

Western Australia Drug Trends 2018

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





**KEY FINDINGS FROM THE
WESTERN AUSTRALIA
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](#).

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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:

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- Dr Caroline Salom and Professor Rosa Alati, School of Public Health, The University of Queensland.

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Participants

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Contributors

We thank all the individuals who assisted with the collection and input of data at a jurisdictional and national level.

Abbreviations

2C-B	4-bromo-2,5-dimethoxyphenethylamine
5-MeO-DMT	5-methoxy-N,N-dimethyltryptamine
DMT	Dimethyltryptamine
EDRS	Ecstasy and Related Drugs Reporting System
GHB	Gamma-hydroxybutyrate
GP	General Practitioner
IDRS	Illicit Drug Reporting System
IQR	Interquartile range
LSD	<i>d-lysergic acid</i>
MDA	3,4-methylenedioxyamphetamine
MDMA	3,4-methylenedioxymethamphetamine
N (or n)	Number of participants
NBOMe	N-methoxybenzyl
NDARC	National Drug and Alcohol Research Centre
NDRI	National Drug Research Institute
NPS	New psychoactive substances
OTC	Over-the-counter
STI	Sexually transmitted infection
WA	Western Australia

Glossary of Terms

TERM	DEFINITION
Availability	Participants are asked how easy it is to obtain a certain drug
Casual sex	Penetrative sex with someone who is not a regular partner
Drug dealing	Sale of drugs for cash profit, where a person purchased drugs and on-sold them for a cash profit (more than the amount to cover personal use)
Ecstasy/MDMA drought	Used to refer to a period in WA (~2011) where there were significant declines in ecstasy availability and purity. This 'drought' was believed to reflect a wider international drought linked to tighter controls on precursor chemicals used to manufacture ecstasy. To meet continued demands for the drug, it is believed manufacturers began substituting MDMA with substances like piperazines, which are known to induce an array of negative adverse effects.
Fraud	Acts involving fraud, including forging cheques, forging prescriptions, social security scams, using someone else's credit card
Incarceration	An occasion where a person has been convicted of an offence and sentenced to jail (excluding remand)
Injection	Injection (typically intravenous) of a substance
Jurisdiction	State or territory
New psychoactive substances	Substances which are sometimes referred to as research chemicals, analogues, legal highs, herbal highs, synthetic drugs, designer drugs or bath salts, and often mimic the effects of traditional illicit drugs
Non-prescribed use	Use of a prescribed medication obtained by a prescription in someone else's name
Overdose (stimulant)	Experience of symptoms such as nausea, vomiting, chest pain, tremors, increased body temperature, increased heart rate, seizure, extreme paranoia, extreme anxiety, panic, extreme agitation, hallucinations, excited delirium, that are outside the person's normal drug experience, or where professional assistance would have been helpful
Overdose (depressant)	Experience of symptoms such as reduced level of consciousness, respiratory depression, turning blue and collapsing, that are outside the person's normal drug experience, or where professional assistance would have been helpful
Over-the-counter	Availability of a medicine through a pharmacy without a doctor's prescription
Penetrative sex	Penetration by penis or hand of the vagina or anus
Point	0.1 gram (although may also be used as a term referring to an amount for one injection)
Prescribed use	Use of a prescribed medication obtained by a prescription in the person's name
Property crime	Theft or destruction of someone else's property, including shoplifting, break and enter, stealing a car, receiving stolen goods
Protective barrier (penetrative sex)	Use of a 'condom/glove/dam' during penetrative sex
Potency	Participants are asked 'how strong would you say *drug* is at the moment?'
Session	A period of continuous use without sleeping
Shelving/shafting	Use via insertion into vagina (shelving) or the rectum (shafting)
Smoking	Use of a substance via inhalation/vaping
Snorting	Use of a substance intranasally
Violent crime	Acts involving violence, including assault, violence in a robbery, armed robbery, sexual assault, breaking an apprehended violence order

Guide to Timeframes

Lifetime use	Use on one or more occasion in their lifetime
Recent use	Use on one or more occasion in the past six months
180 days of use	Use daily in the past six months
90 days of use	Use every second day in the preceding six months
24 days of use	Use weekly in the past six months
12 days of use	Use fortnightly (i.e., every two weeks) in the past six months
6 days of use	Use fortnightly (i.e., every two weeks) in the past six months

Background and methods

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 the [Drug Trends](#) program of research at the [National Drug and Alcohol Research Centre \(NDARC\)](#). 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 nightclubs, dance parties, pubs and music festivals, including ecstasy, methamphetamine, cocaine, new psychoactive substances, LSD (*d*-lysergic acid), ketamine, GHB, and GBL.

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 surveys with people who use stimulant drugs (primarily ecstasy) regularly. This report focuses on the key findings from the annual survey component of the EDRS, namely data obtained from people who use ecstasy regularly in WA.

Methods

Full details of the [methods for the annual interviews](#) are available for download. To briefly summarise, WA participants were recruited primarily via paid Facebook advertising through X-Press Magazine's Facebook account (54%) and snowballing (45%; e.g., peer referral). This recruitment method is consistent with earlier WA recruitment years where the survey was advertised in the X-Press print magazine; however, advertising shifted online in response to advancing technology and because the magazine is now exclusively online. Participants had to: i) be at least 16 years of age (due to ethical constraints), ii) have used ecstasy on at least six occasions during the preceding six months; and iii) have been a resident of Perth in the preceding 12 months. Interviews took place in coffee shops close to public transport and parking options. Following provision of informed consent and completion of a structured questionnaire, participants were reimbursed \$40 for their time and expenses incurred. A total of 100 participants were interviewed between April–July 2018.

Additional Outputs

There are a range of other outputs from the EDRS triangulating key findings from the annual survey 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 intravenous drug use.

Please contact the WA-based research team with any queries; to request additional analyses using these data; or to discuss the possibility of including items in future interviews: j.grigg@curtin.edu.au or s.lenton@curtin.edu.au.

Sample characteristics

In 2018, the WA sample featured a more equal gender split than in past recruitment years (52% males) and had a median age of 20 (IQR=18-22). Almost two-fifths (36%) reported already completing a post-school qualification(s) and 19% were currently studying. Most were still living in their family home (61%), but a third were renting (33%).

Table 1: Demographic characteristics of the sample, 2009-2018

	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
	N=100	N=100	N=28	N=90	N=100	N=100	N=100	N=100	N=100	N=100
Median age (years; IQR)	21 (19-25)	22 (19-26)	25 (20-30)	23 (20-25)	20 (18-21)	21 (18-22)	20 (19-23)	20 (19-23)	19 (18-21)	20* (18-22)
% Male	65	48	68	60	63	69	64	73	69	52*
% Aboriginal and/or Torres Strait Islander	-	-	-	-	-	-	-	-	-	-
% Heterosexual	84	86	100	96	90	93	95	95	87	94
Mean years of school education	11.5	11.7	11.4	11.6	11.6	11.9	11.8	11.7	11.7	11.8
% Post-school qualification(s)^	46	48	36	67	32	29	38	40	30	36
% Employment										
Employed full-time	22	31	14	28	16	23	22	29	24	22
Students [#]	40	25	25	27	31	43	12	47	40	19*
Unemployed	15	13	25	21	20	16	12	10	8	16
Median weekly income \$ (IQR)	(n=76) \$325 (150-600)	(n=31) \$400 (150-600)	(n=13) \$500 (270-588)	(n=86) \$450 (250-885)	(n=96) \$367 (200-700)	(n=97) \$500 (264-750)	(n=94) \$367 (243-650)	(n=90) \$500 (250-800)	(n=95) \$350 (144-700)	(n=95) \$400 (200-800)
% Accommodation										
Own house/flat	8	7	-	-	-	8	-	-	-	-
Rented house/flat	45	45	64	48	28	18	41	26	26	33
Family home	44	44	29	35	66	73	53	69	71	61
Boarding House/hostel	-	-	-	-	-	-	-	-	-	-
No fixed address	-	-	-	-	-	-	-	-	-	-
Other	-	-	-	-	-	-	-	-	-	-
% Currently in drug treatment	-	-	7	-	-	-	-	-	-	-

