number of people who reported recent use of methadone between 2018 (36%) and 2019 (21%; n=20; *p*=0.021) (Figure 20). Recent prescribed use remained constant between 2019 (17%) and 2018 (28%; *p*=0.066).
Frequency of Use: Median days of use of any methadone in the last six months ranged from one to 180 days in 2019, with a median of 96 days (IQR: 48-180) This is mostly driven by prescribed use (median: 120 days; n=15; IQR: 72-180) (Figure 20).

Routes of Administration: Similar trends were reported between 2018 and 2019. Half of the sample (50%; 42% in 2018; *p*=0.568) of respondents who had recently used methadone (n=10) reported injecting any methadone (prescribed and non-prescribed including physeptone tablets and syrup) on a median frequency of 48 days (i.e. twice weekly; IQR: 10-78), also stable from 2018 (median: 48 days; IQR: 4-83).

Figure 20: Past six month use (prescribed and non-prescribed) and frequency of use of methadone, WA, 2000-2019



Note. Includes methadone syrup and tablets. Non-prescribed use not distinguished 2000-2002. Median days computed among those who reported recent use (maximum 180 days). Median days rounded to the nearest whole number. Data labels have been removed from figures with small cell size (i.e. n≤5), and to improve visibility. *p<0.050; **p<0.010; ***p<0.001 for 2018 versus 2019.

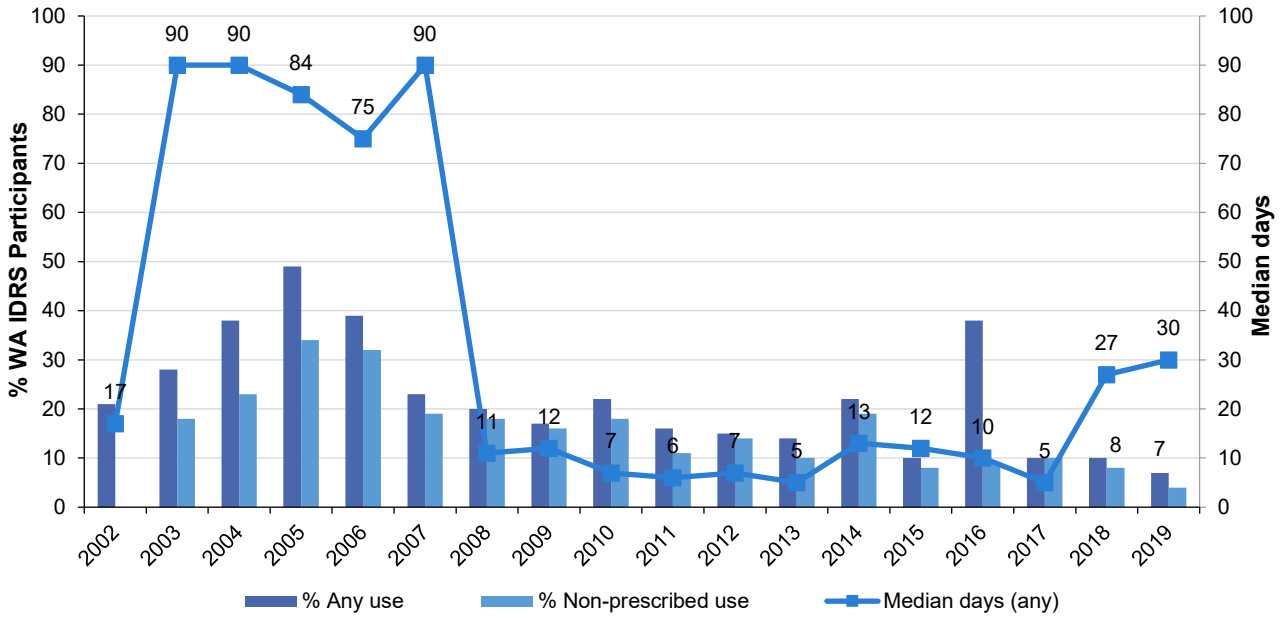
Buprenorphine

Lifetime and Recent Use (past 6 months): A lifetime history of having ever used buprenorphine was reported by 32% (n=30) of the WA sample (41% in 2018; p=0.194), while recent use was reported by 7% of participants in 2019 (10% in 2018; p=0.456) (Figure 21).

Frequency of Use: Frequency of use has fluctuated throughout the years. However, median days of use of any type of buprenorphine in the last six months remained constant between 2019 and 2018. In 2019, frequency of use ranged from two to 90 days, with a median of 30 days (IQR: 7-135; median=27 days in 2018; IQR: 2-90; p=1.000) (Figure 21).

Routes of Administration: In 2019, small numbers reported injecting any buprenorphine (n≤5) in the last 6 months. Please refer to the National IDRS Report for further information or contact the researchers.

Figure 21: Past six month use (prescribed and non-prescribed) of buprenorphine, WA, 2002-2019



Note. Median days computed among those who reported recent use (maximum 180 days). Median days (prescribed and/or non-prescribed use) rounded to the nearest whole number. Data labels have been removed from figures with small cell size (i.e. n≤5), and to improve visibility. Y axis reduced to 100 days to improve visibility of trends *p<0.050; **p<0.010; ***p<0.001 for 2018 versus 2019.

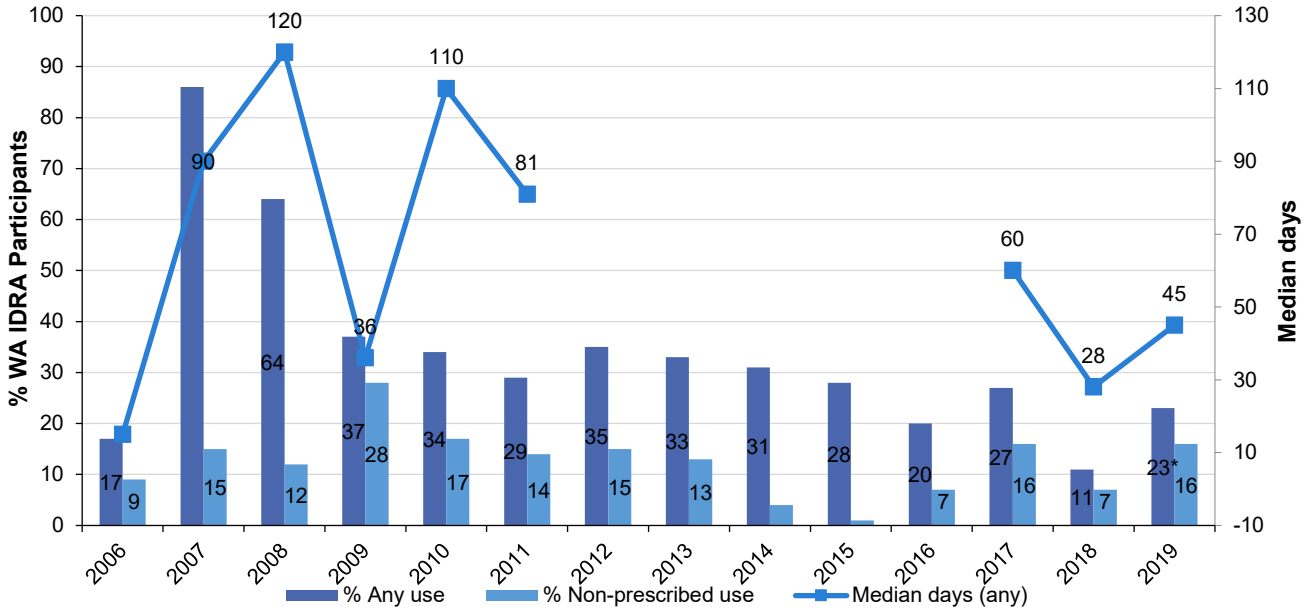
Buprenorphine-Naloxone

Recent Use (past 6 months): There was an increase in the percentage of participants reporting a lifetime history of prescribed and non-prescribed buprenorphine-naloxone (Suboxone®) between 2018 and 2019. In 2018, nearly a third of the sample (31%) reported having ever used buprenorphine-naloxone, while this occurred for more than half of the sample in 2019 (54%; p=0.001). Similarly, there were twice as many participants who reported recent use of buprenorphine-naloxone in 2019 (23%) as in 2018 (11%; p=0.025) (Figure 22). Significantly more participants reported having ever used non-prescribed buprenorphine-naloxone in 2019 (16%) than in 2018 (7%; p=0.049).

Frequency of Use: Frequency of use has fluctuated throughout the years. However, median days of use of prescribed and non-prescribed buprenorphine-naloxone in the last six months remained constant between 2019 and 2018 (Figure 22). In 2019, frequency of use ranged from one to 180 days, with a median of 45 days (IQR: 7-135), which was similar to the values obtained in 2018 (median=28 days; IQR: 1-90; p=0.663). Frequency of use also remained constant in terms of non-prescribed use (median: 12 days; IQR: 3-60 in 2019; median: 10 days; IQR: 1-48 in 2018; p=0.535), as well as prescribed use (median: 180 days; IQR: 81-180 in 2019; median: 30 days; IQR: 21-90 in 2018; p=0.031).

