EDRS

WESTERN AUSTRALIAN DRUG TRENDS 2023

Key Findings from the Western Australian Ecstasy and Related Drugs Reporting System (EDRS) Interviews

WESTERN AUSTRALIAN DRUG TRENDS 2023: KEY FINDINGS FROM THE ECSTASY AND RELATED DRUGS REPORTING SYSTEM (EDRS) INTERVIEWS

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Please note that as with all statistical reports there is the potential for minor revisions to data in this report over its life. Please refer to the online version at Drug Trends.

This report was prepared by the National Drug and Alcohol Research Centre, UNSW Sydney. Please contact the following with any queries regarding this publication: j.grigg@curtin.edu.au or drugtrends@unsw.edu.au

Table of Contents

List of Tables

List of Figures

Acknowledgements

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Research Team

The National Drug and Alcohol Research Centre (NDARC), University of New South Wales (UNSW) Sydney, coordinated the EDRS. The following researchers and research institutions contributed to the EDRS in 2023:

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- Joanna Wilson and Professor Paul Dietze, Burnet, Victoria;
- Sophie Radke, Lauren Stafford and Associate Professor Raimondo Bruno, School of Psychology, University of Tasmania, Tasmania;
- Dr Jodie Grigg and Professor Simon Lenton, National Drug Research Institute and enAble Institute, Curtin University, Western Australia; and
- Catherine Daly, Dr Jennifer Juckel, Dr Natalie Thomas and Associate Professor Caroline Salom, Institute for Social Science Research, The University of Queensland, Queensland.

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

Participants

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

Contributors

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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

1,4-BD	1,4-Butanediol
4-AcO-DMT	*4-Acetoxy*-N,N-dimethyltryptamine
4-FA	4-Fluoroamphetamine
5-MeO-DMT	*5-methoxy*-N,N-dimethyltryptamine
2C-B	4-bromo-2,5-dimethoxyphenethylamine
Alpha PVP	α-Pyrrolidinopentiophenone
AOD	Alcohol and Other Drug
AUDIT	Alcohol Use Disorders Identification Test
BZP	Benzylpiperazine
CBD	Cannabidiol
COVID-19	Coronavirus Disease 2019
DMT	Dimethyltryptamine
DO-x	4-Substituted-2,5-dimethoxyamphetamines
DSM	Diagnostic and Statistical Manual of Mental Disorders
EDRS	Ecstasy and Related Drugs Reporting System
GBL	Gamma-butyrolactone
GHB	Gamma-hydroxybutyrate
GP	General Practitioner
HIV	Human immunodeficiency virus
IDRS	Illicit Drug Reporting System
IQR	Interquartile range
LSA	Lysergic Acid Amide
LSD	*d*-lysergic acid
MDA	3,4-methylenedioxyamphetamine
MDMA	3,4-methylendioxymethamphetamine
MDPV	Methylenedioxypyrovalerone
MXE	Methoxetamine
N (or n)	Number of participants
NBOME	N-methoxybenxyl
NDARC	National Drug and Alcohol Research Centre
NHS	National Health Service
NPS	New psychoactive substances
NSP	Needle Syringe Program
OTC	Over-the-counter
PMA	Para*methoxyamphetamine*
PMMA	Polymethyl methacrylate
PTSD	Post-Traumatic Stress Disorder
REDCAP	Research Electronic Data Capture
ROA	Route of administration

SARS-CoV-2	Severe Acute Respiratory Syndrome Coronavirus 2
SD	Standard Deviation
SDS	Severity of Dependence Scale
SSDP	Students for Sensible Drug Policy
STI	Sexually transmitted infection
THC	Tetrahydrocannabinol
UNSW	University of New South Wales
WA	Western Australia
WHO	World Health Organization

Executive Summary

The Perth Western Australia (WA) EDRS comprises a sentinel sample of people who regularly use ecstasy and/or other illicit stimulants recruited via social media and via word-of mouth in Perth, WA. The results are not representative of all people who use illicit drugs, nor of use in the general population. **Data were collected in 2023 from April-June. Interviews from 2020 onwards were delivered face-to-face as well as via telephone, to reduce the risk of COVID-19 transmission; all interviews prior to 2020 were conducted face-to-face. This methodological change should be factored into all comparisons of data from the 2020-2023 samples, relative to previous years.**

Sample Characteristics

The Perth EDRS sample (N=100) was similar to the sample in 2022 and in previous years. However, gender significantly changed between 2022 and 2023 (p=0.043), with three fifths identifying as male in 2023 (59%; 71% in 2022). The median age was also slightly higher in 2023 (23 years; 21 years in 2022; p=0.024). Other sample characteristics remained stable between 2022 and 2023. Approximately half held tertiary qualifications (53%), while almost one third reported being current students (31%). Two fifths (39%) reported full-time employment, while a similar percentage (42%) reported part-time/casual employment. Approximately half of the sample (46%) reported living in a rental house/flat, while 36% reported residing in their parents/family home at the time of interview. Cannabis and ecstasy were the most commonly reported drugs of choice (27% and 26%, respectively), while cannabis and alcohol were the drugs reportedly used most often in the month preceding interview (36% and 30%, respectively). Weekly or more frequent use of methamphetamine significantly increased, from n≤5 in 2022 to 12% in 2023 (p=0.029).

Ecstasy

The vast majority reported recent (past 6 month) use of ecstasy (any form: 98%), consistent with 2022 and earlier years. Capsule and crystal forms remained the most commonly reported forms used (59% and 57%, respectively). While the frequency of days used any ecstasy in the past six months significantly increased to seven days in 2023 (5 days in 2022; p=0.044), this remains lower than what has been observed historically (pre-COVID-19 pandemic market disruptions). Frequency of use for individual forms of ecstasy remained stable. There were significant changes in the perceived availability of ecstasy pills, capsules and powder in 2023 relative to 2022 (p=0.003; p<0.001; p=0.045, respectively), with increases in the per cent reporting 'easy' or 'very easy' access across all three forms. There were also significant changes in perceived purity of ecstasy capsules and crystals in 2023 relative to 2022 (p<0.001; p=0.033, respectively), with increases in the per cent reporting 'medium' and 'high' purity and decreases in reports of 'low' and 'fluctuating' purity.

Methamphetamine

Twenty-nine per cent of the Perth sample reported recent use of any methamphetamine, representing a significant increase relative to 14% in 2022 (p=0.018) and levels not observed in the Perth EDRS sample since 2014. Crystal remained the main form of methamphetamine reportedly used in 2023, with a significant increase from 11% in 2022 to 28% in 2023 (p=0.005). Methamphetamine crystal was used on a median of 11 days, stable from three days in 2022, and 39% reported weekly or more frequent use (n≤5 in 2022). A significant change was observed in perceived availability of methamphetamine crystal (p=0.014), with

100% reporting access as 'easy' or 'very easy' (86% in 2022). The median price per point of methamphetamine crystal also significantly declined from $125 in 2022 to $60 in 2023 ($p$=0.046). Overall, the median price of methamphetamine crystal seems to have halved, and the percentage of the sample reporting recent use has more than doubled.

Non-Prescribed Pharmaceutical Stimulants

The per cent of Perth participants reporting any recent use of non-prescribed pharmaceutical stimulants (e.g., dexamphetamine, methylphenidate, modafinil) has increased since the commencement of monitoring, from 43% in 2007 to 68% in 2023 (81% in 2022; p=0.053). Non-prescribed pharmaceutical stimulants were used on a median of nine days in 2023, stable from 10 days in 2022. Dexamfetamine remained the most commonly reported form used (96%; 94% in 2022), followed by lisdexamfetamine (37%; 31% in 2022). Reported use of Ritalin significantly declined in 2023 (13%; 28% in 2022; p=0.033).

Cocaine

Self-reported recent use of cocaine has increased over the years of monitoring (beginning at 17% in 2003) but remained stable between 2022 and 2023 (66% and 62%, respectively). Cocaine was used on median of three days in the preceding six months (stable from two days in 2022) and few (n≤5) participants reported weekly or more frequent use. Perceived availability of cocaine significantly changed between 2022 and 2023 (p=0.040), with 76% reporting 'easy' or 'very easy' access in 2023 (62% in 2022).

Cannabis and/or Cannabinoid-Related Products

At least three in four participants have reported any recent use of non-prescribed cannabis and/or cannabinoid-related products each year since 2003 (noting some changes in question wording over time). In 2023, 85% reported recent use (84% in 2022), and among these, 31% reported daily use (25% in 2022). When asked about forms in 2023, 76% reported hydroponic use (64% in 2022) and 33% reported bush cannabis use, a significant decrease from 64% in 2022 (p<0.001). A gram of hydroponic cannabis increased to a median of $28 in 2023 ($25 in 2022; p=0.040). There was also significant change in perceived bush potency between 2022 and 2023 (p=0.023), with a greater per cent reporting 'high' purity (47%; 9% in 2022).

Non-Prescribed Ketamine, LSD and DMT

Recent use of non-prescribed ketamine remained stable in 2023 (36%, 39% in 2022), but frequency of use significantly increased to a median of three days in the past six months (one day in 2022; p=0.006). Recent use of LSD was reported by 36% of the sample in 2023, a significant decline from 54% in 2022 (p=0.016). Frequency of LSD use remained low and stable (median of two days). Recent DMT use remained stable at 26% (29% in 2022), as did frequency of DMT use. Perceived availability of ketamine significantly changed (p=0.002), with more reporting access as 'easy' or 'very easy' in 2023 (71%; 26% in 2022).

New Psychoactive Substances (NPS)

Any NPS use, including plant-based NPS, has fluctuated over time among the Perth sample, peaking at 45% in 2013 and declining to 7% in 2023, marking the lowest per cent observed in the Perth sample since monitoring commenced, although stable relative to 2022 (13%; p=0.243). Similar results were observed for any NPS use, excluding plant-based NPS (6%; 13% in 2022; p=0.151).

Other Drugs

Reported use of most other drugs remained stable in 2023, relative to 2022. However, there

were significant declines in the percentage reporting recent use of nitrous oxide (50%; 70% in 2022; p=0.008) and amyl nitrite (17%; 40% in 2022; p=0.001) in 2023, although frequency of use for both remained stable. There was also a significant decline in the percentage reporting recent use of e-cigarettes (62%; 81% in 2022; p=0.005), but the frequency of recent use increased to a median of 180 days (i.e., daily use; 90 days in 2022; p=0.003).

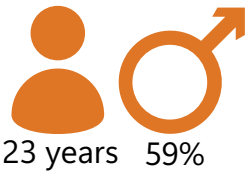
Drug-Related Harms and Other Behaviours

- On the last occasion of ecstasy or related drug use, 70% of the Perth sample reported concurrent use of two or more drugs (excluding tobacco and e-cigarettes), most commonly ecstasy (57%).
- In 2023, 43% reported that they or someone else had tested the content and/or purity of their illicit drugs in Australia in the past year (stable from 48% in 2022).
- Almost three quarters (72%) obtained an AUDIT score of eight or more, indicative of hazardous alcohol use in the past 12 months (stable from 82% in 2022).
- One tenth (11%) reported past year non-fatal stimulant overdose in 2023, stable relative to 2022 (21%; p=0.084), whilst one fifth (20%) reported past year non-fatal depressant overdose (mostly comprising alcohol) (31% in 2022; p=0.079).
- In 2023, 61% of the sample reported that they had ever heard of naloxone (44% in 2022; p=0.024), of which 89% were able to correctly identify the purpose of naloxone (90% in 2022).
- Reported past month injecting drug use remained low (n≤5), as did drug treatment engagement (n≤5).
- The median ecstasy SDS score was zero (IQR=0–2), and the median methamphetamine SDS score was one (IQR=0-7), indicating that the majority of respondents reported no or few symptoms of dependence in relation to ecstasy and methamphetamine use.
- In 2023, approximately three quarters (77%) reported engaging in sexual activity in the past four weeks (76% in 2022), of which 37% reported penetrative sex without a condom where they did not know the HIV status of their partner (12% in 2022; p<0.001).
- Mental health remained stable relative to 2022, with 57% self-reporting a mental health problem in the six months preceding interview (57% in 2022).
- One fifth (21%) of the Perth sample reported very high psychological distress (14% in 2022).
- Almost one quarter (23%) of the sample reported accessing any health service for alcohol and/or drug support in the six months preceding interview, and one quarter (24%) of the sample reported experiencing stigma in any health/non health setting in the six months preceding interview.
- In 2023, the vast majority of the sample (99%) had been tested for SARS-CoV-2 in their lifetime, with three fifths (60%) of participants testing positive to COVID-19 in the 12 months preceding interview.
- Amongst those who had recently driven, 45% reported driving while over the perceived legal limit of alcohol, while 62% reported driving within three hours of consuming an illicit or non-prescribed drug in the prior six months (stable relative to 2022).
- Thirty per cent of the sample reported 'any' crime in the past month (43% in 2022; p=0.082), with drug dealing (23%) and property crime (10%) remaining the two main forms of criminal activity in 2023.
- Face-to-face and social networking applications were the most popular means of participants arranging the purchase of illicit or non-prescribed drugs in the 12 months preceding interview (77% and 75%, respectively).

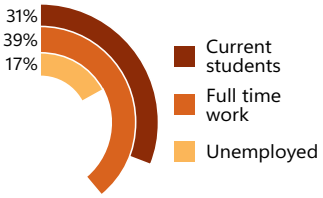
EDRS Ecstasy and Related Drugs Reporting System

2023 SAMPLE CHARACTERISTICS

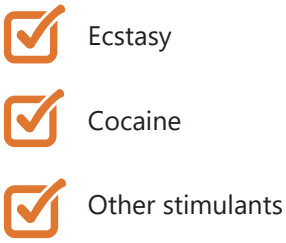
In 2023, 100 participants, recruited from Perth, WA were interviewed.



The median age in 2023 was 23, and 59% identified as male.

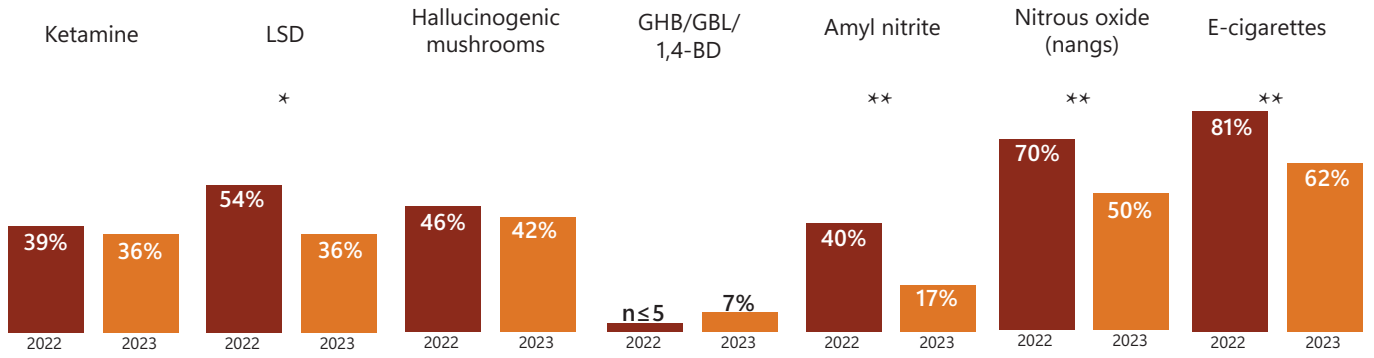


In the 2023 sample, 31% were current students, 39% were employed full time and 17% were unemployed.



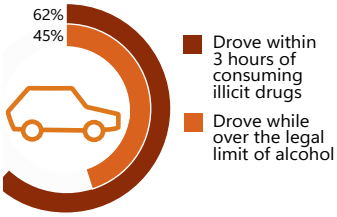
Participants were recruited on the basis that they had consumed ecstasy and/or other illicit stimulants at least monthly in the past 6 months.

PAST 6 MONTH USE OF OTHER DRUGS



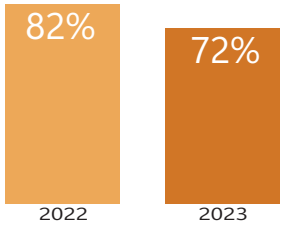
*p<0.050; **p<0.010; ***p<0.001

DRUG-RELATED HARMS AND RISKS

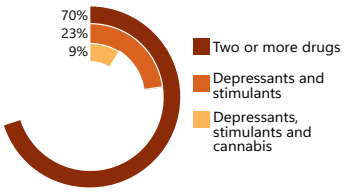


Among recent drivers, 62% reported driving a vehicle within 3 hours of consuming illicit drugs and 45% while over the legal limit of alcohol.

In the 2023 sample, 20% reported a non-fatal depressant overdose in the previous 12 months, and 11% reported a non-fatal stimulant overdose.

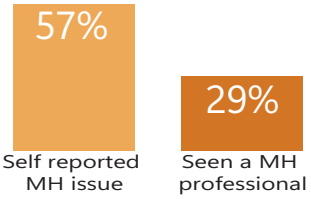


72% of the sample obtained an AUDIT score of eight or more, indicative of past year hazardous alcohol use (82% in 2022).

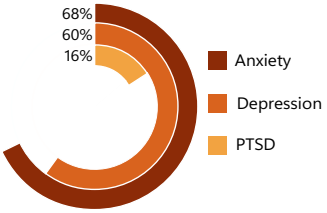


On the last occasion of ecstasy or related drug use, 70% used two or more drugs, 23% used both stimulants and depressants, and 9% used stimulants, depressants and cannabis.

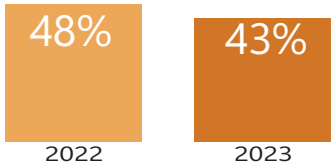
OTHER BEHAVIOURS



In the total sample, 57% self reported a mental health issue and 29% had seen a mental health professional in the past 6 months.



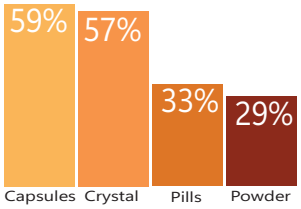
Of those who commented, the three most common mental health issues reported were anxiety (68%), depression (60%) and PTSD (16%).



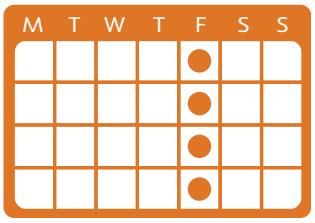
43% of the sample reported that they or someone else had tested the content and/or purity of their illicit drugs in Australia in the past year.

24% of the sample reported experiencing stigma because of their illicit drug use in the six months preceding interview, most commonly from police and GP.

ECSTASY



Past 6 month use of ecstasy capsules, crystal, pills, and powder in 2023.



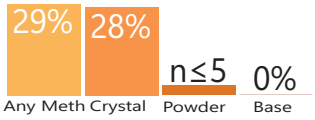
Of those who had recently consumed ecstasy, 18% used it weekly or more frequently.

2 Capsules
2 Pills
0.40 grams of crystal
0.30 grams of powder

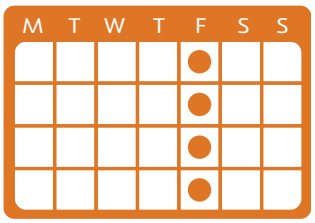
Median amounts of ecstasy consumed in a 'typical' session using each form.

In 2023, more participants perceived the availability of ecstasy powder, pills and capsules as 'easy' or 'very easy' relative to 2022.

METHAMPHETAMINE



Past 6 month use of any methamphetamine, crystal, powder and base in 2023.

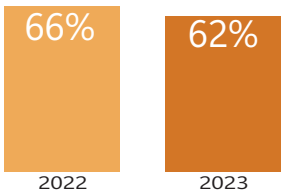


Of those who had recently consumed methamphetamine, 41% used it weekly or more frequently.

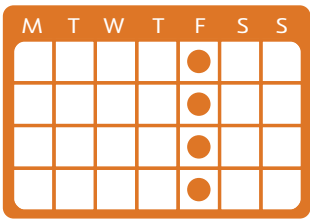
82% of participants who had recently used crystal smoked it.

Of those who could comment 100% perceived crystal methamphetamine to be 'easy' or 'very easy' to obtain.

COCAINE

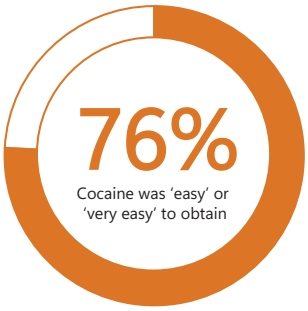


Past 6 month use of any cocaine remained stable between 2022 and 2023.



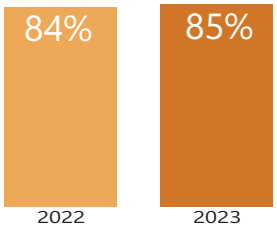
Of participants who had consumed cocaine recently, few (n≤5) reported weekly or more frequent use.

In 2023, the median price of a gram of cocaine was $400.

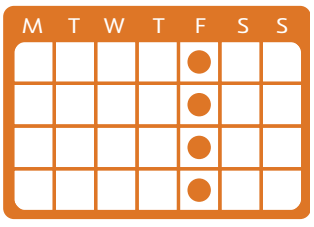


Of those who could comment 76% perceived cocaine to be 'easy' or 'very easy' to obtain.

CANNABIS AND/OR CANNABINOID-RELATED PRODUCTS

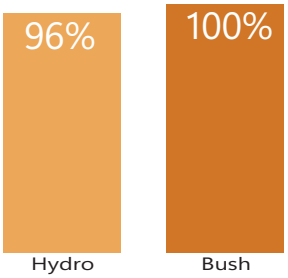


Past 6 month use of non-prescribed cannabis and/or cannabinoid-related products remained stable between 2022 and 2023.



Of those who had consumed non-prescribed cannabis recently, 66% reported weekly or more frequent use.

Of participants who had consumed cannabis in the last 6 months, 95% had smoked it (11% swallowed and 13% vaped it).



Of those who could comment, the majority perceived both hydro and bush to be 'easy' or 'very easy' to obtain.

Background

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

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

Methods

EDRS 2003-2019

Full details of the methods for the annual interviews are available for download. To briefly summarise, since the commencement of monitoring up until 2019, participants were recruited primarily via internet postings, print advertisements, interviewer contacts, and snowballing (i.e., peer referral). Participants had to: i) be at least 17 years of age (due to ethical constraints) (16 years of age in Perth, Western Australia (WA)), ii) have used ecstasy and/or other illicit stimulants (including: MDA, methamphetamine, cocaine, mephedrone, non-prescribed pharmaceutical stimulants or other stimulant NPS) at least six times during the preceding six months; and iii) have been a resident of the capital city in which the interview took place for ten of the past 12 months. Interviews took place in varied locations negotiated with participants (e.g., research institutions, coffee shops or parks), and were conducted using REDCap (Research Electronic Data Capture), a software program to collect data on laptops or tablets. Following provision of written informed consent and completion of a structured interview, participants were reimbursed $40 cash for their time and expenses incurred.

EDRS 2020-2023: COVID-19 Impacts on Recruitment and Data Collection

Given the emergence of COVID-19 and the resulting restrictions on travel and people's movement in Australia (which first came into effect in March 2020), face-to-face interviews were not always possible due to the risk of infection transmission for both interviewers and participants. For this reason, all methods in 2020 were similar to previous years as detailed above, with the exception of:

1. Means of data collection: Interviews were conducted via telephone or via videoconferencing across all capital cities in 2020;
2. Means of consenting participants: Participants consent to participate was collected verbally prior to beginning the interview;
3. Means of reimbursement: Once the interview was completed via REDCap, participants were given the option of receiving $40 reimbursement via one of three methods, comprising bank transfer, PayID or gift voucher; and
4. Age eligibility criterion: Changed from 17 years old (16 years old in Perth, WA) to 18 years old.

From 2021 onwards, a hybrid approach was used with interviews conducted either face-to-face (whereby participants were reimbursed with cash) or via telephone/videoconference (with participants reimbursed via bank transfer or other electronic means). Face-to-face interviews were the preferred methodology; however, telephone interviews were conducted when required (i.e., in accordance with government directives) or when requested by participants. Consent was collected verbally for all participants. Whilst most other jurisdictions continued with the hybrid approach in 2022, Perth interviews were conducted entirely via telephone due to local COVID-19 outbreaks occurring in the lead up to and during the recruitment period. However, a hybrid approach was again used in 2023.

2023 EDRS Sample

A total of 708 participants were recruited across capital cities nationally (April-July, 2023), with 100 participants interviewed in Perth, WA between 14 April and 30 June 2023. A total of 92 interviews (92%) were conducted via telephone in 2023; the remainder were conducted face-to-face.

Seven per cent of the 2023 Perth sample completed the interview in 2022, and 13% of the 2022 Perth sample completed the interview in 2021 (p=0.243). There was a significant change in recruitment methods compared to 2022 (p<0.001), with more participants being recruited via the internet (e.g., Facebook and Instagram) (88%; 64% in 2022), and fewer via word-of-mouth (11%; 35% in 2022).

Data Analysis

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 2022 and 2023, noting that no corrections for multiple comparisons have been made and thus comparisons should be treated with caution. References to significant differences throughout the report are where statistical testing has been conducted and where the p-value is less than 0.050. Values where cell sizes are ≤5 have been suppressed with corresponding notation (zero values are reported). References to 'recent' use and behaviours refers to the six months preceding interview.

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 Perth, Western Australia, 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 are intended to provide evidence indicative of emerging issues that warrant further monitoring.

This report covers a subset of items asked of participants and does not include 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 Perth, WA (see section on 'Additional Outputs' below for details of other outputs providing such profiles).

Differences in the methodology, and the events of 2020-2023, must be taken into consideration when comparing 2020-2023 data to previous years, and treated with caution.

Additional Outputs

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

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

In 2023, the Perth EDRS sample was mostly similar to the sample in 2022 and in previous years (Table 1). However, a significant change was observed in gender identity in 2023 relative to 2022 (p=0.043). Specifically, more participants identified as female in 2023 (41%; 27% in 2022). The median age of the sample also significantly increased to 23 years in 2023 (IQR=20-30; 21 years in 2022; IQR=20-24; p=0.024).

Accommodation remained stable (p=0.987), with almost half (46%) of the sample reporting that they resided in a rented house/flat (52% in 2022), and most of the remaining participants living with their parents/in their family house (36%; 32% in 2022).

Almost one-third (31%) reported being current students (37% in 2022; p=0.450), and 53% had obtained a post-school qualification(s) (50% in 2022; p=0.778).

Employment status remained stable between 2022 and 2023 (p=0.867). Specifically, 42% reported being employed on a part-time/casual basis (46% in 2022), 39% reported being employed full-time (38% in 2022), and 17% reported being unemployed at the time of interview (15% in 2022).

Table 1: Demographic characteristics of the sample, nationally, 2023, and Perth, WA, 2017-2023

	Perth, WA							National
	2017	2018	2019	2020	2021	2022	2023	2023
	(N=100)	(N-=100)	(N=100)	(N=101)	(N=100)	(N=100)	(N=100)	(N=708)
Median age (years; IQR)	19 (18-21)	20 (18-22)	19 (18-21)	20 (19-23)	22 (19-26)	21 (20-24)	**23* (20-30)**	25 (21-32)
% Gender							*	
Female	30	48	38	34	32	27	**41**	40
Male	69	52	62	65	64	71	**59**	58
Non-binary	/	/	0	-	-	-	**0**	3
% Aboriginal and/or Torres Strait Islander	-	-	-	0	-	-	**-**	4
% Sexual identity								
Heterosexual	87	94	88	91	77	84	**78**	71
Homosexual	-	-	-	-	-	-	**-**	8
Bisexual	10	-	8	6	8	7	**16**	16
Queer	0	0	-	0	6	6	**-**	4

	Perth, WA							National
	2017	2018	2019	2020	2021	2022	2023	2023
Different identity	0	0	-	0	-	-	**-**	1
Mean years of school education (range)	12 (9-12)	12 (10-12)	12 (9-12)	12 (8-12)	12 (9-12)	12 (9-12)	**12 (9-12)**	12 (5-12)
% Post-school qualification(s)^	30	36	30	42	54	50	**53**	62
% Current students#	40	19	58	60	59	37	**31**	36
% Current employment status								
Employed full-time	24	22	12	18	30	38	**39**	38
Part time/casual	26	41	63	40	54	46	**42**	39
Self-employed	0	0	-	7	-	-	**-**	4
Unemployed	8	16	20	34	12	15	**17**	19
Current median weekly income $ (IQR)	$350 (144-700)	$400 (200-800)	$300 (150-500)	$550 (300-750)	$600 (354-950)	$800 (500-1154)	**$900 (500-1413)**	$808 (450-1385)
% Current accommodation								
Own house/flat	-	-	-	-	7	12	**14**	9
Rented house/flat	26	33	27	32	46	52	**46**	58
Parents'/family home	71	61	71	64	46	32	**36**	26
Boarding house/hostel	-	-	0	0	0	-	**-**	2
Public housing	0	0	0	0	0	-	**-**	3
No fixed address+	-	-	0	0	0	-	**-**	1
Other	-	-	-	-	-	-	**-**	1

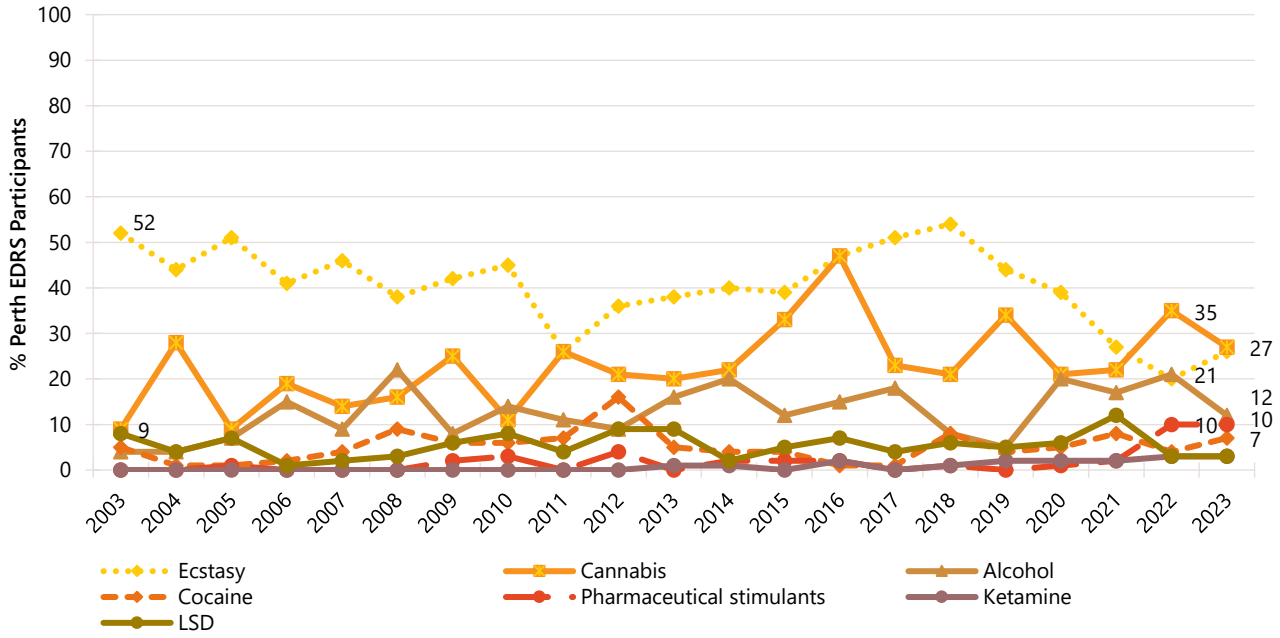
Note. ^Includes trade/technical and university qualifications.# 'Current students' comprised participants who were currently studying for either trade/technical or university/college qualifications. / not asked. + No fixed address included 'couch surfing and rough sleeping or squatting. - Per cent suppressed due to small cell size (n≤5 but not 0). For historical numbers, please refer to the data tables. The response option 'Don't know' was excluded from analysis. Statistical significance for 2022 versus 2023 presented in table; *p<0.050; **p<0.010; ***p<0.001.

Drug of choice remained stable between 2022 and 2023 (p=0.173), with 27% nominating cannabis as the drug of choice in 2023 (35% in 2022), followed by one quarter (26%) nominating ecstasy as the drug of choice (20% in 2022) and 12% nominating alcohol (21% in 2022) (Figure 1).

The drug used most often in the past month also remained stable between 2022 and 2023 (p=0.153), with 36% reporting cannabis as the drug used most often (37% in 2022), followed by alcohol (30%; 26% in 2022) and then ecstasy (12%; 7% in 2022) (Figure 2).