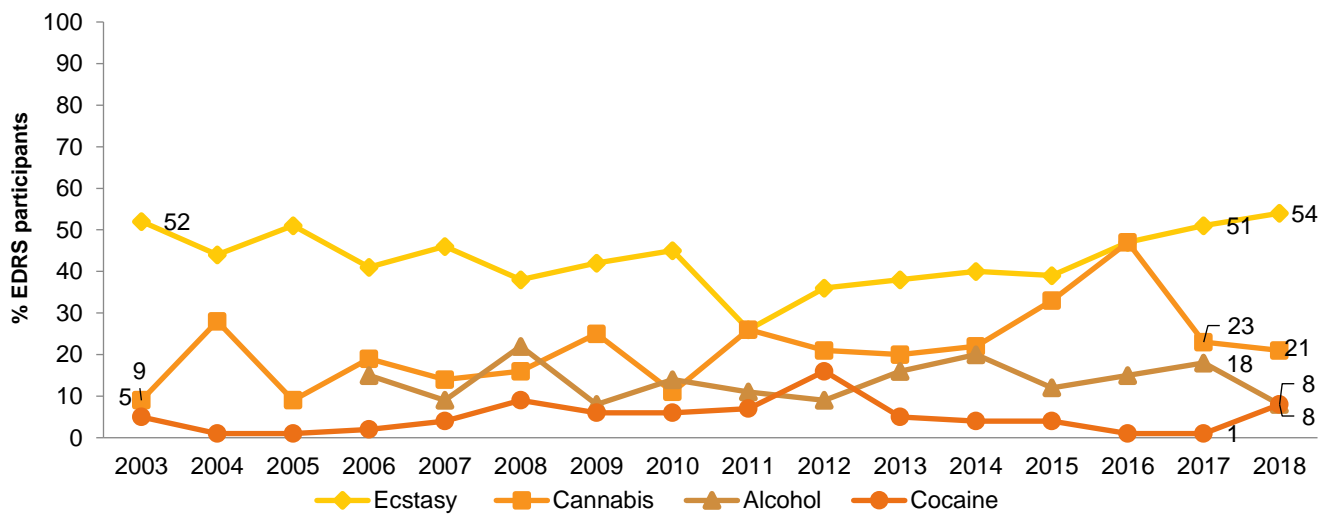
Note. ^Includes trade/technical and university qualifications. #Includes full-time students, part-time students and participants who both work and study. - Percentage suppressed due to small cell size ($n \leq 5$ but not 0). * $p < 0.05$; ** $p < 0.01$; *** $p < 0.001$ for 2017 versus 2018.

Drug of choice

More than half identified ecstasy/MDMA as their drug of choice (54%). While not significantly different to 51% in 2017 ($p=.777$), the below figure shows an increasing trend since 2011—a year where only 28 eligible WA participants were recruited, most likely due to international purity and availability declines resulting from tighter controls on precursor chemicals (EMCDDA, 2010; UNODC, 2010).

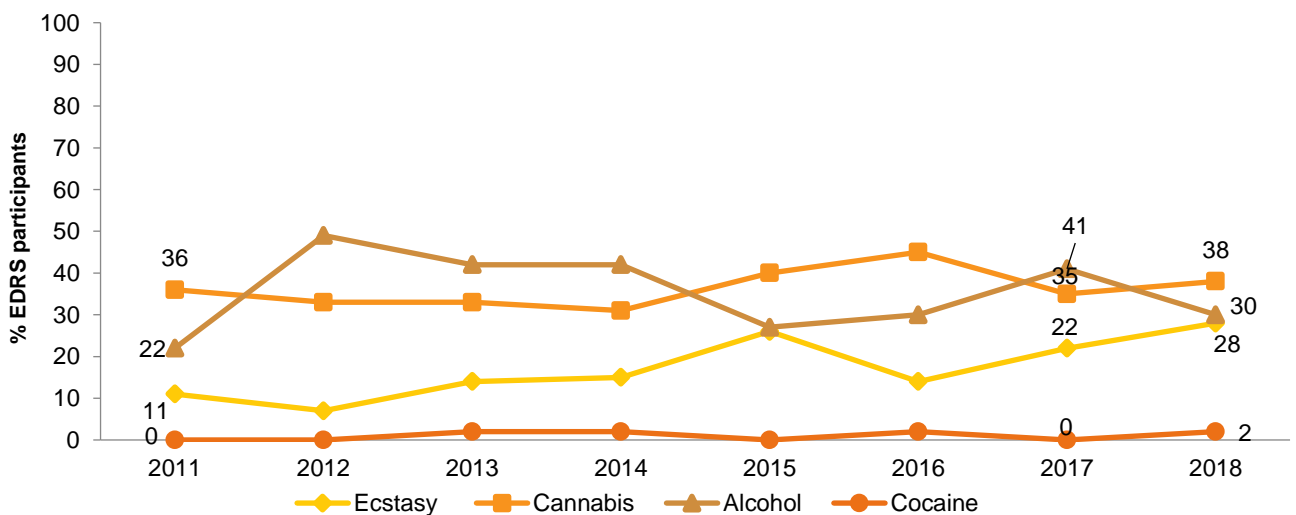
However, only about half who identified ecstasy as their drug of choice reported using it most in the past month (28%). Instead, cannabis was the most commonly used (38%), followed by alcohol (30%). The most commonly reported main reason for this was related to appropriateness in social situations (35%), followed by factors related to price (22%), availability (17%) and health (11%).

Figure 1: Drug of choice, 2003-2018



Note. Substances listed in this figure are the primary endorsed; nominal percentages have endorsed other substances. * $p<0.050$; ** $p<0.010$; *** $p<0.001$ for 2017 versus 2018.

Figure 2: Drug used most often in the past month, 2003-2018



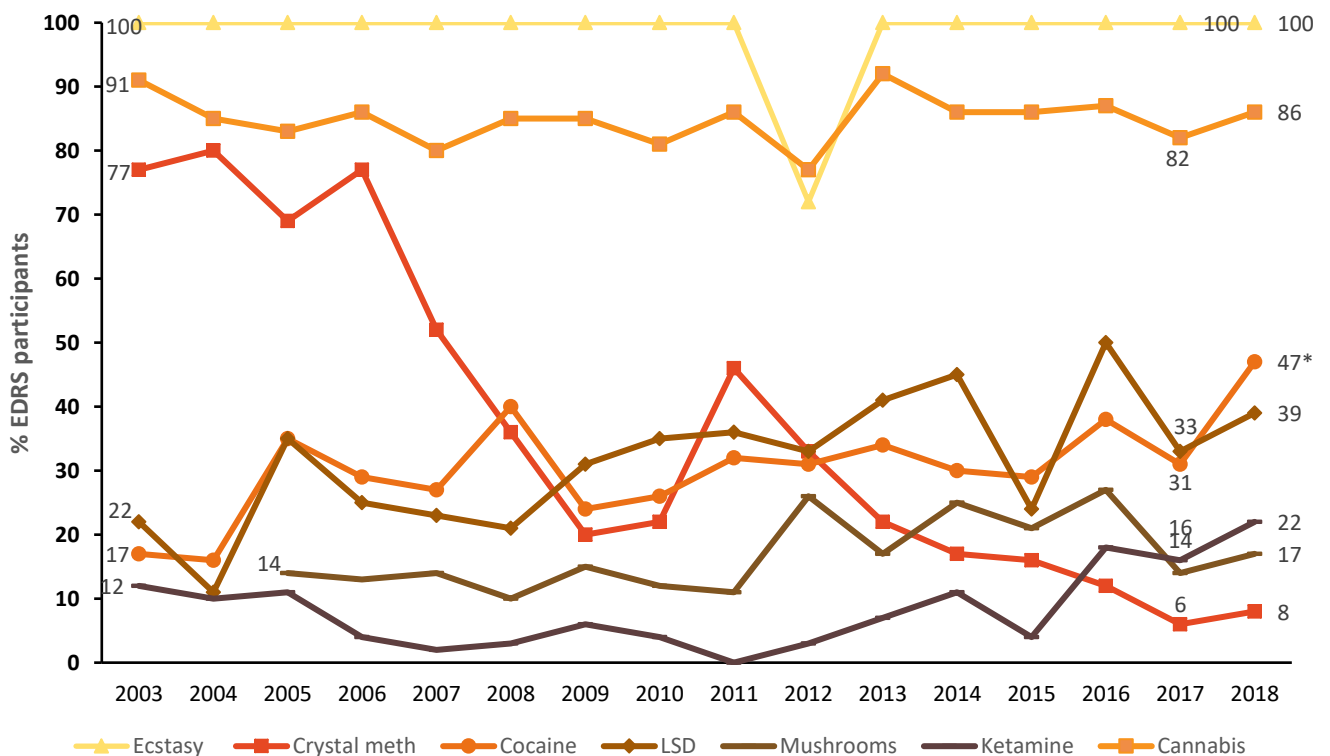
Note. Substances listed in this figure are the primary endorsed; nominal percentages have endorsed other substances. * $p<0.050$; ** $p<0.010$; *** $p<0.001$ for 2017 versus 2018.