Routes of Administration: Similar trends were reported between 2018 and 2019. Sixty-four per cent of the sample who had recently used any form of buprenorphine-naloxone reported injecting on a median of 53 days (IQR: 5-180), also stable from 2018 (median: 26 days; IQR: 1-121; p=0.500).

Figure 22: Past six month use (prescribed and non-prescribed) of buprenorphine-naloxone, WA, 2006-2019



Note. From 2006-2011 participants were asked about the use of buprenorphine-naloxone tablet; from 2012-2015 participants were asked about the use of buprenorphine-naloxone tablet and film; from 2016-2018 participants were asked about the use of buprenorphine–naloxone film only. Y axis reduced to 130 days to improve visibility of trends. *p<0.050; **p<0.010; ***p<0.001 for 2018 versus 2019. Median days missing for 2012-2015 as unable to compute median days for both forms combined.

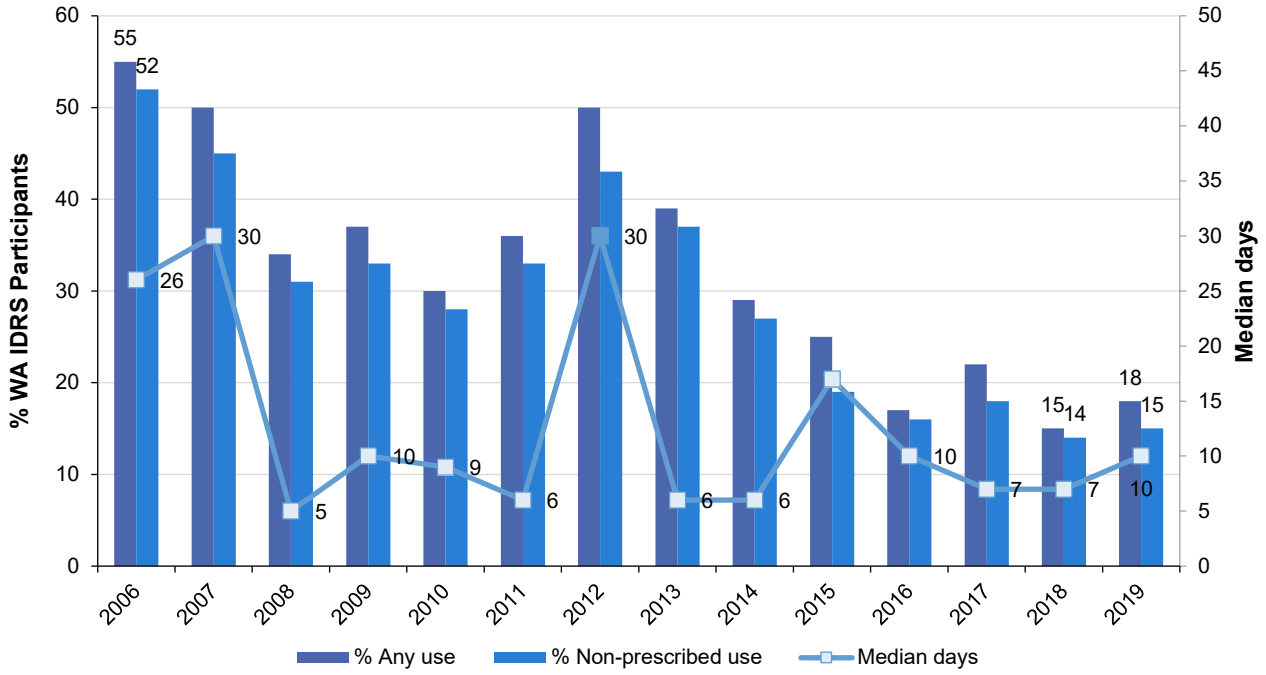
Morphine

Lifetime and Recent Use (past 6 months): A lifetime history of having ever used any morphine (prescribed and non-prescribed) was reported by 67% (n=63) of the WA sample (63% in 2018; p=0.561), while 18% (n=17) of participants reported recent use (15% in 2018; p=0.574) (Figure 23). Recent non-prescribed use remained stable between 2019 (15%) and 2018 (14%; p=0.844).

Frequency of Use: Frequency of use of morphine has varied across the years. However, there was no fluctuation in WA between 2018 and 2019. In 2019, median days of use in the last six months ranged from two to 90 days, with a median of 10 days (IQR: 4-28), which was similar to the values obtained in 2018 (median=7 days; IQR: 3-42; p=0.602) (Figure 23). Frequency of use also remained constant in terms of non-prescribed use (median: 17; IQR: 4-41 in 2019; median: 4; IQR: 1-14 in 2018; p=0.094).

Routes of Administration: More than 9 out of ten participants (94%) reported injecting on a median of six days (IQR: 3-25), also stable from 2018 (median: 7 days; IQR: 3-42; p=0.999).

Figure 23: Past six month use (prescribed and non-prescribed) and frequency of use of morphine, WA, 2006-2019



Note. Median days computed among those who reported recent use (maximum 180 days). Y axis reduced to 60% and 50 days to improve visibility of trend. Median days rounded to the nearest whole number. *p<0.050; **p<0.010; ***p<0.001 for 2018 versus 2019.

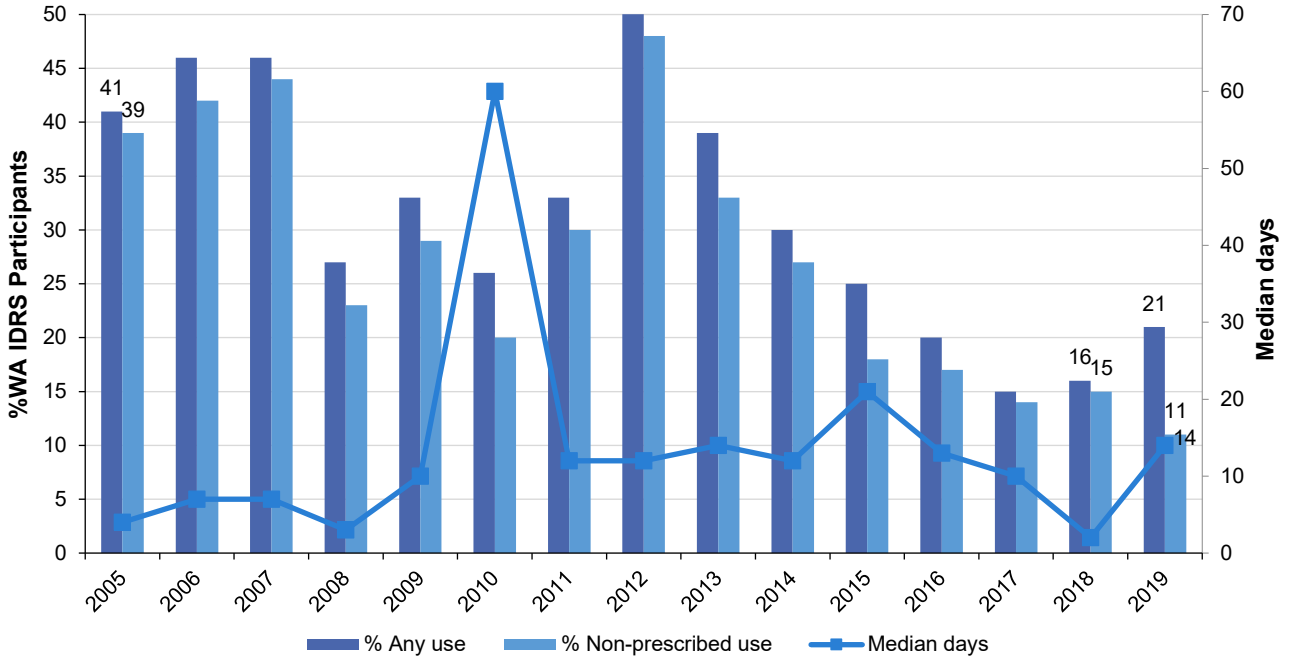
Oxycodone

Lifetime and Recent Use (past 6 months): After an increase in the use of oxycodone between 2005 and 2012, there was a decline in the number of people reporting recent use. However, there was no significant differences between the trends reported between 2018 and 2019 (Figure 24). Seven out of ten participants (70%; n=63) reported having ever used any oxycodone (prescribed and non-prescribed) in 2019 (64% in 2018; p=0.382). Recent use of any oxycodone was similar between 2018 and 2019, with respectively 16% and 21% (n=19) of respondents reporting having used it in the last six months (p=0.375). Similarly, recent use of non-prescribed oxycodone remained constant between 2018 (15%) and 2019 (11%); p=0.102).

Frequency of Use: There was no fluctuation in WA between 2018 and 2019 in terms of any use of oxycodone. Median days of use in the last six months ranged from one to 180 days in 2019, with a median of 14 days (IQR: 3-96) which was similar to the trends in 2018 (median: 2 days; IQR: 2-15; p=0.602) (Figure 24).

