NDARC
DRUG TRENDS
National Drug & Alcohol Research Centre

ECSTASY AND RELATED DRUGS REPORTING SYSTEM
DRUG TRENDS BULLETIN
OCTOBER 2015

The Difference is Research

An overview of the 2015 Ecstasy and Related Drugs Reporting System

Authors: Natasha Sindicich, Courtney Breen and Lucinda Burns
National Drug and Alcohol Research Centre, The University of New South Wales

Medicine | National Drug and Alcohol Research Centre

KEY FINDINGS

- 763 regular psychostimulant users (RPU) participants took part in the EDRS in 2015. Participants were primarily recruited through word-of-mouth and the internet.
- Preference for ecstasy has significantly declined and cannabis has significantly increased with 30% of the EDRS sample reporting ecstasy and 29% reporting cannabis as their drug of choice in 2015. The proportion reporting recent use of cannabis has also significantly increased as has use of cannabis when 'coming down' from ecstasy.
- Despite a significant decrease in the proportion reporting recent use of ecstasy, the most popular form of ecstasy consumed on a regular basis was still pill (tablet) form. There remains an increasing trend in the use of MDMA crystal/rock with 2015 being the second year this data has been collected. This form was considered to be a more potent form of ecstasy with 56% of MDMA crystal/rock users reporting it being of 'high' purity compared to 20% of those reporting pills, powder and caps as 'high'.
- Speed powder remained the form of methamphetamine used by most RPU with a quarter of the sample reporting recent use. However, recent use of speed powder and base was reported by significantly lower proportions of RPU in 2015 compared to 2014. The recent use of ice/crystal remained stable in 2015 with 1 in 5 participants reporting recent ice/crystal use. There was also a significant increase in those reporting that ice/crystal was 'easy' or 'very easy' to obtain.
- The recent use of new psychoactive substances (NPS) remained steady with one-third of the sample having used NPS in the past six months. The frequency of use remains low (1-2 days over a six month period). The most commonly reported NPS were: 2C-B, DMT and NBOMe.
- Synthetic cannabis stabilized at low levels (6%) which is comparable to 2014 figures.
- Recent use of cocaine, LSD, ketamine and GHB was also stable from 2014 to 2015.
- The recent use of cannabis and tobacco increased significantly among RPU in 2015.
- Alcohol is the second most commonly used drug among this group with 97% reporting recent use on a median of 48 days (twice weekly).

INTRODUCTION

The Ecstasy and Related Drugs Reporting System (EDRS) is the most comprehensive and detailed study of ecstasy and related drug markets in Australia. The EDRS uses a similar methodology to the Illicit Drug Reporting System (IDRS). The EDRS monitors the price, purity and availability of 'ecstasy' (MDMA) and other related drugs such as methamphetamine, cocaine, GHB, ketamine and more recently new psychoactive substances (NPS). It also examines trends in the use and harms of these drugs. The data collection includes: a) surveys with regular psychostimulant users (RPU); b) surveys with key experts who have contact with RPU through the nature of their work; and c) the analysis of existing data sources that contain information on ecstasy and other drugs.

Drug trends in this publication are cited nationally or by state/territory, although they represent trends in the capital city of each jurisdiction. Further details, including key expert and indicator data, will be published in the national and jurisdictional EDRS Drug Trends annual reports, which will be available through NDARC in April 2016. Previous years' findings are available in national and jurisdictional reports on the NDARC website, www.ndarc.med.unsw.edu.au (click on 'Drug Trends').

Notes on interpretation:

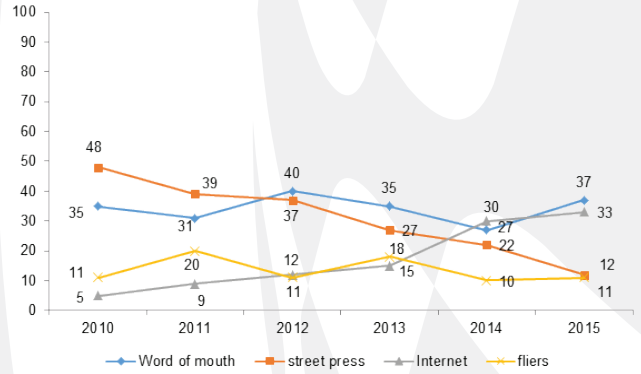
- 'Recent use' data in this bulletin refers to the proportion of participants who had used the drug on at least one occasion in the last six months.
- 'Frequency' data refer to the number of days on which those participants had recently used the drug.
- 'Lifetime' refers to ever having used a drug.
- ↑ Significant increase ($p<0.05$) from previous year (2014) compared with current year (2015)
- ↓ Significant decrease ($p<0.05$) from previous year (2014) compared with current year (2015)