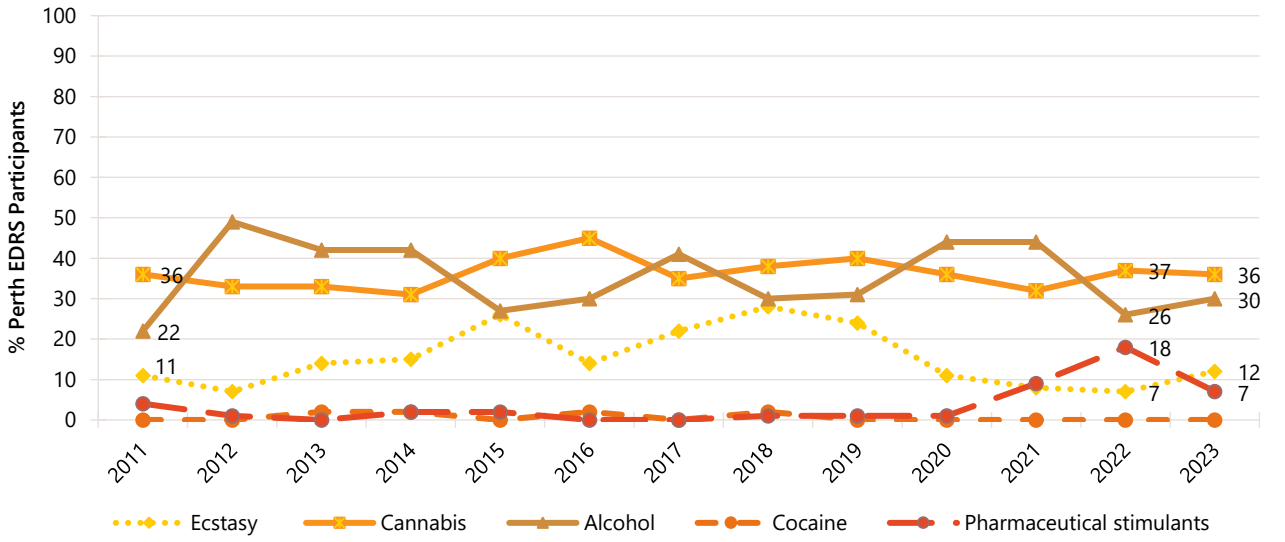
In 2023, 56% of the Perth sample reported weekly or more frequent cannabis use (53% in 2022; p=0.780) and 18% reported weekly or more frequent ecstasy use (10% in 2022; p=0.159). There was a significant increase in the percentage who reported weekly or more frequent methamphetamine use (12% in 2023; n≤5 in 2022; p=0.029) (Figure 3).

Figure 1: Drug of choice, Perth, WA, 2003-2023



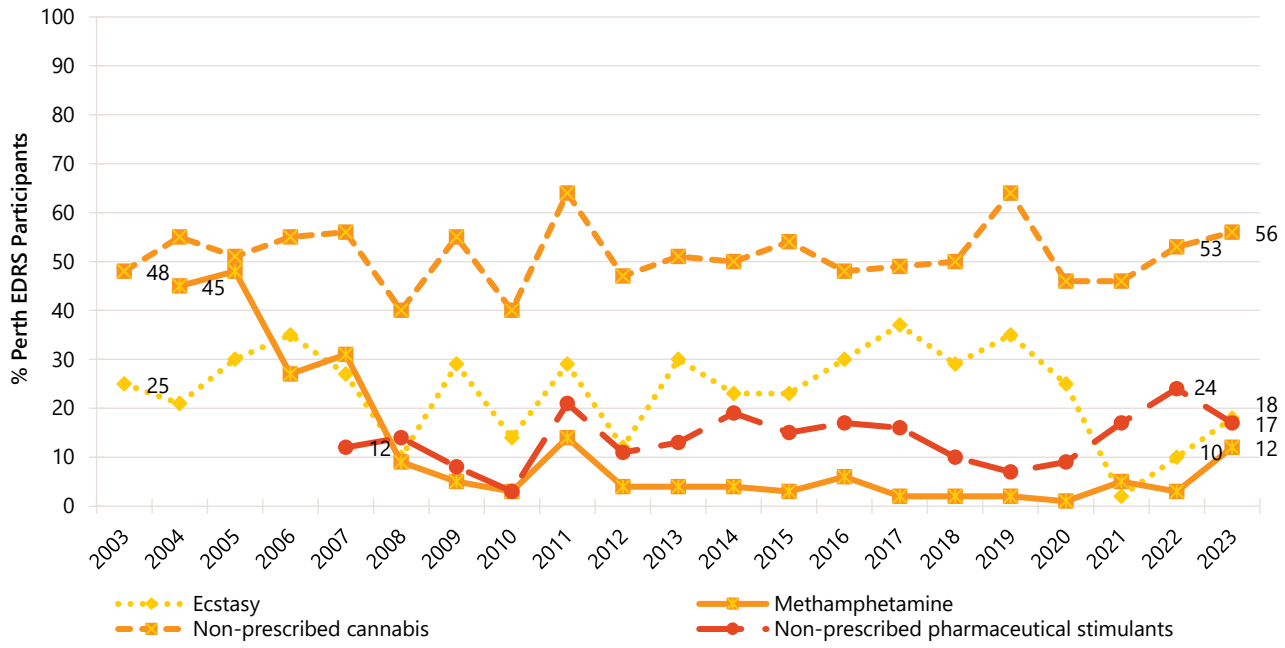
Note. Participants could only endorse one substance. Substances listed in this figure are the primary endorsed; nominal percentages have endorsed other substances. Data labels are only provided for the first (2003) and two most recent years (2022 and 2023) of monitoring, however labels are suppressed where there are small numbers (i.e., n≤5 but not 0). For historical numbers, please refer to the data tables. The response option 'Don't know' was excluded from analysis. Statistical significance for 2022 versus 2023 presented in figure; *p<0.050; **p<0.010; ***p<0.001.

Figure 2: Drug used most often in the past month, Perth, WA, 2011-2023



Note. Participants could only endorse one substance. Substances listed in this figure are the primary endorsed; nominal percentages have endorsed other substances. Data are only presented for 2011-2023 as this question was not asked in 2003-2010. Data labels are only provided for the first (2011) and two most recent years (2022 and 2023) of monitoring, however labels are suppressed where there are small numbers (i.e., n≤5 but not 0). For historical numbers, please refer to the data tables. The response option 'Don't know' was excluded from analysis. Statistical significance for 2022 versus 2023 presented in figure; *p<0.050; **p<0.010; ***p<0.001.

Figure 3: Weekly or more frequent substance use in the past six months, Perth, WA, 2003-2023



Note. Computed from the entire sample regardless of whether they had used the substance in the past six months. Monitoring of pharmaceutical stimulants commenced in 2007. Data labels are only provided for the first (2003/2004) and two most recent years (2022 and 2023) of monitoring, however labels are suppressed where there are small numbers (i.e., n≤5 but not 0). For historical numbers, please refer to the data tables. The response option 'Don't know' was excluded from analysis. Recruitment difficulties were experienced in 2011 (total sample N=28); therefore, all data from this year should be interpreted with caution. Statistical significance for 2022 versus 2023 presented in figure; *p<0.050; **p<0.010; ***p<0.001.

2

Ecstasy

Participants were asked about their recent (past six month) use of various forms of ecstasy (3,4-methylenedoxymethamphetamine), including pills, powder, capsules, and crystal.

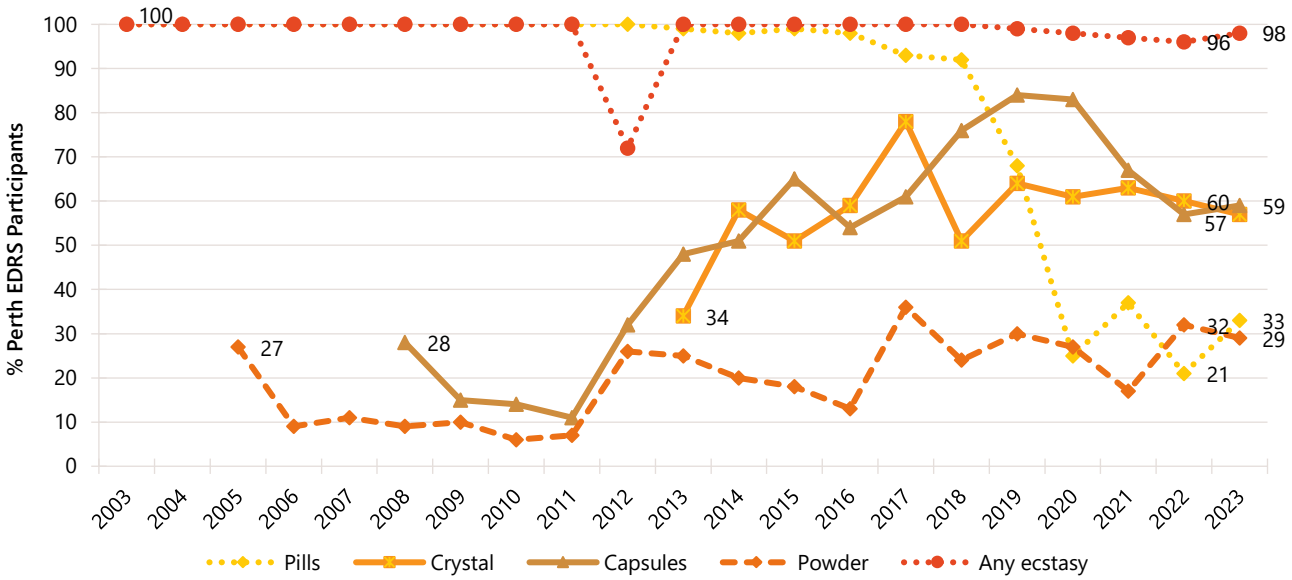
Recent Use (past 6 months)

Nearly all participants (98%) reported use of any ecstasy in the six months preceding interview, consistent with previous years (Figure 4; 96% in 2022; p=0.683) and reflecting the eligibility criteria (see methods). The per cent reporting pill, capsule, crystal, and powder forms remained stable between 2022 and 2023 (p=0.082; p=0.882; p=0.775; p=0.755, respectively).

Frequency of Use

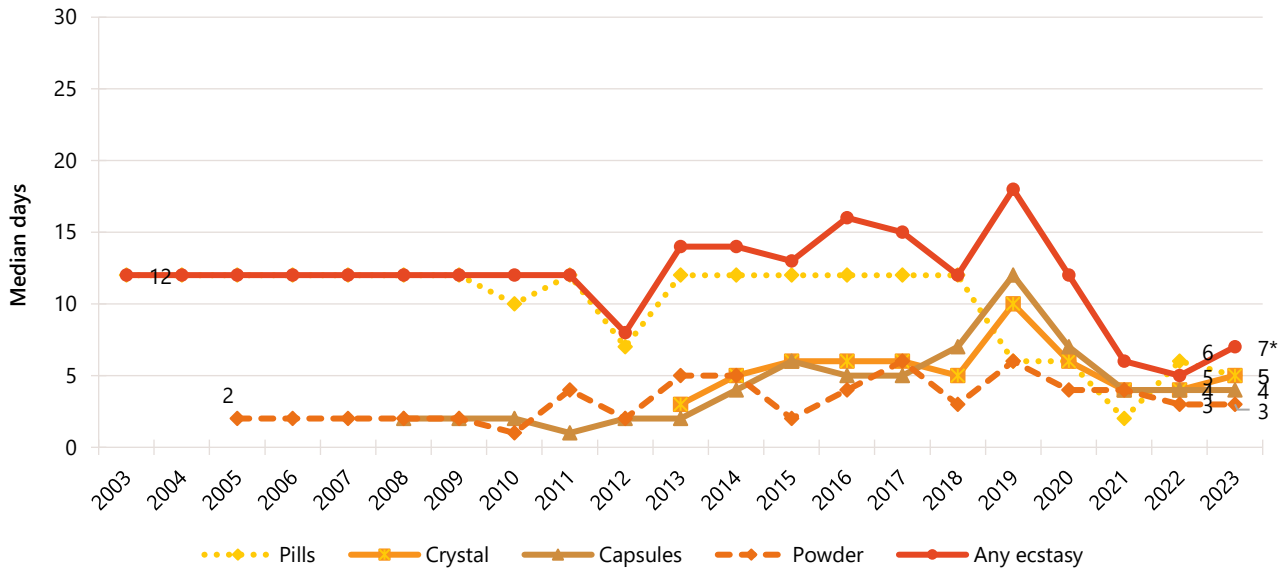
Participants reported using ecstasy (in any form) on a median of seven days in the six months preceding interview (IQR=5-15; n=98), which remains lower than what has been observed historically (before the illicit drug market disruptions associated with the COVID-19 pandemic), but represents a significant increase relative to 2022 (5 days; IQR=3-12; n=96; p=0.044) (Figure 5). Weekly or more frequent use of any form of ecstasy remained stable, relative to 2022 (18%; 10% in 2022; p=0.158) (Figure 4).

Figure 4: Past six month use of any ecstasy, and ecstasy pills, powder, capsules, and crystal, Perth, WA, 2003-2023



Note. Up until 2012, participant eligibility was determined based on any recent ecstasy use; subsequently it has been expanded to broader illicit stimulant use. Data collection for powder started in 2005, capsules in 2008 and crystal in 2013. The response option 'Don't know' was excluded from analysis. Data labels are only provided for the first (2003/2005/2008/2013) and two most recent years (2022 and 2023) of monitoring, however labels are suppressed where there are small numbers (i.e., n≤5 but not 0). For historical numbers, please refer to the data tables. Recruitment difficulties were experienced in 2011 (total sample N=28); therefore, all data from this year should be interpreted with caution. Statistical significance for 2022 versus 2023 presented in figure; *p<0.050; **p<0.010; ***p<0.001.

Figure 5: Median days of any ecstasy and ecstasy pills, powder, capsules, and crystal use in the past six months, Perth, WA, 2003-2023



Note. Up until 2012, participant eligibility was determined based on any recent ecstasy use; subsequently it has been expanded to broader illicit stimulant use. Data collection for powder started in 2005, capsules in 2008 and crystal in 2013. Median days computed among those who reported past 6-month use (maximum 180 days). Median days rounded to the nearest whole number. The response option 'Don't know' was excluded from analysis. Y axis reduced to 30 days to improve visibility of trends. Data labels are only provided for the first (2003/2005/2008/2013) and two most recent years (2022 and 2023) of monitoring, however labels are suppressed where there are small numbers (i.e., n≤5 but not 0). For historical numbers, please refer to the data tables. Recruitment difficulties were experienced in 2011 (total sample N=28); therefore, all data from this year should be interpreted with caution. Statistical significance for 2022 versus 2023 presented in figure; *p<0.050; **p<0.010; ***p<0.001.

Patterns of Consumption (by form)

Ecstasy Pills

Recent Use (past 6 months): One third of the sample (33%) reported recent use of ecstasy pills in 2023, stable relative to 2022 (21%; p=0.082) (Figure 4).

Frequency of Use: Ecstasy pills were used on a median of five days in the preceding six months (IQR=2-12; n=33), stable relative to six days in 2022 (IQR=3-13; n=21; p=0.521) (Figure 5). Among those reporting recent pill use, 18% reported weekly or more frequent use in 2023 (n≤5 in 2022).

Routes of Administration: Swallowing remained the most common route of administration (ROA) (100%; 95% in 2022; p=0.389), although 27% reported snorting pills in 2023 (43% in 2022; p=0.373).

Quantity: Of those who reported recent use and responded (n=33), the median 'typical' amount used per session was two pills (IQR=2-3; 2 pills in 2022; IQR=2-3; n=21). Meanwhile, the median maximum amount used per session was four pills (IQR=2-6; n=33), stable from four pills in 2022 (IQR=3-6; n=21; p=0.823).

Ecstasy Capsules

Recent Use (past 6 months): Almost three fifths of the sample (59%) reported recent use of ecstasy capsules in 2023, stable relative to 2022 (57%; p=0.882) (Figure 4).

Frequency of Use: Capsules were used on a median of four days in the six months preceding interview (IQR=2-6; n=59), stable relative to four days in 2022 (IQR=3-7; n=57; p=0.490) (Figure 5). Few participants reported weekly or more frequent capsule use in 2023 (n≤5; n≤5 in 2022).

Routes of Administration: The most common ROA for capsules was swallowing (98%; 100% in 2022), followed by snorting (24%; n≤5 in 2022; p=0.043).

Quantity: Among those who reported recent use and responded (n=59), the median 'typical' amount used per session remained stable at two capsules (IQR=2-3; 2 capsules in 2022; IQR=1-3; n=57; p=0.630), while the median maximum amount used per session remained stable at three capsules (IQR=2-5; n=59; 4 capsules in 2022; IQR=2-5; n=57; p=0.546).

Ecstasy Crystal

Recent Use (past 6 months): Recent use of ecstasy crystal remained stable at 57% in 2023 (60% in 2022; p=0.775) (Figure 4).

Frequency of Use: Participants reported using ecstasy crystal on a median of five days in the preceding six months (IQR=3-10; n=57), stable relative to 2022 (4 days; IQR=3-7; n=60; p=0.273) (Figure 5). Few participants reported weekly or more frequent use of ecstasy crystal in 2023 (n≤5; n≤5 in 2022; p=0.483).

Routes of Administration: The most common ROA for crystal ecstasy in 2023 remained swallowing (82%; 82% in 2022), followed by snorting (56%; 60% in 2022; p=0.713).

Quantity: Among those who reported recent use and responded (n=52), the median 'typical' amount of ecstasy crystal used per session was 0.40 grams (IQR=0.20-0.50; 0.30 grams in 2022; IQR=0.20-0.50; n=41; p=0.879), while the median maximum amount used per session was 0.50 grams (IQR=0.30-1.00; n=52; 0.50 grams in 2022; IQR=0.50-1.00; n=42; p=0.773).

Ecstasy Powder

Recent Use (past 6 months): Recent use of ecstasy powder was reported by 29% of the sample in 2023, stable relative to 32% in 2022 (p=0.755) (Figure 4).

Frequency of Use: Ecstasy powder was used on a median of three days in the preceding six months (IQR=2-6; n=29), stable from three days in 2022 (IQR=2-10; n=32; p=0.919) (Figure 5). Few participants (n≤5) reported weekly or more frequent use of ecstasy powder in 2023 (n≤5 in 2022; p=0.614).

Routes of Administration: The most common ROA for ecstasy powder in 2023 remained snorting (79%; 88% in 2022; p=0.496), while 52% reported swallowing (44% in 2022; p=0.605).

Quantity: Among those who reported recent use and responded (n=26), the median 'typical' amount of powder used per session was 0.30 grams (IQR=0.30-0.50; 0.30 grams in 2022; IQR=0.20-0.50; n=21; p=0.957), while the median maximum amount used per session was 0.50 grams (IQR=0.50-1.00; n=26; 0.60 grams in 2022; IQR=0.30-1.00; n=21; p=0.636).

Price, Perceived Purity and Perceived Availability

Ecstasy Pills

Price: The median price per ecstasy pill was $35 in 2023 (IQR=30-39; n=30), while few were able to comment on price in 2022 (n≤5; p=0.355) (Figure 6).

Perceived Purity: Perceived purity of ecstasy pills remained stable between 2022 and 2023 (p=0.113). Among those who responded in 2023 (n=38), the greatest percentage reported the purity of pills as 'medium' (37%; 17% in 2022), followed by 'high' (26%; 26% in 2022) and then 'low' (n≤5; 39% in 2022) (Figure 8).

Perceived Availability: A significant change was identified between 2022 and 2023 in terms of perceived availability of pills (p=0.003). Specifically, among those able to comment in 2023 (n=39), a greater percentage of participants reported that pills were 'very easy' to access (44%; 8% in 2022), while there was an inverse decrease in those reporting access as 'difficult' (33%; 52% in 2022). No participants reported that pills were 'very difficult' to access in 2023 (12% in 2022) (Figure 12).

Ecstasy Capsules

Price: The median price per ecstasy capsule in 2023 was $35 (IQR=30-35; n=42), stable from $30 in 2022 (IQR=30-35; n=19; p=0.632) (Figure 7).

Perceived Purity: A significant change was identified between 2022 and 2023 in relation to the perceived purity of capsules (p<0.001). Among those able to comment in 2023 (n=55), there was an increase in the per cent of participants reporting 'medium' (42%; 18% in 2022) and 'high' purity (38%; 17% in 2022), with an inverse decrease in the per cent reporting 'low' (n≤5; 32% in 2022) or 'fluctuating' purity in 2023 (15%; 33% in 2022) (Figure 9).

Perceived Availability: A significant change was also identified between 2022 and 2023 in relation to the perceived availability of capsules (p<0.001). Among those able to comment in 2023 (n=55), capsules were most commonly perceived as 'easy' (44%; 42% in 2022) or 'very easy' (42%; 7% in 2022) to access, with an inverse decrease in the percentage reporting access as 'difficult' (15%; 41% in 2022) or 'very difficult' in 2023 (0%; 10% in 2022) (Figure 13).

Ecstasy Crystal

Price: The median price per gram of ecstasy crystal was $350 in 2023 (IQR=300-350; n=38). While stable relative to $300 in 2022 (IQR=295-350; n=24; p=0.331), the median price per gram has almost tripled since 2020 ($125; IQR=100-150) (Figure 7).

Perceived Purity: A significant change was identified in relation to the perceived purity of crystal between 2022 and 2023 (p=0.033). Among those able to comment in 2023 (n=57),

there was an increase in the per cent of participants reporting the purity of crystal as being 'medium' (46%; 24% in 2022) or 'high' (37%; 33% in 2022), with an inverse decrease in the per cent reporting 'fluctuating' (11%; 24% in 2022) or 'low' purity (n≤5; 18% in 2022) (Figure 10).

Perceived Availability: Perceived availability remained stable between 2022 and 2023 (p=0.091). Among those able to comment in 2023 (n=57), most perceived crystal as being 'easy' (46%; 40% in 2022) or 'very easy' to access (37%; 22% in 2022). Almost one fifth (18%) reported that crystal was 'difficult' or 'very difficult' to obtain in 2023 (38% in 2022) (Figure 14).

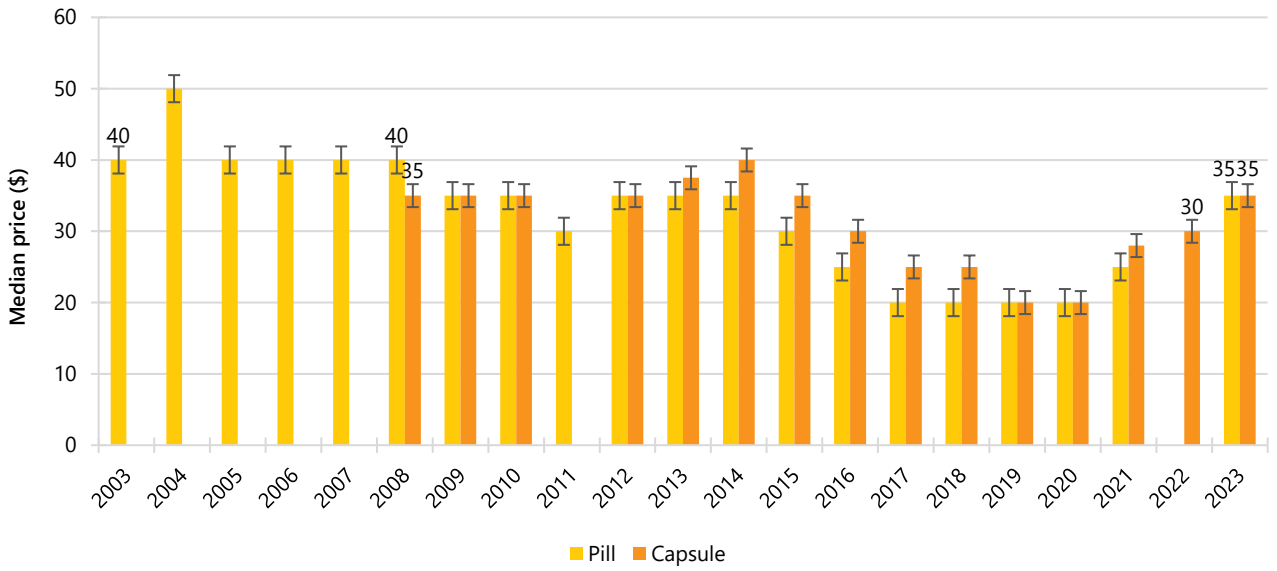
Ecstasy Powder

Price: The median price per gram of ecstasy powder in 2023 was $305 (IQR=285-350; n=10), stable from $350 in 2022 (IQR=350-350; n=9; p=0.174) (Figure 7).

Perceived Purity: The perceived purity of powder remained stable between 2022 and 2023 (p=0.146). Among those able to comment in 2023 (n=21), most reported 'medium' purity (52%; 46% in 2022), followed by 'high' (29%; 21% in 2022) purity (Figure 11).

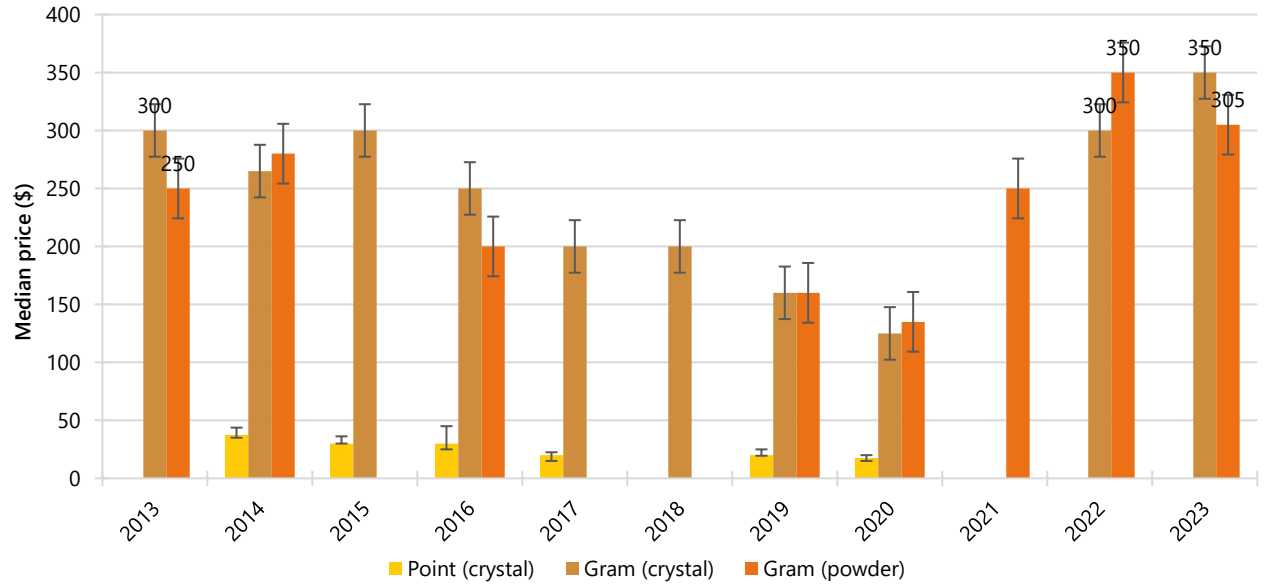
Perceived Availability: A significant change was identified in the perceived availability of powder between 2022 and 2023 (p=0.045). Specifically, among those able to comment in 2023 (n=21), there was an increase in the per cent reporting powder as being 'very easy' (29%; n≤5 in 2022) or 'easy' to obtain in 2023 (38%; 29% in 2022), while there was an inverse decrease in those reporting powder as 'difficult' to access (33%; 63% in 2022) (Figure 15).

Figure 6: Median price of ecstasy pills and capsules, Perth, WA, 2003-2023



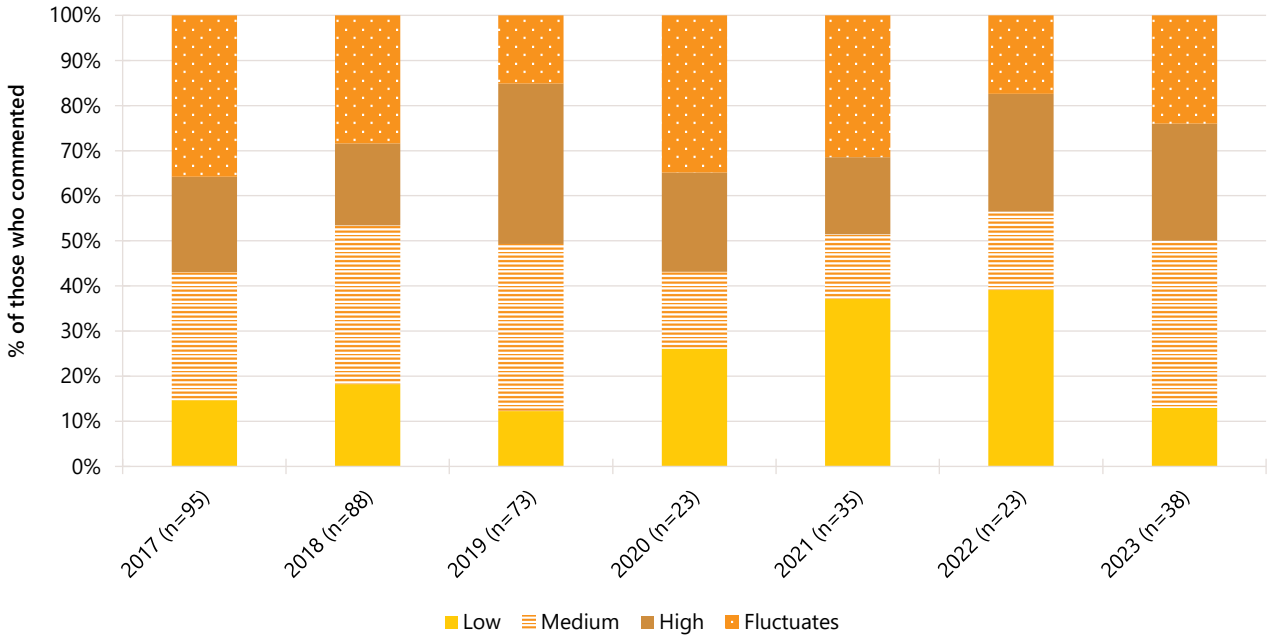
Note. Among those who commented. Data collection for price of ecstasy crystal (gram and point) and ecstasy powder (gram) started in 2013. No participants reported price data for a 'point' of ecstasy crystal in 2013 or 2021. Data labels are only provided for the first (2003/2013) and two most recent years (2022 and 2023) of monitoring, however labels are suppressed where there are small numbers (i.e., n≤5 but not 0). Data are suppressed in the figure and data tables where n≤5 responded to the item. The response option 'Don't know' was excluded from analysis. For historical numbers, please refer to the data tables. The error bars represent the IQR. Recruitment difficulties were experienced in 2011 (total sample N=28); therefore, all data from this year should be interpreted with caution. Statistical significance for 2022 versus 2023 presented in figure; *p<0.050; **p<0.010; ***p<0.001.

Figure 7: Median price of ecstasy crystal (per gram and point) and powder (gram only), Perth, WA, 2013-2023



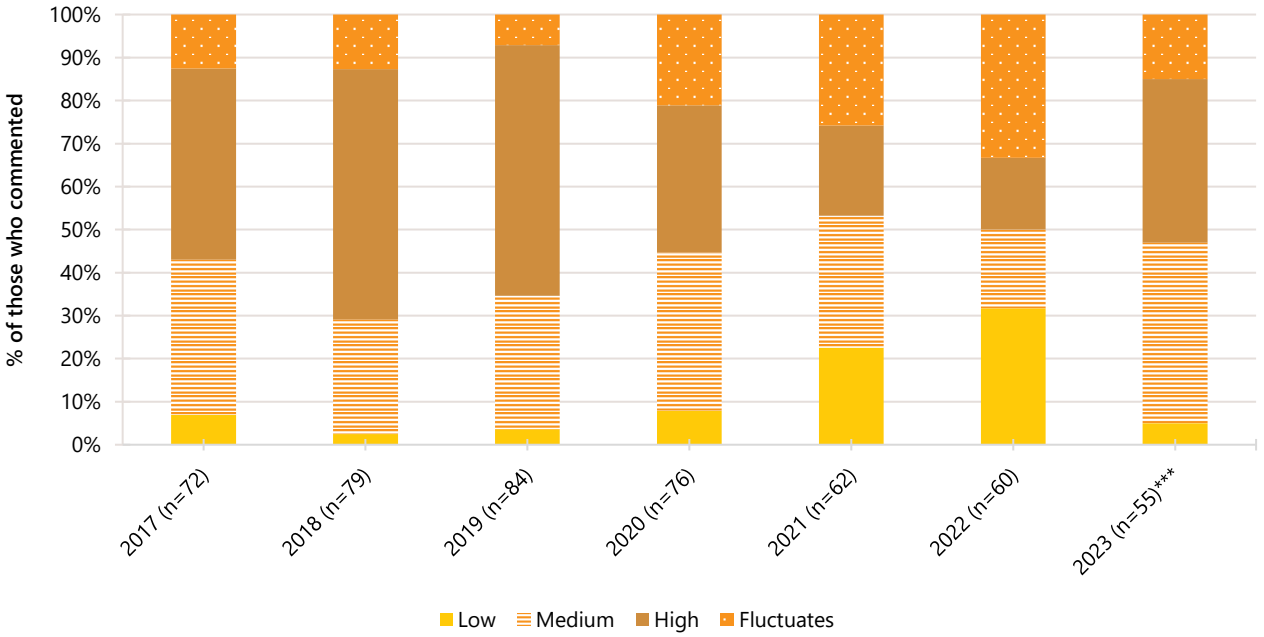
Note. Among those who commented. Data collection for price of ecstasy crystal (gram and point) and ecstasy powder (gram) started in 2013. No participants reported price data for a 'point' of ecstasy crystal in 2013 or 2021. Data labels are only provided for the first (2013) and two most recent years (2022 and 2023) of monitoring, however labels are suppressed where there are small numbers (i.e., n≤5 but not 0). Data are suppressed in the figure and data tables where n≤5 responded to the item. The response option 'Don't know' was excluded from analysis. For historical numbers, please refer to the data tables. The error bars represent the IQR. Statistical significance for 2022 versus 2023 presented in figure; *p<0.050; **p<0.010; ***p<0.001.