Routes of Administration: Of those who had used any form of oxycodone in the last six months, 68% of respondents (n=13) reported injecting on a median of 12 days (IQR: 3-90), also stable from 2018 (median: 5 days; IQR: 2-28; p=0.343).

Figure 24: Past six month use (prescribed and non-prescribed) and frequency of use of oxycodone, WA, 2005-2019



Note. From 2005-2015 participants were asked about any oxycodone; from 2016-2018, oxycodone was broken down into three types: tamper resistant ('OP'), non-tamper proof (generic) and 'other oxycodone'. In 2019, oxycodone was broken down into four types: tamper resistant ('OP'), non-tamper proof (generic), 'other oxycodone' and oxycodone-naloxone. Median days computed among those who reported recent use (maximum 180 days). Median days rounded to the nearest whole number. Y axis reduced to 50% and 70 days to improve visibility of trends. Data labels have been removed from figures in years 2018 and 2019 with small cell size (i.e. n≤5). *p<0.050; **p<0.010; ***p<0.001 for 2018 versus 2019.

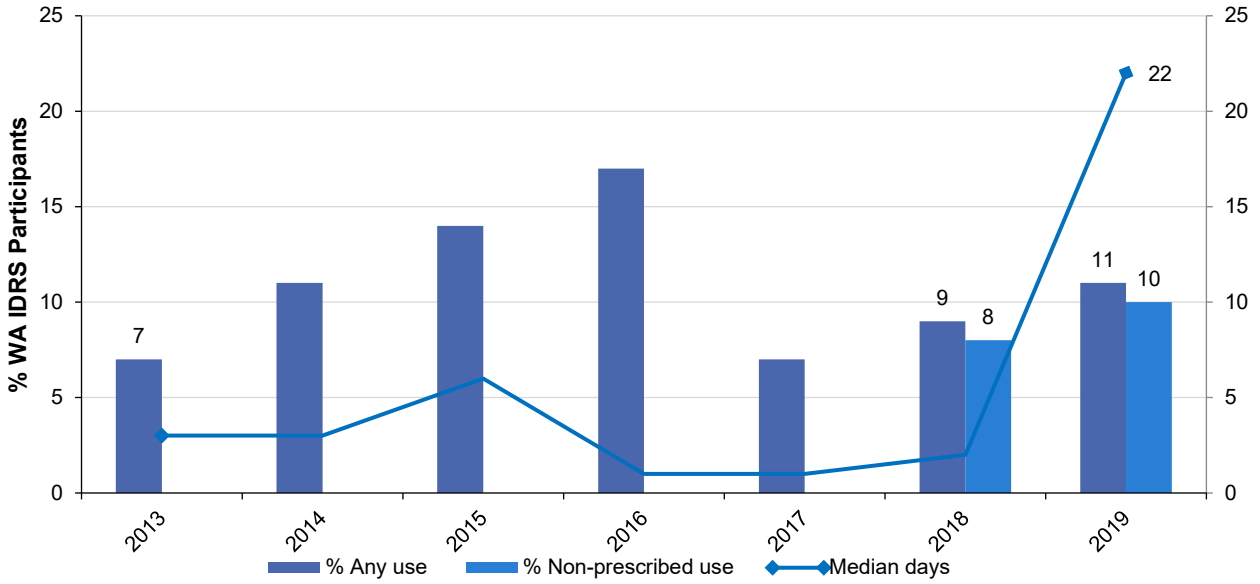
Fentanyl

Lifetime and Recent Use (past 6 months): The number of participants reporting any fentanyl use has been low and steady since monitoring started, until it dropped in 2017. A lifetime history or having ever used any fentanyl (prescribed and non-prescribed) was reported by 33% (n=31) of the WA sample (25% in 2018; p=0.220), while 11% (n=10) of participants reported recent use (9% in 2018; p=0.643) (Figure 25). Similarly, recent non-prescribed use remained steady between 2019 (10%) and 2018 (8%; p=0.627).

Frequency of Use: Frequency of use also remained constant across the years. In 2019, days of use in the last six months ranged from one to 180 days in 2019, with a median of 22 days (IQR: 6-72), which was in line with 2018 values (median=2 days; IQR: 2-18; p=0.095) (Figure 25). Frequency of use also remained constant in terms of non-prescribed use (median: 14 days; IQR: 5-48 in 2019; median: 2; IQR: 1-5 in 2018; p=0.059).

Routes of Administration: Amongst those who had recently used fentanyl, all participants (100%, n=10) reported injecting on a median of two days (IQR: 6-85), also stable from 2018 (median: 2 days; IQR: 2-17; p=0.099).

Figure 25: Past six-month use (prescribed and non-prescribed) and frequency of use of fentanyl, WA, 2013-2019



Note. Data on fentanyl use not collected from 2000-2012, and data on any non-prescribed use not collected 2013-2017. For the first time in 2018, use was captured as prescribed versus non-prescribed. Median days (prescribed and/or non-prescribed use) computed among those who reported recent use (maximum 180 days). Median days rounded to the nearest whole number. Y axis reduced to 25% and 25 days to improve visibility of trends. *p<0.050; **p<0.010; ***p<0.001 for 2018 versus 2019.

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.

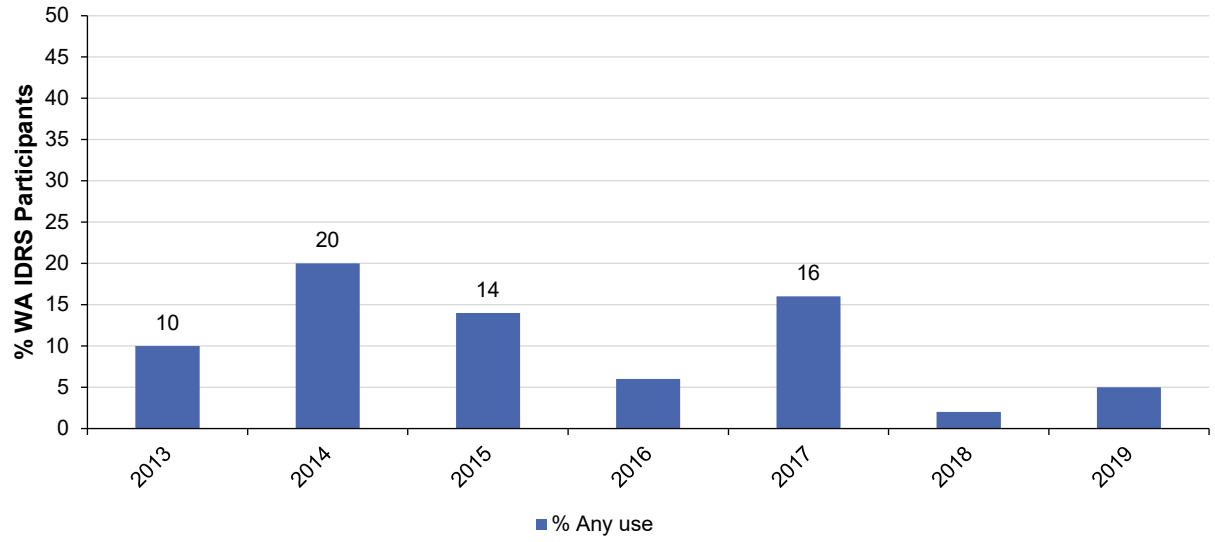
Up until 2017, respondents were only asked about use of OTC codeine for non-pain purposes. Additional items on use of prescription low-dose and prescription high-dose codeine were included in IDRS 2018 and 2019.

Recent use (past 6 months): Recent use of any codeine was reported by 26% of the sample in 2019, while this occurred for 35% of the sample in 2018 (p=0.176). Recent use of non-prescribed codeine was reported by 16% of participants in 2019, while this occurred for 14% of the sample in 2018 (p=0.697) (Figure 26).

Recent Use for Non-Pain Purposes: Low numbers (n≤5) reported use of low dose codeine for non-medical/pain purposes in 2019. It is unclear if this decline was due to the legislative changes detailed above, or to a change in the way this question was asked (i.e. participants could only report use occurring prior to rescheduling in February 2018).

Frequency of Use: Median days of use of any form of prescribed and non-prescribed codeine in the last six months among participants who reported any recent use ranged from one to 180 days in 2019, with a median of six days (IQR: 3-5) (Figure 26). Median days use of non-prescribed codeine was four days (IQR: 2-13).

Figure 26: Past six month use of low-dose codeine (for non-pain purposes), WA, 2013-2019



Note. Y axis reduced to 50% to improve visibility of trends. Differences between 2018 and 2019, and previous years data should be viewed with caution due to differences in the way questions were asked in 2018 (i.e. participants could only report use occurring in the last six months but prior to rescheduling in February 2018). Data labels have been removed from figures with small cell size (i.e. n≤5). **p*<0.050; ***p*<0.010; ****p*<0.001 for 2018 versus 2019.