ISSN 1835-8233

Funded by the Australian Government under the Substance Misuse Prevention and Service Improvement Grants Fund

This bulletin contains a summary of the key findings from the regular psychostimulant user (RPU) survey component of the 2015 national EDRS, in which 763 participants were recruited, of which n=100 were from Sydney, Melbourne, Adelaide, Darwin, Perth, n=99 from Canberra, n=85 from Brisbane and n=78 from Hobart. This represents the thirteenth year in which the study has been conducted nationally. Participants in 2015 were recruited primarily from word of mouth (37%) followed by the internet (33%) whereby Facebook was the predominant online website used (see Figure 1).

Figure 1: National overview of recruitment, 2010-2015



Source: EDRS interviews

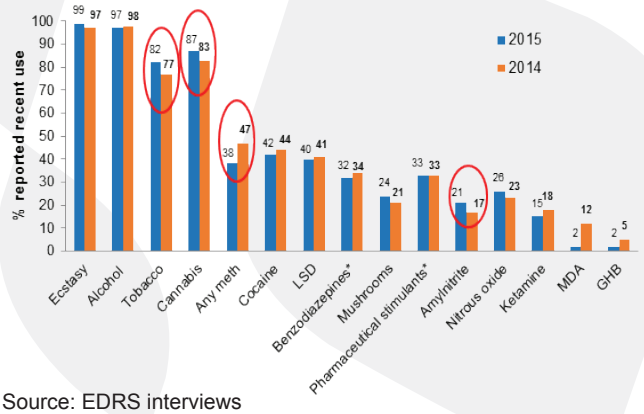
DEMOGRAPHICS OF EDRS PARTICIPANTS

In 2015, EDRS demographic characteristics remained generally consistent across jurisdictions and are similar to those collected over previous years. The mean age of participants was 23 years (SD 6.93), and almost two-thirds were male (62%). Participants generally reported being of an English speaking background (96%) with most (81%) born in Australia. The majority reported being heterosexual (87%) and over half were single (62%). Two-fifths (46%) were tertiary educated, with half reporting either full (24%) or part-time employment (29%). The main source of income for this sample was wages or salary (68%) followed by government benefits (20%), parental allowance (6%), criminal activity (1%), other means (1%) and no income (3%). Mean weekly income nationally was $565 with variations across jurisdictions. In terms of living situation, most reported renting (49%) or living in the family home (42%) with small proportions reporting no fixed address (i.e. homeless 'sleeping rough') or boarding/at a hostel (<1%). As in previous years, a small percentage (2%) reported being in drug treatment mainly drug counseling.

NATIONAL SNAPSHOT OVERVIEW

The vast majority of the national sample (99%) reported recent, regular (i.e monthly) use of ecstasy. A small number (n=7) had used ecstasy on a less than monthly basis. Alcohol was the second most reported substance consumed recently by 97% of the sample. Cannabis was used by 87% and cocaine by 42% of the sample. There was a significant increase in tobacco (77% in 2014 to 82% in 2015, p<0.02), cannabis 83% vs. 87%, p<0.02), and amyl nitrite (17% vs. 21%, p<0.03) and a signifiicant decrease in the use of any methamphetamine (47% in 2014 to 38% in 2015, p<0.000; specifically speed powder and base; see Figure 2). Of note is that while prevalence of recent use is reported in the figure below, frequency of use of these drugs must also be considered and is discussed by drug type later in the bulletin.