Rates of recent drug use

The below figures present, over the last 15 years, the proportions of the sample who reported using a particular drug at least once in the past 6 months. Drugs which significantly increased in 2018 (relative to 2017) include cocaine ($p=.029$) and over the counter codeine ($p<.001$), with rates of cocaine use reaching the highest on record (for the WA EDRS). Drugs which significantly declined in 2018 include pharmaceutical stimulants ($p=.043$) and tobacco ($p=.034$).

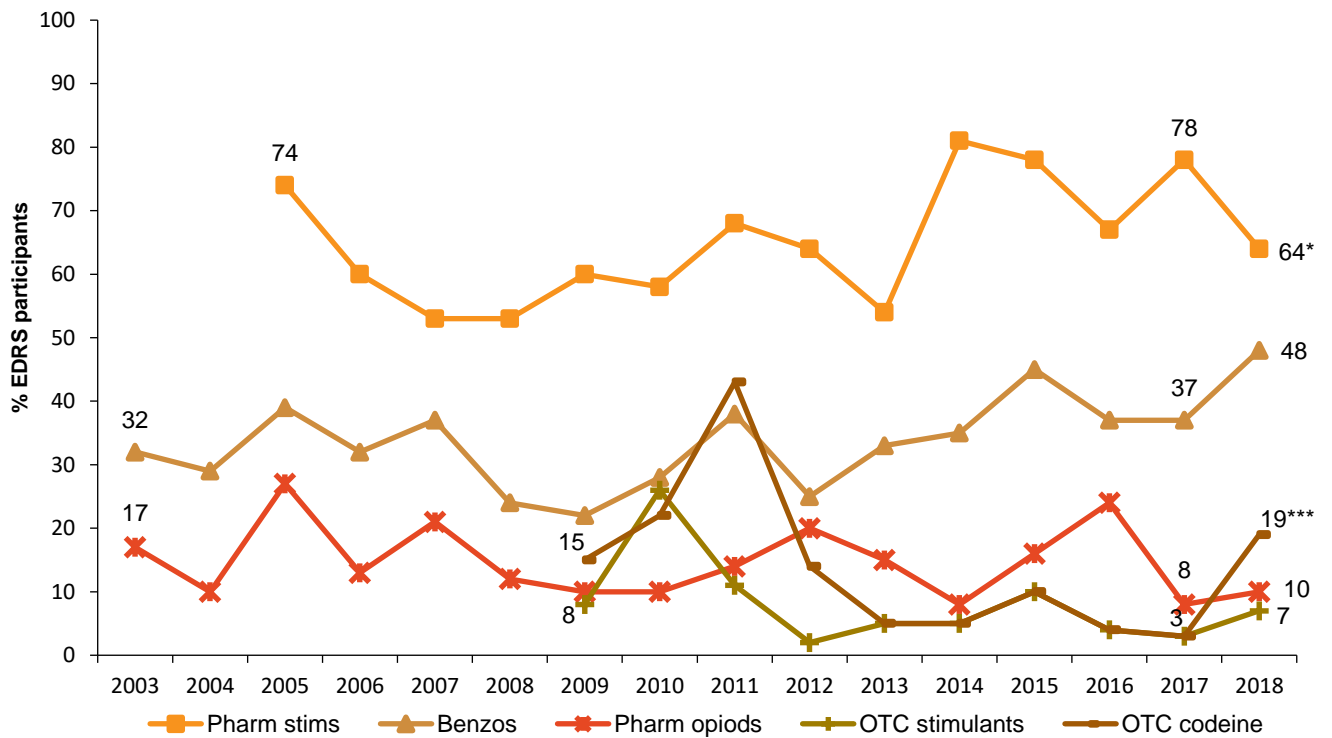
While not significantly different to 2017, the figure shows some longer-term increasing trends in rates of benzodiazepine, ketamine and nitrous oxide use (all observing the highest rates on record in WA in 2018). Figure 3 also shows a strong long-term trend of declining crystal methamphetamine use. The 100% rate observed for ecstasy in the majority of WA samples reflects the recruitment criteria for this study.

Figure 3: Recent (past six months) use of illicit drugs, 2003-2018



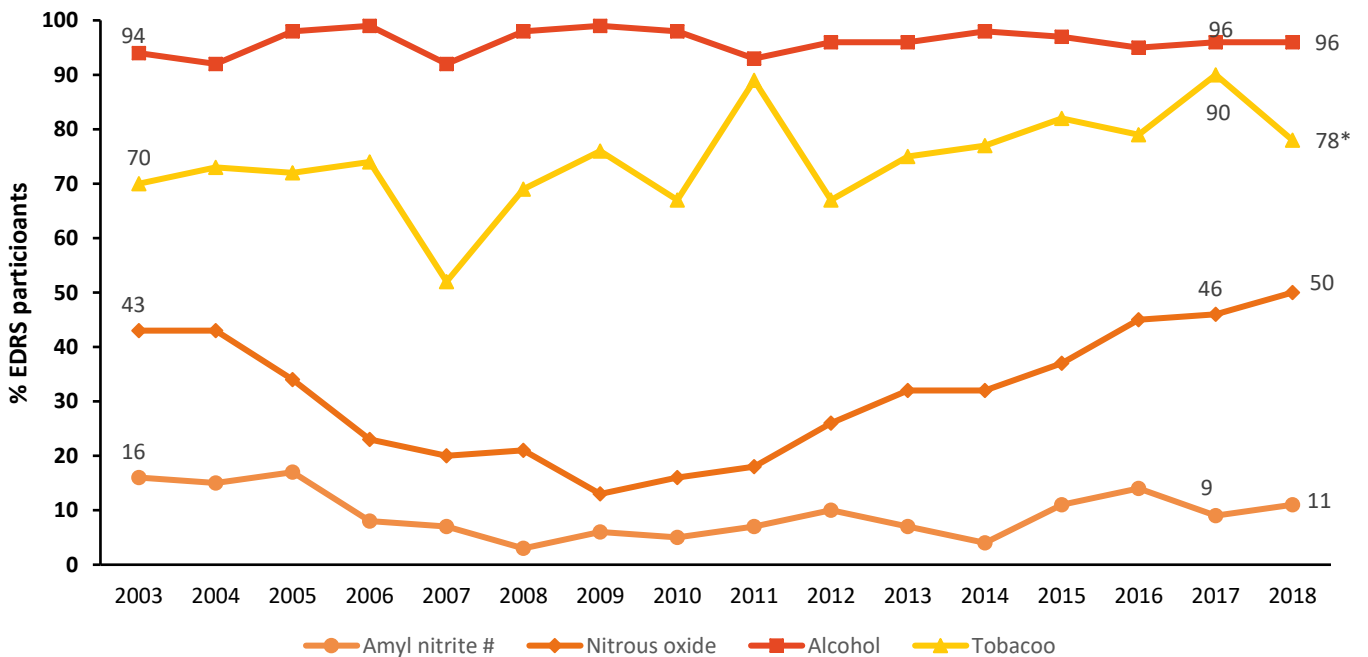
Note. In response to recruitment difficulties in 2011 (likely due to a global MDMA drought), in 2012 the participant eligibility was expanded to broader illicit stimulant use. Drugs with $n \leq 5$ were excluded from this figure (e.g. GHB and heroin). * $p < 0.050$; ** $p < 0.010$; *** $p < 0.001$ for 2017 versus 2018.

Figure 4: Recent (past six months) use of pharmaceutical drugs, 2003-2018



Note. Before the 1st February 2018, people could access low-dose codeine products (<30mg, e.g., Nurofen Plus) over-the-counter, 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. Drugs with $n \leq 5$ were excluded from this figure (e.g. antidepressants). * $p < 0.050$; ** $p < 0.010$; *** $p < 0.001$ for 2017 versus 2018.

Figure 5: Recent (past six months) use of licit drugs, 2003-2018



Note. # 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. Drugs with $n \leq 5$ were excluded from this figure. * $p < 0.050$; ** $p < 0.010$; *** $p < 0.001$ for 2017 versus 2018.