7

Other drugs

New Psychoactive Substances (NPS)

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.

Lifetime and Recent Use (past 6 months)

A lifetime history of having ever used NPS was reported by 33% (n=31) of participants (25% in 2018; *p*=0.218), while recent use was reported by 11% of the WA sample. Recent used remained stable across the WA sample (18 in 2018; *p*=0.229). Five or fewer participants reported use of new drugs that mimic the effects of cannabis (e.g. K2, Spice, Kronic…), followed by drugs that mimic the effects of ecstasy, and amphetamine/cocaine (Table 2).

Table 2: Past six month use of new psychoactive substances, WA, 2017-2019

% recent use	National N=902	2019 N=95	2018 N=93	2017 N=73
'New' drugs that mimic the effects of opioids	**2**	**0**	0	0
'New' drugs that mimic the effects of ecstasy	**2**	**-**	-	0
'New' drugs that mimic the effects of amphetamine or cocaine	**1**	**-**	-	/
'New' drugs that mimic the effects of cannabis	**6**	**-**	-	12
'New' drugs that mimic the effects of psychedelic drugs	**1**	**-**	9	0
'New' drugs that mimic the effects of benzodiazepines	**1**	**0**	0	/
Any of the above	**11**	**11**	**18**	**12**

Note. - Values suppressed due to small cell size (n≤5 but not 0). / denotes that this item was not asked in these years. # In 2017 participants were asked about use of 'new drugs that mimic the effects of ecstasy or psychedelic drugs'. *p<0.050; **p<0.010; ***p<0.001 for 2018 versus 2019.

Non-Prescribed Pharmaceutical Medicines

Benzodiazepines

Recent Use (past 6 months): The percentage of participants reporting recent non-prescribed benzodiazepines use remained similar between 2018 and 2019. Twenty-nine per cent of participants indicating having used non-prescribed benzodiazepines in the last six months, while this occurred for 24% of the sample in 2018 (p=0.428). In addition, in the total sample, 13% reported recent use of non-prescribed alprazolam, and 24% the use of non-prescribed other benzodiazepines (Figure 27).

Frequency of Use: In 2019, participants reported a median 12 days (IQR: 5-147) and 20 days (IQR: 5-30) of non-prescribed use of alprazolam and other benzodiazepines, respectively.

Routes of Administration: In 2019, 7% of participants who had recently used non-prescribed benzodiazepines reported injecting as a route of administration (n≤5 in 2018; p=0.643).

Pharmaceutical stimulants

Recent Use (past 6 months): The percentage of participants reporting recent use of non-prescribed pharmaceutical stimulants (e.g. dexamphetamine, methylphenidate, modafinil) remained similar between 2018 and 2019. Twelve per cent of participants indicating having used non-prescribed pharmaceutical stimulants in the last six months, as compared to 14% of the sample in 2018 (p=0.680) (Figure 27).

Frequency of Use: In 2019, participants reported a median six days (IQR: 2-7) of non-prescribed pharmaceutical stimulants, consistent with 2018 reports (7 days; IQR: 4-14; p=0.428).

Routes of Administration: Thirty-six per cent of those who had recently used non-prescribed pharmaceutical stimulants reported that they had injected it on a median of six days (IQR: 3-9; 29% in 2018; p =0.715)

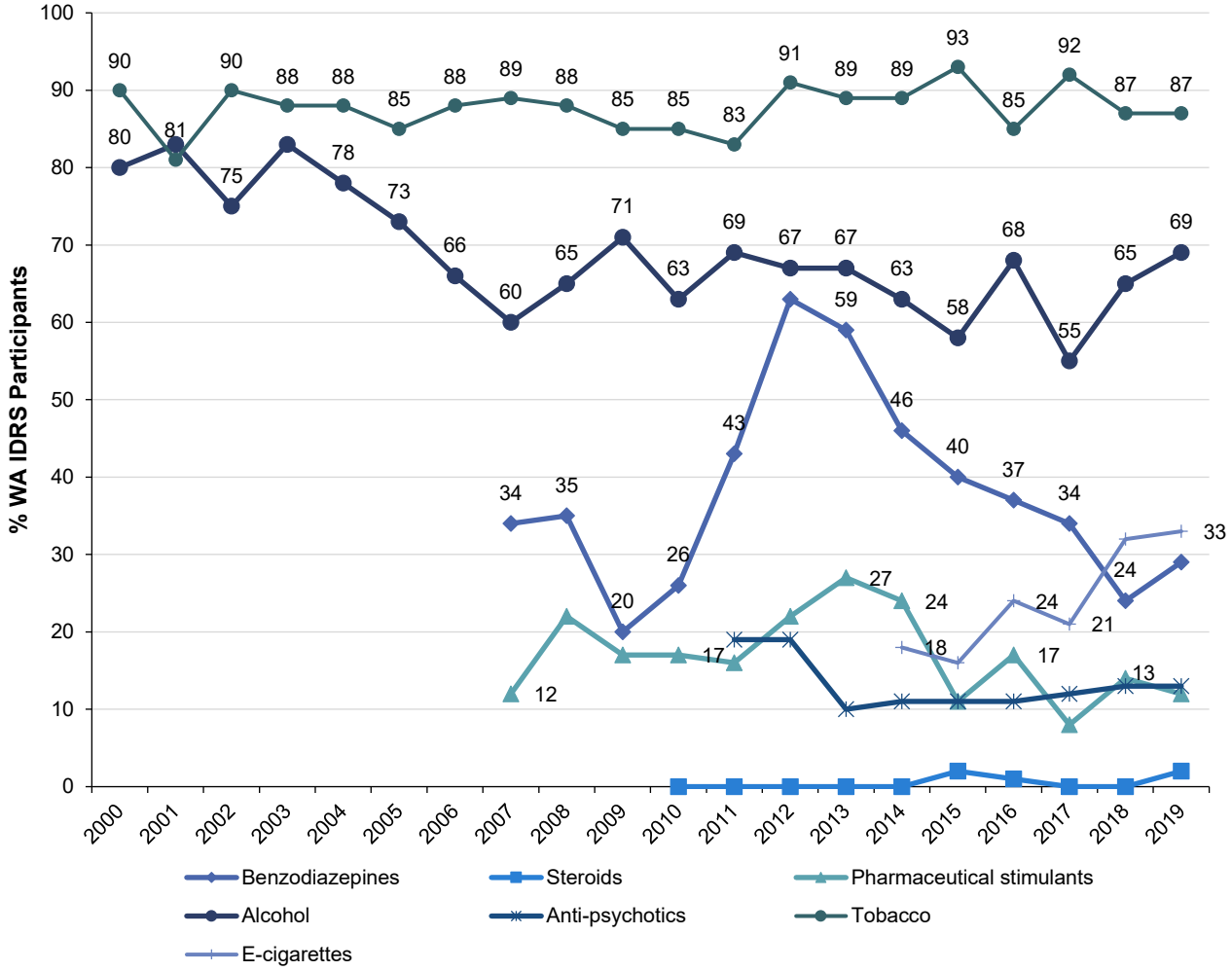
Anti-psychotics

Recent Use (past 6 months): The percentage of participants reporting recent non-prescribed anti-psychotic use remained stable between 2018 and 2019 (13% and 13%, respectively) (Figure 27).

Frequency of Use: In 2019, participants reported a median 10 days (IQR: 1-51) of non-prescribed use of anti-psychotics, consistent with 2018 reports (3 days; IQR: 2-5; p=0.115).

Routes of Administration: Similar to 2018, none of the participants who had recently used non-prescribed anti-psychotics reported injecting as a route of administration.

Figure 27: Past six month use of other drugs, WA, 2000-2019



Note. Non-prescribed use is reported for prescription medicines (i.e., benzodiazepines, anti-psychotics, and pharmaceutical stimulants). Participants were first asked about steroids in 2010, anti-psychotics in 2011 (asked as 'Seroquel' until 2019), and e-cigarettes in 2014. Pharmaceutical stimulants were separated into prescribed and non-prescribed from 2006 onwards, and benzodiazepines were separated into prescribed and non-prescribed in 2007; Data labels have been removed from figures in years 2018 and 2019 with small cell size (i.e. n≤5), and to improve visibility. *p<0.050; **p<0.010; ***p<0.001 for 2018 versus 2019.

Licit and Other Drugs

Steroids

Recent Use (past 6 months): The percentage of participants reporting recent non-prescribed steroid use remained low since monitoring began in 2010. Small numbers reported recent use of steroids in 2019. (Figure 27).

Alcohol

Recent Use (past 6 months): Sixty-nine per cent of the sample reported recent use of alcohol in 2019, as compared to 65% of participants in 2018 (p=0.553) (Figure 27).

Frequency of Use: In 2019, median frequency of use of alcohol was 24 days (IQR: 5-90), consistent with 2018 reports (24 days; IQR: 6-90; *p*=0.475). Daily use of alcohol among recent consumers was reported by 11% of respondents, as compared to 9% of participants in 2018 (*p*=0.705).