Figure 8: Current perceived purity of ecstasy pills, Perth, WA, 2017-2023



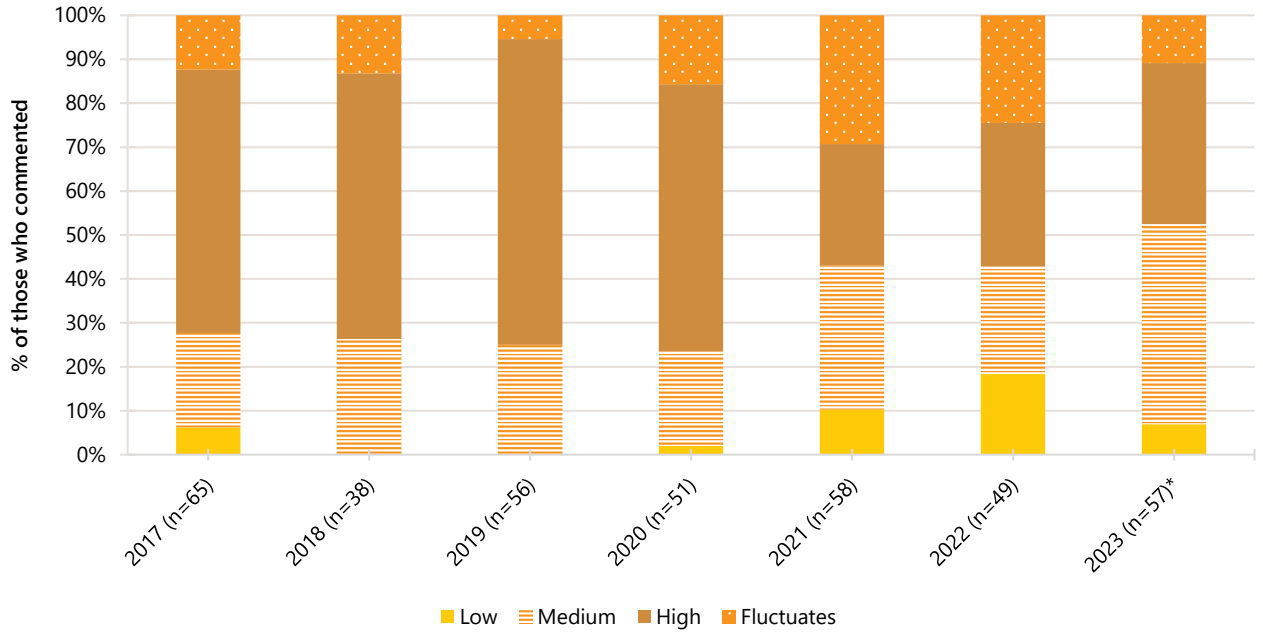
Note. The response option 'Don't know' was excluded from analysis. Market questions were only asked for all forms of ecstasy from 2017 onwards. Data labels are not shown for any of the stacked bar charts in the jurisdictional reports; see data tables for values. Data are suppressed in the figure and data tables where n≤5 responded to the item. Statistical significance for 2022 versus 2023 presented in figure; *p<0.050; **p<0.010; ***p<0.001.

Figure 9: Current perceived purity of ecstasy capsules, Perth, WA, 2017-2023



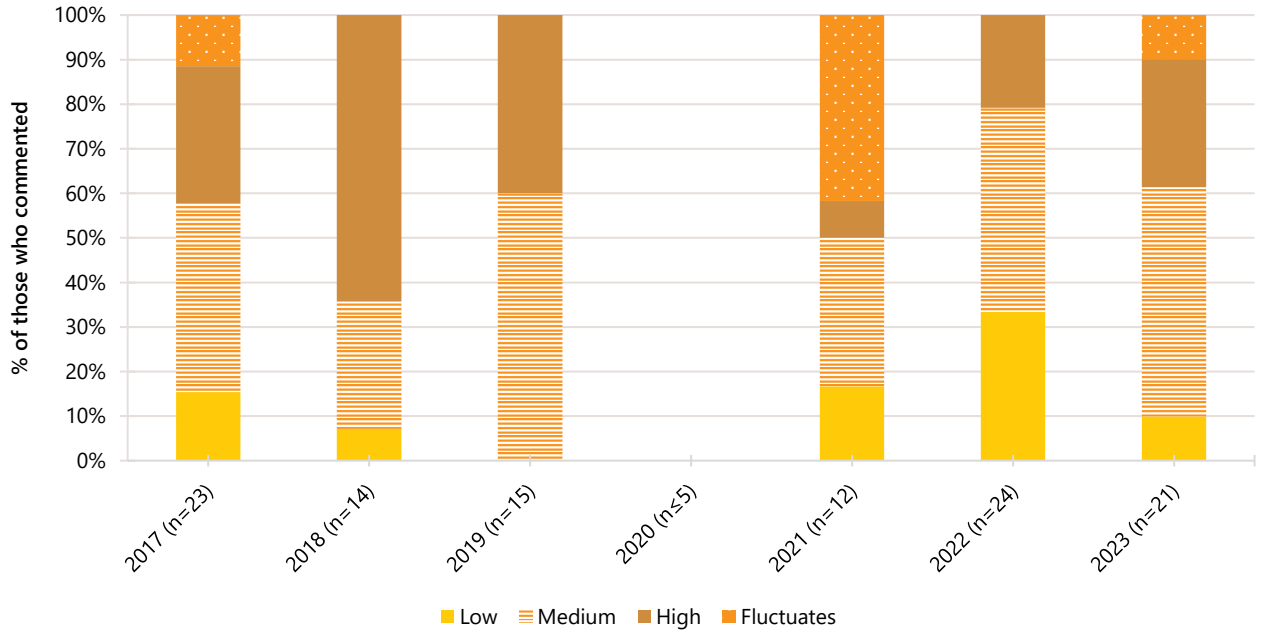
Note. The response option 'Don't know' was excluded from analysis. Market questions were only asked for all forms of ecstasy from 2017 onwards. Data labels are not shown for any of the stacked bar charts in the jurisdictional reports; see data tables for values. Data are suppressed in the figure and data tables where n≤5 responded to the item. Statistical significance for 2022 versus 2023 presented in figure; *p<0.050; **p<0.010; ***p<0.001.

Figure 10: Current perceived purity of ecstasy crystal, Perth, WA, 2017-2023



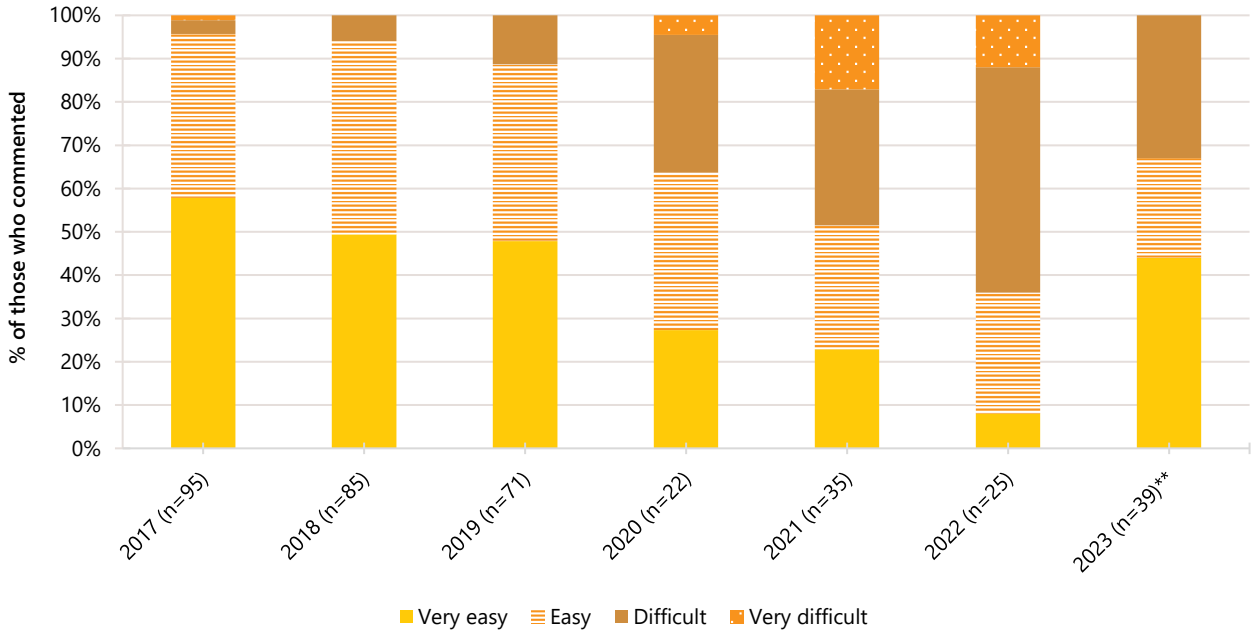
Note. The response option 'Don't know' was excluded from analysis. Market questions were only asked for all forms of ecstasy from 2017 onwards. Data labels are not shown for any of the stacked bar charts in the jurisdictional reports; see data tables for values. Data are suppressed in the figure and data tables where n≤5 responded to the item. Statistical significance for 2022 versus 2023 presented in figure; *p<0.050; **p<0.010; ***p<0.001.

Figure 11: Current perceived purity of ecstasy powder, Perth, WA, 2017-2023



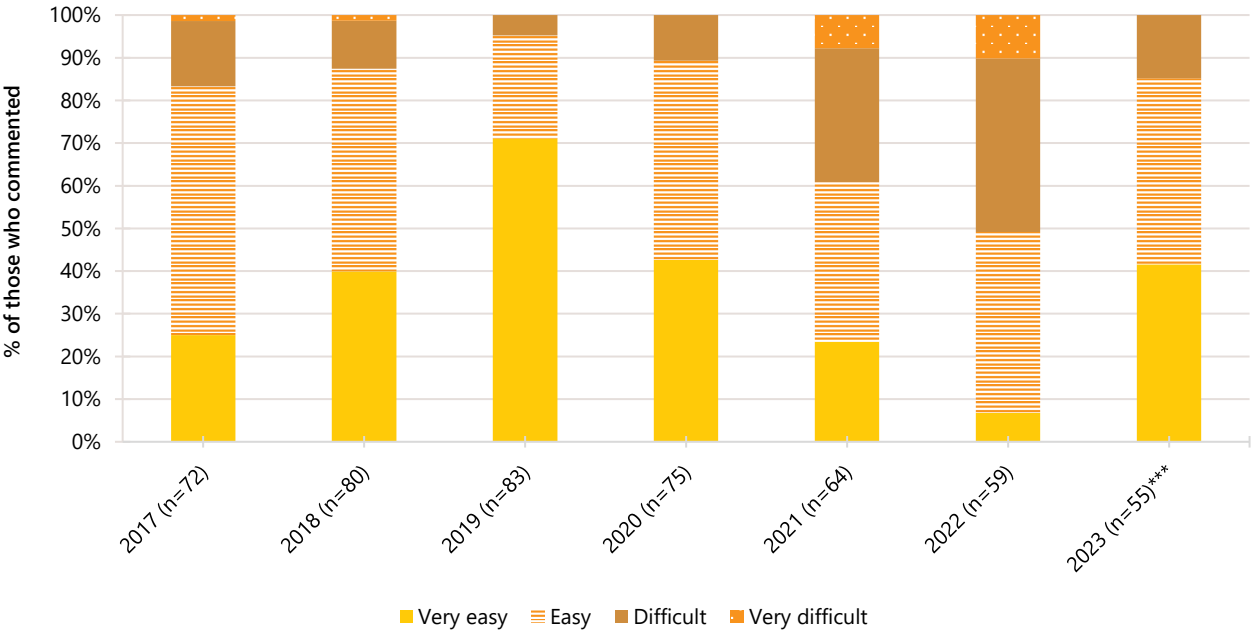
Note. The response option 'Don't know' was excluded from analysis. Market questions were only asked for all forms of ecstasy from 2017 onwards. Data labels are not shown for any of the stacked bar charts in the jurisdictional reports; see data tables for values. Data are suppressed in the figure and data tables where n≤5 responded to the item. Statistical significance for 2022 versus 2023 presented in figure; *p<0.050; **p<0.010; ***p<0.001.

Figure 12: Current perceived availability of ecstasy pills, Perth, WA, 2017-2023



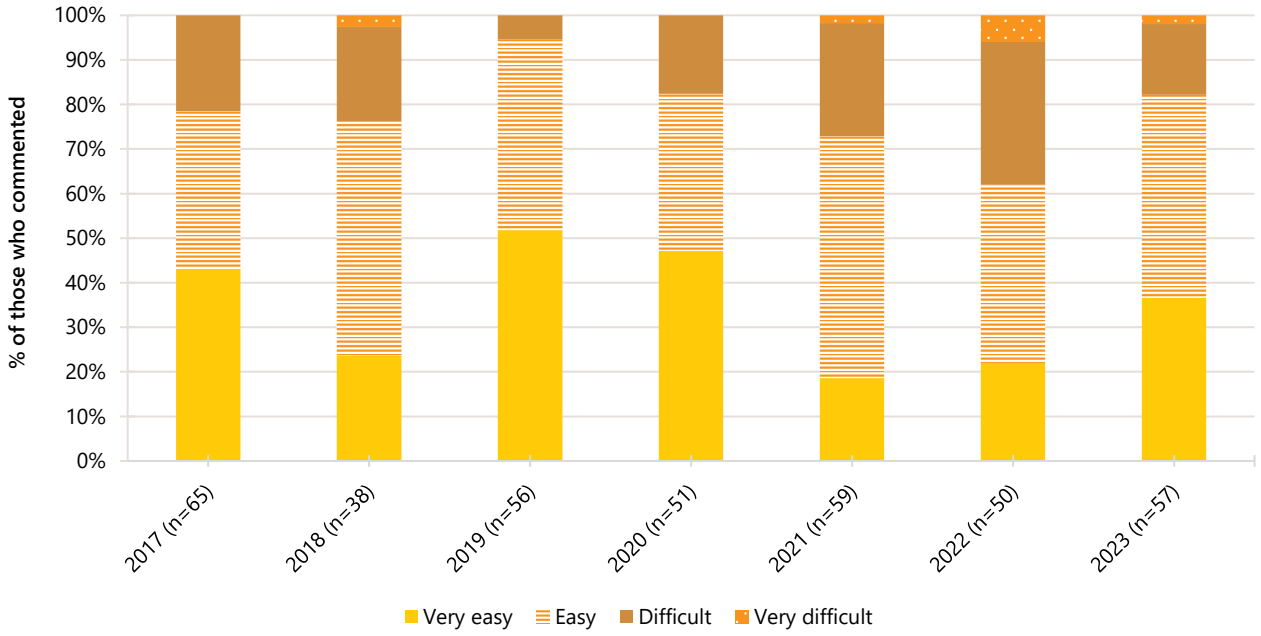
Note. The response option 'Don't know' was excluded from analysis. Market questions were only asked for all forms of ecstasy from 2017 onwards. Data labels are not shown for any of the stacked bar charts in the jurisdictional reports; see data tables for values. Data are suppressed in the figure and data tables where n≤5 responded to the item. Statistical significance for 2022 versus 2023 presented in figure; *p<0.050; **p<0.010; ***p<0.001.

Figure 13: Current perceived availability of ecstasy capsules, Perth, WA, 2017-2023



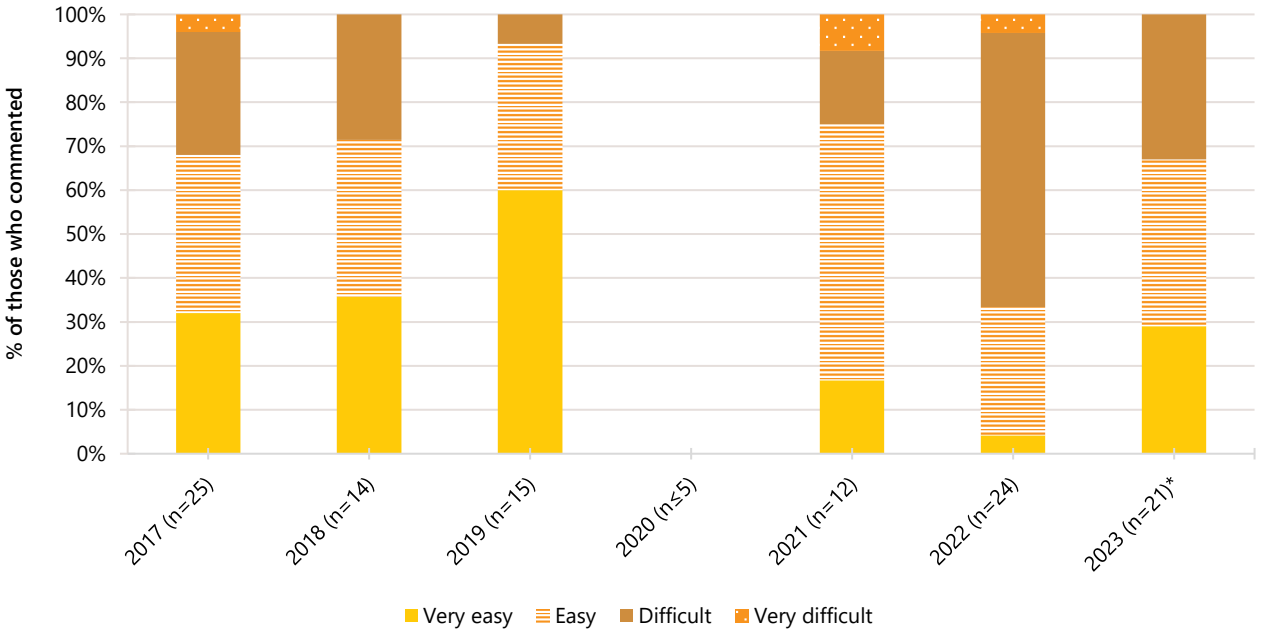
Note. The response option 'Don't know' was excluded from analysis. Market questions were only asked for all forms of ecstasy from 2017 onwards. Data labels are not shown for any of the stacked bar charts in the jurisdictional reports; see data tables for values. Data are suppressed in the figure and data tables where n≤5 responded to the item. Statistical significance for 2022 versus 2023 presented in figure; *p<0.050; **p<0.010; ***p<0.001.

Figure 14: Current perceived availability of ecstasy crystal, Perth, WA, 2017-2023



Note. The response option 'Don't know' was excluded from analysis. Market questions were only asked for all forms of ecstasy from 2017 onwards. Data labels are not shown for any of the stacked bar charts in the jurisdictional reports; see data tables for values. Data are suppressed in the figure and data tables where n≤5 responded to the item. Statistical significance for 2022 versus 2023 presented in figure; *p<0.050; **p<0.010; ***p<0.001.

Figure 15: Current perceived availability of ecstasy powder, Perth, WA, 2017-2023



Note. The response option 'Don't know' was excluded from analysis. Market questions were only asked for all forms of ecstasy from 2017 onwards. Data labels are not shown for any of the stacked bar charts in the jurisdictional reports; see data tables for values. Data are suppressed in the figure and data tables where n≤5 responded to the item. Statistical significance for 2022 versus 2023 presented in figure; *p<0.050; **p<0.010; ***p<0.001.

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

Patterns of Consumption (Any Methamphetamine)

Recent Use (past 6 months)

Twenty-nine per cent of the Perth sample reported recent use of any methamphetamine in 2023, representing a significant increase from 14% in 2022 (p=0.018). This increase also follows a period of relatively low and stable reports of use in the Perth sample between 2017-2022 (Figure 16).

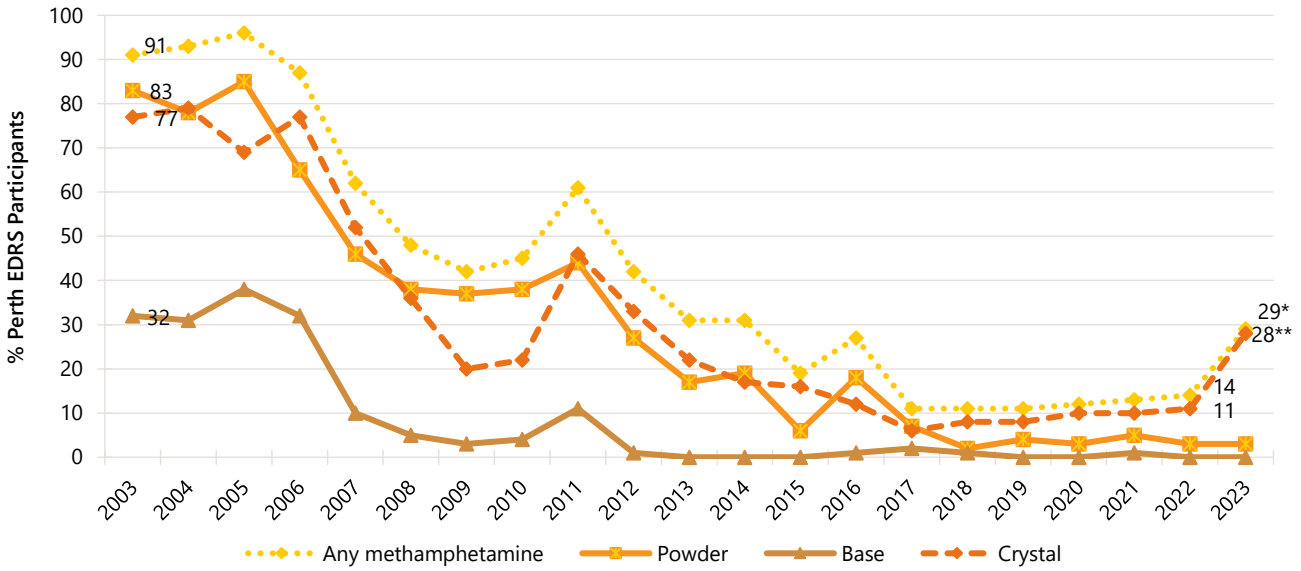
Frequency of Use

Participants reported using methamphetamine (in any form) on a median of 10 days in the six months preceding interview (IQR=2-60), stable relative to three days in 2022 (IQR=2-11; n=14; p=0.121) (Figure 17). Among participants who had recently used methamphetamine (in any form; n=29), 41% reported weekly or more frequent use (n≤5 in 2022; p=0.308).

Forms Used

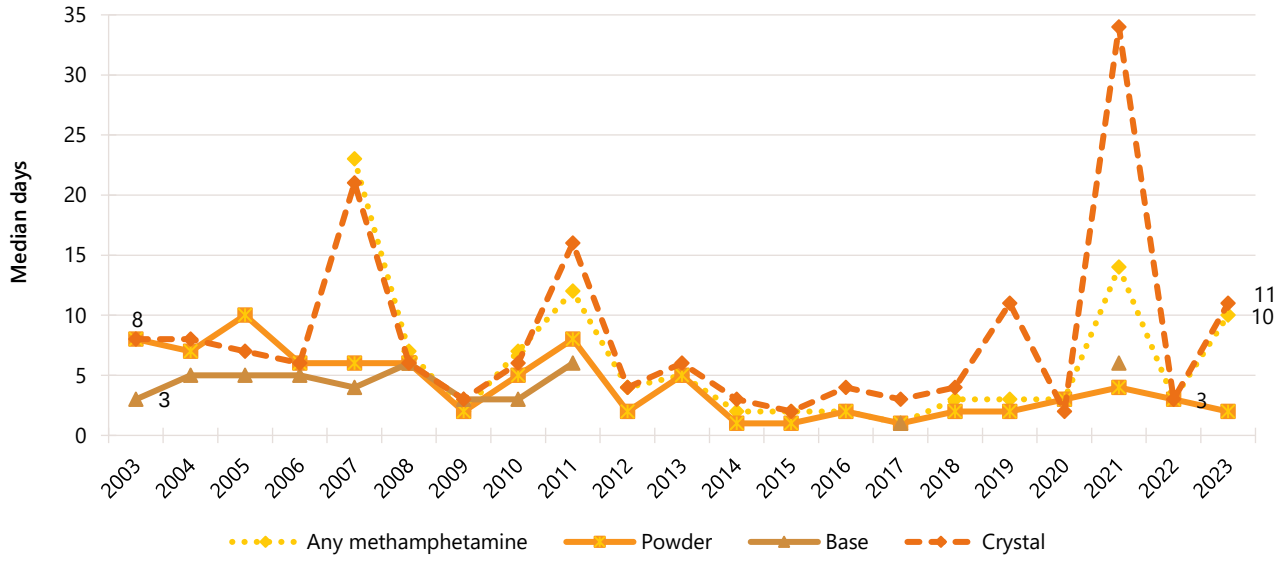
All forms of methamphetamine have decreased since the start of monitoring, with 91% of participants reporting any use in 2003, decreasing to 29% in 2023 (Figure 16). Of participants who had used methamphetamine in the six months preceding interview in 2023 (n=29), most had used crystal methamphetamine (97%; 79% in 2022; p=0.094), followed by powder (n≤5; 21% in 2022; p=0.373).

Figure 16: Past six month use of any methamphetamine, and methamphetamine powder, base, and crystal, Perth, WA, 2003-2023



Note. Data labels are only provided for the first (2003) and two most recent years (2022 and 2023) of monitoring, however labels are suppressed where there are small numbers (i.e., n≤5 but not 0). The response option 'Don't know' was excluded from analysis. For historical numbers, please refer to the data tables. Recruitment difficulties were experienced in 2011 (total sample N=28); therefore, all data from this year should be interpreted with caution. Statistical significance for 2022 versus 2023 presented in figure; *p<0.050; **p<0.010; ***p<0.001.

Figure 17: Median days of any methamphetamine, powder, base, and crystal use in the past six months, Perth, WA, 2003-2023



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 35 days to improve visibility of trends. Data labels are only provided for the first (2003) and two most recent years (2022 and 2023) of monitoring, however labels are suppressed where there are small numbers (i.e., n≤5 but not 0). The response option 'Don't know' was excluded from analysis. Recruitment difficulties were experienced in 2011 (total sample N=28); therefore, all data from this year should be interpreted with caution. For historical numbers, please refer to the data tables. Statistical significance for 2022 versus 2023 presented in figure; *p<0.050; **p<0.010; ***p<0.001.

Patterns of Consumption (by form)

Methamphetamine Powder

Few participants (n≤5) reported recent use of methamphetamine powder in 2023 and preceding years, and therefore, further details are not reported. Please refer to the 2023 National EDRS Report for national trends, or contact the Drug Trends team for further information.

Methamphetamine Base

No participants reported recent use of methamphetamine base in 2023 and few (n≤5) in preceding years, therefore, further details are not reported. Please refer to the 2023 National EDRS Report for national trends, or contact the Drug Trends team for further information.

Methamphetamine Crystal

Recent Use (past 6 months): Twenty-eight per cent of the Perth sample reported recent use of methamphetamine crystal in 2023, representing a significant increase from 11% in 2022 (p=0.005) (Figure 16).

Frequency of Use: Methamphetamine crystal was used on a median of 11 days in the six months preceding interview in 2023 (IQR=4-63, n=28), stable relative to 2022 (3 days; IQR=2-18; n=11; p=0.221) (Figure 17). Among those who reported any recent use in 2023 (n=28), two fifths (39%) reported weekly or more frequent use (n≤5 in 2022; p=0.713).

Routes of Administration: Among those reporting crystal methamphetamine use in 2023 (n=28), most reported smoking it (82%; 91% in 2022; p=0.655). Few participants (n≤5) reported swallowing, snorting and injecting crystal methamphetamine in 2023 (each n≤5 in 2022), while no participants reported shelving/shafting in 2023 (0% in 2022).

Quantity: Among those who reported recent use and responded (n=28), the median 'typical' amount used per session was 0.20 grams (IQR=0.20-0.40), representing a significant increase from 0.10 grams in 2022 (IQR=0.10-0.20; n=9; p=0.022). Meanwhile, the median maximum amount used per session in 2023 was 0.50 grams (IQR=0.20-0.80; n=27), stable relative to 0.30 grams in 2022 (IQR=0.10-0.40; n=10; p=0.099).

Price, Perceived Purity and Perceived Availability

Due to low numbers (n≤5), details will not be reported on the price, perceived purity and perceived availability for methamphetamine powder or base. Please refer to the 2023 National EDRS Report for national trends, or contact the Drug Trends team for further information.

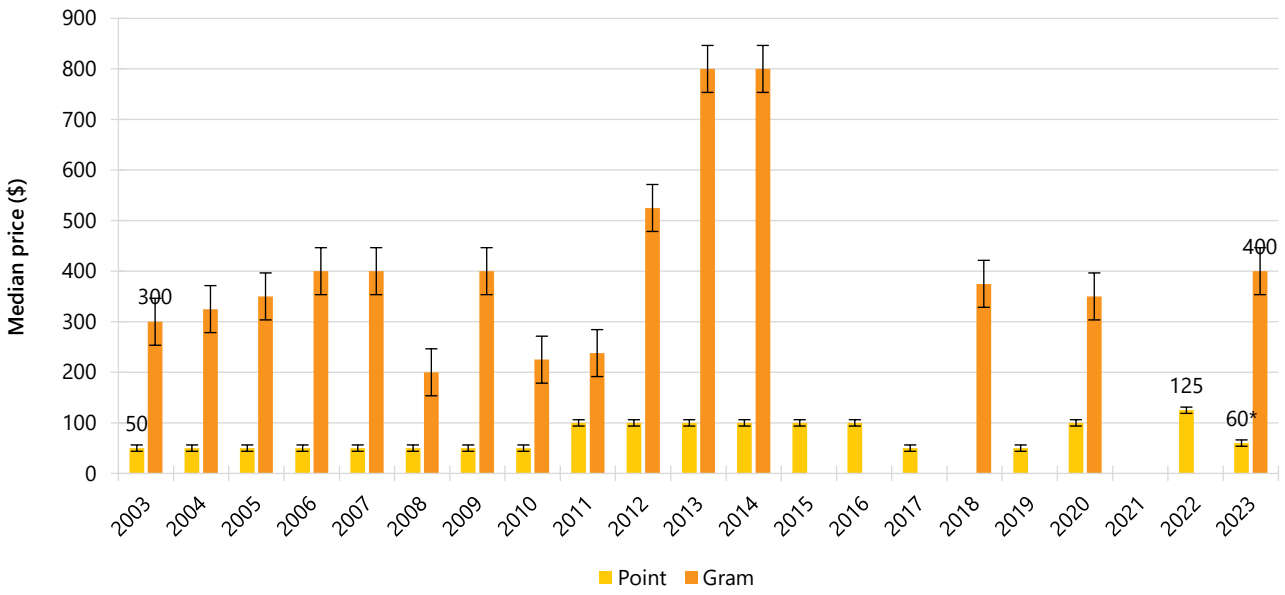
Methamphetamine Crystal

Price: Among those able to comment (n=10), the median price per point of crystal methamphetamine in 2023 was $60 (IQR=50-100), representing a significant decrease from $125 in 2022 (IQR=83-145; n=6; *p*=0.046). Of those able to comment on the price per gram in 2023 (n=7), the median price was $400 (IQR=300-550; n≤5 in 2022).

Perceived Purity: The perceived purity of methamphetamine crystal remained stable between 2022 and 2023 (*p*=0.856). Among those able to comment in 2023 (n=24), most perceived the purity as 'high' (63%; 64% in 2022) (Figure 19).

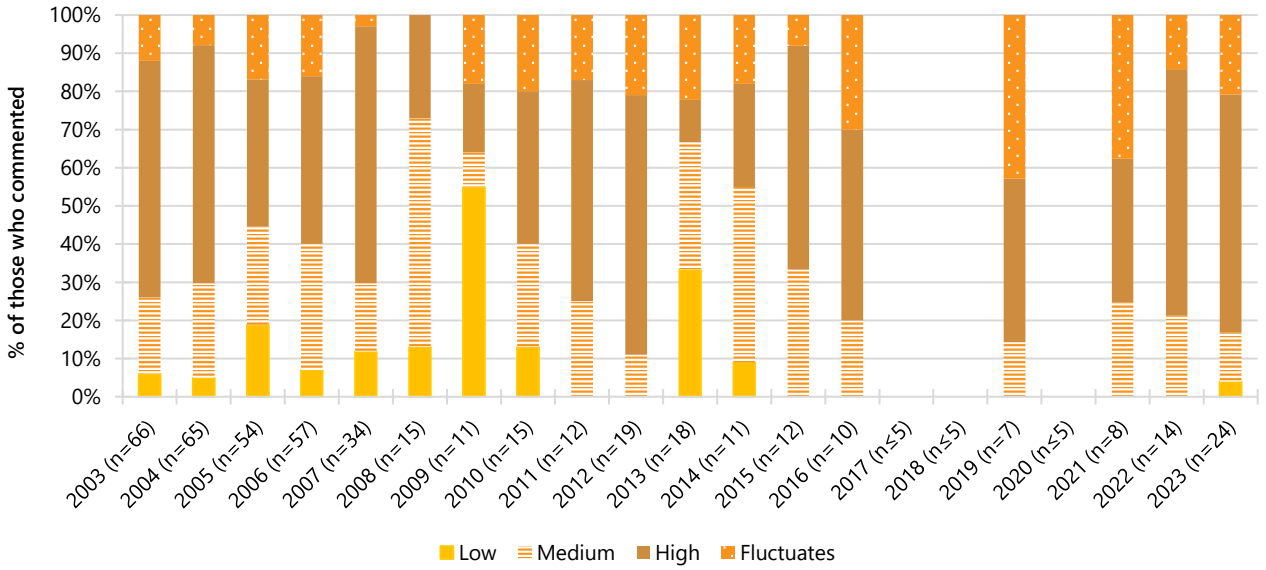
Perceived Availability: A significant change was identified in the perceived availability of crystal methamphetamine between 2022 and 2023 (*p*=0.014). Specifically, among those able to comment in 2023 (n=25), there was an increase in the per cent reporting crystal methamphetamine as being 'very easy' to access (84%; 43% in 2022) and a decline in the per cent reporting 'easy' (n≤5; 43% in 2022) and 'difficult' (0%; 14% in 2022) (Figure 20).