Recent trends in ecstasy/MDMA

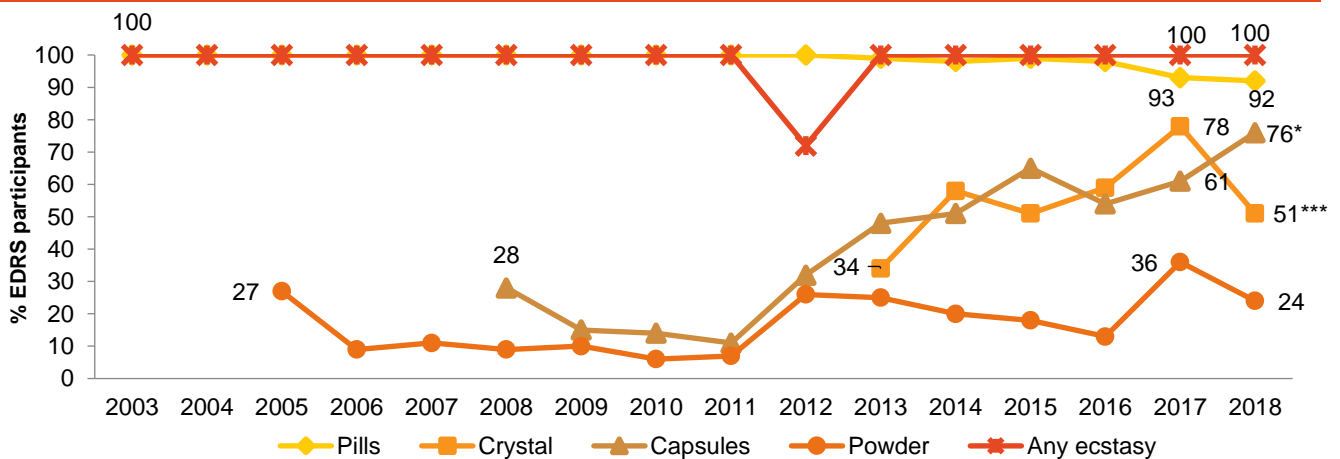
Consumption trends for all forms of ecstasy

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

Forms used: Pills remained the most common form used in 2018 (92%). However, the gap between pills and capsules has been closing since 2011, with capsule use significantly increasing to 76% in 2018 ($p=.022$). While crystal use significantly declined between 2017 and 2018 ($p<.001$), it is important to note that capsules typically contain pre-packaged crystals. Thus, this decline in crystals more likely reflects the way in which the drug is being sold and packaged, as opposed to a decline in the availability of ecstasy/MDMA crystals in the WA drug market.

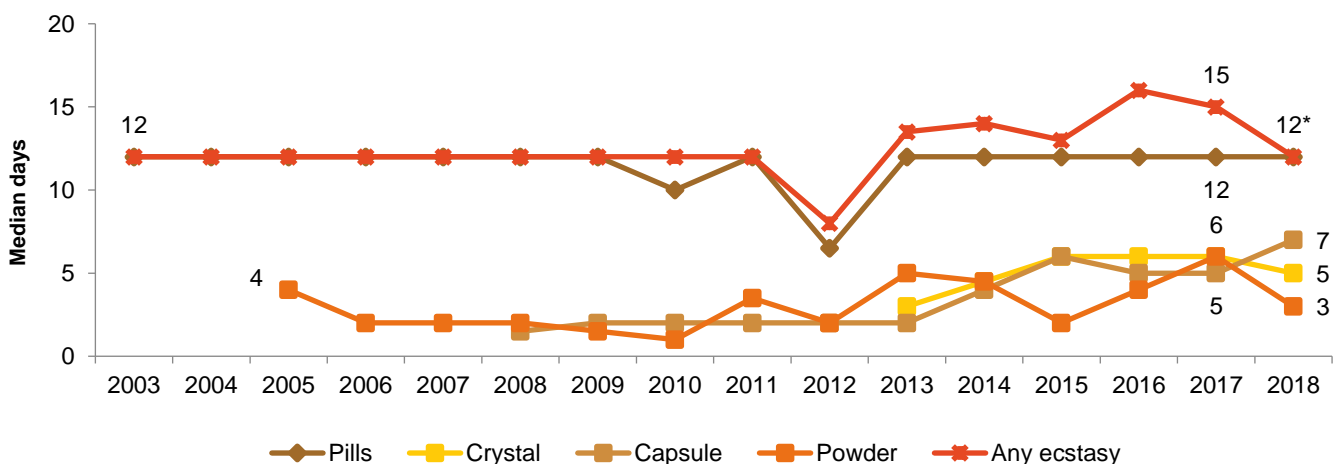
Frequency of use: Participants reported using ecstasy (in any form) on a median of 12 days, equivalent to fortnightly (IQR=10-24; $n=91$) in the preceding six months (vs. 15 days in 2017, $p=.054$). The proportion of the sample that reported weekly or greater use of any form of ecstasy also remained stable at 29% (vs. 37% in 2017; $p=.229$).

Figure 6: Recent (past six months) use of any ecstasy, and different forms of ecstasy, 2003-2018



Note. In response to recruitment difficulties in 2011 (most likely due to an international MDMA drought), in 2012 the participant eligibility was expanded to broader illicit stimulant use. Data collection for powder started in 2005, capsules in 2008 and MDMA crystal in 2013. * $p<0.050$; ** $p<0.010$; *** $p<0.001$ for 2017 versus 2018.

Figure 7: Median days of ecstasy use in the past six months, 2003-2018



Note. In 2012 participant eligibility was expanded to broader illicit stimulant use. Data collection for powder started in 2005, capsules in 2008 and MDMA crystal in 2013. 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 2017 versus 2018.

Consumption trends for individual forms of ecstasy

Ecstasy pills

Recent (past 6m) use: Most (92%) reported using pills, not significantly different to 93% in 2017 ($p=.788$).

Frequency of use: Declined significantly from a median of 15 days to 12 days ($p=.027$, IQR=3-24), but the proportion reporting weekly or greater use did not significantly change (21% vs. 28% in 2017; $p=.266$).

ROAs: The most common ROA remained swallowing (100% vs 99% in 2017; $p=.319$) and there was a significant decrease in snorting in 2018 (29% vs 63% in 2017; $p<.001$). Few reported recent shelving/shafting (4%).

Quantities used: The median number of pills used in a 'typical' session remained stable at three (IQR=2-4; $n=90$, $p=.698$), while the median used in a 'heavy' session significantly declined from five pills to four (IQR=3-7.5; $n=91$, $p=.001$).

Ecstasy capsules

Recent (past 6m) use: Three-quarters (76%) reported using capsules, a significant increase from 61% in 2017 ($p=.022$).

Frequency of use: Remained stable at a median of seven days (IQR=3-12; $n=74$, $p=.096$), as did the proportion who reported weekly or greater use (6% vs. 5% in 2017; $p=.730$).

ROAs: The most common ROA was swallowing (100% vs 93% in 2017; $p=.022$), followed by snorting (18% vs 32% in 2017; $p=.074$).

Quantities used: The median number of caps used in a 'typical' session remained stable at two (IQR=1.8-3.3; $n=73$, $p=.883$), as did the median used in a 'heavy' session ($Mdn=3$, IQR=2-6; $n=73$, $p=.255$).

Ecstasy crystal

Recent (past 6m) use: Half (51%) reported using crystals, a significant decline from 78% in 2017 ($p<.001$). However, capsule use increased (and capsules typically contain pre-packaged crystals).

Frequency of use: Remained stable at a median of 5 days (IQR=2-9; $n=52$, vs. 6 days in 2017, $p=.154$), as did the proportion reporting weekly or greater use (8% vs. 13% in 2017; $p=.355$).

ROAs: The most common ROA was swallowing (90% vs 83% in 2017; $p=.259$), but more than a third reported snorting (37% vs 50% in 2017; $p=.157$).

Quantities used: The median amount of crystals used in a 'typical' session was 0.5 grams (IQR=0.2-1; $n=21$), while the median used in a 'heavy' session was 0.6 grams (IQR=0.4-2; $n=21$).

Ecstasy powder

Recent (past 6m) use: A quarter (24%) reported using ecstasy powder in 2018, compared to about a third in 2017 (36%; $p=.064$).

Frequency of use: Frequency of use declined non-significantly from 6 days to 3 days (IQR=2-7.5; $n=24$; $p=.052$). Only one respondent reported weekly use of powder ecstasy in 2018 versus five in 2017.

ROAs: The most common ROA was snorting (72% vs 83% in 2017; $p=.288$), followed by swallowing (60% vs 42% in 2017; $p=.159$).

Quantities used: The median amount used in a 'typical' session was 3 lines (IQR=2-4; $n=11$) and the median amount used in a heavy session was also 3 lines (IQR=2-6; $n=11$).

Market trends for individual forms of ecstasy

Ecstasy pills

Price: Median of \$20 per pill (IQR=15-25, $n=82$), unchanged from 2017. Price was mainly perceived as stable (60%), followed by decreasing (20%).

Potency: Mixed perceptions of potency, but most commonly rated as medium (35%) and stable over the preceding six months (40%). However, a third reported fluctuations (33%).

Availability: Majority rated as easy or very easy to obtain (94%) and stable (63%).



Ecstasy capsules

Price: Median of \$25 per cap (IQR=20-25, $n=73$), unchanged from 2017. Price was perceived mainly as stable (66%), followed by decreasing (18%).

Potency: Most rated capsules as being high potency (58%) and stable (59%).

Availability: Rated mainly as easy or very easy to obtain (88%), with stable availability (59%).