Tobacco

Recent Use (past 6 months): Tobacco use has remained fairly high and stable across the years, with 87% of respondents reporting recent use in both 2018 and 2019 (Figure 27).

Frequency of Use: In 2019, median frequency of use of tobacco was 180 days (IQR: 180-180; median: 180 days in 2018; IQR: 180-180; *p*=0.857), with 83% of recent consumers reporting daily use (85% in 2018; *p*=0.724)

E-cigarettes

Recent Use (past 6 months): E-cigarette use has been increasing since monitoring began in 2014, with 18% in 2014 to 33% in 2019 (32% in 2018; *p*=0.882) (Figure 27).

Frequency of Use: In 2019, median frequency of use of e-cigarette was four days (IQR: 2-29; 6 days in 2018; IQR: 2-29; *p*=0.802)

8

Drug-Related Harms and Other Risk Factors

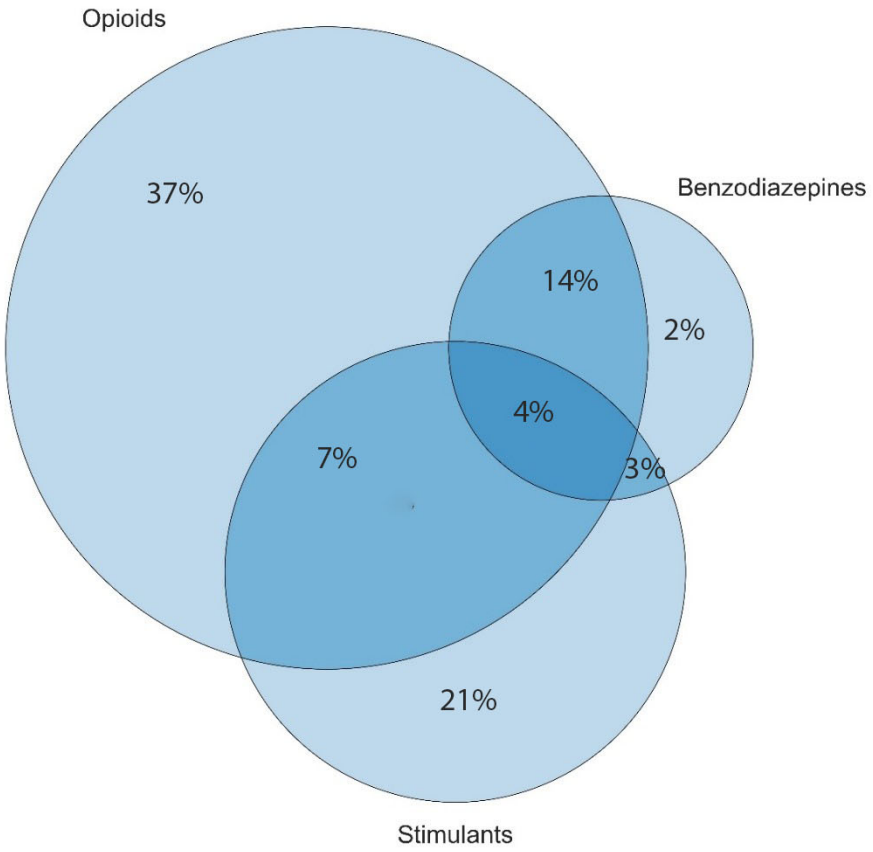
Respondents were asked about how they understand various drug-related harms and other risk factors including polysubstance use, overdose, injecting risk, drug treatment, mental health, sexual health behaviours and crime.

Polysubstance Use

In 2019, the majority of the sample (97%) reported using one or more drugs on the day preceding interview (including prescription medications, tobacco and alcohol), as compared to 96% of participants in 2018 (p=0.705). The five most commonly used substances the day prior the interview were opioids (65%), tobacco (61%), stimulants (37%), cannabis (30%) and benzodiazepines (24%). Alcohol consumption was reported by 19% of the sample the day prior the interview.

Eighty-eight per cent of the participants reported using any opioids, benzodiazepines, and/or stimulants on the day preceding interview. Twenty-eight per cent of the total sample reported using a combination of opioids, stimulants and/or benzodiazepines on the day preceding interview (25% in 2018), with the most common combinations being opioids and benzodiazepines (14%), as well as opioids and stimulants (7%) (Figure 28).

Figure 28: Use of opioids, stimulants and benzodiazepines on the day preceding interview, WA, 2019



Note. This figure captures those who had used stimulants, opioids and/or benzodiazepines on the day preceding interview (88%; n=96).

AUDIT-C

Participants of the IDRS were asked the Alcohol Use Disorders Identification Test-Consumption (AUDIT-C) as a valid measure of identifying hazardous drinking.

In 2019, the sample mean score on the AUDIT-C was 4 (SD=3, range: 1-12). Forty-two per cent of those who responded had a score of five or more on the AUDIT-C in 2019, while this occurred for 58% of participants in 2018 (p=0.060) (Table 3).

Table 3: AUDIT-C score, WA, 2016-2019

	2019 (n=96)	2018 (n=97)	2017 (n=102)	2016 (n=100)
Mean AUDIT-C score~ (SD; range)	**4 (3; 1-12)**	9 (8; 1-32)	4 (3; 0-12)	5 (3; 1-12)
Score of 5 or more~ (%) Males Females	**42 (48 Males/ 33 Females)**	58 (64 Males/ 46 Females)	46 (41 Males/55 Females)	51 (54 Males/44 Females)

Note. Computed of those who had consumed alcohol in the last 12 months. ~ Possible score range 0-12. *p<0.050; **p<0.010; ***p<0.001 for 2018 versus 2019.

Overdose

Non-fatal Overdose

There has been some variation in the way questions about overdose have been asked over the years.

In 2019, participants were asked about their past 12-month experience of overdose where symptoms aligned with examples provided and effects were outside their normal experience or they felt professional assistance may have been helpful. We specifically asked about:

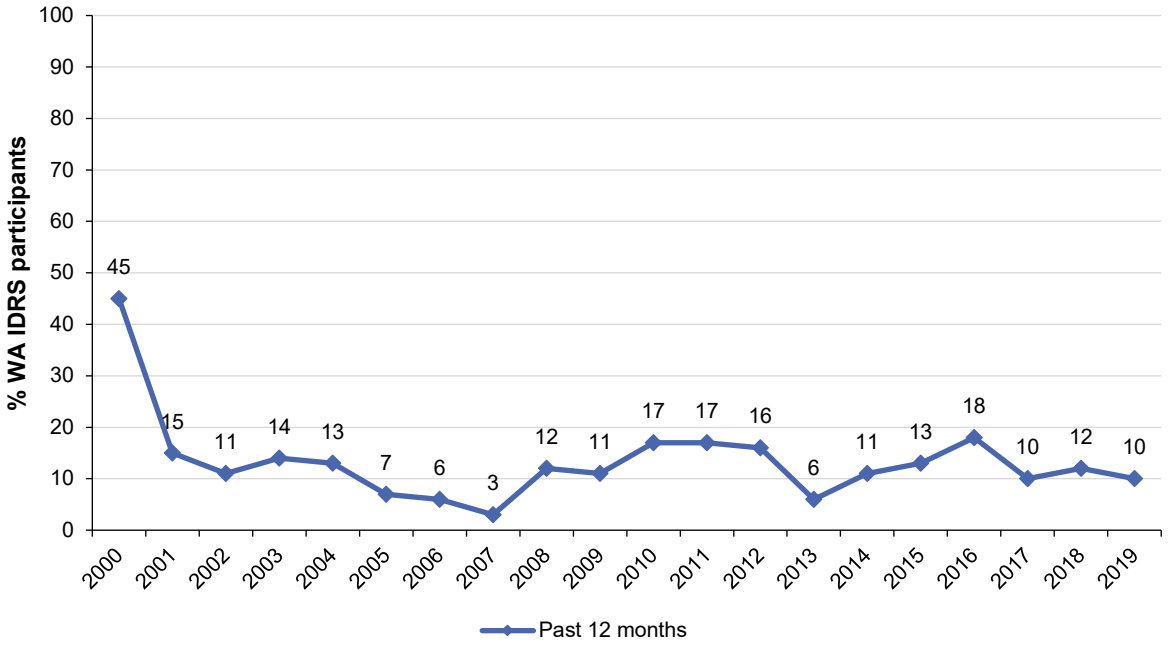
- **opioid overdose** (e.g. reduced level of consciousness, respiratory depression, turning blue, collapsing and being unable to be roused). Participants who reported this experience were asked to identify all opioids involved in such events in the past 12 months;
- **stimulant overdose** (e.g. nausea and vomiting, chest pains, tremors, increased body temperature or heart rate, seizure, extreme paranoia, hallucinations, anxiety or panic); and
- **'other drug' overdose** including alcohol, cannabis, amyl nitrite/alkyl nitrite, benzodiazepines, NPS, pharmaceutical stimulants or any other drug.