Figure 2: National overview of recent EDRS participant use, 2014-2015

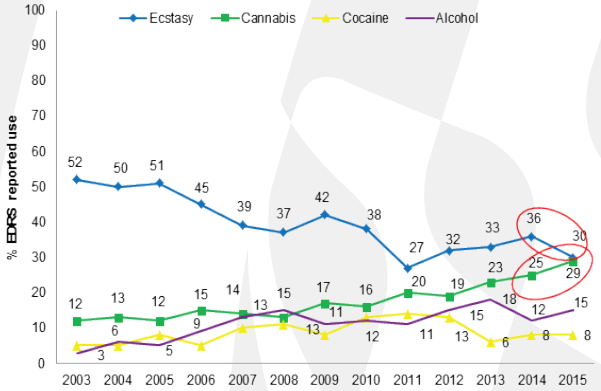


Source: EDRS interviews

* includes licit and illicit use

Preference for ecstasy as the participants' drug of choice (i.e. preferred drug) experienced a significant decline from 36% in 2014 to 30% in 2015 p=0.02; see Figure 3). Cannabis was reported to steadily increase from 25% in 2014 to 29% in 2015, p=0.04. This is the first year since monitoring began by which ecstasy and cannabis have been almost on par in relation to preference. This is also of note considering cannabis is not a drug required for eligibility in participating in the EDRS study. Alcohol and cocaine remain at stable levels in relation to preference. Drug used most often in the last month was cannabis (41%), followed by alcohol (34%) and ecstasy (17%).

Figure 3: Drug of choice trends EDRS participants, 2003-2015



Source: EDRS interviews

Ecstasy

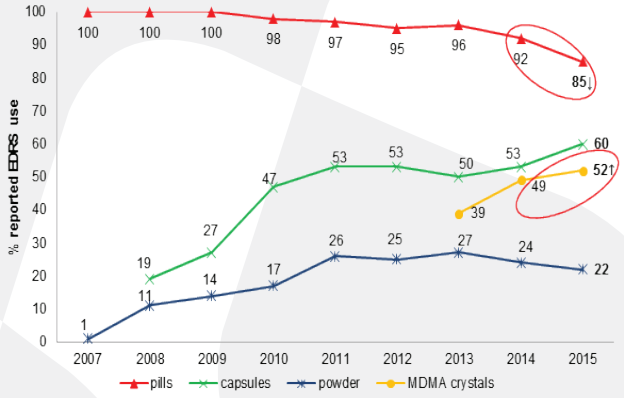
Consumption patterns

Nationally, ecstasy in all its forms (pills, powder, capsules and crystals/rock) was used on a median of 12 days in the six months prior to interview (approximately once per fortnight; range 1-180 days). No differences were found in the frequency of ecstasy use, with most reporting use monthly to fortnightly (61%). Participants reported using a median of two ecstasy tablets in a typical session of use, of which over a quarter (27%) reported use of more than two tablets in a typical session. In terms of the average amount used in a session of 'other forms' of ecstasy use, the regular user reported using a median of 0.5 grams (range 0.1-3 grams) of powder in a typical session and a median of 2 capsules of MDMA crystal (range 0.25-40 capsules) in a typical session.

Only ten participants reported using ecstasy pills as their only form, implying that most of the participants that reported ecstasy use are using a variation of the other forms. In recent years the other forms of powder and particularly capsules have become a common form of consumption for the drug (see figure 4). In 2012, a new form of ecstasy termed 'MDMA crystal/rock' had been reported by 2% (n=11) of the national sample mostly in VIC, NSW and QLD, in 2013 and 2014 that figure continued to rise and in 2015 over half of the entire sample reported using MDMA crystals recently (49% in 2014 vs. 52% in 2015, p<0.003). Interestingly however, the delivery method of the crystalline form of ecstasy can be in capsules or in a crystalline form. Overall, the main route of administration for any form of ecstasy was swallowing (86%) followed by snorting (13%), these figures are similar to those for MDMA crystal users route of administration (roa), however there was a higher proportion reporting snorting as a roa (swallowing 73% and snorting 52%).

This year the practice of bingeing (48 hours or more without sleep) specifically on ecstasy remained stable, however the use of other drugs with ecstasy during a session reported a significant increase (84% in 2014 vs. 89% in 2015, p<0.002). While using drugs to come down from ecstasy remained stable (54% in 2014 vs. 58% in 2015), the use of cannabis to come down from ecstasy significantly increased (77% in 2014 vs. 86% in 2015, p=0.001). This increase in reported cannabis use when coming down from ecstasy, coupled with the increase in preference in cannabis as a drug of choice and the significant increase in recent use of cannabis are the first signs in some time that the cannabis market in the EDRS sample is experiencing some change.