Figure 18: Median price of methamphetamine crystal per point and gram, Perth, WA, 2003-2023



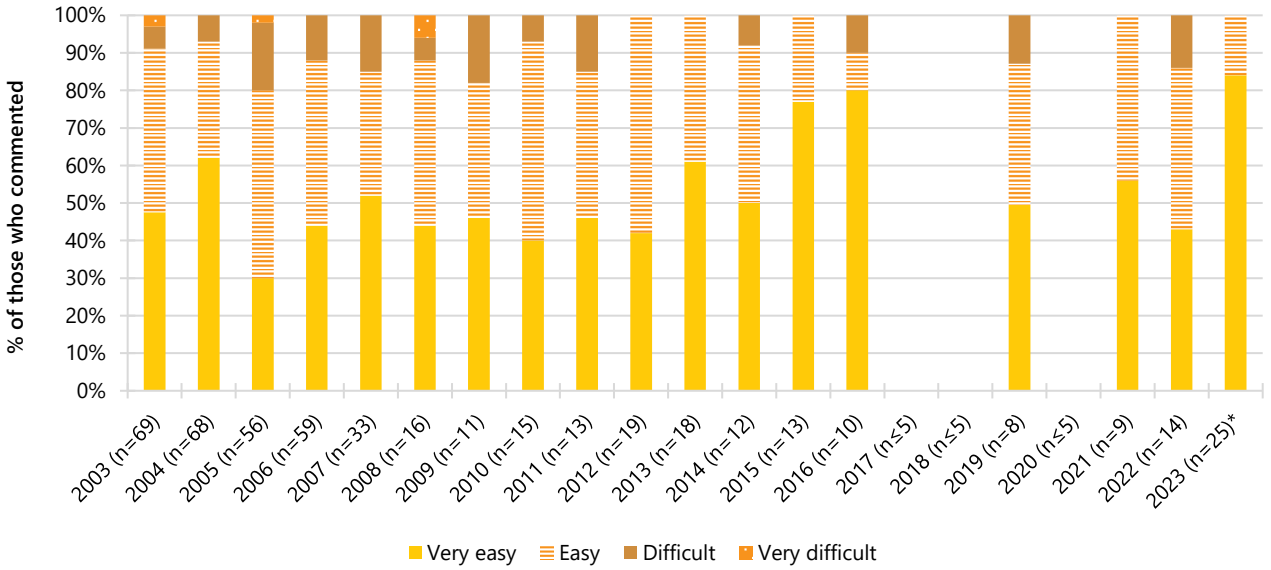
Note. Among those who commented. No participants reported purchasing a gram of powder methamphetamine in 2014, 2020, 2021 and 2022. Data labels are only provided for the first (2003) and two most recent years (2022 and 2023) of monitoring, however labels are suppressed where there are small numbers (i.e., n≤5 but not 0). Data are suppressed in the figure and data tables where n≤5 responded to the item. The response option 'Don't know' was excluded from analysis. For historical numbers, please refer to the data tables. The error bars represent the IQR. Recruitment difficulties were experienced in 2011 (total sample N=28); therefore, all data from this year should be interpreted with caution. Statistical significance for 2022 versus 2023 presented in figure; *p<0.050; **p<0.010; ***p<0.001.

Figure 19: Current perceived purity of methamphetamine crystal, Perth, WA, 2003-2023



Note. The response option 'Don't know' was excluded from analysis. Data labels are not shown for any of the stacked bar charts in the jurisdictional reports; see data tables for values. Data are suppressed in the figure and data tables where n≤5 responded to the item. Recruitment difficulties were experienced in 2011 (total sample N=28); therefore, all data from this year should be interpreted with caution. Statistical significance for 2022 versus 2023 presented in figure; *p<0.050; **p<0.010; ***p<0.001.

Figure 20: Current perceived availability of methamphetamine crystal, Perth, WA, 2003-2023



Note. The response option 'Don't know' was excluded from analysis. Data labels are not shown for any of the stacked bar charts in the jurisdictional reports; see data tables for values. Data are suppressed in the figure and data tables where n≤5 responded to the item. Recruitment difficulties were experienced in 2011 (total sample N=28); therefore, all data from this year should be interpreted with caution. Statistical significance for 2022 versus 2023 presented in figure; *p<0.050; **p<0.010; ***p<0.001.

4

Non-Prescribed Pharmaceutical Stimulants

Participants were asked about their recent (past six month) use of non-prescribed pharmaceutical stimulants, such as dexamfetamine, lisdexamfetamine (Vyvanse®), or methylphenidate (Concerta®, Ritalin®, Ritalin LA®). These substances are commonly prescribed to treat attention deficit hyperactivity disorder and narcolepsy.

Patterns of Consumption

Recent Use (past 6 months)

The per cent of participants reporting any recent use of non-prescribed pharmaceutical stimulants (e.g., dexamphetamine, methylphenidate, modafinil) has increased, albeit with some fluctuation, since the commencement of monitoring, from 43% in 2007 to 68% in 2023 (81% in 2022; p=0.053) (Figure 21).

Frequency of Use

Frequency of use remained stable in 2023, at a median of nine days in the six months prior to interview (IQR=4-21; n=68), stable from 10 days in 2022 (IQR=4-24; n=81; p=0.666) (Figure 21).

Routes of Administration

Among participants who had recently consumed non-prescribed pharmaceutical stimulants and responded (n=68), the vast majority reported swallowing as a route of administration (99%; 94% in 2022; p=0.220), followed by snorting (19%; 32% in 2022; p=0.097).

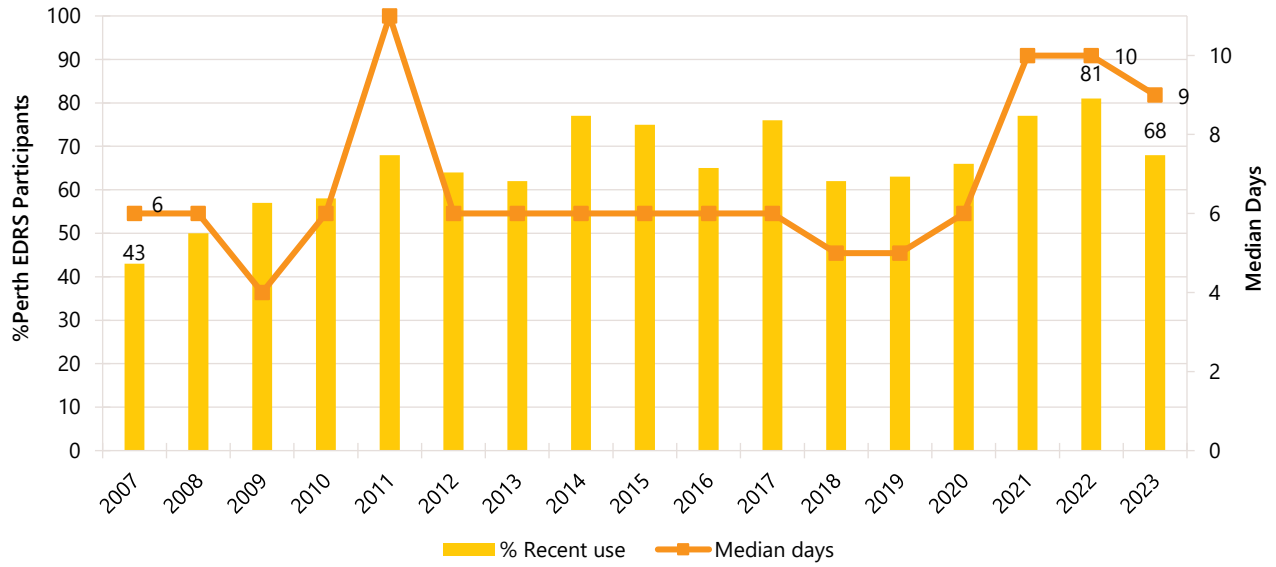
Quantity

Among those who reported recent use and responded (n=61), the median amount used in a 'typical' session was three pills/tablets (IQR=2-4), stable from two pills/tablets in 2022 (IQR=2-4; n=70; p=0.270). Of those who reported recent use and responded (n=63), the median maximum amount used per session was five pills/tablets (IQR=3-10), again stable from four tablets in 2022 (IQR=2-6; n=70; p=0.089).

Forms Used

Among participants who had recently consumed non-prescribed pharmaceutical stimulants and commented (n=68), the majority reported using dexamfetamine (96%; 94% in 2022; p=0.734), followed by lisdexamfetamine (37%; 31% in 2022; p=0.491) and Ritalin® (13%; 28% in 2022; p=0.033). Few participants reported use of modafinil in 2023 (n≤5; 9% in 2022; p=0.347).

Figure 21: Past six month use and frequency of use of non-prescribed pharmaceutical stimulants, Perth, WA, 2007-2023



Note. Monitoring of pharmaceutical stimulants commenced in 2007. Median days computed among those who reported recent use (maximum 180 days). Median days rounded to the nearest whole number. Secondary Y axis reduced to 10 days to improve visibility of trends. The response option 'Don't know' was excluded from analysis. Data labels are only provided for the first (2007) and two most recent years (2022 and 2023) of monitoring, however labels are suppressed where there are small numbers (i.e., n≤5 but not 0). For historical numbers, please refer to the data tables. Recruitment difficulties were experienced in 2011 (total sample N=28); therefore, all data from this year should be interpreted with caution. Statistical significance for 2022 versus 2023 presented in figure; *p<0.050; **p<0.010; ***p<0.001.

Price and Perceived Availability

Price and availability data for non-prescribed pharmaceutical stimulants were collected from 2022.

Price

Participants reported a median price of $5 per 5mg tablet in 2023 (IQR=5-8; n=49; $5 in 2022; IQR=4-7; n=36; p=0.135).

Perceived Availability

Among those who responded in 2023 (n=62), the perceived availability of non-prescribed pharmaceutical stimulants significantly changed between 2022 and 2023 (p=0.014). In 2023, 71% perceived non-prescribed pharmaceutical stimulants to be 'very easy' to obtain, an increase from 46% in 2022. An inverse decrease was observed in those reporting availability as 'easy' (19%; 42% in 2022).

5

Cocaine

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

Patterns of Consumption

Recent Use (past 6 months)

Since 2016, the per cent reporting any recent cocaine use has steadily increased. In 2023, 62% of the Perth sample reported recent use, stable from 66% in 2022 (p=0.661) (Figure 22).

Frequency of Use

Cocaine was used on a median of three days in the six months preceding interview in 2023 (IQR=1-6; n=62), stable from two days in 2022 (IQR=1-4; n=66; p=0.120), and consistent with the type of low frequency use typically observed in past years (Figure 22). Weekly or more frequent use of cocaine remained uncommon (n≤5 in 2023 and 2022; p=0.197).

Routes of Administration

The main route of administration for cocaine has consistently been 'snorting' (97% in 2023; 100% in 2022; p=0.233). Few participants (n≤5) reported 'swallowing' cocaine in 2023 (n≤5 in 2022; p=0.681) and few (n≤5) reported smoking cocaine (0% in 2022).

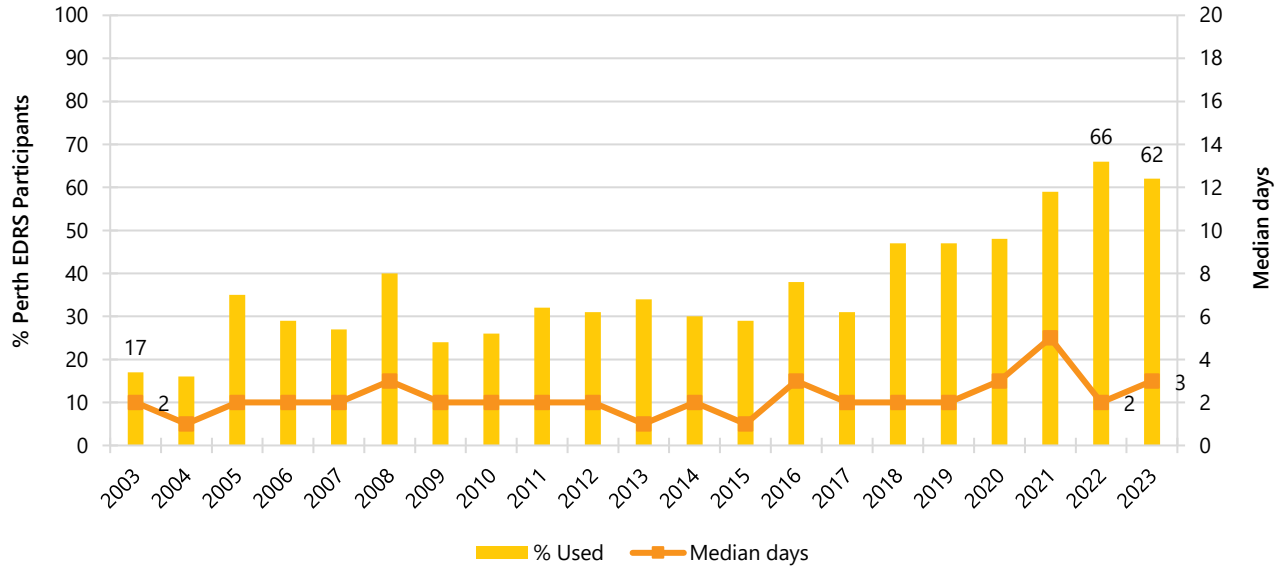
Quantity

Of those who reported recent cocaine use and responded (n=41), the median amount used in a 'typical' session was 0.50 grams (IQR=0.30-1.00; 0.50 grams in 2022; IQR=0.30-1.00; n=29; p=0.981). Of those who reported recent cocaine use and responded (n=44), the median maximum amount used per session was 0.50 grams (IQR=0.30-1.00; 1.00 gram in 2022; IQR=0.30-1.80; n=29; p=0.402).

Forms Used

Among participants who had recently used cocaine and responded (n=62), most reported using powder form (92%; 97% in 2022; p=0.263), while 10% reported using cocaine which came in rock form (n≤5 in 2022; p=0.758).

Figure 22: Past six month use and frequency of use of cocaine, Perth, WA, 2003-2023



Note. Median days computed among those who reported recent use (maximum 180 days). Median days rounded to the nearest whole number. Secondary Y axis reduced to 20 days to improve visibility of trends for days of use. Data labels are only provided for the first (2003) and two most recent years (2022 and 2023) of monitoring, however labels are suppressed where there are small numbers (i.e., n≤5 but not 0). The response option 'Don't know' was excluded from analysis. For historical numbers, please refer to the data tables. Recruitment difficulties were experienced in 2011 (total sample N=28); therefore, all data from this year should be interpreted with caution. Statistical significance for 2022 versus 2023 presented in figure; *p<0.050; **p<0.010; ***p<0.001.

Price, Perceived Purity and Perceived Availability

Price

The median price per gram of cocaine in 2023 was $400 (IQR=375-450; n=35), which was stable relative to 2022 ($400; IQR=350-400; n=25; p=0.383) (Figure 23).

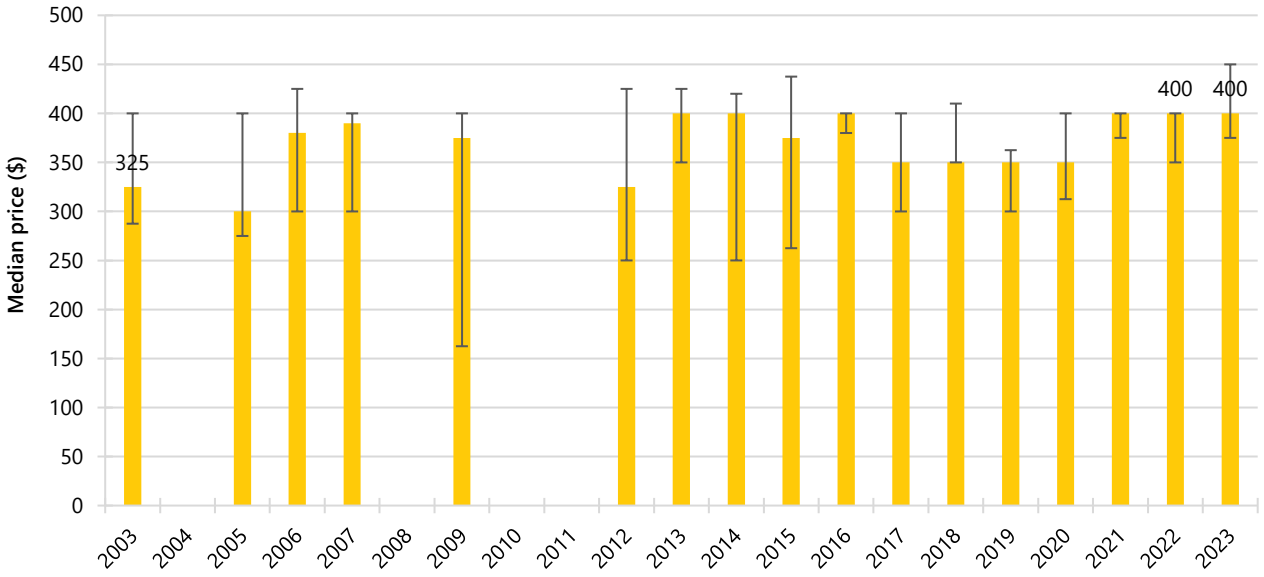
Perceived Purity

The perceived purity of cocaine remained stable between 2022 and 2023 (p=0.536). Among those able to comment in 2023 (n=51), the most commonly reported perception was that cocaine was 'low' purity (45%; 36% in 2022), followed by 'high' (20%; 16% in 2022), 'medium' (18%; 29% in 2022) and 'fluctuating' (18%; 20% in 2022) (Figure 24).

Perceived Availability

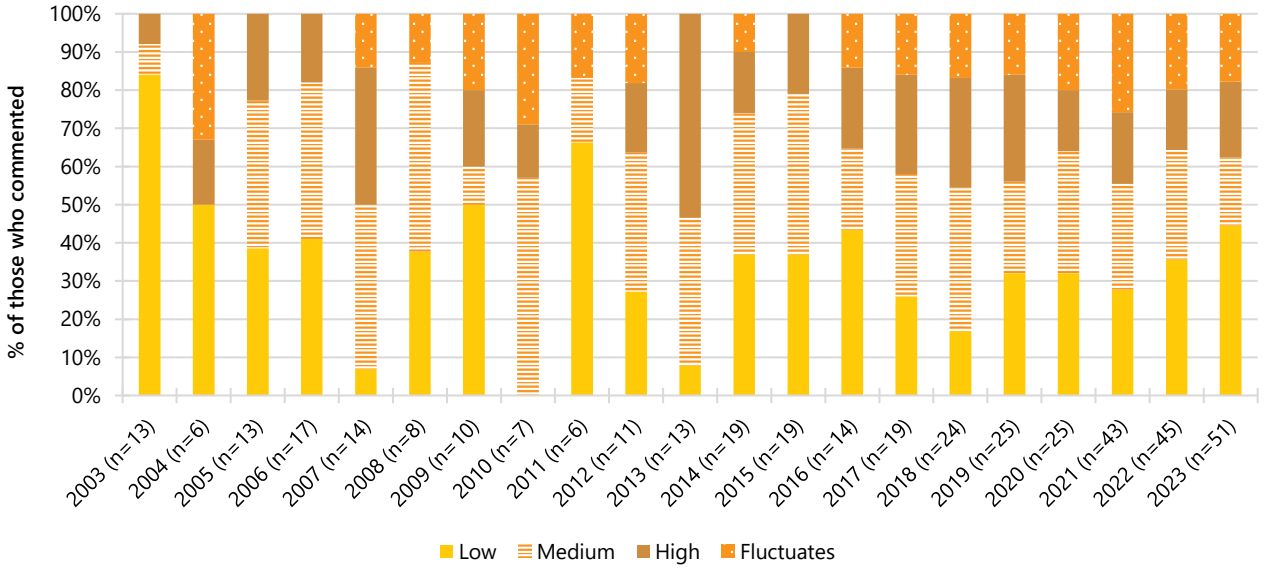
A significant difference was identified in the perceived availability of cocaine between 2022 and 2023 (p=0.040). Among those able to comment in 2023 (n=53), a greater per cent reported cocaine as being 'very easy' to obtain (34%; 11% in 2022), while there was a decrease in the per cent reporting 'difficult' (23%; 31% in 2022) (Figure 25).

Figure 23: Median price of cocaine per gram, Perth, WA, 2003-2023



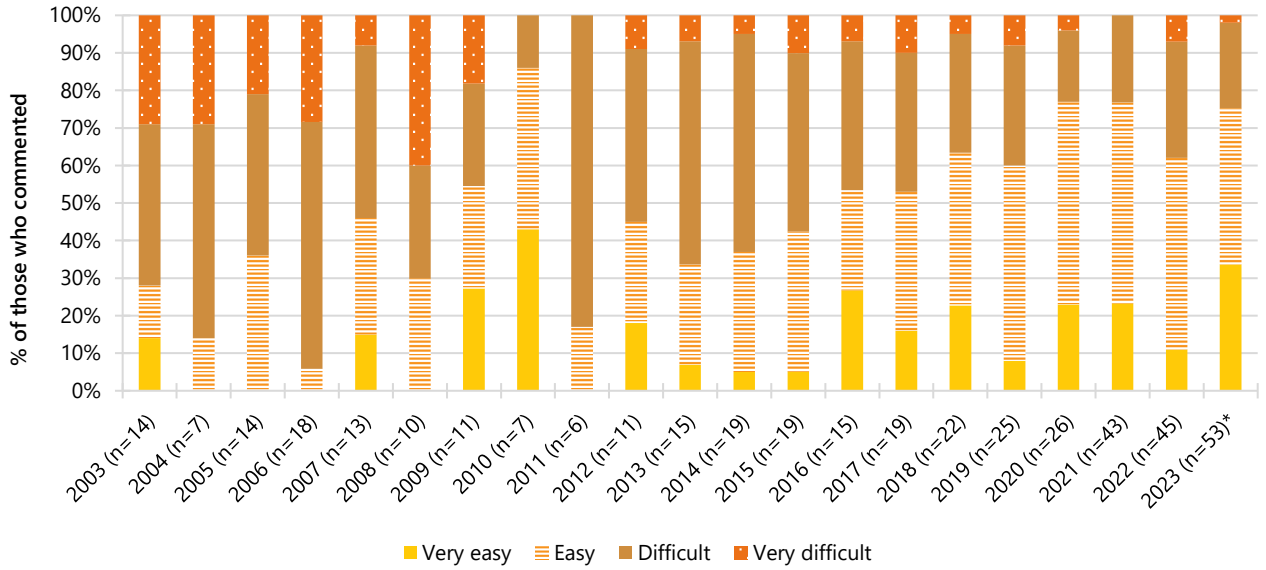
Note. Among those who commented. Data labels are only provided for the first (2003) and two most recent years (2022 and 2023) of monitoring, however labels are suppressed where there are small numbers (i.e., n≤5 but not 0). Data are suppressed in the figure and data tables where n≤5 responded to the item. For historical numbers, please refer to the data tables. The error bars represent the IQR. The response option 'Don't know' was excluded from analysis. Recruitment difficulties were experienced in 2011 (total sample N=28); therefore, all data from this year should be interpreted with caution. Statistical significance for 2022 versus 2023 presented in figure; *p<0.050; **p<0.010; ***p<0.001.

Figure 24: Current perceived purity of cocaine, Perth, WA, 2003-2023



Note. The response option 'Don't know' was excluded from analysis. Data labels are not shown for any of the stacked bar charts in the jurisdictional reports; see data tables for values. Data are suppressed in the figure and data tables where n≤5 responded to the item. Recruitment difficulties were experienced in 2011 (total sample N=28); therefore, all data from this year should be interpreted with caution. Statistical significance for 2022 versus 2023 presented in figure; *p<0.050; **p<0.010; ***p<0.001.

Figure 25: Current perceived availability of cocaine, Perth, WA, 2003-2023



Note. The response option 'Don't know' was excluded from analysis. Data labels are not shown for any of the stacked bar charts in the jurisdictional reports; see data tables for values. Data are suppressed in the figure and data tables where n≤5 responded to the item. Recruitment difficulties were experienced in 2011 (total sample N=28); therefore, all data from this year should be interpreted with caution. Statistical significance for 2022 versus 2023 presented in figure; *p<0.050; **p<0.010; ***p<0.001.

6

Cannabis and/or Cannabinoid-Related Products

Participants were asked about their recent (past six month) use of various forms of cannabis, including indoor-cultivated cannabis via a hydroponic system ('hydroponic') and outdoor-cultivated cannabis ('bush'), hashish, hash oil, commercially prepared edibles and CBD and THC extract.

Terminology throughout this chapter refers to:

• **Prescribed use:** use of cannabis and/or cannabinoid related products obtained by a prescription in the person's name;
• **Non-prescribed use:** use of cannabis and/or cannabinoid related products which the person did not have a prescription for (i.e., illegally sourced or obtained from a prescription in someone else's name); and
• **Any use:** use of cannabis and/or cannabinoid related products obtained through either of the above means.

Patterns of Consumption

In 2023, participants were asked about their use of both prescribed and non-prescribed cannabis and/or cannabinoid-related products.

In the remainder of this chapter, data from 2021-2023, and from 2003-2016, refers to non-prescribed cannabis use only, while data from 2017-2020 refers to 'any' cannabis use (including hydroponic and bush cannabis, hash and hash oil). While comparison between 2021-2023 and previous years should be treated with caution, the relatively recent legalisation of medicinal cannabis in Australia and the small percentage reporting prescribed use in 2022 and 2023 lends confidence that estimates are relatively comparable.

Recent Use (past 6 months)

In 2023, 85% of the Perth sample reported recent use of non-prescribed cannabis and/or cannabinoid-related products in 2023, stable from 2022 (84%), and similar to estimates from earlier years (Figure 26). Six per cent of participants in Perth reported prescribed use in the six months preceding interview in 2023 (n≤5 in 2022; p=0.748).

Frequency of Use

Median frequency of cannabis use has varied between once to three times weekly over the course of monitoring. Among those who reported recent use of non-prescribed cannabis and/or cannabinoid-related products and responded in 2023 (n=85), cannabis was used on a median of 72 days in the preceding six months (i.e. approximately three times per week; IQR=10-180), stable relative to 2022 (50 days; IQR=10-175; n=84; p=0.657) (Figure 26). Two thirds (66%; n=56) reported using non-prescribed cannabis on a weekly or more frequent basis (63% in 2022; p=0.740), including almost one third (31%) who reported using it daily (25% in 2022; p=0.496).

Routes of Administration

Among participants who had recently consumed non-prescribed cannabis and/or cannabinoid-related products (n=85), most (95%) reported smoking it in the past six months (94% in 2022; *p*=0.746), 13% reported inhaling or vaporising (11% in 2022; *p*=0.806) and 11% reported swallowing it (29% in 2022; *p*=0.004).

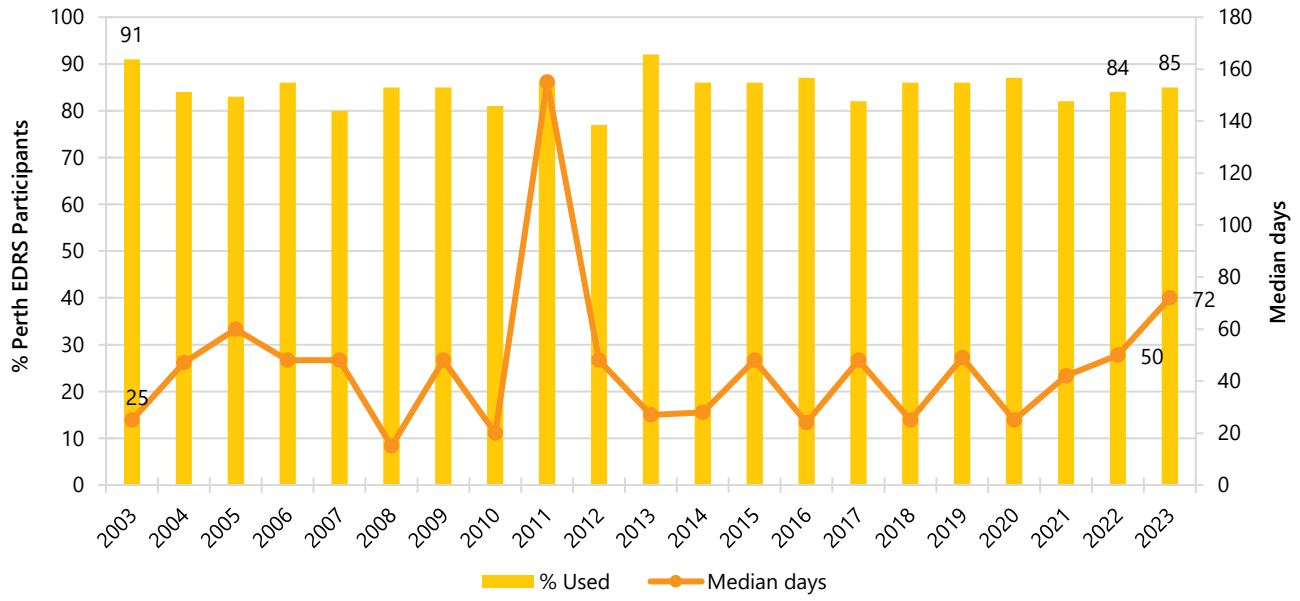
Quantity

Among participants who reported recent non-prescribed cannabis use, the median amount used on the last occasion of use was 1.50 grams (IQR=1.00-3.00; n=23; 1.00 gram in 2022; IQR=0.50-1.50; n=30; *p*=0.073), 3 cones (IQR=2-5; n=41; three cones in 2022; IQR=1-4; n=36; *p*=0.867) or one joint (IQR=1-1; n=15; 1 joint in 2022; IQR=1-1; n=22).

Forms Used

Among participants who had recently used non-prescribed cannabis and/or cannabinoid-related products and were able to comment (n=75), three quarters (76%) reported recent use of hydroponic cannabis, stable from 64% in 2022 (*p*=0.122). Meanwhile, one third (33%) reported recent use of outdoor-grown 'bush', representing a significant decline from 64% in 2022 (*p*<0.001). In 2023, few participants (n≤5) reported recent use of hashish or hash oil (n≤5 in 2022; *p*=0.489; n≤5 in 2022, respectively). Almost one tenth (9%) reported recent use of (non-prescribed) CBD extract in 2023 (12% in 2022; *p*=0.791), but few participants (n≤5) reported recent use of THC extract (n≤5 in 2022).

Figure 26: Past six month use and frequency of use of non-prescribed cannabis and/or cannabinoid-related products, Perth, WA, 2003-2023



Note. Prior to 2021, we did not distinguish between prescribed and non-prescribed cannabis, and as such it is possible that 2017-2020 figures include some participants who were using prescribed cannabis only (with medicinal cannabis first legalised in Australia in November 2016), although we anticipate these numbers would be very low. Further, from 2022, we captured use of 'cannabis and/or cannabinoid-related products', while in previous years questions referred only to 'cannabis'. Median days computed among those who reported recent use (maximum 180 days). Median days rounded to the nearest whole number. Data labels are only provided for the first (2003) and two most recent years (2022 and 2023) of monitoring, however labels are suppressed where there are small numbers (i.e., n≤5 but not 0). For historical numbers, please refer to the data tables. The response option 'Don't know' was excluded from analysis. Recruitment difficulties were experienced in 2011 (total sample N=28); therefore, all data from this year should be interpreted with caution. Statistical significance for 2022 versus 2023 presented in figure; *p<0.050; **p<0.010; ***p<0.001.

Price, Perceived Potency and Perceived Availability

Hydroponic Cannabis

Price: The median price per gram of hydroponic cannabis in 2023 was $28 (IQR=25-30; n=8), representing a significant increase from $25 in 2022 (IQR=19-25; n=11; *p*=0.040) and most years since monitoring commenced in 2006. The median price per ounce was $375 (IQR=350-400; n=12), stable relative to 2022 ($400; IQR=350-400; n=11; *p*=0.906) (Figure 27a).

Perceived Potency: The perceived potency of non-prescribed hydroponic cannabis remained stable between 2022 and 2023 (*p*=0.105). Of those who commented in 2023 (n=49), 45% reported 'high' potency (52% in 2022), 35% reported 'medium' (15% in 2022) and 18% 'fluctuating' (30% in 2022) (Figure 28a).

Perceived Availability: The perceived availability of non-prescribed hydroponic cannabis remained stable between 2022 and 2023 (*p*=0.721). Of those who commented in 2023 (n=49), the vast majority (96%) reported that hydroponic cannabis was 'easy' or 'very easy' to obtain (95% in 2022) (Figure 29a).