It is important to note that events reported across the drug types may not be unique given high rates of polysubstance use amongst the sample. Each year we compute the total per cent of participants who have experienced any past 12-month overdose event by looking for any endorsement across the drug types queried (see below) but note that estimates may vary over time because of changed nuance in asking by drug type.

Opioid Non-Fatal Overdoses: Twelve per cent of participants (n=11) reported having experienced a non-fatal accidental opioid overdose in the last 12 months, in comparison to 7% in 2018 (p=0.234). Participants reported having overdosed accidentally on an opioid on a median of two occasions (IQR: 1-4) in the last year. More specifically, the majority of participants who had an overdose in the past year reported having overdosed on an opioid on one (46%) or two occasions (27%).

Heroin Non-Fatal Overdoses: Among the participants who reported having had an opioid overdose in the last 12 months, the most commonly cited substance involved in the last 12 months non-fatal overdoses was heroin (90%). There were some fluctuations in the number of non-fatal heroin overdoses in the last 12 months throughout the years, with a large decrease between 2000 and 2005. However, the number of recent non-fatal heroin overdoses remained stable between 2018 and 2019 (12% and 10% respectively; p=0.673) (Figure 29).

Figure 29: Past 12 month non-fatal heroin overdose, WA, 2000-2019



Note. Estimates from 2000-2005 refer to heroin and morphine non-fatal overdose only. *p<0.050; **p<0.010; ***p<0.001 for 2018 versus 2019.

Of those who had overdosed on heroin in the last year (n=9), 63% reported that an ambulance had attended, 38% visited an hospital emergency department, and 38% reported received CPR from a friend, partner, or peer, and the same percentage of participants (38%) reported receiving naloxone (Narcan®) on the occasion of their last overdose. None of the participants indicated that they received GP treatment, oxygen, or got CPR from a health professional or from another person (excluding friends, partners or peers).

Other Non-Fatal Drug Overdoses: In terms of non-fatal overdoses due to other drugs, 16% reported having had any type of non-fatal drug overdose (15% in 2018; p=0.857) (Table 4).

Table 4: Past year non-fatal overdose by drug type, WA, 2018-2019

	National	WA	
	2019	**2019**	2018
% Heroin overdose	N=890 12	**N=94** **10**	N=81 12
% Methadone overdose	N=890 1	**N=94** **-**	N=96 0
% Morphine overdose	N=890 1	**N=94** **0**	N=95 -
% Oxycodone	N=890 -	**N=94** **0**	N=93 0
% Any drug overdose	N=890 21	**N=94** **16**	N=78 15

Note. Participants reported on whether they had overdosed following use of specific substances. Other substances may have been involved on the occasion(s). - Values suppressed due to small cell size (n≤5 but not 0).

Naloxone Program and Distribution

Naloxone is a short-acting opioid antagonist that has been used for over 40 years to reverse the effects of opioids. In 2012, a take-home naloxone program commenced in the ACT (followed by NSW, VIC, and WA) through which naloxone was made available to peers and family members of people who inject drugs for the reversal of opioid overdose. In early 2016, the Australian Therapeutic Goods Administration placed 'naloxone when used for the treatment of opioid overdose' on a dual listing of Schedule 3 and Schedule 4, meaning naloxone can be purchased OTC at pharmacies without a prescription, and at a reduced cost via prescription.

Awareness of Naloxone: The percentage of participants who have heard of naloxone between 2013 and 2019 remained steady, with approximately nine in ten participants (89%) who reported awareness of naloxone in 2019 (83% in 2018; p=0.228) (Figure 30).

Awareness of Training Programs: Similarly, there has been no significant changes in the percentage of participants who have heard of naloxone training programs between 2018 and 2019, with nearly six in ten participants (62%) reporting awareness of it (69% in 2018; p=0.386) (Figure 30).

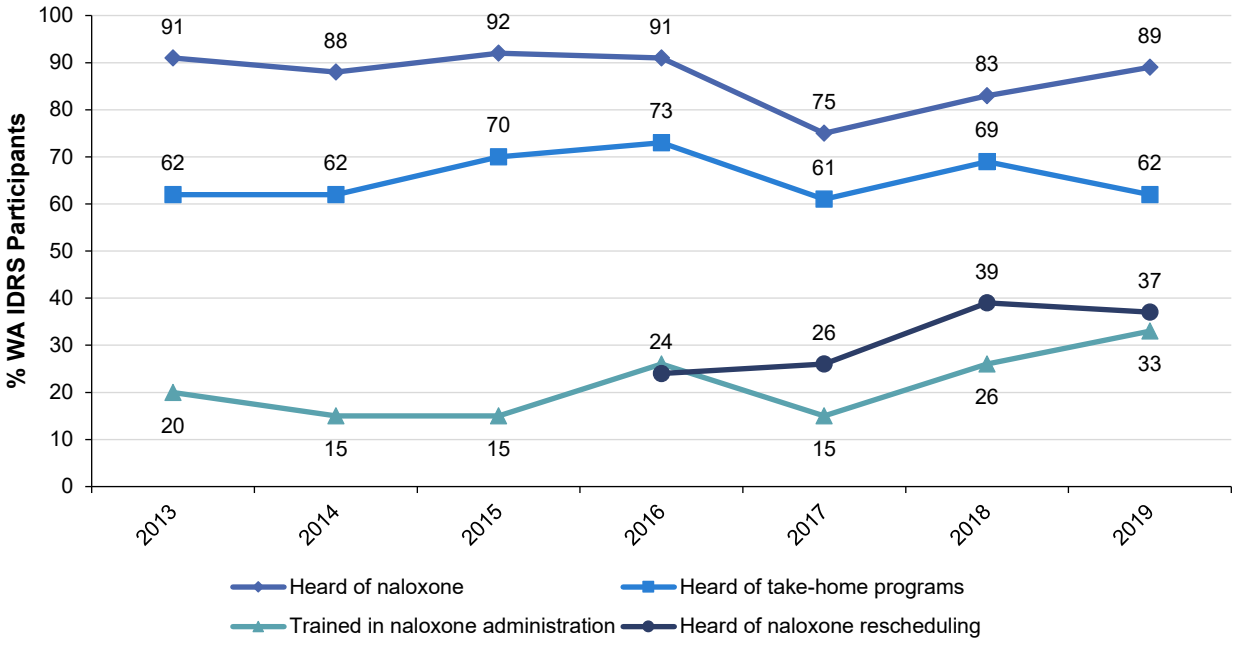
Participation in Training Programs: Since the beginning of the monitoring period, there has been a slight increase in the number of people who were trained in naloxone administration. However, there was no significant differences between the number of participants trained between 2018 and 2019 (26% and 33% respectively; p=0.294) (Figure 30).

Awareness of Naloxone Scheduling and Products: Slightly more than one-third of participants (37%) had heard of naloxone rescheduling in 2019. Similar trends were obtained in 2018 (39%; p=0.778) (Figure 30).

Use of Naloxone to Reverse Overdose: In 2019, small numbers (n≤5) of the WA sample reported that they had been resuscitated with naloxone by somebody who went through the take-home naloxone program, and a small percentage of participants indicated that they had been resuscitated with naloxone which had been obtained over the counter from a pharmacist without a prescription. Among the participants who completed the training in WA (n=30), 13% were resuscitated with an intra-muscular naloxone that they received during the training.

Of those who had completed the take-home naloxone program (n=30), 63% reported that they had used naloxone to resuscitate someone following the training. The majority of these participants (63%; n=19) indicated that they had resuscitated someone with a naloxone that they obtained during the take-home naloxone training.

Figure 30: Take-home naloxone program and distribution, WA, 2013-2019



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

Injecting Risk Behaviours and Harms

Injecting risk behaviours

In 2019, 13% of the WA IDRS borrowed a needle from someone else in the past month (stable from 16% in 2018; p=0.559) (Table 5) and 23% reported distributive needle sharing in the past month (17 in 2018; p=0.559) (Figure 31). The majority of the time, participants who reported receptive needle sharing, had shared a needle with one person in the last month (83%). This person who was almost invariably described as a 'regular sex partner' (58%) In terms of distributive needle sharing, the majority of participants lent their needles to someone else twice (33%), one time (29%), or between three and five times (24%).

Nearly half of the sample (47%) reported that they had reused their own needles in the past month in 2019 (44% in 2018; p=0.679) (Figure 31) and this had occurred the majority of the time between 3 to 5 times (12%) or more than ten times (12%). Approximately a third of the sample (28%) indicated that they had reused their own injecting equipment (excluding needles and syringes) in the past month in the 2019 interview (Table 5). More specifically the most common items commonly reused included spoons or mixing containers (74%), water (47%), tourniquets (41%), and swabs (35%). The most common equipment reused after someone else were spoons or mixing containers (88%), as well as tourniquets (50%).

One third (33%; 29% in 2018; p=0.551) reported that they had injected someone else after injecting themselves (with either a new or used needle), and a quarter (25%; 12% in 2018; p=0.021) were injected by someone else who had previously injected in the last month (with either a new or used needle) (Table 5).