Ecstasy crystal

Price: Median of \$200 per gram (IQR=200-250, $n=27$), unchanged from 2017. Rated mainly as stable (75%), followed by decreasing (17%).

Potency: Crystals were most frequently rated as high potency (61%) and stable over the preceding six months (64%).

Availability: Rated mainly as easy or very easy to obtain (76%), and stable availability (59%).



Ecstasy powder

Price: Median of \$90 per gram ($n=6$, IQR=45-162). Price was mainly perceived as stable (77%).

Potency: Most rated potency of powder as high (64%, $n=14$) and stable (64%).

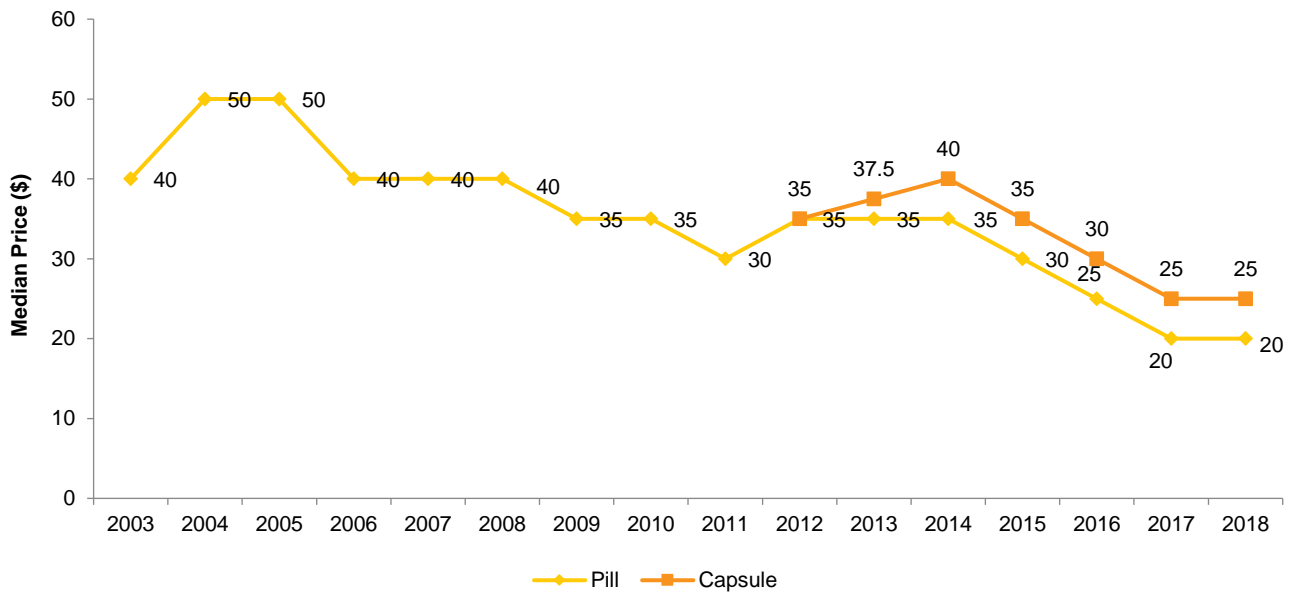
Availability: Rated mainly as easy or very easy to obtain (71%) and stable (50%).



No statistically significant differences were observed in market trends for ecstasy between 2017 and 2018.

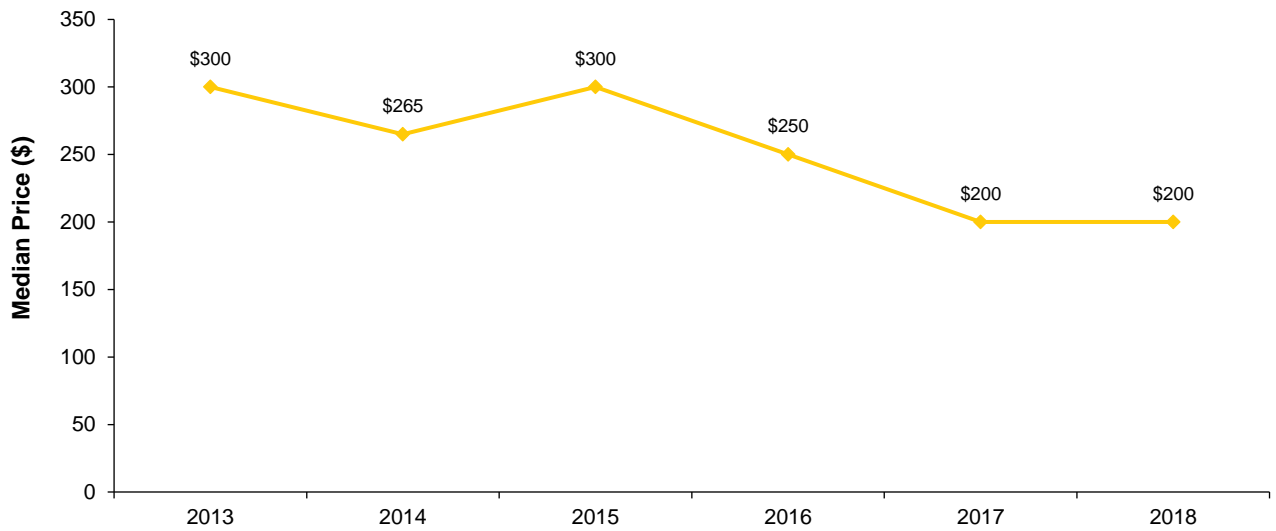
Image source: Pillreports.net and Ecstasydata.org

Figure 8: Median price of ecstasy pills and capsules, 2003-2018



Note. Among those who commented. Data collection for price of ecstasy capsules started in 2008.

Figure 9: Median price of ecstasy crystals per gram, 2013-2018



Note. Among those who commented. Data collection for price of ecstasy crystal started in 2013.

Table 2: Perceived potency and availability of different forms of ecstasy, 2017-2018

	2017	2018
Current Potency		
% Pills (n)	(n=72)	(n=88)
Low	15	18
Medium	28	35
High	21	18
Fluctuates	36	28
% Capsules (n)	(n=72)	(n=79)
Low	7	-
Medium	36	27
High	44	58
Fluctuates	13	13
% MDMA crystal (n)	(n=65)	(n=38)
Low	6	-
Medium	22	26
High	60	61
Fluctuates	12	13
% Powder (n)	(n=26)	(n=14)
Low	15	7
Medium	42	29
High	31	64
Fluctuates	12	-
Current Availability		
% Pills (n)	(n=95)	(n=85)
Very easy	58	49
Easy	38	44
Difficult	-	6
Very difficult	-	-
% Capsules (n)	(n=72)	(n=80)
Very easy	25	40
Easy	58	48
Difficult	15	11
Very difficult	-	-
% Crystal (n)	(n=65)	(n=38)
Very easy	43	24
Easy	35	53
Difficult	22	21
Very difficult	-	-
% Powder (n)	(n=25)	(n=24)
Very easy	32	36
Easy	36	36
Difficult	28	29
Very difficult	-	-

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

Recent trends in other drugs

Table 3: Summary of recent trends in other drugs (consumption and market trends), 2017-2018

Drug	Recent (past 6m) %		Median days used (IQR)		Quantity typical		Median price \$ (IQR)		Potency		Availability	
	2017	2018	2017	2018	2017	2018	2017	2018	2017	2018	2017	2018
Crystal meth	6	8	3 (1-30)	4 (1-25)	-	-	-	-	-	-	-	-
Cocaine	31	47*	2 (1-6)	2 (1-5)	0.3g (.1-1) (n=21)	0.4g (.3-1) (n=12)	\$350/g (300-400) (n=11)	\$350/g (350-410) (n=18)	mixed, 32% med (n=19)	mixed, 38% med (n=24)	53% easy/very easy (n=19)	64% easy/very easy (n=22)
Cannabis	82	86	48 (12-98)	25 (5-117)	4 cones (2-7) (n=40)	3 cones* (2-5) (n=47)	\$330/oz (300-350) (n=22)#	\$350/oz (300-360) (n=11)#	60% high, 33% med (n=42)#	45% high, 31% med (n=42)#	98% easy/very easy (n=43)#	86% easy/very easy (n=22)#
LSD	33	39	3 (1-6)	2 (1-4)	1.5 tabs (1-3) (n=24)	1 tab (1-3) (n=35)	\$25/tab 20-25 (n=38)	\$25/tab 20-25 (n=29)	63% high, 29% med (n=38)	60% high, 30% med (n=32)	mixed, 60% easy/very easy (n=38)	mixed, 54% difficult/very difficult (n=35)
Ketamine	16	22	2.5 (1-6) (n=16)	2 (1-4) (n=22)	-	0.5g (.1-6) (n=6)	-	\$150/g (100-280) (n=7)	-	75% high (n=12)	mixed, 33% difficult (n=6)	75% difficult/very difficult (n=12)

Note: This is a summary of key findings; however, additional data on consumption and market characteristics was collected. #data reported for hydro cannabis. - Data has been suppressed where $n \leq 5$. Statistical analyses for 2017 compared to 2018 were not performed where $n \leq 5$. * $p < 0.050$; ** $p < 0.010$; *** $p < 0.001$ for 2017 versus 2018.