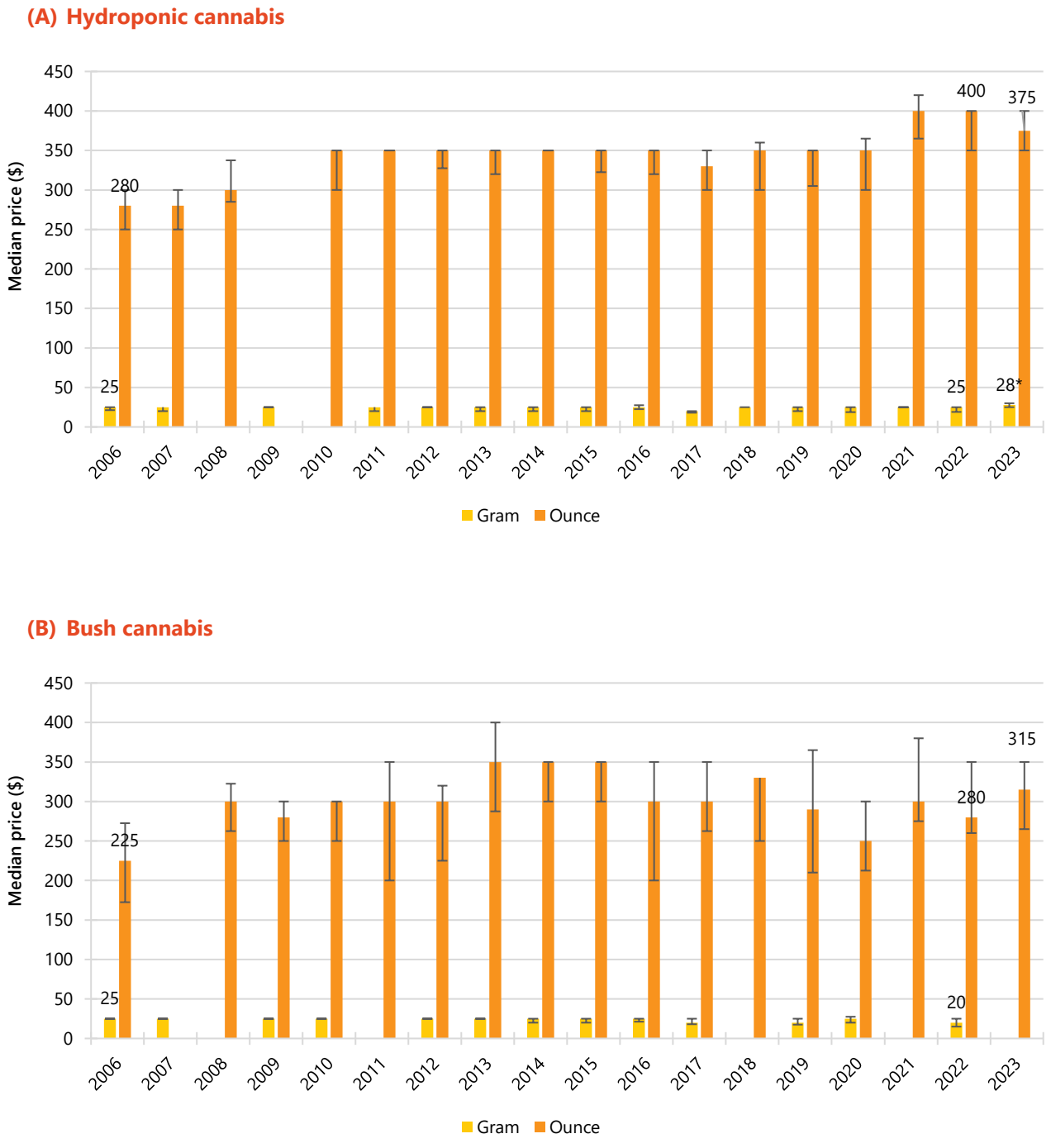
Bush Cannabis

Price: Few participants (n≤5) were able to comment on the price per gram of non-prescribed bush cannabis in 2023, but the price per gram of bush has fluctuated between $20 and $25 since monitoring commenced ($20 in 2022; IQR=15-25; n=10; *p*=0.089). Meanwhile, the median price per ounce of non-prescribed bush cannabis in 2023 was $315 (IQR=265-350; n=8), stable relative to 2022 ($280; IQR=260-350; n=9; *p*=0.923), although the price has fluctuated between about $250 and $350 across monitoring years (Figure 27b).

Perceived Potency: There was a significant change in perceived potency of non-prescribed bush cannabis between 2022 and 2023 (*p*=0.023). Among those who commented in 2023 (n=19), there was an increase in the per cent reporting 'high' purity (47%; 9% in 2022), and a decrease in the per cent reporting 'low' purity (n≤5; 31% in 2022) (Figure 28b).

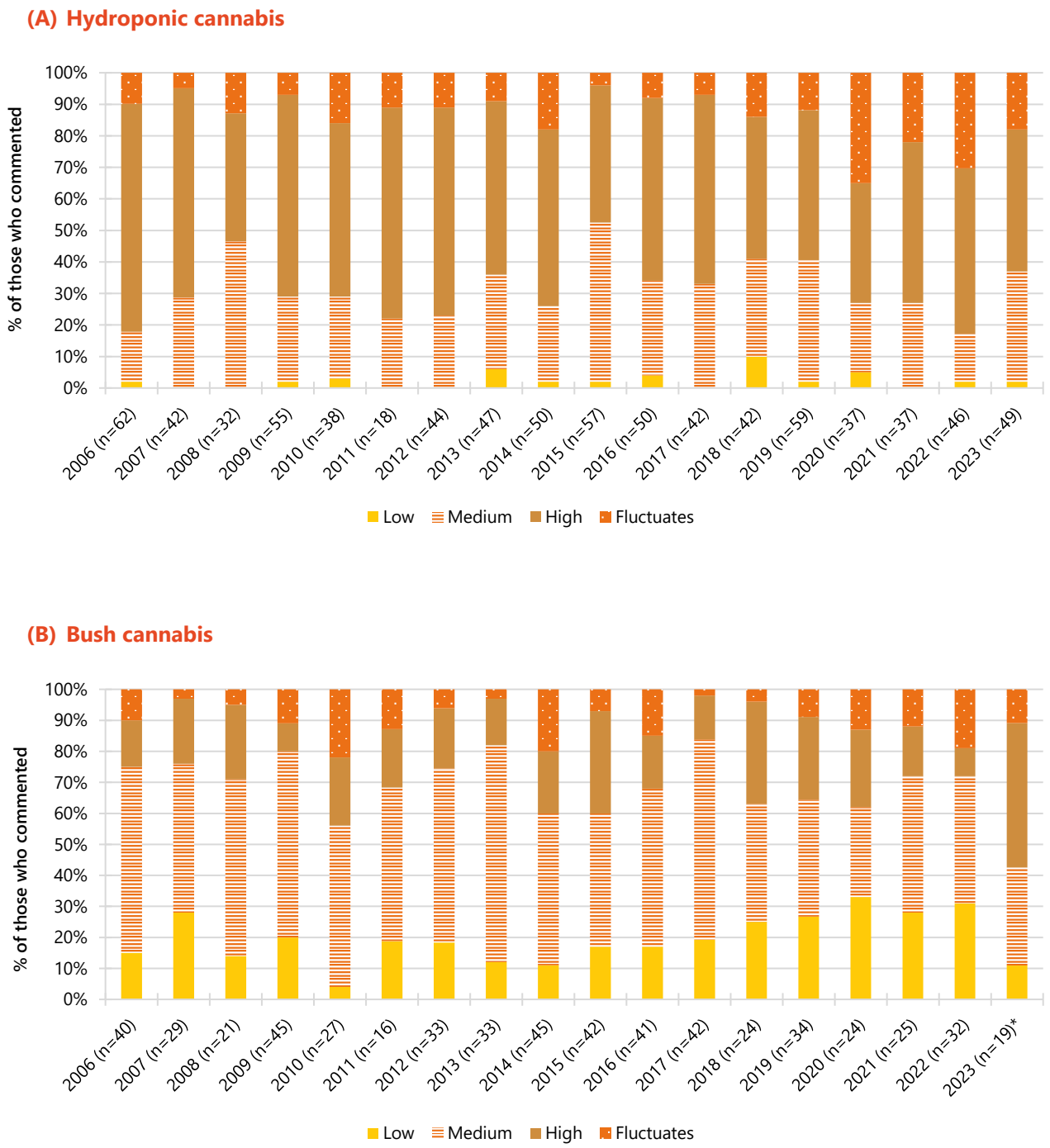
Perceived Availability: The perceived availability of non-prescribed bush cannabis remained stable between 2022 and 2023 (*p*=0.121). Of those who commented in 2023 (n=20), all participants (100%) reported that non-prescribed bush cannabis was 'easy' or 'very easy' to obtain (91% in 2022) (Figure 29b).

Figure 27: Median price of non-prescribed hydroponic (A) and bush (B) cannabis per ounce and gram, Perth, WA, 2006-2023



Note. From 2006 onwards hydroponic and bush cannabis data collected separately. Data from 2022 onwards refers to non-prescribed cannabis only; prior to 2022, we did not distinguish between prescribed and non-prescribed cannabis, and as such it is possible that 2017-2021 figures include some participants who reported on the price of prescribed cannabis (with medicinal cannabis first legalised in Australia in November 2016), although we anticipate these numbers would be very low. Data labels are only provided for the first (2006) and two most recent years (2022 and 2023) of monitoring, however labels are suppressed where there are small numbers (i.e., n≤5 but not 0). Data are suppressed in the figure and data tables where n≤5 responded to the item. For historical numbers, please refer to the data tables. The error bars represent the IQR. The response option 'Don't know' was excluded from analysis. Recruitment difficulties were experienced in 2011 (total sample N=28); therefore, all data from this year should be interpreted with caution. Statistical significance for 2022 versus 2023 presented in figure; *p<0.050; **p<0.010; ***p<0.001.

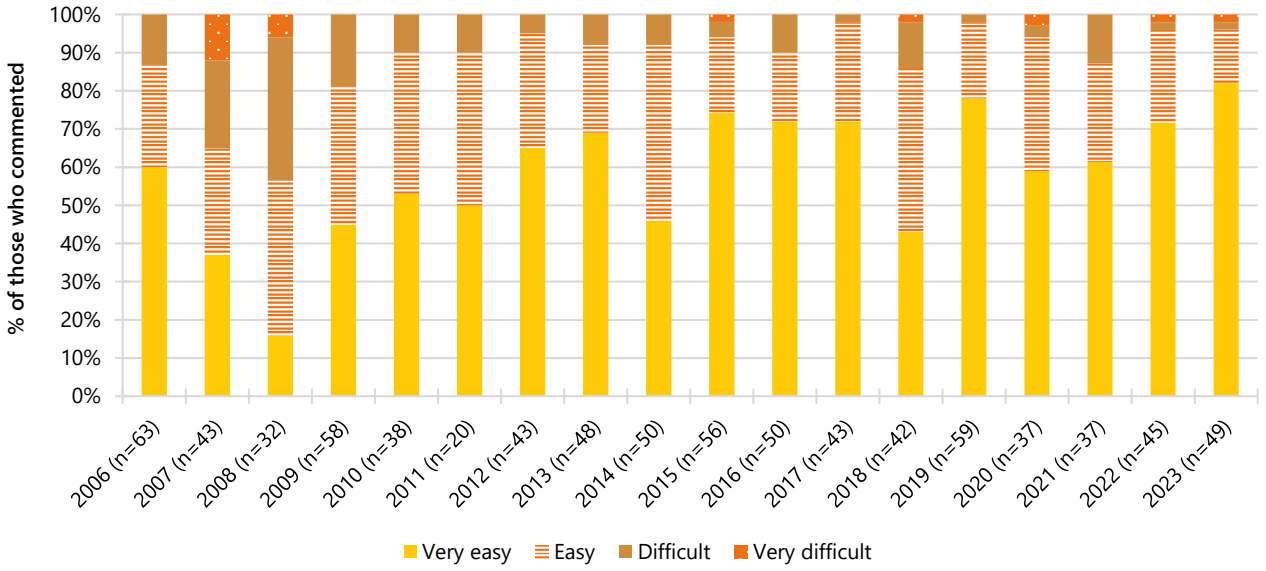
Figure 28: Current perceived potency of non-prescribed hydroponic (A) and bush (B) cannabis, Perth, WA, 2006-2023



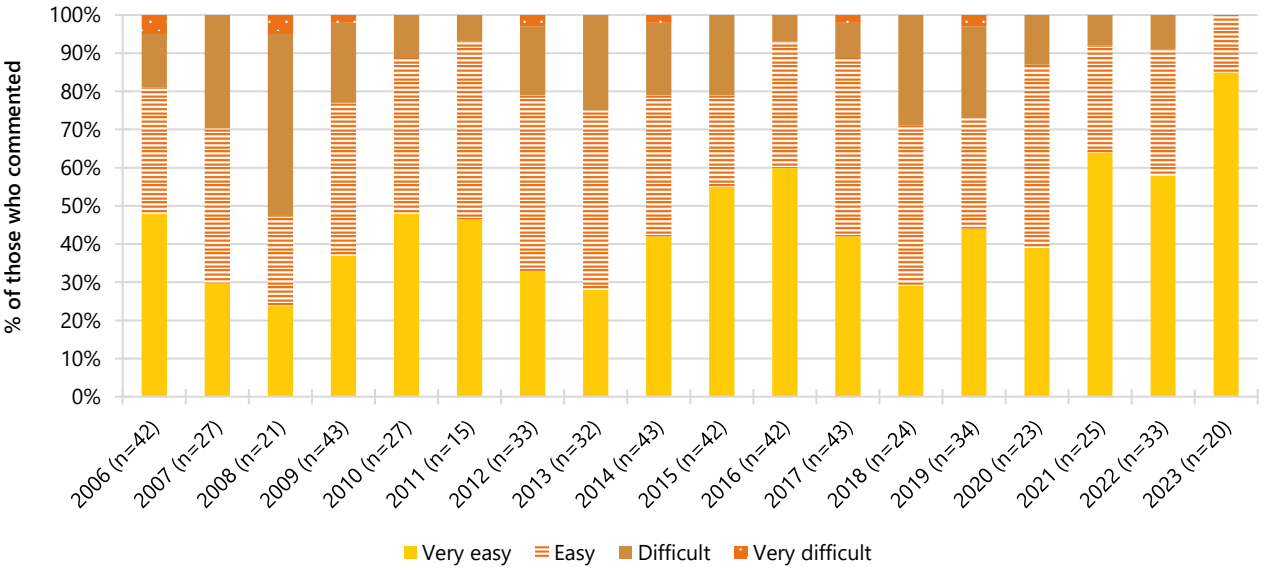
Note. From 2006 onwards hydroponic and bush cannabis data collected separately. Data from 2022 onwards refers to non-prescribed cannabis only; prior to 2022, we did not distinguish between prescribed and non-prescribed cannabis, and as such it is possible that 2017-2021 figures include some participants who reported on the price of prescribed cannabis (with medicinal cannabis first legalised in Australia in November 2016), although we anticipate these numbers would be very low. Data labels are not shown for any of the stacked bar charts in the jurisdictional reports; see data tables for values. Data are suppressed in the figure and data tables where n≤5 responded to the item. The response option 'Don't know' was excluded from analysis. Recruitment difficulties were experienced in 2011 (total sample N=28) therefore all data from this year should be interpreted with caution. Statistical significance for 2022 versus 2023 presented in figure; *p<0.050; **p<0.010; ***p<0.001.

Figure 29: Current perceived availability of non-prescribed hydroponic (A) and bush (B) cannabis, Perth, WA, 2006-2023

(A) Hydroponic cannabis



(B) Bush cannabis



Note. From 2006 onwards hydroponic and bush cannabis data collected separately. Data from 2022 onwards refers to non-prescribed cannabis only; prior to 2022, we did not distinguish between prescribed and non-prescribed cannabis, and as such it is possible that 2017-2021 figures include some participants who reported on the price of prescribed cannabis (with medicinal cannabis first legalised in Australia in November 2016), although we anticipate these numbers would be very low. Data labels are not shown for any of the stacked bar charts in the jurisdictional reports; see data tables for values. Data are suppressed in the figure and data tables where n≤5 responded to the item. The response option 'Don't know' was excluded from analysis. Recruitment difficulties were experienced in 2011 (total sample N=28) therefore all data from this year should be interpreted with caution. Statistical significance for 2022 versus 2023 presented in figure; *p<0.050; **p<0.010; ***p<0.001.

7

Ketamine, LSD and DMT

Non-Prescribed Ketamine

Patterns of Consumption

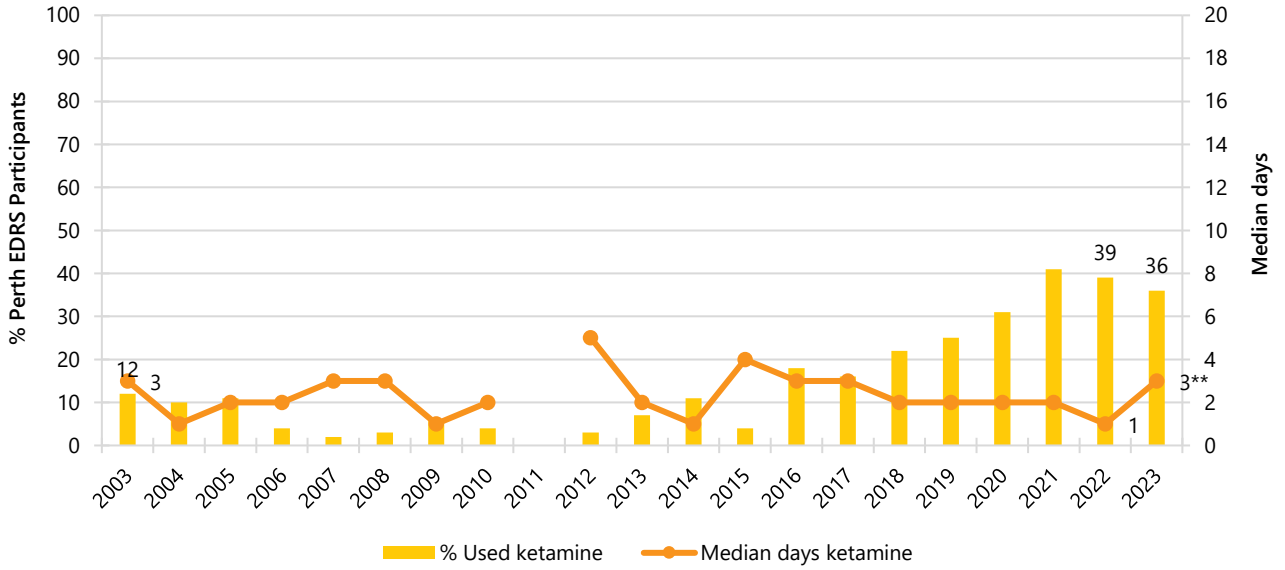
Recent Use (past 6 months): In 2023, 36% of the Perth EDRS sample reported recent non-prescribed ketamine use. While stable relative to 2022 (39%; p=0.770), reports of recent ketamine use have increased since 2016 (Figure 30).

Frequency of Use: Non-prescribed ketamine was used a median of three days in the six months preceding interview (IQR=2-5; n=36), which represents a significant increase from one day in 2022 (IQR=1-2; n=39; p=0.006) (Figure 30). Few participants (n≤5) reported weekly or more frequent use of non-prescribed ketamine in 2023 (0% in 2022; p=0.480).

Routes of Administration: Among participants who had recently used non-prescribed ketamine (n=36), the vast majority (97%) reported snorting it in the past six months (85% in 2022; p=0.109). Few participants (n≤5) reported swallowing non-prescribed ketamine (15% in 2022; p=0.265).

Quantity: Of those who reported recent use and were able to comment on quantities (n=20), the median 'typical' amount used per session was 0.30 grams (IQR=0.20-0.50; 0.40 grams in 2022; IQR=0.20-0.80; n=16; p=0.316), while the median maximum amount used per session was 0.50 grams (IQR=0.30-0.70; n=20; 0.50 grams in 2022; IQR=0.30-1.00; n=16; p=0.372).

Figure 30: Past six month use and frequency of use of non-prescribed ketamine, Perth, WA, 2003-2023



Note. Median days computed among those who reported recent use (maximum 180 days). Median days rounded to the nearest whole number. Secondary Y axis reduced to 20 days to improve visibility of trends. Data from 2023 onwards refers to non-prescribed ketamine only (noting that although ketamine has been used as an anaesthetic for many years, it only become available via prescription, for treatment resistant depression, in 2021). Data labels are only provided for the first (2003) and two most recent years (2022 and 2023) of monitoring, however labels are suppressed where there are small numbers (i.e., n≤5 but not 0). For historical numbers, please refer to the data tables. The response option 'Don't know' was excluded from analysis. Recruitment difficulties were experienced in 2011 (total sample N=28); therefore, all data from this year should be interpreted with caution. Statistical significance for 2022 versus 2023 presented in figure; *p<0.050; **p<0.010; ***p<0.001.

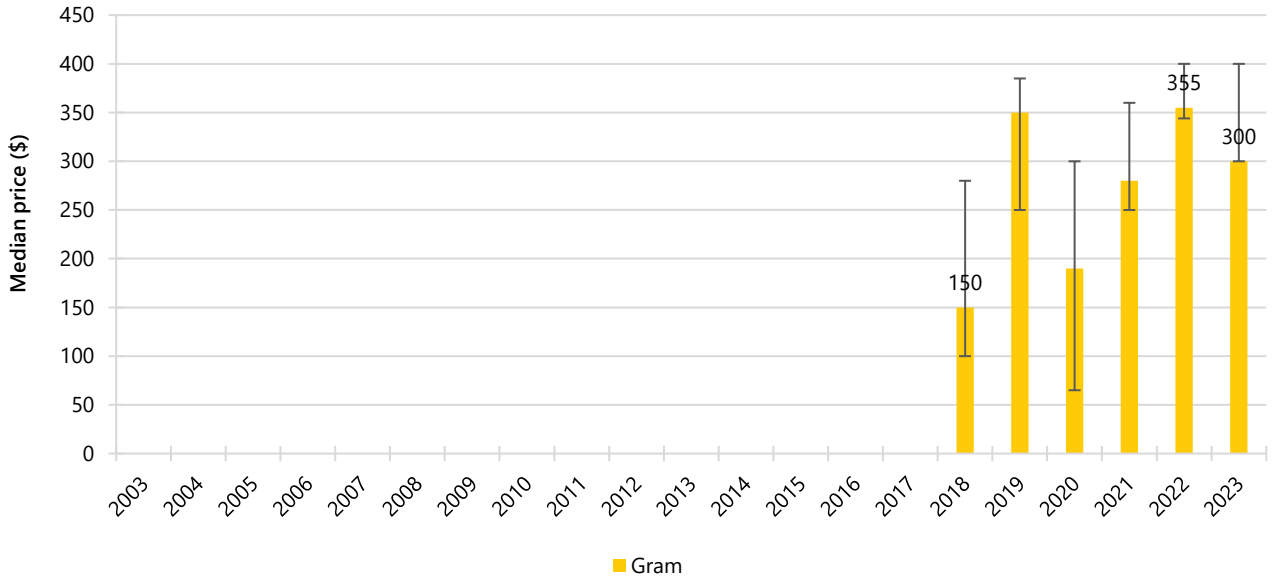
Price, Perceived Purity and Perceived Availability

Price: The median price per gram of non-prescribed ketamine was $300 in 2023 (IQR=300-400; n=13), stable from $355 in 2022 (IQR=344-400; n=16; p=0.174) (Figure 31).

Perceived Purity: The perceived purity of non-prescribed ketamine remained stable between 2022 and 2023 (p=0.199). Among those who were able to respond in 2023 (n=20), 55% reported the purity of non-prescribed ketamine as being 'high' (62% in 2022), while 30% reported 'medium' (29% in 2022) (Figure 32).

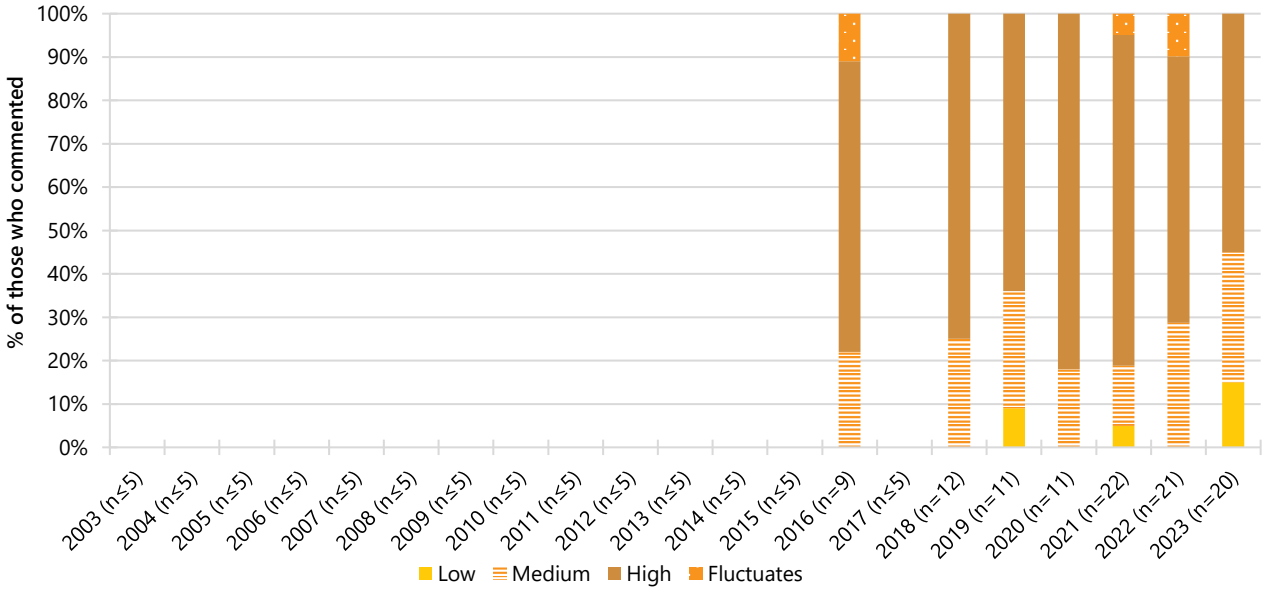
Perceived Availability: A significant change was identified in perceptions of non-prescribed ketamine availability between 2022 and 2023 (p=0.002). Among those able to comment in 2023 (n=21), there was an increase in the per cent of participants reporting that non-prescribed ketamine was 'easy' or 'very easy' to obtain (71%; 26% in 2022), while there was an inverse decrease in the per cent reporting that access was 'difficult' or 'very difficult' (29%; 74% in 2022) (Figure 33).

Figure 31: Median price of non-prescribed ketamine per gram, Perth, WA, 2003-2023



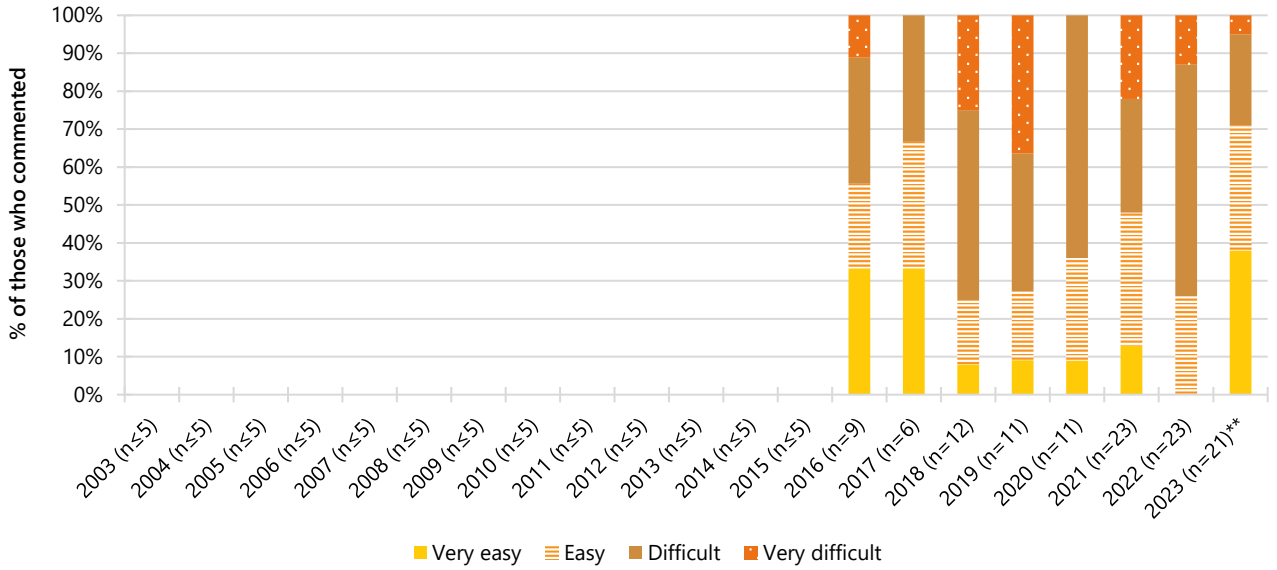
Note. Among those who commented. Between 2003 and 2017, the number of participants able to comment on price were too few to compute a median. Data from 2023 onwards refers to non-prescribed ketamine only (noting that although ketamine has been used as an anaesthetic for many years, it only become available via prescription, for treatment resistant depression, in 2021). Data labels are only provided for the first (2018) and two most recent years (2022 and 2023) of monitoring, however labels are suppressed where there are small numbers (i.e., n≤5 but not 0). Data are suppressed in the figure and data tables where n≤5 responded to the item. For historical numbers, please refer to the data tables. The error bars represent the IQR. The response option 'Don't know' was excluded from analysis. Recruitment difficulties were experienced in 2011 (total sample N=28); therefore, all data from this year should be interpreted with caution. Statistical significance for 2022 versus 2023 presented in figure; *p<0.050; **p<0.010; ***p<0.001.

Figure 32: Current perceived purity of non-prescribed ketamine, Perth, WA, 2003-2023



Note. The response option 'Don't know' was excluded from analysis. Between 2003-2015 and in 2017, few participants (n≤5) were able to comment on perceived purity and data are therefore suppressed in the figure and data tables. Data from 2023 onwards refers to non-prescribed ketamine only (noting that although ketamine has been used as an anaesthetic for many years, it only become available via prescription, for treatment resistant depression, in 2021). Data labels are not shown for any of the stacked bar charts in the jurisdictional reports; see data tables for values. The response option 'Don't know' was excluded from analysis. Recruitment difficulties were experienced in 2011 (total sample N=28); therefore, all data from this year should be interpreted with caution. Statistical significance for 2022 versus 2023 presented in figure; *p<0.050; **p<0.010; ***p<0.001.

Figure 33: Current perceived availability of non-prescribed ketamine, Perth, WA, 2003-2023



Note. The response option 'Don't know' was excluded from analysis. Between 2003-2015, few participants (n≤5) were able to comment on perceived availability and data are therefore suppressed in the figure and data tables. Data from 2023 onwards refers to non-prescribed ketamine only (noting that although ketamine has been used as an anaesthetic for many years, it only become available via prescription, for treatment resistant depression, in 2021). Data labels are not shown for any of the stacked bar charts in the jurisdictional reports; see data tables for values. Recruitment difficulties were experienced in 2011 (total sample N=28); therefore, all data from this year should be interpreted with caution. Statistical significance for 2022 versus 2023 presented in figure; *$p<0.050$; **$p<0.010$; ***$p<0.001$.

LSD

Patterns of Consumption

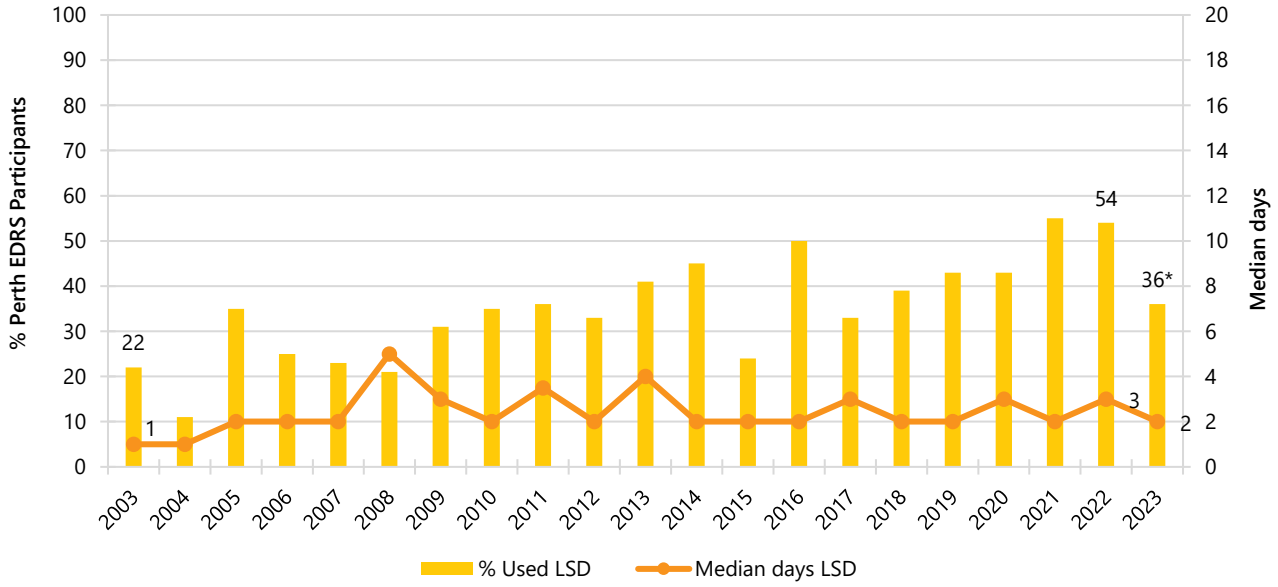
Recent Use (past 6 months): Thirty-six per cent of the Perth sample reported recent LSD use in 2023, representing a significant decline from 54% reporting use in 2022 (p=0.016), but comparable to levels observed before the COVID-19 pandemic illicit drug market disruptions in 2021-22 (Figure 34).

Frequency of Use: Median days of LSD use has remained low over monitoring years. Among those reporting recent use in 2023 (n=36), LSD was used on a median of two days in the preceding six month period (IQR=1-4), not significantly different to three days in 2022 (IQR=1-6; n=54; p=0.376) (Figure 34). Consistent with 2022 and previous data collection years, few participants (n≤5) reported weekly or more frequent LSD use.

Routes of Administration: Consistent with past monitoring years, the only route of administration for consuming LSD that was reported in 2023 was swallowing (i.e., sublingual; n=36; 100%).

Quantity: Of those who had recently used LSD and responded (n=27), the median 'typical' amount used per session was one tab (IQR=1.00-2.00; 1 tab in 2022; IQR=1.00-1.00; n=32; p=0.667), and the median maximum amount used per session was also one tab (IQR=1.00-2.00; n=26; 1 tab in 2022; IQR=1.00-2.00; n=31; p=0.828).