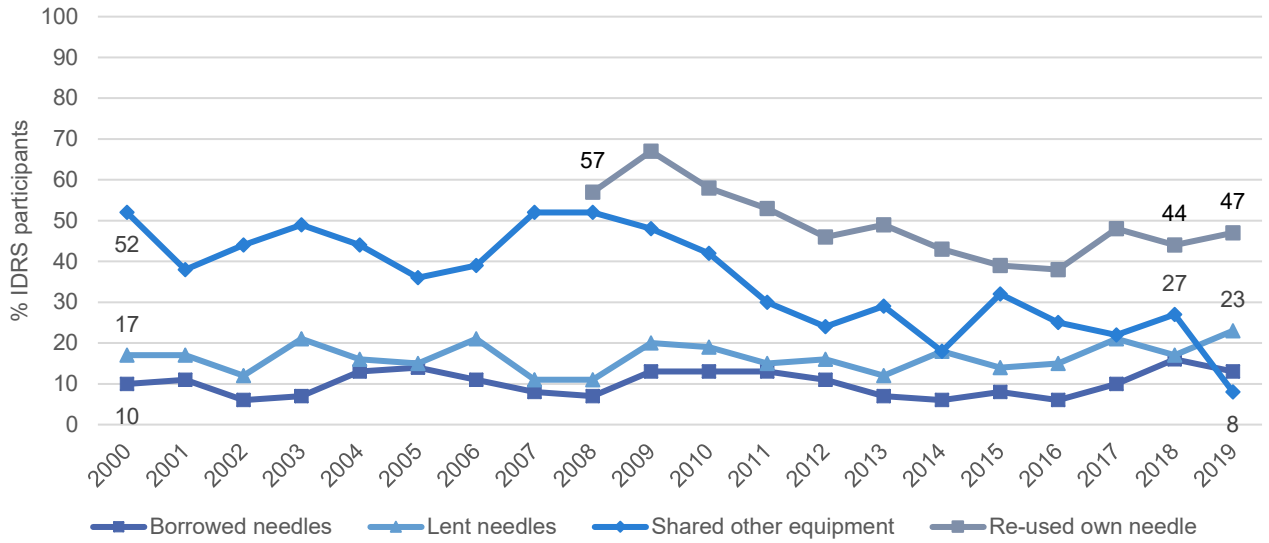
The majority of participants in the sample reported that they had last injected in a private home (76%), followed by a car (10%), a street/park or beach (8%) (Table 5).

Table 5: Sharing and re-using needles and injecting equipment in the past month, nationally and WA, 2014-2019

	National		WA				
	2019	**2019**	2018	2017	2016	2015	2014
	N=893	**N= 95**	N=100	N=73	N=69	N=74	N=98
% Borrowed a needle	8	**13**	16	10	6	8	6
% Lent a needle	11	**23**	17	21	15	14	18
% Shared any injecting equipment ^	5	**8****	26	22	25	32	18
% Reused own needle	44	**47**	44	48	38	39	43
% Reused own injecting equipment ^	28	**28**	26	49	48	45	41
% Injected partner/friend after injecting self (with either a new or used needle)	35	**33**	29	27	31	NA	NA
% Somebody else injected them after injecting themselves (with either a new or used needle)	21	**25***	12	14	17	NA	NA
%Location of last injection							
Private home	77	**76**	76	74	83	81	83
Car	4	**10**	11	10	7	14	10
Street/car park/beach	7	**8**	-	-	-	-	-
Public toilet	7	**-**	10	10	-	-	-
MSIC	4	**0**	0	0	0	0	0
Other	1	**0**	-	-	-	-	0

Note. ^ Includes spoons, water, tourniquets and filters; excludes needles/syringes. # amongst those who reported sharing any injecting equipment. ˜ New or used needle. Borrowed (receptive): used a needle after someone else. Lent (distributive): somebody else used a needle after them. - Values suppressed due to small cell size (n≤5 but not 0). / Participants first asked about injecting other and being injected by others in 2016. *p<0.050; **p<0.010; ***p<0.001 for 2018 versus 2019.

Figure 31: Borrowing and lending of needles and sharing of injecting equipment in the past month, WA, 2000-2019

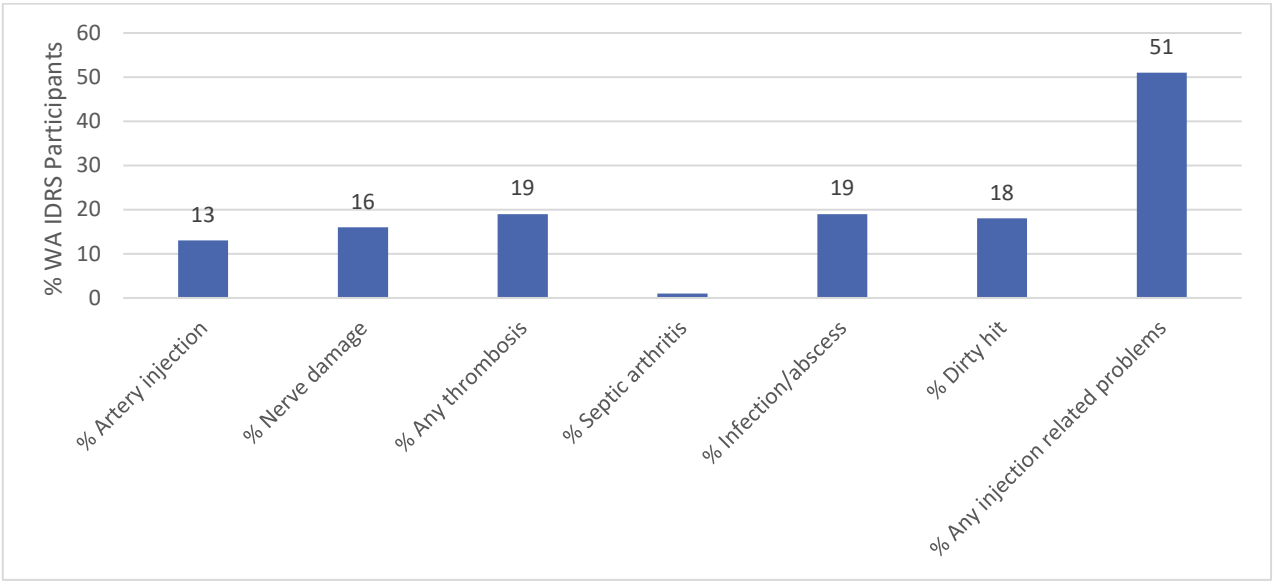


Note. Data collection for 'reused own needle' started in 2008. Borrowed (receptive sharing): used a needle after someone else. Data labels have been removed from figures in years 2018 and 2019 to improve visibility Lent (distributive sharing): somebody else used a needle after them. *p<0.050; **p<0.010; ***p<0.001 for 2018 versus 2019.

Self-reported injection-related health problems

In 2019, half of the WA sample (51%) reported having had an injection-related health issue in the month preceding the interview. With regards to injection-related problems experienced in the month before the interview, the most common were infections/abscesses (19%), thromboses (19%), dirty hits (18%), followed by nerve damages (16%), as well as artery injections (13%) (Figure 32). Only few participants reported having blood clots in the deep veins, endocarditis, sepsis and septic arthritis.

Figure 32 Injection-related issues in the past month, WA, 2019



Note. Values suppressed due to small cell size (n≤5 but not 0). Y axis reduced to 60% to improve visibility of trends.

Drug Treatment

Twenty-seven per cent of participants reported that they were currently in treatment for their substance use in 2019 (34% in 2018; *p*=0.289*)*, with the majority of them undertaking a methadone/Biodone® syrup treatment (39%), followed by drug counselling (35%) (Table 6). Eighteen per cent of participants (28% of those who said they used opioids yesterday) were currently on an opioid substitution treatment (28% in 2018; *p*=0.098). Heroin (56%) and methamphetamine (33%) were the main drugs for which participants intended to seek treatment. Among the participants who had used methamphetamine in the past year (n=88), 8% reported receiving treatment for their methamphetamine use from a drug treatment centre in the same period. The majority of participants reported that they were overall 'very satisfied' or 'satisfied' with their current treatment (72%). One third of participants (33) indicated that they had tried to access drug treatment in the last six months, but were unable to.