Table 4: Summary of recent trends in other drugs (consumption only), 2017-2018

Drug	Recent (past 6m) %		Median days used (IQR)	
	2017	2018	2017	2018
Alcohol	96	96	48 (24-39)	30 (20-53)
Tobacco	90	78*	90 (24-180)	48 (12-180)
Mushrooms	14	17	2 (1-4)	1 (1-2)
Nitrous oxide	46	50	6 (2-12)	3 (1-10)
Amyl nitrite	9	11	3 (1-10)	3 (1-7)
GHB/GBL	-	-	-	-
Pharm stims (non-prescribed)	76	62*	6 (2-15)	5 (2-11)
Benzodiazepines (non-prescribed)	33	41	5 (1-12)	5 (1-10)
E-cigarettes	24	28	5.5 (2-21)	5 (3-12)

Note: This is a summary of key findings; however, additional data on consumption and market characteristics was collected. -Data has been suppressed where $n \leq 5$. Statistical analysis comparisons were not performed where $n < 5$. * $p < 0.050$; ** $p < 0.010$; *** $p < 0.001$ for 2017 versus 2018.

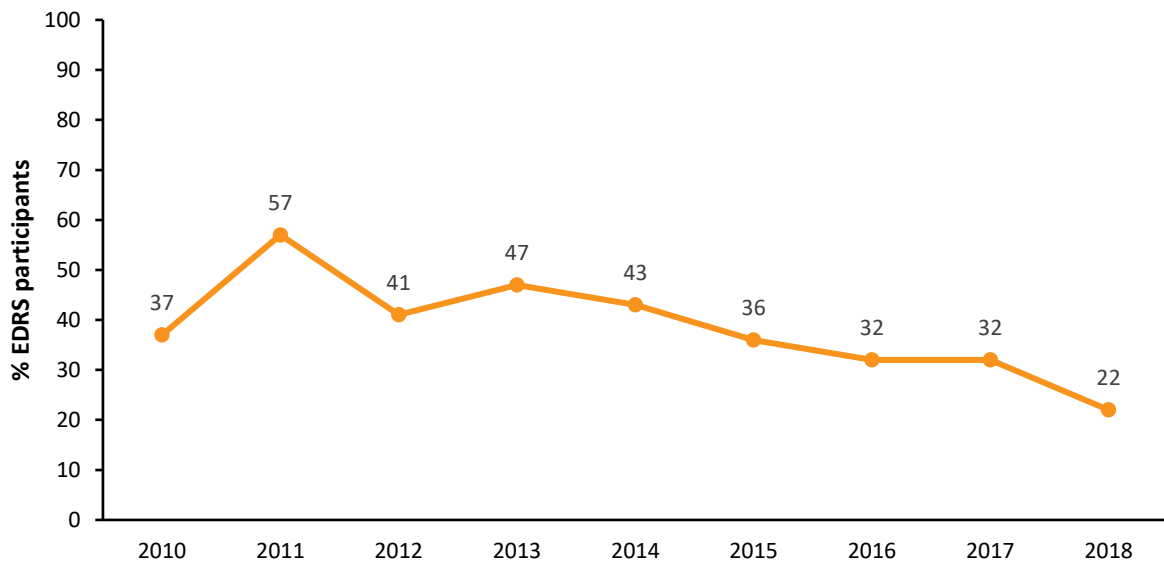
New psychoactive substances (NPS)

Participants were asked about their recent use of various forms of NPS. Importantly, they were asked to report only on NPS they had *intentionally* used, not if they suspect their drugs were misrepresented or adulterated with NPS.

In 2018, about two-fifths (42%) reported having ever used an NPS (vs. 43% in 2017), while one-fifth reported recent use (22%) (vs. 32% in 2017, $p=.151$).

Consistent with past years, the most common NPS was DMT (17% vs. 23% in 2017). Rates of other NPS use were very low, with the next most common drugs nominated by only 2% (5-MEO-DMT, 2C-B, Methylone and NBOMe). DMT was also the most common NPS ever used (64%), followed by synthetic cannabinoids (24%), 2C-B (21%) and NBOMe (19%).

Figure 10: Recent (past six months) use of any NPS, 2010-2018

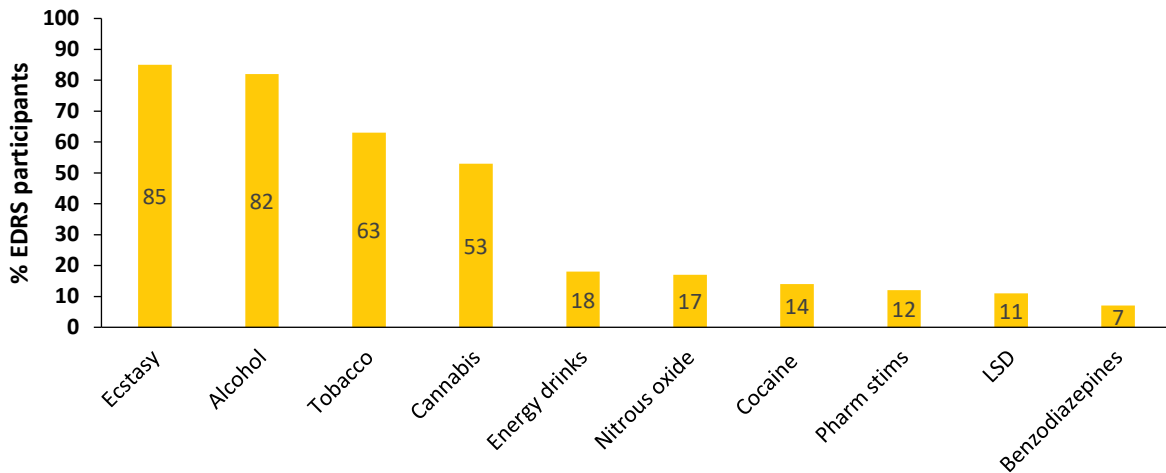


Trends in drug-related harms and other risk factors

Polydrug Use

All participants reported polydrug use on the last occasion of psychostimulant use (vs. 97% in 2017). The most common drugs reportedly used on the last occasion were ecstasy (85%), alcohol (82%; 66% ≥5 standard drinks), tobacco (63%) and cannabis (53%). Other common drugs included nitrous oxide (17%), cocaine (14%) and pharmaceutical stimulants (12%).

Figure 11: Polydrug use on the last occasion of psychostimulant use, 2018



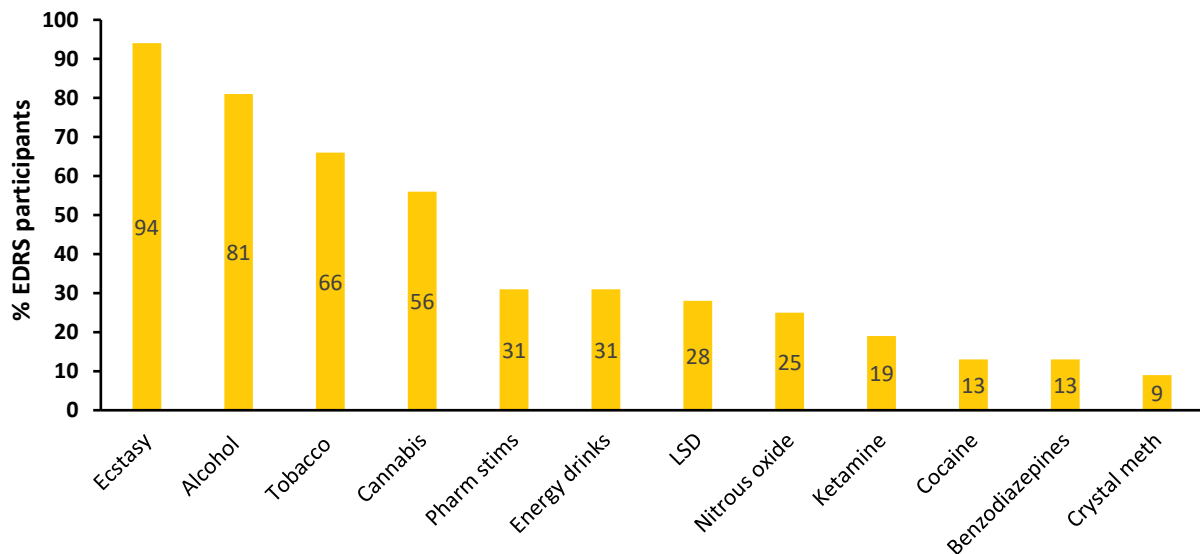
Note. Data has been suppressed for drugs where $n \leq 5$.