Figure 34: Past six month use and frequency of use of LSD, Perth, WA, 2003-2023



Note. Median days computed among those who reported recent use (maximum 180 days). Median days rounded to the nearest whole number. Secondary Y axis reduced to 20 days to improve visibility of trends. Data labels are only provided for the first (2003) and two most recent years (2022 and 2023) of monitoring, however labels are suppressed where there are small numbers (i.e., n≤5 but not 0). For historical numbers, please refer to the data tables. The response option 'Don't know' was excluded from analysis. Recruitment difficulties were experienced in 2011 (total sample N=28); therefore, all data from this year should be interpreted with caution. Statistical significance for 2022 versus 2023 presented in figure; *p<0.050; **p<0.010; ***p<0.001.

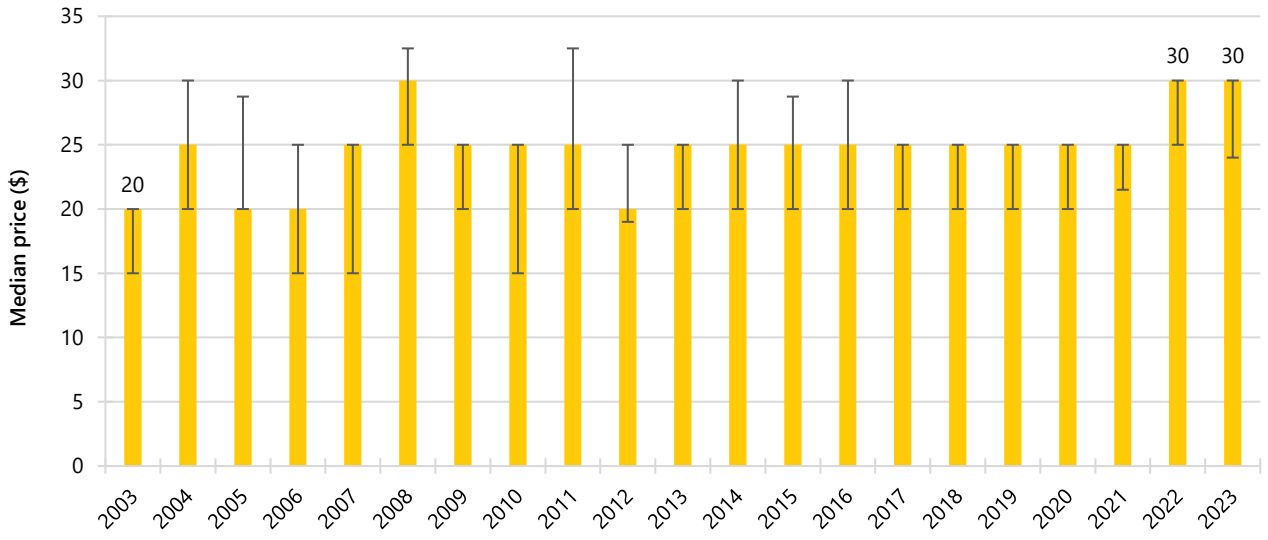
Price, Perceived Purity and Perceived Availability

Price: The median price per tab of LSD in 2023 was $30 (IQR=24-30; n=28). While stable from $30 in 2022 (IQR=25-30; n=16; *p*=0.712), the price has increased from $25 in earlier reporting years (Figure 35).

Perceived Purity: The perceived purity of LSD remained stable between 2022 and 2023 (*p*=0.300). Among those able to comment in 2023 (n=35), 60% reported that LSD purity was 'high' (51% in 2022) and 23% reported 'medium' (20% in 2022). Few participants (n≤5) reported it had 'fluctuated' (29% in 2022) (Figure 36).

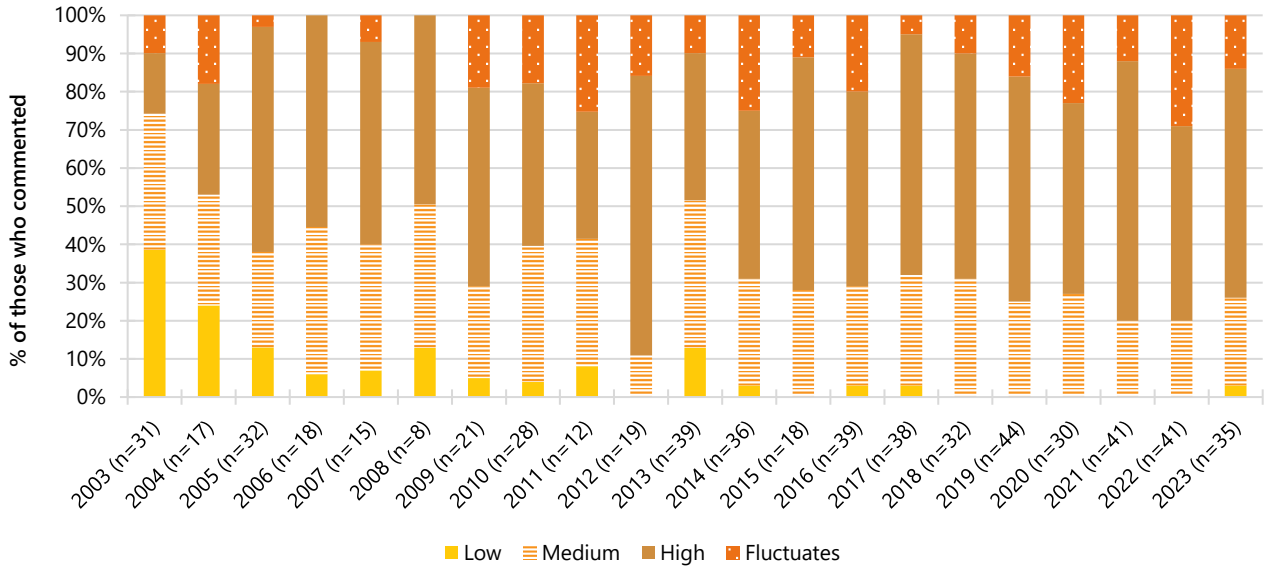
Perceived Availability: The perceived availability of LSD also remained stable between 2022 and 2023 (*p*=0.381). Among those able to comment in 2023 (n=33), most considered LSD as being either 'easy' or 'very easy' to access (88%; 82% in 2022) (Figure 37).

Figure 35: Median price of LSD per tab, Perth, WA, 2003-2023



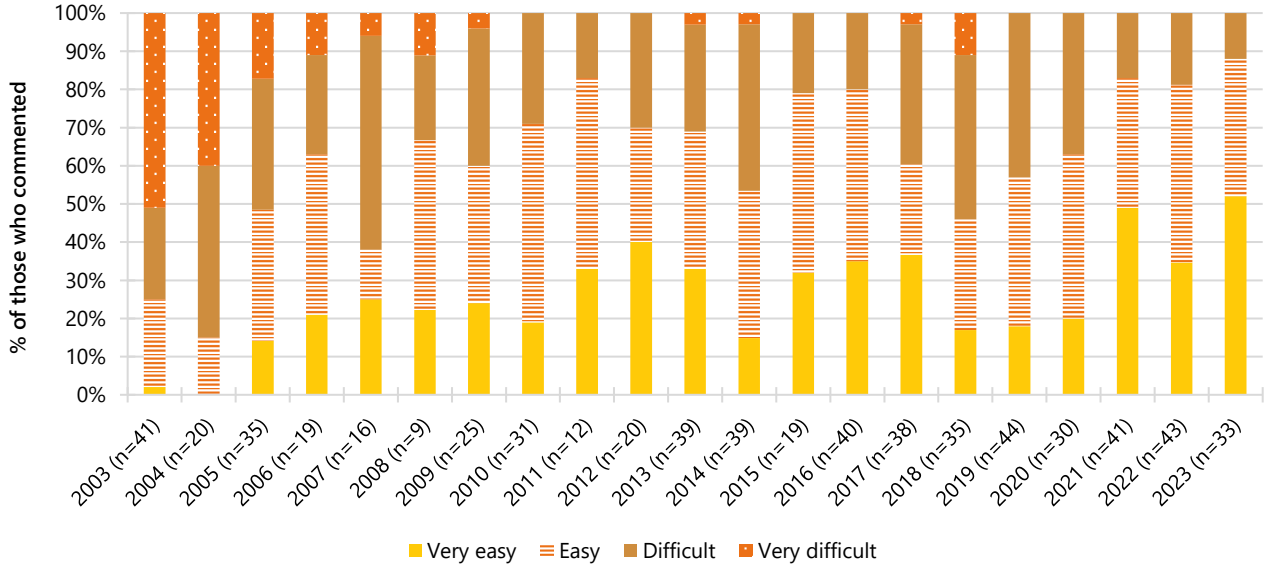
Note. Among those who commented. Data labels are only provided for the first (2003) and two most recent years (2022 and 2023) of monitoring, however labels are suppressed where there are small numbers (i.e., n≤5 but not 0). For historical numbers, please refer to the data tables. The error bars represent the IQR. The response option 'Don't know' was excluded from analysis. Recruitment difficulties were experienced in 2011 (total sample N=28); therefore, all data from this year should be interpreted with caution. Statistical significance for 2022 versus 2023 presented in figure; *p<0.050; **p<0.010; ***p<0.001.

Figure 36: Current perceived purity of LSD, Perth, WA, 2003-2023



Note. The response option 'Don't know' was excluded from analysis. Data labels are not shown for any of the stacked bar charts in the jurisdictional reports; see data tables for values. Data are suppressed in the figure and data tables where n≤5 responded to the item. Recruitment difficulties were experienced in 2011 (total sample N=28); therefore, all data from this year should be interpreted with caution. Statistical significance for 2022 versus 2023 presented in figure; *p<0.050; **p<0.010; ***p<0.001.

Figure 37: Current perceived availability of LSD, Perth, WA, 2003-2023



Note. The response option 'Don't know' was excluded from analysis. Data labels are not shown for any of the stacked bar charts in the jurisdictional reports; see data tables for values. Data are suppressed in the figure and data tables where n≤5 responded to the item. Recruitment difficulties were experienced in 2011 (total sample N=28); therefore, all data from this year should be interpreted with caution. Statistical significance for 2022 versus 2023 presented in figure; *p<0.050; **p<0.010; ***p<0.001.

DMT

Patterns of Consumption

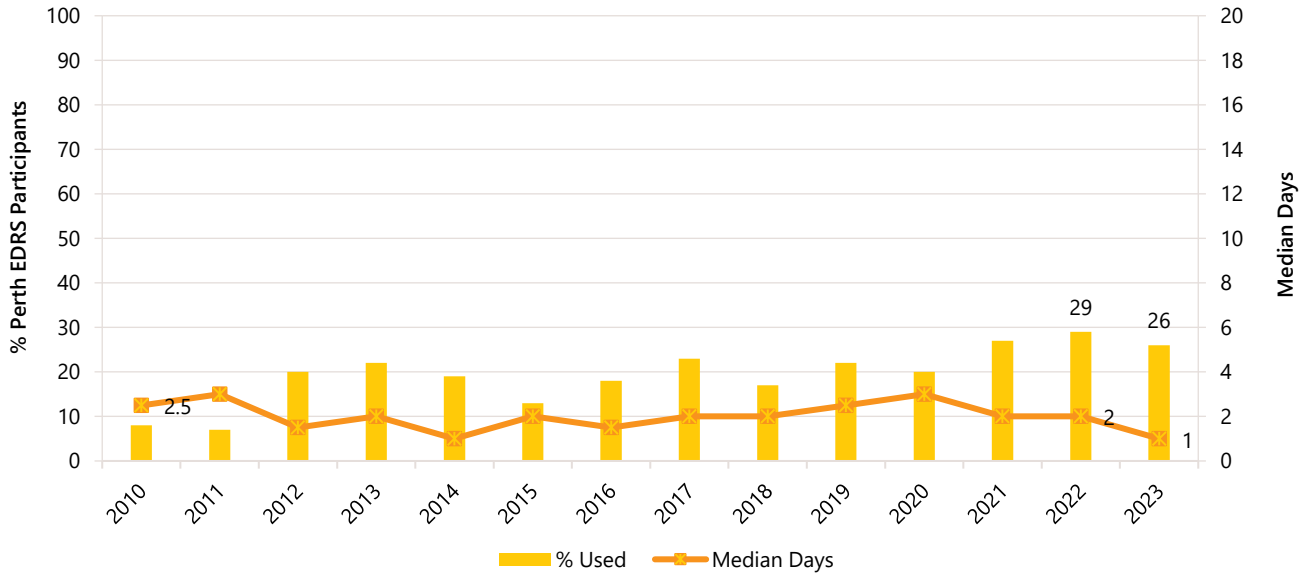
Recent Use (past 6 months): One quarter (26%) of the Perth sample reported recent DMT use in 2023, stable relative to 2022 (29%; *p*=0.741) (Figure 39).

Frequency of Use: Median days of DMT use has been infrequent and stable across monitoring years. In 2023, DMT was used on a median of one day in the six months preceding interview (IQR=1-2; 2 days in 2022; IQR=1-4; n=29; *p*=0.113) (Figure 38).

Routes of Administration: Among participants who had recently used DMT (n=26), all participants reported smoking it (100%; 97% in 2022). No participants reported other routes of administration in 2023 (n≤5 reported swallowing in 2022).

Quantity: Of those who reported recent DMT use and were able to comment on quantities (n=11), the median 'typical' amount used per session was 5 mgs (IQR=1-55; 50mgs in 2022; IQR=35-238; n=6; *p*=0.039), while the median maximum amount used per session was also 5 mgs (IQR=2-55; 68mgs in 2022; IQR=60-281; *p*=0.039). However, due to the low number of participants able to comment on amounts of DMT used, these findings should be interpreted with caution.

Figure 38: Past six month use and frequency of use of DMT, Perth, WA, 2010-2023



Note. Median days computed among those who reported recent use (maximum 180 days). Median days rounded to the nearest whole number. Secondary Y axis reduced to 20 days to improve visibility of trends. Data labels are only provided for the first (2010) and two most recent years (2022 and 2023) of monitoring, however labels are suppressed where there are small numbers (i.e., n≤5 but not 0). For historical numbers, please refer to the data tables. The response option 'Don't know' was excluded from analysis. Recruitment difficulties were experienced in 2011 (total sample N=28); therefore, all data from this year should be interpreted with caution. Statistical significance for 2022 versus 2023 presented in figure; *$p<0.050$; **$p<0.010$; ***$p<0.001$.

8

New Psychoactive Substances

New Psychoactive Substances (NPS) are often defined as substances which do not fall under international drug control, but which may pose a public health threat. However, there is no universally accepted definition, and in practicality the term has come to include drugs which have previously not been well-established in recreational drug markets.

In previous (2010-2020) EDRS reports, DMT and para*methoxyamphetamine* (PMA) were categorised as NPS. However, the classification of these substances as NPS is not universally accepted, and the decision was made to exclude them from this category from this point on. This means that the figures presented below for recent use of tryptamine, phenethylamine and any NPS will not align with those in our previous reports.

Further, some organisations (e.g., the United Nations Office on Drugs and Crime) include plant-based substances in their definition of NPS, whilst other organisations exclude them. To allow comparability with both methods, we present figures for 'any' NPS use, both including and excluding plant-based NPS.

Recent Use (past 6 months)

Any NPS use, including plant-based NPS, has fluctuated over time among the Perth sample, peaking at 45% in 2013 and declining to 7% in 2023, marking the lowest per cent observed in the Perth sample since monitoring commenced (Table 2), but stable relative to 2022 (13%; p=0.243). Any NPS use, excluding plant-based NPS, has shown a similar trend, peaking at 43% in 2013 and declining to 6% in 2023 (13% in 2022; p=0.151), marking the equal lowest per cent observed in the Perth sample since monitoring commenced (Table 2).

Forms Used

Participants are asked about a range of NPS each year, updated to reflect key emerging substances of interest. In 2023, few participants (n≤5) reported use of any individual NPS, consistent with 2022, with the exception of 5-MeO-DMT which was reported by 7% of the sample in 2022 (Table 3). Please refer to the 2023 National EDRS Report for national trends, or contact the Drug Trends team for further information.

Table 2: Past six month use of NPS (excluding and including plant-based NPS), Perth, WA, 2010-2023

	Perth, WA	
%	Excluding plant-based NPS	Including plant-based NPS
2010	31	32
2011	14	15
2012	24	26
2013	43	45
2014	39	39
2015	32	32
2016	21	21
2017	21	22
2018	12	13
2019	6	8
2020	7	9
2021	9	10
2022	13	13
2023	**6**	**7**

Note. Monitoring of NPS first commenced in 2010. In 2021, the decision was made to remove DMT and PMA from the NPS category, with these substances now presented in Chapter 7 and Chapter 9, respectively. This has had a substantial impact on the percentage of the sample reporting 'any' NPS use in the past six months and means that the figures presented above will not align with those presented in previous (2010-2020) EDRS reports. – Per cent suppressed due to small cell size (n≤5 but not 0). The response option 'Don't know' was excluded from figure. Recruitment difficulties were experienced in 2011 (total sample N=28); therefore, all data from this year should be interpreted with caution. Statistical significance for 2022 versus 2023 presented in table; *p<0.050; **p<0.010; ***p<0.001.

Table 3: Past six month use of NPS by drug type, Perth, WA, 2010-2023

	2010 (N=100)	2011 (N=28)	2012 (N=90)	2013 (N=100)	2014 (N=100)	2015 (N=100)	2016 (N=100)	2017 (N=100)	2018 (N=100)	2020 (N=100)	2020 (N=100)	2021 (N=100)	2022 (N=100)	2023 (N=100)
% Phenethylamine^	-	-	-	23	23	12	12	11	-	-	-	-	-	-
Any 2C substance~	-	-	-	23	16	7	9	8	-	-	-	-	-	-
NBOMe	/	/	/	/	10	-	-	6	-	0	0	-	-	**0**
DO-x	0	0	0	0	-	0	0	0	-	0	0	-	0	**0**
4-FA	/	/	/	/	/	/	0	0	0	0	0	0	0	**0**
NBOH	/	/	/	/	/	/	/	/	/	/	/	/	0	**0**
% Tryptamines^^	-	0	0	0	-	0	-	-	-	-	-	-	7	-
5-MeO-DMT	-	0	0	0	-	0	0	-	-	-	-	-	7	-
4-AcO-DMT	/	/	/	/	/	/	-	-	/	/	/	/	/	**/**
% Synthetic cathinones	16	18	7	8	6	8	-	-	-	0	0	0	0	-
Mephedrone	16	14	-	-	-	-	0	-	0	0	0	0	0	**0**
Methylone/bk MDMA	/	-	-	-	-	-	-	-	-	0	0	0	0	**0**
MDPV/Ivory wave	0	0	-	-	0	0	0	0	0	0	0	0	0	**0**
Alpha PVP	/	/	/	/	/	/	-	0	0	0	0	0	0	**0**
n-ethylhexedrone	/	/	/	/	/	/	/	/	/	0	0	0	0	**0**
n-ethylpentylone	/	/	/	/	/	/	/	/	/	0	-	0	0	**0**
N-ethylbutylone	/	/	/	/	/	/	/	/	/	/	/	0	0	-
Other substituted cathinone	/	/	-	0	0	0	0	0	0	/	/	/	0	**0**
3-chloromethcathinone	/	/	/	/	/	/	/	/	/	/	/	/	0	**0**
4-chloromethcathinone	/	/	/	/	/	/	/	/	/	/	/	/	/	**0**
3–methylmethcathinone	/	/	/	/	/	/	/	/	/	/	/	/	0	**0**
Alpha PHP	/	/	/	/	/	/	/	/	/	/	/	/	0	**0**
Dimethylpentylone	/	/	/	/	/	/	/	/	/	/	/	/	0	**0**
N, N-Dimethyl Pentylone	/	/	/	/	/	/	/	/	/	/	/	/	0	**0**
Pentylone	/	/	/	/	/	/	/	/	/	/	/	/	0	**0**
% Piperazines	25	-	-	0	0	0	0	-	/	/	/	/	/	**0**
BZP	25	-	-	0	0	0	0	-	/	/	/	/	/	**0**
% Dissociatives	/	/	/	-	0	0	0	0	0	0	0	0	0	-
Methoxetamine (MXE)	/	/	/	-	0	0	0	0	0	0	0	0	0	**0**

	2010 (N=100)	2011 (N=28)	2012 (N=90)	2013 (N=100)	2014 (N=100)	2015 (N=100)	2016 (N=100)	2017 (N=100)	2018 (N=100)	2020 (N=100)	2020 (N=100)	2021 (N=100)	2022 (N=100)	2023 (N=100)
2-Fluorodeschloroketamine (2-FDCK)	/	/	/	/	/	/	/	/	/	/	/	/	0	**0**
3 CI-PCP/4CI-PCP	/	/	/	/	/	/	/	/	/	/	/	/	0	**0**
3-HO-PCP/4-HO-PCP	/	/	/	/	/	/	/	/	/	/	/	/	0	**0**
3-MeO-PCP/4- MeO-PCP	/	/	/	/	/	/	/	/	/	/	/	/	0	**0**
Other drugs that mimic effects of dissociatives like ketamine	/	/	/	/	/	/	/	/	/	/	0	0	0	**0**
% Plant-based NPS	-	-	-	-	-	0	-	-	-	-	-	-	-	**-**
Ayahuasca	/	/	/	/	/	0	-	-	-	-	-	0	0	**-**
Salvia divinorum	/	-	-	-	-	0	0	-	-	-	-	0	0	**0**
Kratom	/	/	/	/	/	/	/	/	/	/	0	0	0	**0**
Mescaline	-	-	-	0	-	0	-	-	-	0	-	-	-	**-**
LSA	/	0	-	-	-	0	-	/	/	/	/	/	/	**0**
Datura	-	0	-	0	0	0	0	/	/	/	/	/	/	**0**
% Benzodiazepines	/	/	/	/	/	/	0	0	0	0	0	-	-	**-**
Etizolam	/	/	/	/	/	/	0	0	0	0	0	-	-	**0**
8 – Aminoclonazolam	/	/	/	/	/	/	/	/	/	/	/	/	0	**0**
Bromazolam	/	/	/	/	/	/	/	/	/	/	/	/	0	**0**
Clonazolam	/	/	/	/	/	/	/	/	/	/	/	/	-	**-**
Flualprazolam	/	/	/	/	/	/	/	/	/	/	/	/	-	**-**
Other drugs that mimic effect of benzodiazepines	/	/	/	/	/	/	/	/	/	/	0	0	0	**0**
% Synthetic cannabinoids	/	32	18	19	12	6	-	0	-	-	-	-	-	**0**
% Herbal high[#%]	/	/	11	-	-	-	-	0	-	0	/	/	/	**0**
Phenibut	/	/	/	/	/	/	/	/	/	/	0	-	0	**0**
% Other drugs that mimic the effect of opioids	/	/	/	/	/	/	/	0	0	0	0	0	0	**0**
% Other drugs that mimic the effect of ecstasy	/	/	/	/	/	/	/	-	0	0	0	0	0	**0**
% Other drugs that mimic the effect of amphetamine or cocaine	/	/	/	/	/	/	/	0	0	0	0	0	0	**-**

	2010 (N=100)	2011 (N=28)	2012 (N=90)	2013 (N=100)	2014 (N=100)	2015 (N=100)	2016 (N=100)	2017 (N=100)	2018 (N=100)	2020 (N=100)	2020 (N=100)	2021 (N=100)	2022 (N=100)	2023 (N=100)
% Other drugs that mimic the effect of psychedelic drugs like LSD	/	/	/	/	/	/	/	-	-	0	0	-	0	**0**

Note. NPS first asked about in 2010. / not asked. ^In previous EDRS reports, PMA was included as a NPS under 'phenethylamines' and mescaline was included under both 'phenethylamines' and 'plant-based NPS'. In 2021, the decision was made to remove PMA from the NPS category altogether, while mescaline was removed from 'phenethylamines' and is now only coded under 'plant-based NPS'. This means that the percentages reported for any phenethylamine NPS use in the 2021-2023 EDRS reports will not align with those presented in earlier (2010-2020) reports. ^^In previous (2010-2020) EDRS reports, DMT was included as a NPS under 'tryptamines', however, was removed from the NPS category in 2021 (refer to Chapter 7 for further information on DMT use among the sample). This means that the percentages reported for any tryptamine NPS use in the 2021-2023 EDRS reports will not align with those presented in earlier (2010-2020) reports. # The terms 'herbal highs' and 'legal highs' appear to be used interchangeably to mean drugs that have similar effects to illicit drugs like cocaine or cannabis but are not covered by current drug law scheduling or legislation. ~ In 2010 and between 2017-2019, three forms of 2C were asked about whereas between 2011-2016 four forms were asked about. From 2020 onwards, 'any' 2C use is captured. - Per cent suppressed due to small cell size (n≤5 but not 0). The response option 'Don't know' was excluded from analysis. Recruitment difficulties were experienced in 2011 (total sample N=28); therefore, all data from this year should be interpreted with caution. Statistical significance for 2022 versus 2023 presented in table; *$p<0.050$; **$p<0.010$; ***$p<0.001$.

9

Other Drugs

Non-Prescribed Pharmaceutical Drugs

Codeine

Before the 1 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 1 February 2018, legislation changed so that all codeine products, low- and high-dose, require a prescription from a doctor to access.

Up until 2017, participants were only asked about use of OTC codeine for non-pain purposes. Additional items on use of prescription low-dose and prescription high-dose codeine were included in the 2018-2020, however in 2021, participants were only asked about prescribed and non-prescribed codeine use, regardless of whether it was low- or high-dose.

Recent Use (past 6 months): Almost one quarter (24%) reported recent use of any codeine (28% in 2022; p=0.627). Almost one tenth (9%) reported any prescribed codeine use (17% in 2022; p=0.150), whilst 16% reported using any non-prescribed codeine (13% in 2022; p=0.679) (Figure 39).

Recent Use for Non-Pain Purposes (past 6 months): One-tenth (11%) of the Perth sample reported using non-prescribed codeine for non-pain purposes in 2023 (12% in 2022) (69% of participants who had recently used non-prescribed codeine in 2023; 92% in 2022).

Frequency of Use: Participants who had recently used non-prescribed codeine (n=16) reported use on a median of four days (IQR=2-11) in the past six months (4 days in 2022; IQR=3-5; n=13; p=0.627).

Pharmaceutical Opioids

Recent Use (past 6 months): One tenth (11%) of the Perth sample reported recent use of non-prescribed pharmaceutical opioids (e.g., methadone, buprenorphine, morphine, oxycodone, fentanyl, excluding codeine) (9% in 2022; p=0.808) (Figure 39).

Frequency of Use: Participants who had recently used non-prescribed pharmaceutical opioids and commented (n=11) reported use on a median of two days in the six months preceding interview (IQR=2-6), stable relative to five days in 2022 (IQR=2-11; n=8; p=0.705).

Benzodiazepines

Recent Use (past 6 months): Recent use of non-prescribed benzodiazepines has remained stable in recent years with around one third of the sample reporting use (34% in 2023; 36% in 2022; p=0.878) (Figure 39). From 2019, participants were asked about non-prescribed alprazolam (Xanax) use versus 'other benzodiazepines' (e.g., diazepam/Valium). One fifth (19%) of the sample reported recent use of non-prescribed alprazolam in 2023 (21% in 2022; p=0.855), whilst 31% reported use of 'other' non-prescribed benzodiazepines (29% in 2022; p=0.875).

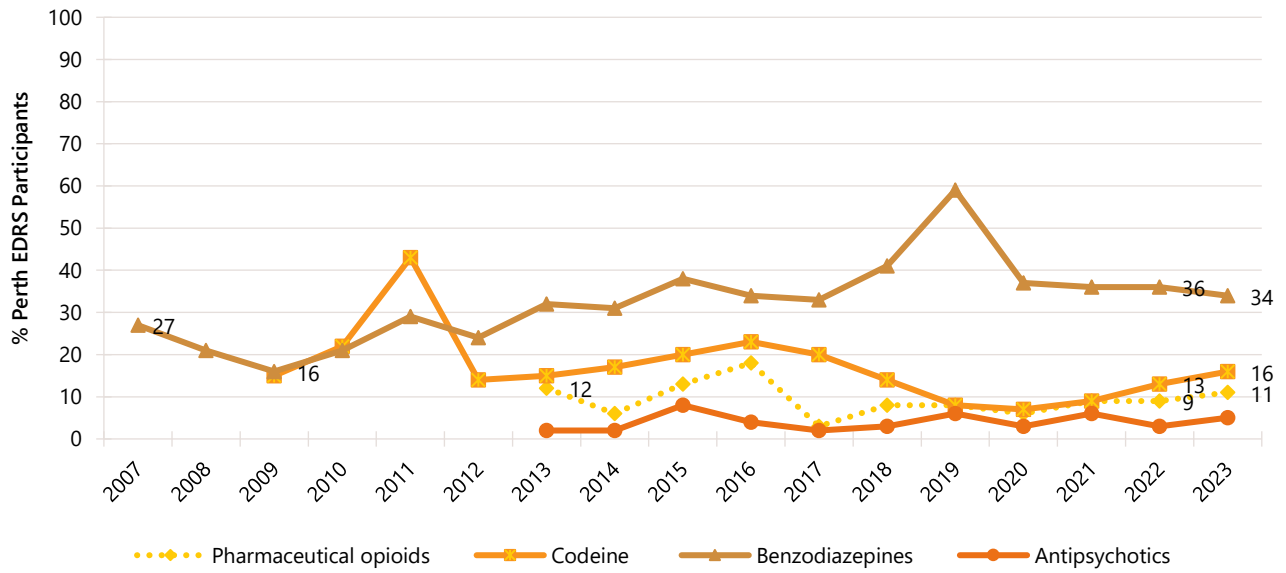
Frequency of Use: Participants reported using non-prescribed alprazolam on a median of five days in the six months preceding interview (IQR=2-7; n=19), stable from five days in 2022 (IQR=3-10; n=21; p=0.556). Meanwhile, 'other' non-prescribed benzodiazepines were used on a median of nine days (IQR=2-12; n=31), stable from five days in 2022 (IQR=2-10; n=29; p=0.433).

Forms Used: Among participants who had recently consumed non-prescribed benzodiazepines and commented (n=8), few participants (n≤5) were able to report on individual brands used and therefore, details are not reported. Please refer to the 2023 National EDRS Report for national trends, or contact the Drug Trends team for further information.

Antipsychotics

Few (n≤5) participants reported recent non-prescribed use of antipsychotics in 2023 (n≤5 in 2022; p=0.721), therefore, further details are not reported (Figure 39). Please refer to the 2023 National EDRS Report for national trends, or contact the Drug Trends team for further information.

Figure 39: Non-prescribed use of pharmaceutical drugs in the past six months, Perth, WA, 2007-2023



Note. Non-prescribed use is reported for prescription medicines. Monitoring of benzodiazepines commenced in 2007, and pharmaceutical opioids and antipsychotics in 2013. Monitoring of over-the-counter (OTC) codeine (low-dose codeine) commenced in 2010, however, in February 2018, the scheduling for codeine changed such that low-dose codeine formerly available OTC was required to be obtained via a prescription. To allow for comparability of data, the time series here represents non-prescribed low- and high dose codeine (2018-2023), with high-dose codeine excluded from pharmaceutical opioids from 2018. Data labels are only provided for the first (2007/2013) and two most recent years (2022 and 2023) of monitoring, however labels are suppressed where there are small numbers (i.e., n≤5 but not 0). For historical numbers, please refer to the data tables. The response option 'Don't know' was excluded from analysis. Recruitment difficulties were experienced in 2011 (total sample N=28); therefore, all data from this year should be interpreted with caution. Statistical significance for 2022 versus 2023 presented in figure; *p<0.050; **p<0.010; ***p<0.001.

Other Illicit Drugs

Hallucinogenic Mushrooms

Recent Use (past 6 months): Forty-two per cent the Perth sample reported recent use of hallucinogenic mushrooms in 2023. While stable relative to 2022 (46%; *p*=0.669), reports of recent mushroom use have roughly doubled since 2020 (Figure 40).

Frequency of Use: Participants reported using mushrooms on a median of two days in the six months preceding interview (IQR=1-4; n=42; 2 days in 2022; IQR=1-3; n=46; *p*=0.658) (Figure 40).

MDA

Few participants (n≤5) reported recent use of MDA in 2023 (7% in 2022; *p*=0.170) (Figure 40). For further information on use of MDA over time, please refer to the 2023 National EDRS Report for national trends, or contact the Drug Trends team for further information.

Substances with Unknown Contents

Capsules: Few (n≤5) participants reported recent use of capsules with 'unknown contents' in 2023, therefore, further details are not reported (6% in 2022; *p*=0.170). Please refer to the 2023 National EDRS Report for national trends, or contact the Drug Trends team for further information.

Other Unknown Substances: From 2019, we asked participants about their use more broadly of substances with 'unknown contents'. Nine per cent of participants reported use of any substance with 'unknown contents' in 2023 (14% in 2022; *p*=0.281) on a median of one day (IQR=1-1; n=9; 1 day in 2022; IQR=1-2; n=14; *p*=0.095).

When broken down by substance form, few (n≤5) participants reported on recent use of pills, powder and crystal with 'unknown contents' in 2023 (n≤5 in 2022), therefore, further details are not reported. Please refer to the 2023 National EDRS Report for national trends, or contact the Drug Trends team for further information.

Quantity: From 2020, we asked participants about the average amount of pills and capsules used with 'unknown contents' in the six months preceding interview. Few (n≤5) participants were able to answer questions regarding the median quantity of pills and capsules used in a 'typical' session in 2022 and 2023, therefore, further details are not reported. Please refer to the 2023 National EDRS Report for national trends, or contact the Drug Trends team for further information.