Table 6: Current drug treatment, nationally and WA, 2014-2019

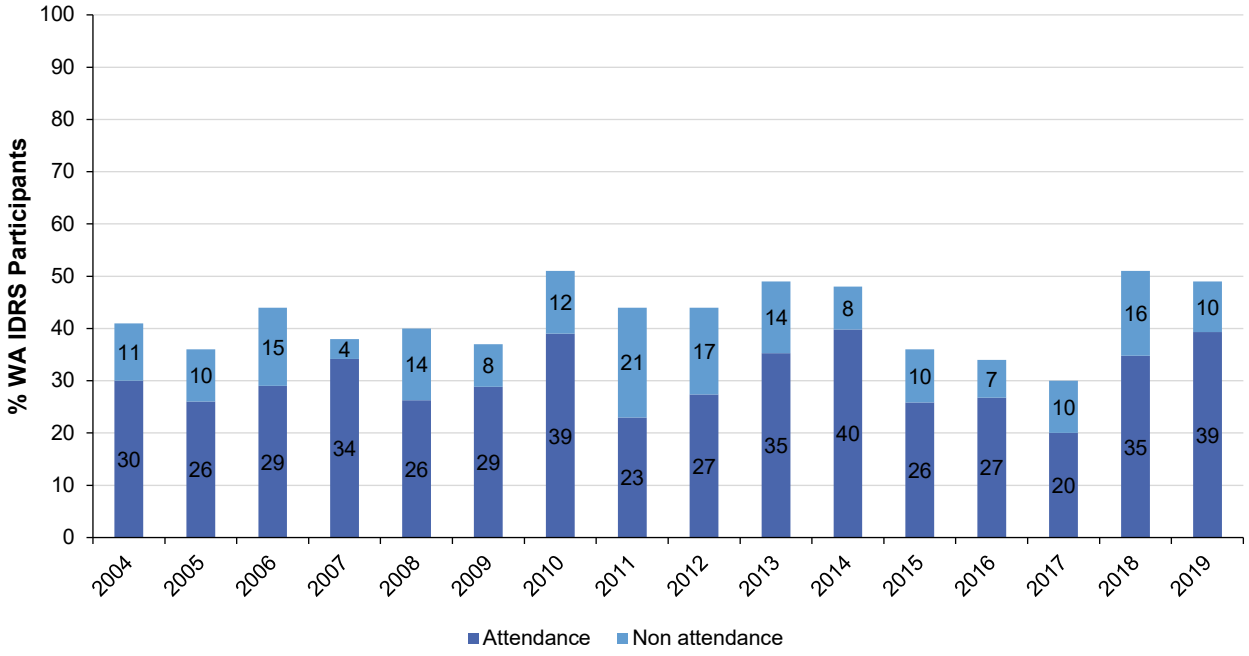
	National		WA				
	N=901	**N= 96**	N=100	N=73	N=71	N=89	N=98
	2019	**2019**	2018	2017	2016	2015	2014
% Current drug treatment	41	**27**	34	48	42	36	50
Methadone/Biodone® syrup	25	**10****	25	18	18	20	30
Buprenorphine	-	**0**	0	0	-	-	-
Buprenorphine-naloxone	9	**7**	-	9	7	7	13
Drug counselling	9	**9**	-	-	-	-	-
Other	-	**-**	-	-	-	-	-
% Recently tried to access treatment but unable	33	**33***	15	12	11	12	9

Note. Numbers suppressed when n≤5 (but not 0). **p*<0.050; ***p*<0.010; ****p*<0.001 for 2018 versus 2019.

Mental Health

In 2019, 49% of the sample who responded (n=44) self-reported that they had experienced a mental health problem in the preceding six months, stable from 2018 (51%; *p*=0.789) (Figure 33). Amongst this group, the most commonly reported problems were depression (66%), followed by anxiety (59%), manic depression/bipolar (14%), ADHD (14%), personality disorder (11%) and other mental health issues (11%). Approximately two thirds of those who reported to have a mental health problem (67%) reported that they had taken any non-prescribed medication, drugs or alcohol in the last six months, in order to cope with their mental health problems. Seventy-seven per cent of those who reported having seen a health professional about a mental health problem had been prescribed medication for their mental health problem in the last six months (57% in 2018; *p*=0.061).

Figure 33: Self-reported mental health problems and treatment seeking in the past six months, WA, 2004-2019



Note. Stacked bar graph of % who self-reported a mental health problem, disaggregated by the percentage who reported attending a health professional versus the percentage who have not. Data labels have been removed from figures with small cell size (i.e. n≤5). **p*<0.050; ***p*<0.010; ****p*<0.001 for 2018 versus 2019.

Sexual Health Behaviours

In 2019, 58% of the sample reported having engaged in penetrative sex with one or more people in the six months preceding interview (Table 7). 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 reported penetrative sex with one or more people (n=47), 19% had penetrative sex without a barrier and did not know the HIV/STI status of their partner. Of those who reported having penetrative sex (n=48), 15% reported that alcohol and/or other drugs impaired their ability to negotiate their wishes during sexual intercourse.

Over one third (39%) of the WA sample reported having had a sexual health check in the last 12 months, and 44% more than a year ago. and a small number (n≤5) had been diagnosed with a sexually transmitted infection in the last 12 months, and 13% more than one year ago.

Table 7: Sexual health behaviours, nationally and Western Australia, 2019

	National	Western Australia
	N=865	N=98
	2019	2019
% Any penetrative sex in the last 6 months (n)	62 (540)	58 (49)
Of those who responded:	N=521	N=47
% Had penetrative sex without a barrier and did not know HIV/STI status of partner	19	19
Of those who responded:	N=520	N=48
% Drugs and/or alcohol impaired their ability to negotiate their wishes during sexual intercourse	20	15
Of those who responded (past 12 months):	N=855	N=84
% Had a sexual health check	46	39
% Diagnosed with a sexually transmitted infection	3	-

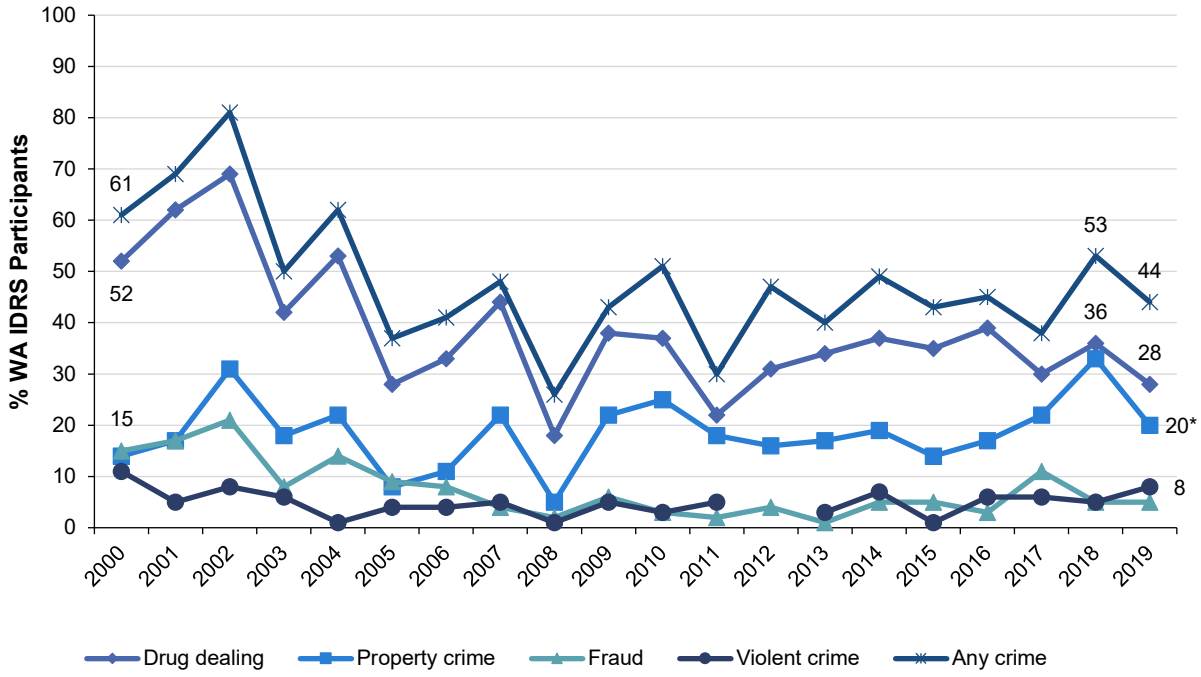
Note. Numbers suppressed when n≤5 (but not 0).

Crime

Approximately one third of participants (29%) reported being arrested in the 12 months preceding interview, consistent with 2018 (26%; *p*=0.641). Lifetime prison history was reported by 46% of respondents in 2019. Similar trends were observed in 2018 (41%; *p*=0.492).

There was a decrease in the number of respondents who reported past month criminal activity throughout the years, until 2011, when it started to stabilise. In 2019, dealing (28%; 36% in 2018; *p*=0.235) and property crimes (20%; 33% in 2018; *p*=0.042) were the most frequently self-reported crimes in the month preceding interview (Figure 34). In 2019, 28% reported being a victim of a crime in the month preceding interview (e.g. assault, sexual or domestic violence…) while this occurred for 15% of the sample in 2018 (*p*=0.030).

Figure 34: Self-reported criminal activity in the past month, WA, 2000-2019



Note. 'Any crime' comprises the percentage who report any property crime, drug dealing, fraud and/or violent crime in the past month. Data labels have been removed from figures with small cell size (i.e. n≤5), and to improve visibility. **p*<0.050; ***p*<0.010; ****p*<0.001 for 2018 versus 2019.