Binging

A third of the sample (32%) reported a recent drug binge (using drugs for ≥48hrs without sleeping), comparable to 29% in 2017 ($p=.611$). The median number of recent binges was two (IQR=1-4) and the median length of binges was 48 hours or 2 days (IQR=48-72).

Drugs most commonly involved in these binges included ecstasy/MDMA (94%), alcohol (81%; 69% ≥5 standard drinks), tobacco (66%), cannabis (56%), pharmaceutical stimulants and energy drinks (each 31%).

Figure 12: Drugs involved in recent (past six months) binges, 2018



Note. Data has been suppressed for drugs where $n \leq 5$.

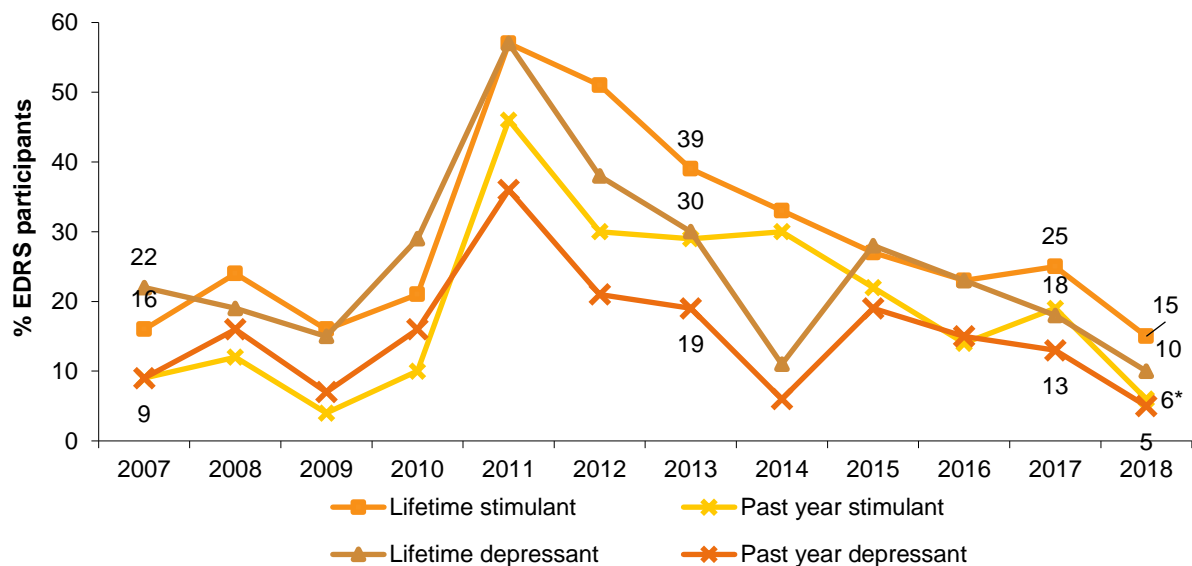
Non-Fatal Overdose

Fifteen per cent of participants reported ever experiencing a stimulant overdose (vs. 25% in 2017, $p=.089$), which occurred on a median of one occasion (IQR=1-2). However, only 6% reported overdosing recently, a significant decline from 19% in 2017 ($p=.010$). All recent overdoses were attributed to ecstasy; however, polydrug use was present in all cases. Among those who commented ($n=5$), the *main* overdose symptoms were nausea, vomiting, increased heart rate, irregular breathing or paranoia.

Figure 13 demonstrates a gradual declining trend in WA overdose rates since the 2011 ecstasy ‘drought’. However, the reasons for this decline are unclear from the data. While it could be related to purer ecstasy in WA leading to less adverse effects (e.g. pills no longer being regularly substituted with piperazines), and/or people who use ecstasy no longer switching to other riskier substances (e.g. NPS), it could also be related to sampling issues (expanding the criteria in 2012 and smaller sample sizes) or an array of other unknown factors (e.g. safer drug using practices).

One in 10 (10%) reported ever experiencing a *depressant* overdose, not significantly different to 18% in 2017 ($p=.154$). However, only half (5%) reported experiencing an overdose recently (vs. 13% in 2017, $p=.084$).

Figure 13: Lifetime and past year non-fatal stimulant and depressant overdoses, 2007-2018



Note. WA experienced recruitment difficulties in 2011 ($n=28$), likely due to international declines in ecstasy availability and purity. Thus, in 2012 the selection criteria was expanded to wider stimulant use ($n=90$). The 2011/12 sampling differences should be considered when interpreting this figure. * $p<0.050$; ** $p<0.010$; *** $p<0.001$ for 2017 versus 2018.

Injecting Drug Use

In 2018, no participants reported injecting a drug in their lifetime. With the exception of 2011 (which had a disproportionate representation, attributed to recruitment difficulties discussed previously), rates of injecting among WA EDRS samples have been declining over the past 15 years

Drug Treatment

The proportion reporting current drug treatment has consistently been very low. In 2018, no participants reported being in any form of drug treatment. However, the most common treatment type in past years has been counselling.

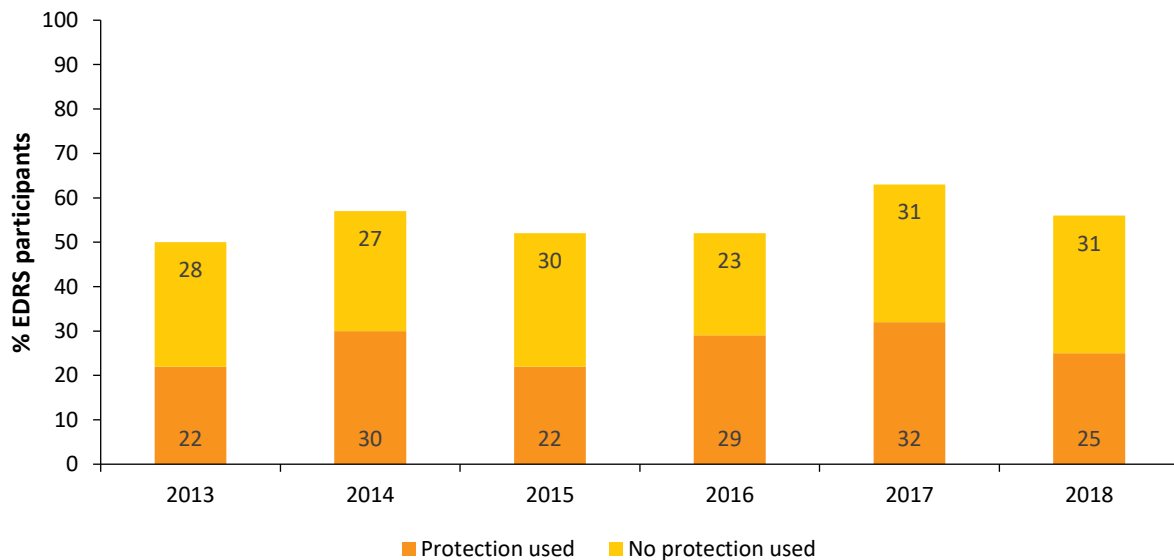
Sexual Risk Behaviours

More than two-thirds (71%) reported having sex with at least one casual partner recently (vs. 74% in 2017, $p=.716$). Of these, most reported having only 1-2 casual partners (57%), while 10% reported more than 10.

Among those reporting recent casual sex, most (86%) also reported using drugs while having sex on at least one occasion in the past six months (59% of the total sample). The most common drugs used during casual sex were alcohol (86%), ecstasy (58%) and cannabis (51%). Only one-in-five (21%) reported always using a barrier (e.g. condom), and most (55%) did not use a barrier last time they had casual sex while using drugs (see Figure 14).

Less than half the overall sample (46%) reported having a sexual health check-up in the past year, while a further 16% reported doing so more than one year ago. Only 3% reported a positive STI diagnosis in the past year, but a further 6% reported ever getting one. There were no significant differences in relation to sexual health check-ups or STI diagnoses between 2017 and 2018.