PMA

Few participants (n≤5) reported recent use of PMA in 2023 (0% in 2022) (Figure 40). Please refer to the 2023 National EDRS Report for national trends, or contact the Drug Trends team for further information.

PMMA

No participants reported recent use of PMMA in 2023 (0% in 2022) (Figure 40). Please refer to the 2023 National EDRS Report for national trends, or contact the Drug Trends team for further information.

Heroin

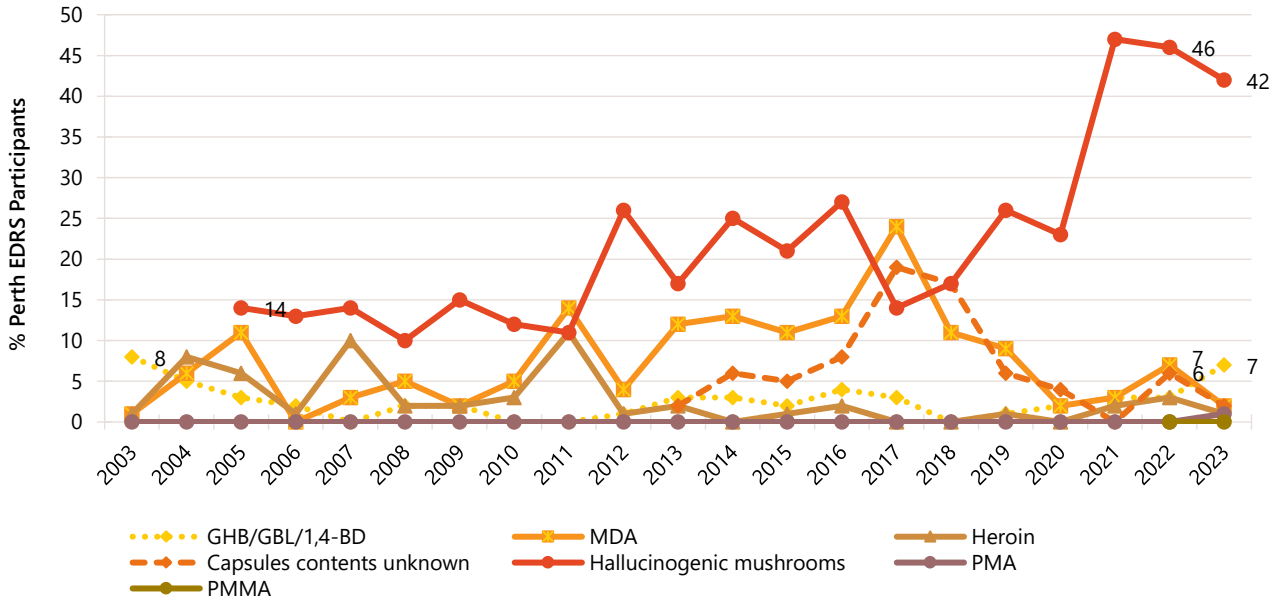
Few (n≤5) participants reported recent use of heroin in 2023 (n≤5 in 2022; *p*=0.621), therefore, further details are not reported (Figure 40). Please refer to the 2023 National EDRS Report for national trends, or contact the Drug Trends team for further information on use of heroin.

GHB/GBL/1,4-BD (liquid E)

Recent Use (past 6 months): In 2023, 7% of the Perth sample reported recent use of GHB/GBL/1,4-BD (n≤5 in 2022; *p*=0.331) (Figure 40).

Frequency of Use: A median of 20 days of GHB/GBL/1,4-BD use (IQR=3-39; n=7) was reported in the six months prior to interview in 2023 (n≤5 in 2022; *p*=0.046).

Figure 40: Past six month use of other illicit drugs, Perth, WA, 2003-2023



Note. Monitoring of hallucinogenic mushrooms commenced in 2005. Monitoring of capsules contents unknown commenced in 2013; note that in 2019, participants were asked more broadly about 'substances contents unknown' (with further ascertainment by form) which may have impacted the estimate for 'capsules contents unknown'. Monitoring of PMA commenced in 2010 and monitoring of PMMA commenced in 2022. Y axis has been reduced to 50% to improve visibility of trends. Data labels are only provided for the first (2003/2005/2010/2013) and two most recent years (2022 and 2023) of monitoring, however labels are suppressed where there are small numbers (i.e., n≤5 but not 0). For historical numbers, please refer to the data tables. The response option 'Don't know' was excluded from analysis. Recruitment difficulties were experienced in 2011 (total sample N=28); therefore, all data from this year should be interpreted with caution. Statistical significance for 2022 versus 2023 presented in figure; *p<0.050; **p<0.010; ***p<0.001.

Licit and Other Drugs

Alcohol

Recent Use (past 6 months): Most participants (95%) reported recent use of alcohol in 2023, which has remained consistent since monitoring commenced (99% in 2022; *p*=0.212) (Figure 41).

Frequency of Use: Among those who had consumed alcohol recently (n=95), alcohol was reportedly used on a median of 48 days in the six months preceding interview (i.e., twice per week, IQR=20-50; 48 days in 2022; IQR=30-72; n=98; *p*=0.009). Three quarters (74%) of those who had recently

consumed alcohol had done so on a weekly or more frequent basis in 2023, a significant decline from 89% in 2022 (p=0.012). Few (n≤5) participants reported daily use of alcohol in 2023 (n≤5 in 2022).

Tobacco

Recent Use (past 6 months): Sixty-three per cent of the Perth sample reported recent tobacco use in 2023 (75% in 2022; p=0.097) (Figure 41).

Frequency of Use: Participants reported using tobacco on a median of 90 days in the six months preceding interview (IQR=13-180; n=63), stable relative to 104 days in 2022 (IQR=22-180; n=75; p=0.995). Among those who had recently used tobacco (n=63), almost half (48%) reported daily use (40% in 2022; p=0.391).

E-cigarettes

In Australia, legislation came into effect on 1 October 2021, requiring people to obtain a prescription to legally import nicotine vaping products. Thus, from 2022, participants were asked about their use of both prescribed and non-prescribed e-cigarettes.

Recent Use (past 6 months): Recent use of non-prescribed e-cigarettes was reported by 62% of the sample in 2023, a significant decline from 81% in 2022 (p=0.005) (Figure 41). Few participants (n≤5) in the Perth sample reported recent use of prescribed e-cigarettes in 2023 (n≤5 in 2022).

Frequency of Use: Participants reported using non-prescribed e-cigarettes on a median of 180 days in six months preceding interview (i.e., daily, IQR=49-180; n=62), representing a significant increase from 90 days in 2022 (IQR=14-180; n=81; p=0.003) and the highest frequency of e-cigarette use since monitoring commenced. It also represents a doubling in the per cent of participants using daily between 2022 and 2023 (29% and 63%, respectively; p<0.001).

Forms Used: Among participants who responded (n=62), the majority (98%) reported using e-cigarettes containing nicotine, whereas few participants (n≤5) reported using e-cigarettes containing cannabis. Few participants (n≤5) reported using e-cigarettes containing both nicotine and cannabis, and few participants (n≤5) reported using e-cigarettes which did not contain nicotine or cannabis. No participants reported using e-cigarettes that contained another substance.

Reason for Use: Of those who reported any (i.e., prescribed and non-prescribed) e-cigarette use in the last six months and responded (n=63), 44% reported using it as a smoking cessation tool (41% in 2022; p=0.726), whilst 56% did not.

Nitrous Oxide

Recent Use (past 6 months): Half (50%) of the Perth sample reported recent use of nitrous oxide in 2023, a significant decline from 70% in 2022 (p=0.008) (Figure 41).

Frequency of Use: Nitrous oxide was used on a median of four days in the six months preceding interview (IQR=1-10; n=50), which was stable relative to 2022 (4 days; IQR=2-10; n=70; p=0.925).

Quantity: Of those who reported recent use and responded (n=47), the median 'typical' amount used per session was 20 bulbs (IQR=5-50), stable from 15 bulbs in 2022 (IQR=5-50; n=70; p=0.821). Meanwhile, the median maximum amount used per session was 30 bulbs (IQR=10-80), stable from 30 bulbs in 2022 (IQR=10-50; n=70; p=0.878).

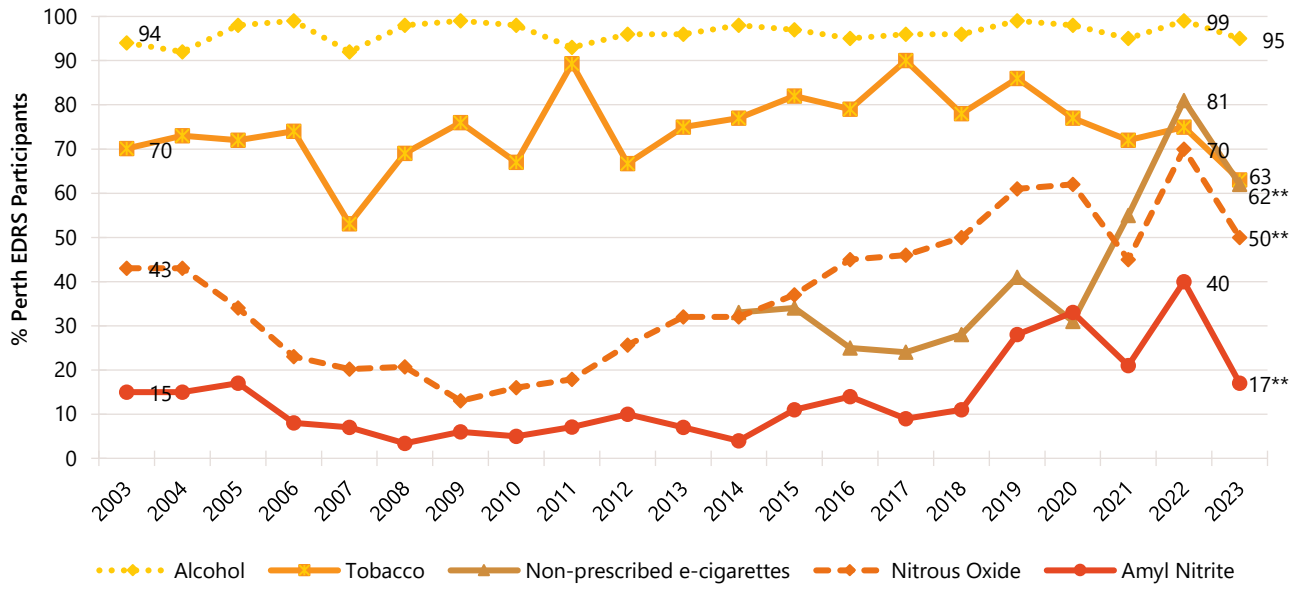
Amyl Nitrite

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

Recent Use (past 6 months): Seventeen per cent of the Perth sample reported recent use of amyl nitrite in 2023, representing a significant decline from 40% in 2022 (p=0.001) and following an upward trend in reported use since approximately 2018 (Figure 41).

Frequency of Use: Amyl nitrite was used on a median of two days in the six months preceding interview (IQR=1-3; n=17), stable from three days in 2022 (IQR=1-4; n=40; p=0.802).

Figure 41: Licit and other drugs used in the past six months, Perth, WA, 2003-2023



Note. Monitoring of e-cigarettes commenced in 2014, however on 1 October 2021, legislation came into effect requiring people to obtain a prescription to legally import nicotine vaping products. Data from 2022 onwards refers to non-prescribed e-cigarettes only. Data labels are only provided for the first (2003/2014) and two most recent years (2022 and 2023) of monitoring, however labels are suppressed where there are small numbers (i.e., n≤5 but not 0). For historical numbers, please refer to the data tables. The response option 'Don't know' was excluded from analysis. Recruitment difficulties were experienced in 2011 (total sample N=28); therefore, all data from this year should be interpreted with caution. Statistical significance for 2022 versus 2023 presented in figure; *p<0.050; **p<0.010; ***p<0.001.

10

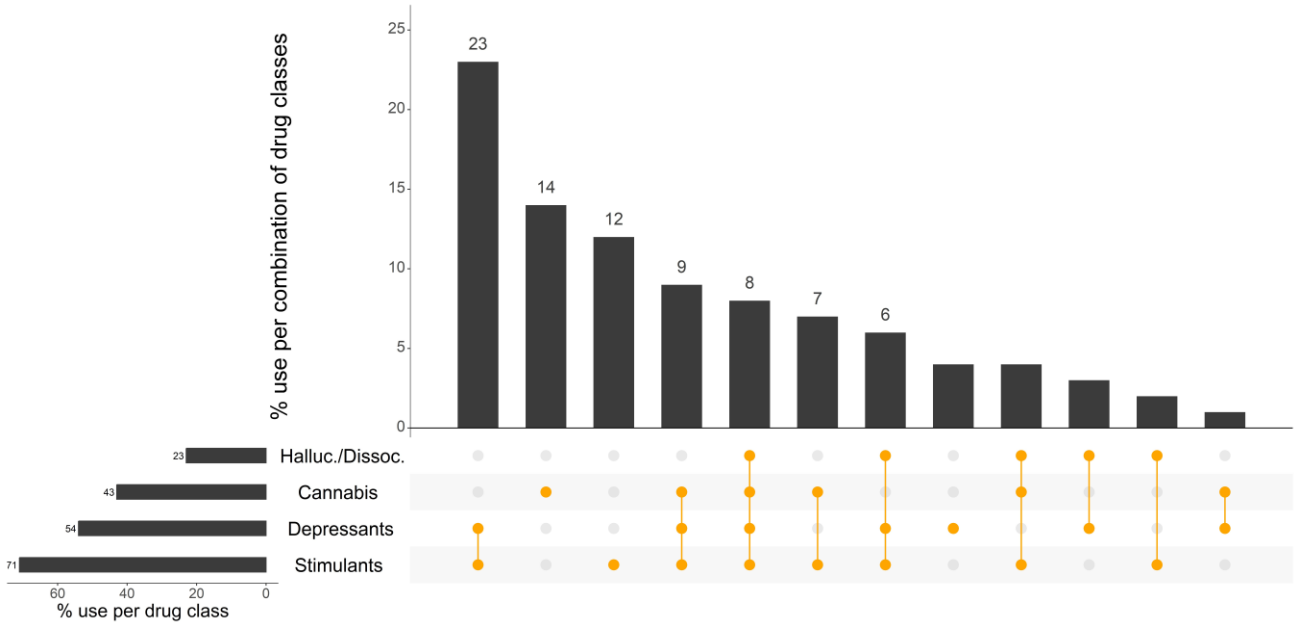
Drug-Related Harms and Other Behaviours

Polysubstance Use

On the last occasion of ecstasy or related drug use, among those who answered (n=99), the most commonly used substances were ecstasy (57%), alcohol (53%), cannabis (43%), ketamine, (13%), methamphetamine (13%), cocaine (12%), and pharmaceutical stimulants (12%).

Seventy per cent of the Perth sample reported concurrent use of two or more drugs on the last occasion of ecstasy or related drug use (excluding tobacco and e-cigarettes). The most commonly used combination of drug classes were depressants (predominantly alcohol) and stimulants (23%), followed by cannabis alone (14%), stimulants alone (12%), depressants, stimulants and cannabis (9%), and then depressants, stimulants, cannabis and hallucinogens/dissociatives (8%) (Figure 42).

Figure 42: Use of depressants, stimulants, cannabis, hallucinogens and dissociatives on the last occasion of ecstasy or related drug use, Perth, WA, 2023: Most common drug pattern profiles



Note. % calculated out of Perth, WA, EDRS 2023 sample. The horizontal bars represent the per cent of participants who reported use of each substance on their last occasion of ecstasy or related drug use; the vertical columns represent the per cent of participants who used the combination of drug classes represented by the orange circles. Drug use pattern profiles reported by ≤5 participants or which did not include any of the four drug classes depicted are not shown in the figure but are counted in the denominator. Halluc./Dissoc = hallucinogens/dissociatives (LSD, hallucinogenic mushrooms, amyl nitrite, DMT, ketamine and/or nitrous oxide); depressants (alcohol, GHB/GBL,1,4-BD, kava, opioids and/or benzodiazepines); stimulants (cocaine, MDA, ecstasy, methamphetamine, and/or pharmaceutical stimulants). Use of benzodiazepines, opioids and stimulants could be prescribed or non-prescribed use. Note that participants may report use of multiple substances within a class. Y axis reduced to 25% to improve visibility of trends.

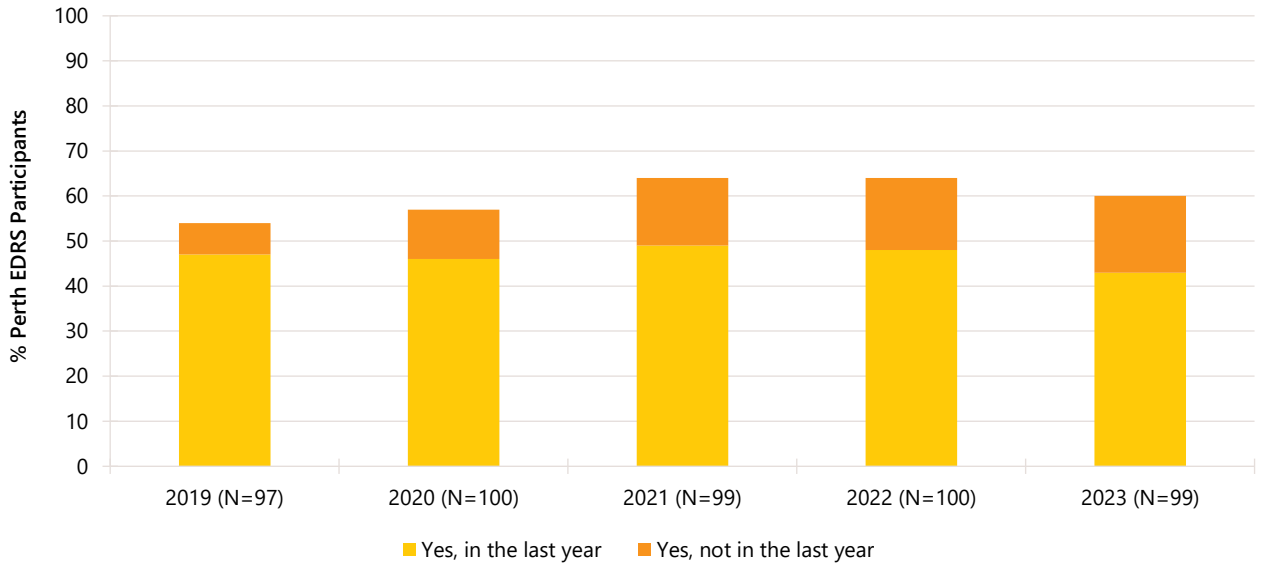
Drug Checking

Drug checking is a common strategy used to test the purity and contents of illicit drugs. At the time of interviewing in 2023, the only government-sanctioned drug checking services that had operated in Australia were at the Groovin the Moo festival in Canberra, ACT (2018, 2019) and at CanTEST, a fixed-site drug checking service in Canberra which has been operational since 17 July 2022.

In 2023, 43% of participants reported that they or someone else had tested the content and/or purity of their illicit drugs in Australia in the past year (48% in 2022; p=0.570). Of those who reported that they or someone else had tested their illicit drugs in the past year and could comment on the testing method (n=41), all participants (100%) reported using colorimetric or reagent test kits. Few participants (n≤5) reported having their drugs tested via testing strips (e.g., BTNX fentanyl strips or other immunoassay testing strips) or other method of spectroscopy/ chromatography, and no participants reported using Fourier Transform Infrared Spectroscopy.

Among those who reported that they or someone else had tested their illicit drugs in the past year (n=43), two thirds (67%) reported testing the drugs themselves and 37% reported a friend testing the drugs. Few participants (n≤5) reported having their drugs tested via their dealer or at an event-based face-to-face service in the past year.

Figure 43: Lifetime and past year engagement in drug checking, Perth, WA, 2019-2023



Note: The response option 'Don't know' was excluded from analysis. For historical numbers, please refer to the data tables. Statistical significance for 2022 versus 2023 presented in figure; *p<0.050; **p<0.010; ***p<0.001.

Alcohol Use Disorders Identification Test

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

The mean score on the AUDIT for the total Perth sample (including people who had not consumed alcohol in the past six months) was 12.8 (SD 7.2), a significant decrease from 14.1 (SD 6.5) in 2022 (p<0.001) (Table 4). AUDIT scores are divided into four 'zones' which indicate risk level. Specifically, scores between 0-7 indicate low risk drinking or abstinence; scores between 8-15 indicate alcohol use in excess of low-risk guidelines; scores between 16-19 indicate harmful or hazardous drinking; and scores 20 or higher indicate possible alcohol dependence. There was no significant change in the per cent of participants falling into each of these zones between 2022 and 2023 (p=0.287). Almost three quarters (72%) of participants obtained a score of eight or more, indicative of hazardous use (82% in 2022; p=0.138).

Table 4: AUDIT total scores and per cent of participants scoring above recommended levels, Perth, WA, 2010-2023

	2010 n=98	2011 N=26	2012 N=87	2013 N=98	2014 N=100	2015 n=98	2016 n=97	2017 n=98	2018 n=96	2019 n=98	2020 N=100	2021 n=96	2022 n=98	2023 N=100
Mean AUDIT total score (SD)	12.6 (6.8)	18.6 (7.3)	15.5 (7.2)	14.4 (6.6)	13.3 (5.4)	12.8 (5.6)	13.2 (7.0)	12.3 (5.0)	13.0 (6.6)	13.8 (6.3)	12.3 (6.2)	12.5 (6.3)	14.1 (6.5)	**12.8 (7.2) *****
Score 8 or above (%)	72	82	82	87	88	81	80	88	73	84	81	77	82	**72**
AUDIT zones:														
Score 0-7	28	18	18	13	12	19	20	12	27	16	19	23	18	**28**
Score 8-15	36	29	29	48	56	48	48	65	30	39	52	48	42	**39**
Score 16-19	16	23	23	17	19	20	15	13	23	27	19	17	11	**13**
Score 20 or higher	20	30	30	21	13	12	16	9	20	18	10	13	29	**20**

Note. Monitoring of AUDIT first commenced in 2010. Computed from the entire sample regardless of whether they had consumed alcohol in the past twelve months. Total AUDIT score range is 0-40, with higher scores indicating greater likelihood of hazardous and harmful drinking. – Per cent suppressed due to small cell size (n≤5 but not 0). The response option 'Don't know' was excluded from analysis. Recruitment difficulties were experienced in 2011 (total sample N=28); therefore, all data from this year should be interpreted with caution. Statistical significance for 2022 versus 2023 presented in table; *p<0.050; **p<0.010; ***p<0.001. Imputation used for missing scale scores.

Overdose Events

Non-Fatal Overdose

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

From 2019, changes were made to this module. Participants were asked about alcohol, stimulant and other drug overdose, prompted by the following definitions provided:

- **Alcohol overdose:** experience of symptoms (e.g., reduced level of consciousness, respiratory depression, turning blue and collapsing) where professional assistance would have been helpful.

- **Stimulant overdose:** experience of symptoms (e.g., nausea, vomiting, chest pain, tremors, increased body temperature, increased heart rate, seizure, extreme paranoia, extreme anxiety, panic, extreme agitation, hallucinations, excited delirium) where professional assistance would have been helpful.

- **Other drug overdose (not including alcohol or stimulant drugs):** similar definition to above. Note that in 2019, participants were prompted specifically for opioid overdose but this was removed in 2020 as few participants endorsed this behaviour.

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

For the purpose of comparison with previous years, we computed the per cent reporting any depressant overdose, comprising any endorsement of alcohol overdose, or other drug overdose where a depressant (e.g. opioid, GHB/GBL/1,4-BD, benzodiazepines) was listed.

Non-Fatal Stimulant Overdose

In 2023, one tenth of the sample (11%) reported that they had experienced a non-fatal stimulant overdose in the preceding 12 months (21% in 2022; p=0.084).

Due to low numbers reporting stimulant overdose for individual drugs (n≤5), please refer to the 2023 National EDRS Report for national trends on the most common stimulants involved in overdose events in 2023, or contact the Drug Trends team for further information.

Among those who experienced a recent non-fatal stimulant overdose and responded (n=11), 91%, reported that they had also consumed one or more additional drugs on the last occasion, most notably, alcohol (55%).

On the last occasion of experiencing a non-fatal stimulant overdose, 55% reported that they did not receive treatment or assistance. Due to low numbers reporting that they had received treatment or assistance (n≤5), please refer to the 2023 National EDRS Report for national trends, or contact the Drug Trends team for further information.

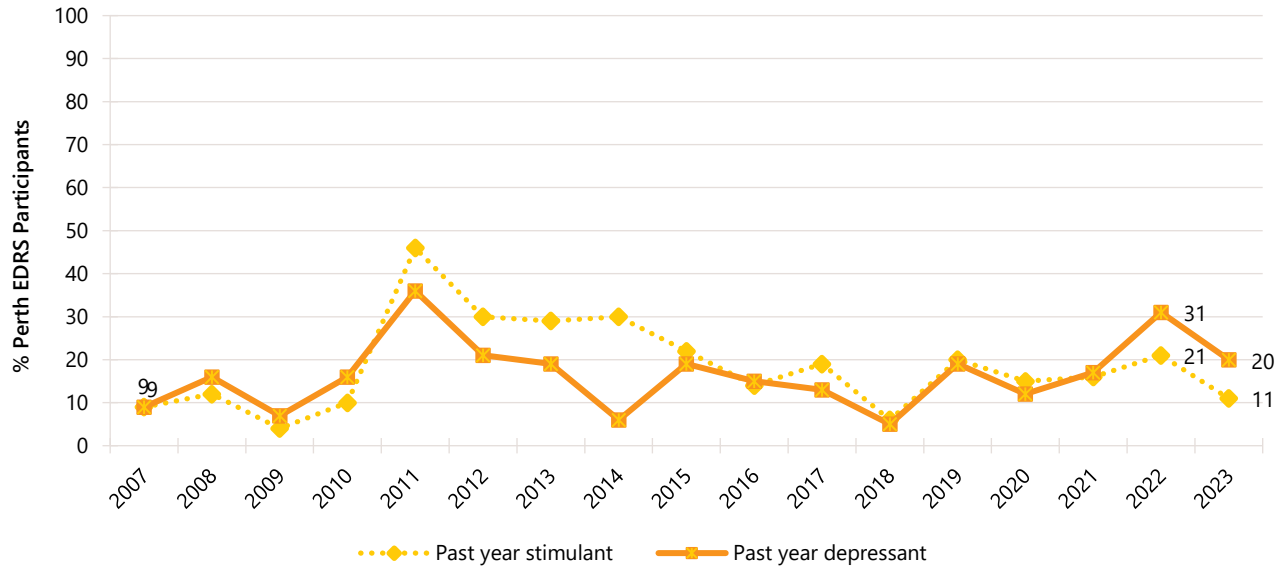
Non-Fatal Depressant Overdose

Alcohol: In 2023, 12% of the Perth sample reported a non-fatal alcohol overdose in the 12 months preceding interview (on a median of one occasion; IQR=1-9), representing a significant decline from 29% in 2022 (p=0.003). Of those who had experienced an alcohol overdose in the past year (n=12), the vast majority (91%) reported that they had not received treatment on the last occasion; the most common reason for not seeking treatment was 'deciding it wasn't serious enough' (6%). Due to low numbers reporting further reasons for not receiving treatment (n≤5), please refer to the 2023 National EDRS Report for national trends, or contact the Drug Trends team for further information.

Any depressant (including alcohol): In 2023, one fifth (20%) reported that they had experienced any non-fatal depressant overdose in the past 12 months (31% in 2022; p=0.079).

Of those who had experienced any depressant overdose in the past 12 months (n=20), the most common depressant drug reportedly involved was alcohol (60%), followed by benzodiazepines (30%). Few participants (n≤5) reported an overdose due to other drugs, therefore, these data are suppressed. Please refer to the 2023 National EDRS Report for national trends, or contact the Drug Trends team for further information.

Figure 44: Past 12 month non-fatal stimulant and depressant overdose, Perth, WA, 2007-2023



Note. Past year stimulant and depressant overdose was first asked about in 2007. In 2019, items about overdose were revised, and changes relative to 2018 may be a function of greater nuance in capturing depressant events. Data labels are only provided for the first (2007) and two most recent years (2022 and 2023) of monitoring, however labels are suppressed where there are small numbers (i.e., n≤5 but not 0). For historical numbers, please refer to the data tables. The response 'Don't know' was excluded from analysis. Recruitment difficulties were experienced in 2011 (total sample N=28); therefore, all data from this year should be interpreted with caution. Statistical significance for 2022 versus 2023 presented in figure; *p<0.050; **p<0.010; ***p<0.001.

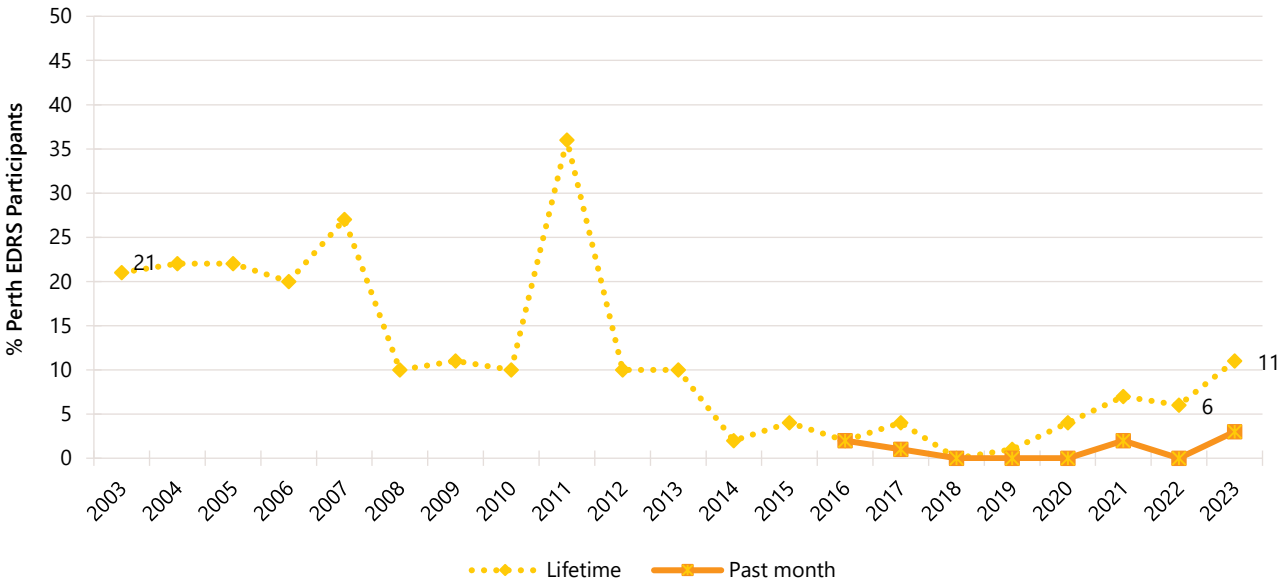
Awareness of Naloxone

Three fifths of the sample (61%, n=60) reported that they had ever heard of naloxone in 2023, a significant increase from 44% in 2022 (p=0.024). Among those who had ever heard of naloxone and responded (n=57), 89% were able to correctly identify the purpose of naloxone, stable from 90% in 2022.

Injecting Drug Use and Associated Risk Behaviours

In 2023, one tenth (11%) of the Perth sample reported that they had ever injected a drug, stable from 6% in 2022 (p=0.306). Few participants (n≤5) reported injecting a drug in the preceding month (0% in 2022; p=0.246) (Figure 45). Please refer to the 2023 National EDRS Report for national trends, or contact the Drug Trends team for further information on injecting use.

Figure 45: Lifetime and past month drug injection, Perth, WA, 2003-2023



Note. Items assessing whether participants had injected drugs in the past month were first asked in 2016. Data labels are only provided for the first (2003/2016) and two most recent years (2022 and 2023) of monitoring, however labels are suppressed where there are small numbers (i.e., n≤5 but not 0). For historical numbers, please refer to the data tables. The response option 'Don't know' was excluded from analysis. Recruitment difficulties were experienced in 2011 (total sample N=28); therefore, all data from this year should be interpreted with caution. Statistical significance for 2022 versus 2023 presented in figure; *p<0.050; **p<0.010; ***p<0.001.

Drug Treatment

Few participants (n≤5) reported that they were currently receiving drug treatment; this is consistent with reporting in previous years (n≤5 in 2022). Please refer to the 2023 National EDRS Report for national trends on drug treatment, or contact the Drug Trends team for further information.

Ecstasy and Methamphetamine Dependence

From 2017, participants were asked questions from the Severity of Dependence Scale (SDS) adapted to investigate ecstasy and methamphetamine dependence. The SDS is a five-item tool questionnaire designed to measure the degree of dependence on a variety of drugs. The SDS focuses on the psychological aspects of dependence, including impaired control of drug use, and preoccupation with, and anxiety about, use. A total score was created by summing responses to each of the five questions. Possible scores range from 0 to 15.

To assess ecstasy dependence in the past six months, a cut-off score of three or more was used, as this has been found to be a good balance between sensitivity and specificity for identifying problematic dependent ecstasy use. Of those who had recently used ecstasy and responded (n=97),

14% recorded a score of three and above, stable from 10% in 2022 (p=0.507). The median ecstasy SDS score was 0 (IQR: 0–2). Almost three fifths (58%) of participants obtained a score of zero on the ecstasy SDS and a further 10% obtained a score of one, indicating that the majority of respondents reported no or few symptoms of dependence in relation to ecstasy use (Table 5).