Figure 4: Forms of ecstasy used, 2007-2015



Source: EDRS interviews

Note: capsules were only included in the EDRS survey in 2008, crystals were only included in 2013

Market characteristics

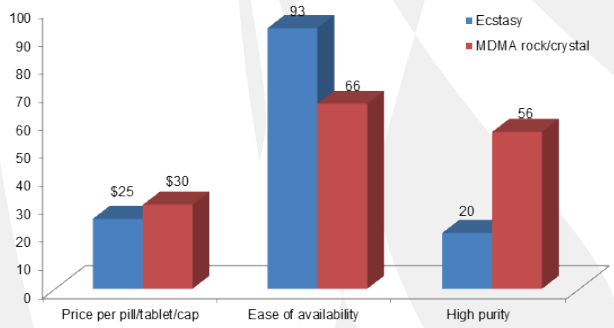
The national price of ecstasy pills remained consistent with previous years at $25 per pill. Price of ecstasy pills in 2015 has remained similar across jurisdictions (ranging from $20 in SA to $40 in the NT). Last price paid per gram of ecstasy powder nationally was $250 (range $25-$400), and for capsules the last price paid was $30 (range $3-$300). In terms of price changes for pills, powder and capsules, the highest proportion of participants reported the price was stable which was reflected in the figures reported by the last price paid for each form. Lower prices reported in the range are most likely due to purchases being made in bulk.

In relation to purity, results were consistent with last year with 35% reporting that it was medium, 16% reporting that it was low, 20% reported that it was high and 29% reported that it fluctuated. Availability for ecstasy pills, powder and capsules appeared to again have significantly increased from 2014 with a higher proportion reporting that it was 'easy to very easy' to obtain (89% in 2014 vs. 93% in 2015, p=0.03).

MDMA crystal/rock

This is the second year in which specific market characteristics were collected for MDMA crystal/rock. Often sold in capsules (caps) MDMA crystal a new form, considered of a higher purity than the other forms of ecstasy. Price nationally is approximately $250 per gram of MDMA (range $10-$450). The median national price per capsule was $30 (range $17-$50). Price is considered to have remained stable (69%) over the past six month period. Interestingly in comparison to the other forms of ecstasy, 56% reported purity of MDMA crystal to be high, 27% medium, 6% is low and 11% has fluctuated. Almost two-thirds of the sample (65%) that used MDMA crystal reported this purity level to have been stable over the past six months. Sixty-six percent reported that MDMA crystal was 'easy' to 'very easy' to obtain (see Figure 5 for Ecstasy versus MDMA crystal/rock comparison).

Figure 5: Comparison of Ecstasy forms versus MDMA crystal/Rock, 2015



Source: EDRS participant interviews

New psychoactive substances (NPS) use

This class of drug known as new psychoactive substances (NPS) or by law enforcement termed 'analogues and other synthetic drugs' have been present in Australia and on the international market since the mid 2000's. In Australia they have gained popularity by way of media coverage, reported recent use, and customs detections in recent years. NPS are available within the illicit drug market and are variants or mimic a parent compound which is usually a prohibited or scheduled drug e.g. cocaine or MDMA. In recent years, this class of drug has been sought out rather than used as a substitute. Prevalence in the EDRS remains moderate and frequency of use remains low indicating more sporadic use in comparison to the more established class of illicit drugs used by this group.

These classes of drugs were initially investigated by the EDRS in 2010. In 2015, the number of EDRS participants that had consumed an NPS in the previous 6 month period remained steady at 35% (36% in 2014; see Figure 6). Frequency of use for separate NPS remains low at 1-2 days over the last six months (i.e. equating to sporadic use). A sub-group in this class that continues to receive considerable attention includes the Phenethylamines group which includes sub-classes of the '2C-x family' e.g. 2C-B, 2C-I; 'Beta-ketones' e.g. cathinones like Mephedrone, MDPV. Particular NPS that remained more frequently reported were DMT, 2CB and NBOMe (see Table 1 below).