Figure 14: Sex with a casual partner while using drugs in the past six months and use of any protection/barrier on the last occasion, 2013-2018

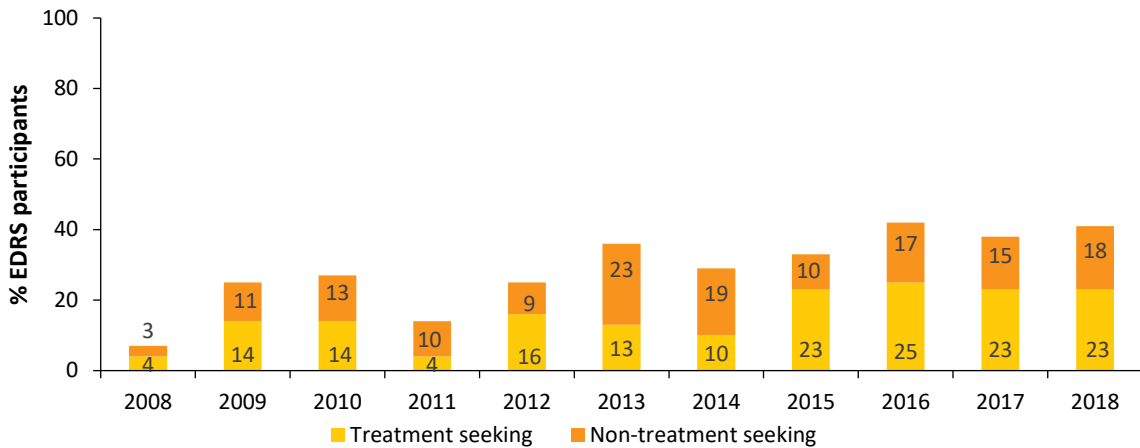


Note. Don't know and did not respond responses excluded. Given some participants skipped questions, the percentage who report protection used and no protection used may not equal the percent who reported penetrative sex with a causal partner in the past six months. * $p<0.050$; ** $p<0.010$; *** $p<0.001$ for 2017 versus 2018.

Mental Health

Of those commenting ($n=97$), two-fifths (42%) self-reported experiencing a recent mental health problem (other than drug dependence). Consistent with previous years, the most commonly reported problem was anxiety (85%), followed by depression (44%). Of those experiencing a problem, just over half reported seeing a mental health professional recently (56% vs. 60% in 2017) and two-fifths (39%) reported being prescribed a medication (vs. 56% in 2017).

Figure 15: Self-reported mental health problems and treatment seeking in the past six months, 2008-2018



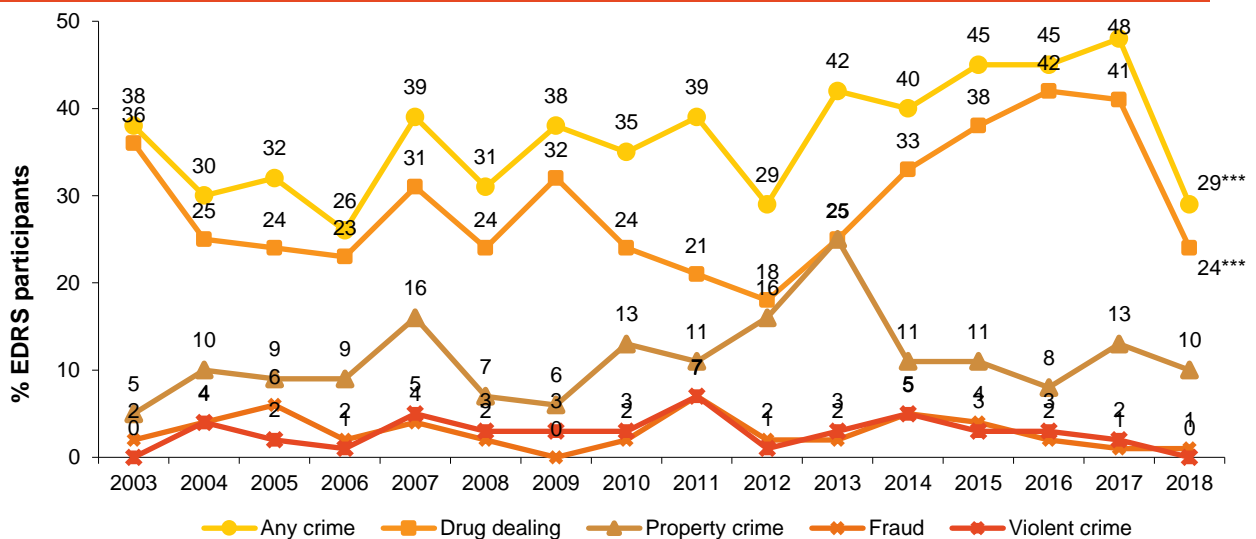
Note. Questions regarding mental health problems were included for the first time in the 2008 EDRS.

Crime

Rates of past month criminal activity have fluctuated over time, with dealing unsurprisingly the most common type of criminal activity (see Figure 16). However, dealing significantly declined from 41% in 2017 to 24% in 2018 ($p<0.001$).

Only 4% of the sample reported having been arrested in the preceding 12 months and 1% reported having ever been to prison (for a conviction). Of those arrested in the preceding 12 months, crimes included drunk and disorderly ($n=2$), property crime, and alcohol and driving (each $n=1$).

Figure 16: Self-reported criminal activity in the past month, 2003-2018



Note. Y axis has been reduced to 50% to improve visibility of trends. * $p<0.050$; ** $p<0.010$; *** $p<0.001$ for 2017 vs 2018.

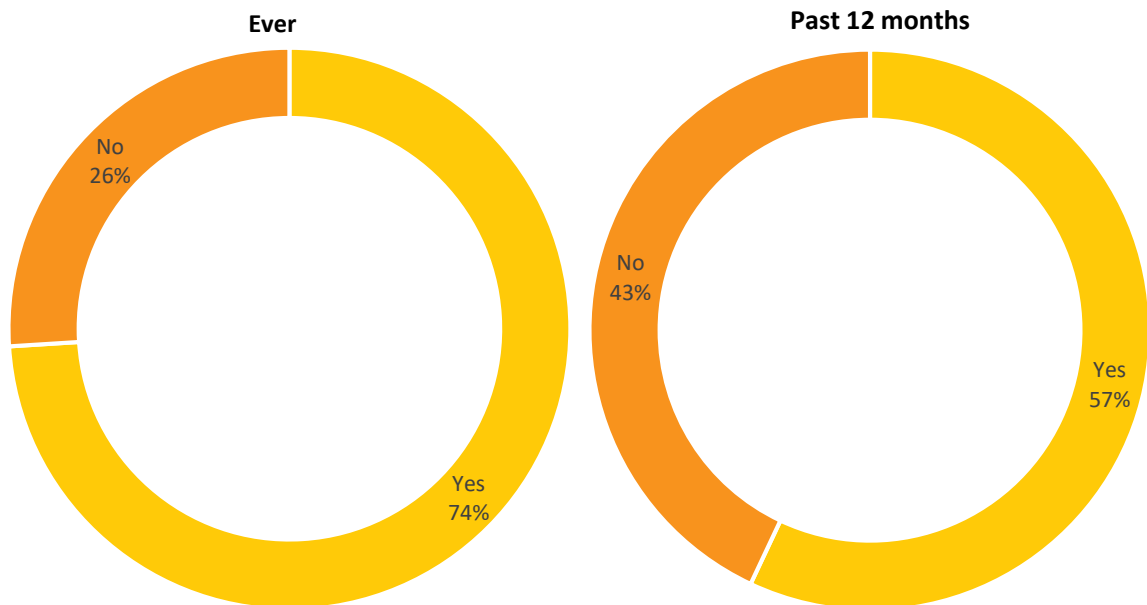
Digital purchasing

In 2018, a special module for digital purchasing was included. It was found that 14% reported purchasing a drug online in the preceding 12 months, and a further 3% had done so ever. Of those purchasing online recently, half ($n=7$, 54%) had purchased from a darknet marketplace (6 from Australian marketplaces and 6 from international marketplaces). The most common drugs reportedly obtained were ecstasy (54%), LSD (46%), benzodiazepines (31%) and cannabis (23%).

Only 3% had not heard of the darknet, while half (50%) had heard of it, but never accessed or researched it, 13% had researched it, but never accessed it, 24% had accessed it, but never purchased from it and 11% had purchased from it.

Perhaps the most noteworthy finding from this special module was that more than half (57%) reported obtaining drugs in the preceding 12 months through someone who purchased the drugs from a darknet marketplace, and three-quarters (74%) had ever purchased from someone who obtained the drugs from the darknet.

Figure 17: Purchased drugs from someone who purchased them from the darknet (ever and in the past 12 months), 2018



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EMCDDA (2010). The state of the drugs problem in Europe. Luxembourg, European Monitoring Centre for Drugs and Drug Addiction.

UNODC (2010). World Drug Report. United Nations, United Nations Office on Drugs and Crime.