To assess methamphetamine dependence in the past six months, a cut-off of four and above was used as a likely indicator of methamphetamine dependence. Of those who had recently used methamphetamine and responded (n=29), 45% scored four or above, stable relative to 2022 (n≤5; p=0.303). The median methamphetamine SDS score was one (IQR: 0–7). Two fifths (41%) obtained a score of zero on the methamphetamine SDS and a few participants (n≤5) obtained a score of one on the scale, indicating that approximately half of respondents who had used methamphetamine recently reported no or few symptoms of dependence in relation to methamphetamine use (Table 5).

Table 5: Total ecstasy and methamphetamine SDS scores, and per cent of participants scoring above cut-off scores indicative of dependence, among those who reported past six month use, Perth, WA, 2017-2023

	2017	2018	2019	2020	2021	2022	2023
Ecstasy	(N=100)	(N=98)	(N=97)	(N=0)	(N=96)	(N=96)	(N=97)
Median total score (IQR)	1 (0-3)	1 (0-2)	1 (0-2)	/	0 (0-1)	0 (0-1)	**0 (0-2)**
% score 0	35	41	44	/	63	66	**58**
% score =1	18	19	20	/	15	17	**10**
% score ≥3	28	23	25	/	16	10	**14**
Methamphetamine	(N=7)	(N=11)	(N=9)	(N=12)	(N=13)	(N=13)	(N=29)
Median total score (IQR)	4 (0-5)	0 (0-3)	1 (0-2)	0 (0-0)	1 (0-8)	1 (0-2)	**1 (0-7)**
% score 0	-	55	-	92	46	-	**41**
% score =1	0	-	-	0	-	-	**-**
% score ≥4	-	-	-	0	-	-	**45**

Note. Severity of Dependence scores calculated out of those who used ecstasy/methamphetamine recently (past 6 months). A cut-off score of ≥3 and ≥4 is used to indicate screening positive for potential ecstasy and methamphetamine dependence, respectively. / Ecstasy Severity of Dependence Scale was not asked of participants in 2020. – Per cent suppressed due to small cell size (n≤5 but not 0). The response option 'Don't know' was excluded from analysis. Imputed values used for missing scale scores. Statistical significance for 2022 versus 2023 presented in table; *p<0.050; **p<0.010; ***p<0.001.

Sexual Health Behaviours

Three quarters (77%) of the Perth sample reported engaging in some form of sexual activity in the four weeks preceding interview (76% in 2022).

Of those who had engaged in sexual activity in the past four weeks and responded (n=76), 83% reported that they had used alcohol and/or other drugs before or during sexual activity in the preceding month (79% in 2022; p=0.537). Of those who had engaged in sexual activity in the past four weeks and responded (n=76), almost one tenth (9%) reported that their use of alcohol and/or other drugs had impaired their ability to negotiate their wishes during sex (n≤5 in 2022; p=0.327). Of those who had engaged in sexual activity in the preceding four weeks and responded (n=76), 37% reported penetrative sex without a condom where they did not know the HIV status of their partner (12% in 2022; p<0.001).

Of the total sample who responded (n=99), approximately one fifth (22%) reported a sexual health check up in the past six months (34% in 2022; p=0.086), whilst 69% had done so in their lifetime (71% in 2022; p=0.762). Of the total sample who responded (n=99), few participants (n≤5) reported that they had been diagnosed with a sexually transmitted infection (STI) in the past six months (n≤5 in 2022; p=0.279), whilst one fifth (20%) reported a positive diagnosis in their lifetime (15% in 2022; p=0.359). Due to low numbers reporting on the specific types of STIs diagnosed (n≤5), please refer to the 2023 National EDRS Report for national trends, or contact the Drug Trends team for further information.

Of the total sample who responded (n=98), one fifth (22%) reported having had a test for human immunodeficiency virus (HIV) in the past six months (22% in 2022), whilst 57% reported having a test in their lifetime (49% in 2022; p=0.324). Few participants (n≤5) in the Perth sample reported that they had ever been diagnosed with HIV (0% in 2022; p=0.497), with no participants reporting a positive diagnosis in the six months preceding interview (0% in 2022) (Table 6).

Table 6: Sexual health behaviours, Perth, WA, 2021-2023

	2021	2022	2023
Of those who responded#:	N=99	N=100	**N=100**
% Any sexual activity in the past four weeks (n)	86 (n=85)	76 (n=76)	**77 (n=77)**
Of those who responded# and reported any sexual activity in the past four weeks:	n=83	n=75	**n=76**
% Drugs and/or alcohol used prior to or while engaging in sexual activity	76	79	**83**
Of those who responded# and reported any sexual activity in the past four weeks:	n=80	n=76	**n=76**
% Drugs and/or alcohol impaired their ability to negotiate their wishes during sexual activity	16	-	**9**
Of those who responded# and reported any sexual activity in the past four weeks:	n=83	n=76	**n=76**
% Had penetrative sex without a condom and did not know HIV status of partner	10	12	**37*** **
Of those who responded#:	n=95	n=100	**n=98**
% Had a HIV test in the last six months	16	22	**22**
% Had a HIV test in their lifetime	45	49	**57**
Of those who responded#:	n=98	n=100	**n=98**
% Diagnosed with HIV in the last six months	-	0	**0**
% Diagnosed with HIV in their lifetime	0	0	**-**
Of those who responded#:	n=98	n=100	**n=99**
% Had a sexual health check in the last six months	30	34	**22**
% Had a sexual health check in their lifetime	66	71	**69**
Of those who responded#:	n=98	n=100	**n=99**
% Diagnosed with a sexually transmitted infection in the last six months	-	-	**-**
% Diagnosed with a sexually transmitted infection in their lifetime	21	15	**20**

Note. # Due to the sensitive nature of these items, there is missing data for some participants who chose not to respond. The response option 'Don't know' was excluded from analysis. – Per cent suppressed due to small cell size (n≤5 but not 0). Statistical significance for 2022 versus 2023 presented in table; *p<0.050; **p<0.010; ***p<0.001.

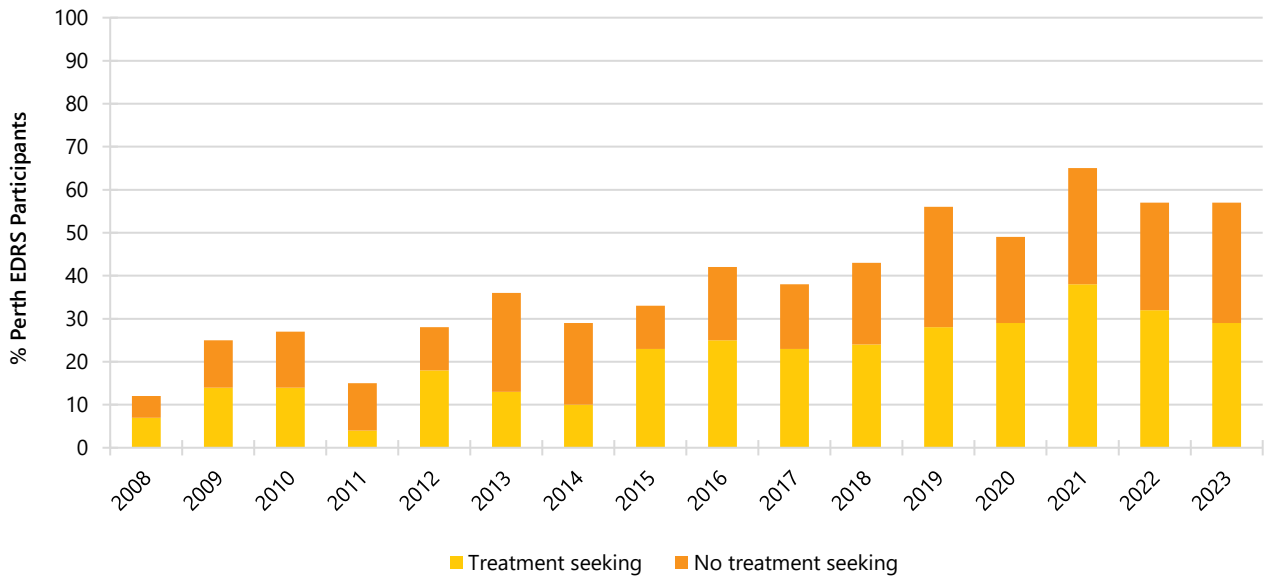
Mental Health and Psychological Distress (K10)

Mental Health

In 2023, 57% self-reported that they had experienced a mental health problem in the six months preceding interview, stable from 57% in 2022 (Figure 46). Among those self-reporting a recent mental health problem and able to respond (n=57), the most commonly reported problem was anxiety (68%; 62% in 2022; *p*=0.452), followed by depression (60%; 50% in 2022; *p*=0.354) and PTSD (16% n≤5 in 2022; *p*=0.252).

Of those who self-reported experiencing a recent mental health problem and commented (n=57), half (49%) reported seeing a mental health professional during the past six months (57% in 2022; *p*=0.447) (29% of the total sample in 2023) (Figure 46). Of those who reported seeing a mental health professional (n=29), 69% (n=20) reported being prescribed medication for their mental health problem (44% in 2022; *p*=0.073).

Figure 46: Self-reported mental health problems and treatment seeking in the past six months, Perth, WA, 2008-2023



Note. Questions about treatment seeking were first asked in 2008. The combination of the per cent who report treatment seeking and no treatment is the per cent who reported experiencing a mental health problem in the past six months. The response option 'Don't know' was excluded from analysis. For historical numbers, please refer to the data tables. Recruitment difficulties were experienced in 2011 (total sample N=28); therefore, all data from this year should be interpreted with caution. Statistical significance for 2022 versus 2023 presented in figure; *p<0.050; **p<0.010; ***p<0.001.

Psychological Distress (K10)

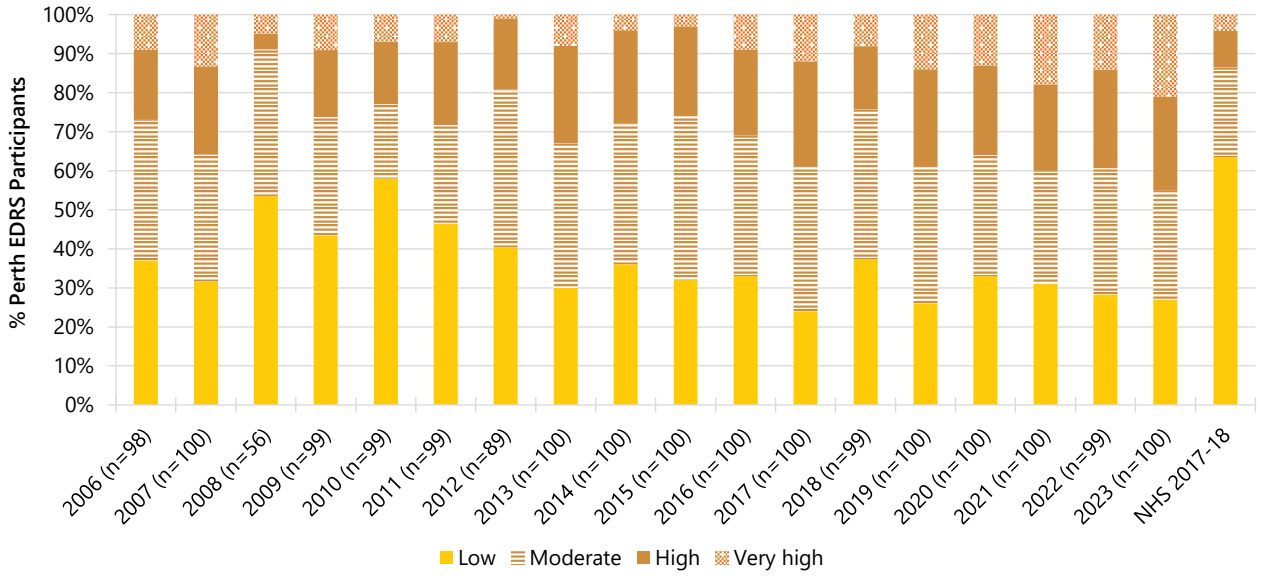
The Kessler Psychological Distress Scale 10 (K10) was administered to obtain a measure of psychological distress in the past four weeks. It is a 10-item standardised measure that has been found to have good psychometric properties and to identify clinical levels of psychological distress as measured by the Diagnostic and Statistical Manual of Mental Disorders/the Structured Clinical Interview for DSM disorders.

The minimum score is 10 (indicating no psychological distress) and the maximum is 50 (indicating very high psychological distress). Scores can be coded into four categories to describe degrees of distress: scores from 10–15 are considered to indicate 'low' psychological distress; scores between 16–21 indicate 'moderate' psychological distress; scores between 22–29 indicate 'high' psychological distress; and scores between 30–50 indicate 'very high' psychological distress. Among the general population, scores of 30 or more have been demonstrated to indicate a high likelihood of having a mental health problem, and possibly requiring clinical assistance.

Among those who responded in 2023 (n=100), the per cent of participants scoring in each of the four K10 categories remained stable between 2022 and 2023 (p=0.620). In 2023, one fifth (21%) of the Perth EDRS participants had a score of 30 or more (14% in 2022) (Figure 47).

The National Health Survey 2017-18 provides Australian population data for adult (≥18 years) K10 scores on K10. EDRS participants in 2023 reported greater levels of 'moderate', 'high' and 'very high' distress compared to the general population (Figure 47).

Figure 47: K10 psychological distress scores, Perth, WA, 2006-2023 and NHS 2017-18



Note. Data from the National Health Survey are a national estimate from 2017-18 for adults 18 or older. Imputation used for missing scale scores (EDRS only). The response option 'Don't know' was excluded from analysis. For historical numbers, please refer to the data tables. Statistical significance for 2022 versus 2023 presented in figure; *p<0.050; **p<0.010; ***p<0.001.

Health Service Access

Almost one quarter (23%) of the Perth sample reported accessing any health service for alcohol and/or drug support in the six months preceding interview in 2023 (17% in 2022; p=0.375). Primary services reported by participants in 2023 were a General Practitioner (GP) (9%; 9% in 2022) and the emergency department (7%; 3% in 2022) (Table 7).

Almost four fifths (79%) of participants reported accessing any health service in the six months preceding interview in 2023 (86% in 2022; p=0.261). Primary services reported by participants in 2023 were a GP (65%; 71% in 2022), a dentist (32%; 36% in 2022), a psychologist (21%; 24% in 2022) and the emergency department (19%; 18% in 2022) (Table 7).

Table 7: Health service access for alcohol and other drug reasons and for any reason in the past six months, Perth, WA, 2022-2023

	AOD support		Any reason	
	2022 (N=99)	2023 (N=100)	2022 (N=100)	2023 (N=100)
% accessed a health service in the past 6 months	**17**	**23**	**86**	**79**
Type of service accessed ***(participants could select multiple services)***	**N=99**	**N=100**	**N=100**	**N=100**
GP	9	9	71	65
Emergency department	3	7	18	19
Hospital admission (inpatient)	-	-	10	12
Medical tent (e.g., at a festival)	0	-	-	-
Drug and Alcohol counsellor	-	-	-	-
Hospital as an outpatient	-	-	6	13
Specialist doctor (not including a psychiatrist)	-	-	9	6
Dentist	0	-	36	32
Ambulance attendance	-	-	7	7
Other health professional (e.g., physiotherapist)	0	-	18	15
Psychiatrist	-	6	16	13
Psychologist	-	6	24	21
NSP	0	0	-	0
Peer based harm reduction service	0	0	-	0
Other harm reduction service	0	0	-	0

Note. The response option 'Don't know' was excluded from analysis. – Per cent suppressed due to small cell size (n≤5 but not 0). Statistical significance for 2022 versus 2023 presented in table; *p<0.050; **p<0.010; ***p<0.001.

Stigma

Questions regarding stigma were derived from the Stigma Indicators Monitoring Project, with stigma defined as being treated negatively or differently because of their illicit drug use. These questions have been asked, in part, since 2022.

In 2023, almost one quarter of the Perth sample (24%) reported experiencing stigma because of their illicit drug use in any health/non-health care setting in the six months preceding interview.

No participants reported experiencing stigma within specialist alcohol and other drug (AOD) services in the six months preceding interview, stable relative to 2022 (n≤5; p=0.121). A larger percentage, however, reported experiencing stigma within general health care services in the six months preceding interview (15%; 19% of those who had attended general health care services), a significant increase relative to 2022 (n≤5; p=0.002). Self-reported experiences of stigma whilst attending general health care services most commonly occurred when visiting a GP (8%) and the emergency department (6%). Fifteen per cent of participants reported experiencing stigma in non-health care settings, most commonly from police (9%) (Table 8).

Table 8: Self-reported experiences of stigma due to illicit drug use in the past six months, Perth, WA, 2022-2023

	2022	2023
% Experienced stigma in specialist AOD service:	n=100 -	**n=98** **0**
% Experienced stigma in general health care service:	N=100 -	**N=98** **15****
% Experienced stigma in non-health care service:	/	**n=98** **15**
% Experienced stigma in any of the above settings^	/	**24**
% Did any of the following to avoid being treated negatively or differently by AOD specialist or general healthcare services	/	**n=96** **42**
Delayed accessing healthcare	/	**10**
Did not tell health worker about drug use	/	**34**
Downplayed need for pain medication	/	**-**
Looked for different services	/	**-**
Did not attend follow-up appointment	/	**8**
Other	/	**0**

Note. N is the number who responded (denominator). The response option 'Don't know' was excluded from analysis. ^Includes specialist AOD service, general health care service and non-health care services. – Per cent suppressed due to small cell size (n≤5 but not 0). The response option 'Don't know' was excluded from analysis. / Not asked. Statistical significance for 2022 versus 2023 presented in table; *p<0.050; **p<0.010; ***p<0.001.

COVID-19 Testing and Diagnosis

In 2023, the vast majority (99%) of the Perth EDRS sample had ever been tested for SARS-CoV-2, with 84% having been tested in the 12 months preceding interview (95% in 2022; 37% in 2021; 7% in 2020). Of those who reported ever having been tested for COVID-19 (n=99), 84% reported ever being diagnosed with the virus (52% in 2022; 0% in 2021; 0% in 2020), and the median number of separate infections reported was one (IQR: 1-2). Three fifths (60%) of the sample reported a positive COVID-19 test in the 12 months preceding interview.

At the time of interview, 96% reported that they had received at least one COVID-19 vaccine dose (95% in 2022), with participants receiving a median of three doses (IQR=2-3); n≤5 received one dose, 38% received two doses and 56% received three or more doses.

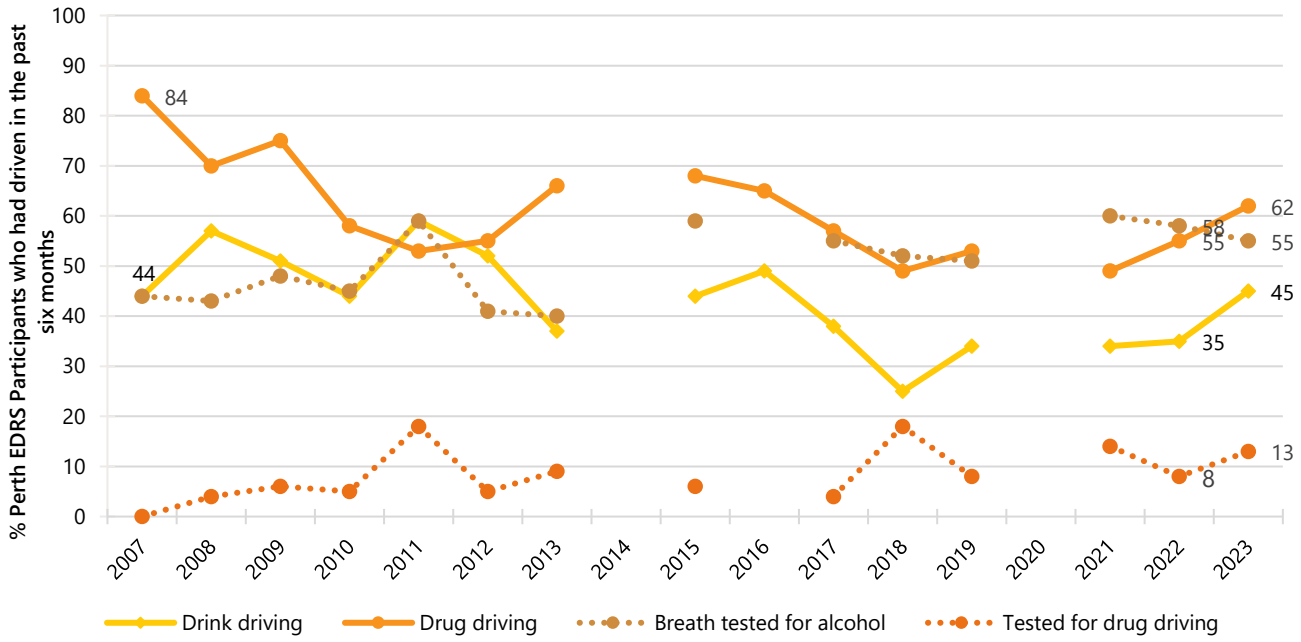
Driving

In 2023, most (86%) of the Perth sample had driven a car, motorcycle or other vehicle in the last six months. Of those who had driven in the past six months and responded (n=83), 45% reported driving while over the legal limit of alcohol at least once in that period (35% in 2022; p=0.206).

Of those who had driven in the past six months and responded (n=85), 62% reported driving within three hours of consuming an illicit or non-prescribed drug in the last six months (55% in 2022; p=0.356) (Figure 48). Participants most commonly reported using cannabis (60%) within three hours of driving in the last six months, followed by methamphetamine crystal (21%), pharmaceutical stimulants (17%) and other benzodiazepines (13%).

Among those who had driven in the past six months (n=86), 13% reported that they had been tested for drug driving by the police roadside drug testing service (8% in 2022; p=0.324), and 55% reported that they had been breath tested for alcohol by the police roadside testing service in the six months prior to interview (58% in 2022; p=0.763) (Figure 48).

Figure 48: Self-reported testing, and driving over the (perceived) legal limit for alcohol or three hours following illicit drug use, among those who had driven in the past six months, Perth, WA, 2007-2023



Note. Computed of those who had driven a vehicle in the past six months. Questions about driving behaviour were first asked about in 2007. Questions about driving behaviour not asked in 2014 or 2020; questions about alcohol and drug driving testing were not asked in 2016. Data labels are only provided for the first (2007) and two most recent years (2022 and 2023) of monitoring, however labels are suppressed where there are small numbers (i.e., n≤5 but not 0). For historical numbers, please refer to the data tables. The response option 'Don't know' was excluded from analysis. Recruitment difficulties were experienced in 2011 (total sample N=28); therefore, all data from this year should be interpreted with caution. Statistical significance for 2022 versus 2023 presented in figure; *p<0.050; **p<0.010; ***p<0.001.

Experience of Crime and Engagement with the Criminal Justice System

In 2023, 30% of the Perth sample reported 'any' crime in the past month (43% in 2022; p=0.082), with drug dealing (23%; 32% in 2022; p=0.209) and property crime (10%; 19% in 2022; p=0.112) being the two main forms of criminal activity (Figure 49).

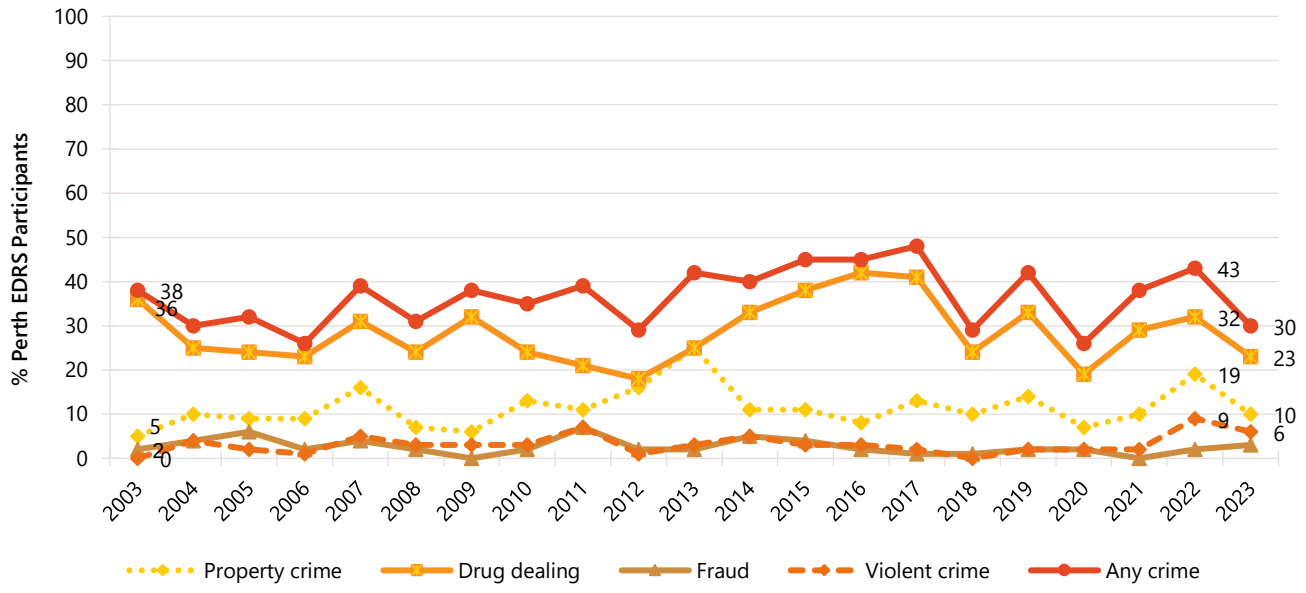
In 2023, 14% of the sample reported being the victim of a crime involving violence in the past month, stable relative to 2022 (12%; p=0.829) (Figure 50).

Seven per cent of the sample reported having been arrested in the 12 months preceding interview, stable relative to 2022 (9%; p=0.792). Few participants (n≤5) reported reasons for arrest; therefore, these data are suppressed. Please refer to the 2023 National EDRS Report for national trends, or contact the Drug Trends team for further information.

In 2023, 13% of the sample reported a drug-related encounter with law enforcement in the last 12 months which did not result in charge or arrest (9% in 2022; p=0.492). This predominantly comprised being stopped for questioning (46%; 56% in 2022), stopped and searched (46%; 44% in 2022) and stopped and issued a caution (31%; 33% in 2022).

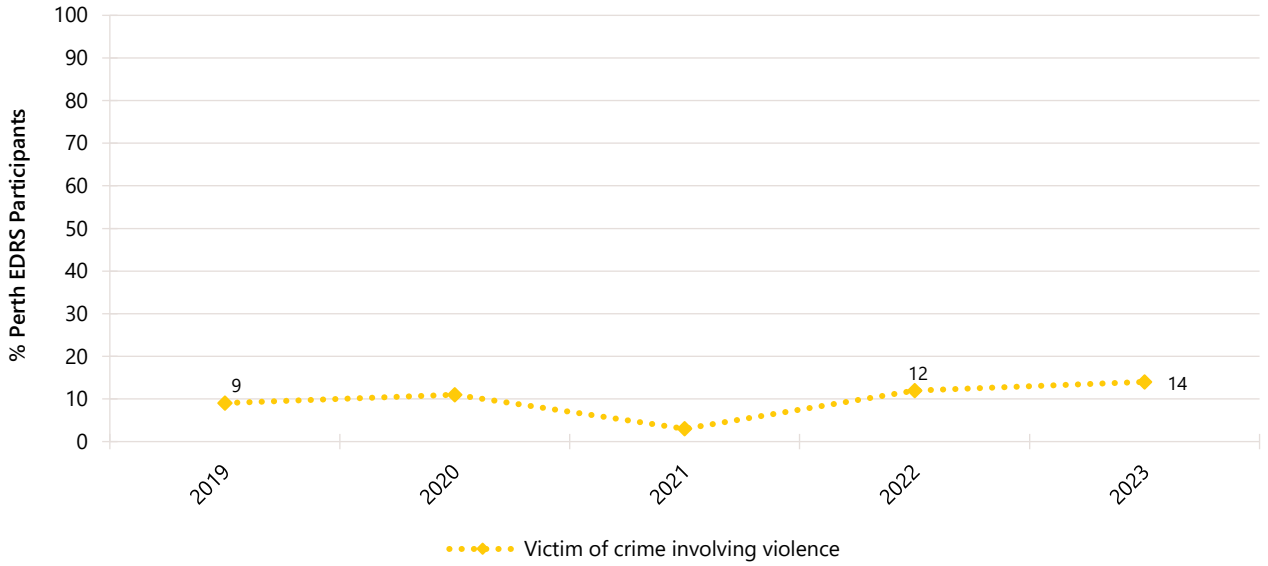
Few participants (n≤5) reported having ever been to prison, stable relative to 2022 (n≤5; p=0.683). Please refer to the 2023 National EDRS Report for national trends, or contact the Drug Trends team for further information on experience of crime.

Figure 49: Self-reported criminal activity in the past month, Perth, WA, 2003-2023



Note. Data labels are only provided for the first (2003) and two most recent years (2022 and 2023) of monitoring, however labels are suppressed where there are small numbers (i.e., n≤5 but not 0). For historical numbers, please refer to the data tables. The response option 'Don't know' was excluded from analysis. Recruitment difficulties were experienced in 2011 (total sample N=28); therefore, all data from this year should be interpreted with caution. Statistical significance for 2022 versus 2023 presented in figure; *p<0.050; **p<0.010; ***p<0.001.

Figure 50: Victim of crime involving violence in the past month, Perth, WA, 2019-2023



Note. Questions regarding being the victim of a crime involving violence were first asked in 2019. Data labels are only provided for the first (2019) and two most recent years (2022 and 2023) of monitoring, however labels are suppressed where there are small numbers (i.e., n≤5 but not 0). For historical numbers, please refer to the data tables. The response option 'Don't know' was excluded from analysis. Statistical significance for 2022 versus 2023 presented in figure; *p<0.050; **p<0.010; ***p<0.001.

Modes of Purchasing Illicit or Non-Prescribed Drugs

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

Purchasing Approaches

In 2023, the most popular means of arranging the purchase of illicit or non-prescribed drugs in the 12 months preceding interview was face-to-face (77%; 74% in 2022; p=0.735). This was closely followed by social networking applications (e.g., Telegram, Facebook, Wickr, WhatsApp, Snapchat, Grindr, Tinder) (75%; 73% in 2022; p=0.869) (Table 9). It is important to re-iterate that this refers to people *arranging the purchase* of illicit or non-prescribed drugs. This captures participants who messaged friends or known dealers on Facebook Messenger or WhatsApp, for example, to organise the purchase of illicit or non-prescribed drugs, which may have then been picked up in person. After these methods, the next most commonly reported means of arranging purchase was via text messaging (45%; 31% in 2022; p=0.047) and phone calls (26%; 14% in 2022; p=0.039).

Buying and Selling Drugs Online

Few participants (n≤5) reported purchase via the darknet market in 2023 (n≤5 in 2022), while 7% reported purchasing from the surface web (n≤5 in 2022; p=0.035) (Table 9). In 2023, 45% (n=39) of participants reported they had ever obtained drugs through someone who purchased them on the surface web/darknet, with 31% doing so within the past 12 months (43% in 2022, p=0.121).

In 2023, few (n≤5) participants reported that they had sold illicit drugs on the surface web or darknet market in the 12 months preceding interview (n≤5 in 2022; p=0.656).

Source and Means of Obtaining Drugs

The majority of participants reported obtaining illicit drugs from a friend/relative/partner/colleague in 2023 (83%; 82% in 2022), 55% reported obtaining them from a known dealer/vendor (54% in 2022) and 42% reported obtaining them from an unknown dealer/vendor (43% in 2022) (Table 9).

When asked about how participants had received illicit drugs on any occasion in the last 12 months, the most commonly reported means was face-to-face (100%; 98% in 2022; p=0.497), followed by a collection point (17%; 6% in 2022; p=0.027) (collection point defined as a predetermined location where a drug will be left for later collection), and then via the post (9%; n≤5 in 2022; p=0.251) (Table 9).

Table 9: Means of purchasing and obtaining illicit drugs in the past 12 months, Perth, WA, 2020-2023

	2020	2021	2022	2023
	(N=100)	(N=100)	(N=100)	**(N=100)**
% Purchasing approaches in the last 12 months^#	(n=99)	(n=100)	(n=100)	**(n=99)**
Face-to-face	82	90	74	**77**
Surface web	14	-	-	**7***
Darknet market	8	12	-	**-**
Social networking or messaging applications#	79	73	73	**75**
Text messaging	47	35	31	**45***
Phone call	33	21	14	**26***
Grew/made my own	-	-	-	**-**
Other	0	0	-	**0**
% Means of obtaining drugs in the last 12 months^~	(n=100)	(n=100)	(n=99)	**(n=99)**
Face-to-face	99	93	98	**100**
Collection point	18	-	6	**17***
Post	13	10	-	**9**
% Source of drugs in the last 12 months^	(n=99)	(n=100)	(n=99)	**(n=99)**
Friend/relative/partner/colleague	91	88	82	**83**
Known dealer/vendor	63	50	54	**55**
Unknown dealer/vendor	39	29	43	**42**

Note. - Per cent suppressed due to small cell size (n≤5 but not 0). ^ participants could endorse multiple responses. #This refers to people *arranging the purchase* of illicit or non-prescribed drugs. This captures participants who messaged friends or known dealers on Facebook Messenger or WhatsApp, for example, to organise the purchase of illicit or non-prescribed drugs, which may have then been picked up in person. ~ The face-to-face response option from 2021 was combined by those responding, 'I went and picked up the drugs', 'The drugs were dropped off to my house by someone' and/or 'Was opportunistic – I arranged and collected at the same time (e.g., at an event/club.)' The response option 'Don't know' was excluded from analysis. Statistical significance for 2022 versus 2023 presented in table; *p<0.050; **p<0.010; ***p<0.001.