Table 1: Recent use of NPS, 2011-2015

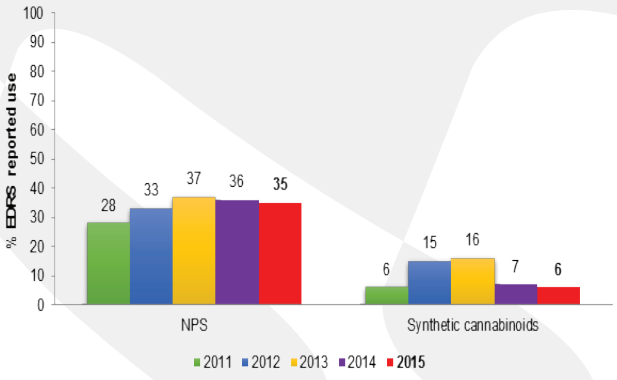
%	2015 (N=763)	2014 (N=800)	2013 (N=686)	2012 (N=607)	2011 (N=574)
%Phenethylamines (2C-x Class)	%	%	%	%	%
2CB	11	12	14	9	8
2CI	4	6	8	2	4
2CE	1	<1	1	3	3
NBOMe	7	9	n.a	n.a	n.a
%Synthetic canthinones					
Mephedrone	3	5	6	5	13
Methylone/bk MDMA	4	3	3	5	5
Ivory Wave/MDPV/ Bath salts	<1	<1	1	2.5	1
%Tryptamines					
DMT	11	14	14	12	13
%Dissociative					
DXM (Cough syrup)	5	3	4	2.5	5
Methoxetamine (MXE)	2	2	2	1	n.a

Note: n.a means data was not available that year

Source: EDRS participant interviews

Cannabimimetics or synthetic cannabinoids of which many traditionally contain synthetic chemicals which mimic the effects of the main psychoactive component of cannabis tetrahydrocannabioid (THC) has also been linked to this NPS class of drugs. The use of synthetic cannabinoids in 2015 remains low at 6% (see Figure 6).

Figure 6: Recent use of NPS and synthetic cannabinoids, nationally, 2011-2015



Source: EDRS participant interviews

Australia is now one of the few countries that can now offer population estimates on NPS recent use (0.4%) and synthetic cannabis recent use (1.2%) (AIHW, 2014). NPS are now found in most of Europe and North America, as well as Oceania, Asia and South America and a in a number of African countries. The growth of novel NPS to enter the global market has been exponential over the period 2009-2014, with 380 substances currently reported in this class (UNODC, World Drug Report 2015).

Methamphetamine

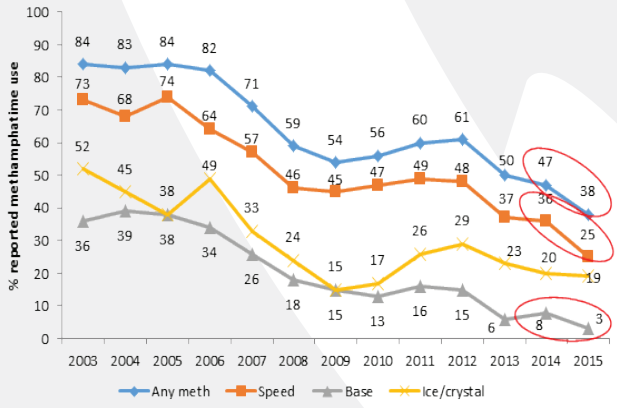
Consumption patterns

The EDRS distinguishes between the three forms of methamphetamine – methamphetamine powder ('speed'); methamphetamine base ('base'); and crystalline methamphetamine, ('crystal' or 'ice'). Recent use of any form of methamphetamine, speed powder and base were all reported to have significantly decreased from 2014 compared to 2015 (see Figure 7). Ice/crystal methamphetamine remained stable in 2015 at 19% compared to 20% in 2014. Ice/crystal methamphetamine use was highest in the NT (36%) followed by SA (26%). Frequency of use was relatively stable across the forms (nationally speed: 2 days, base: 2 days, ice/crystal: 6 days; and any form methamphetamine: 3 days).

Market characteristics

The median price of a gram of speed with nationally was comparable with 2014 figures reported at $260 in 2015 (from $250 in 2014), with some variability reported across states. The median price nationally for a point of ice/crystal was $100 and varied this year from $50 in NSW and VIC to $150 in the NT.

Figure 7: Prevalence of recent use of methamphetamine, by EDRS participants, Australia, 2003-2015



Source: EDRS participant interviews

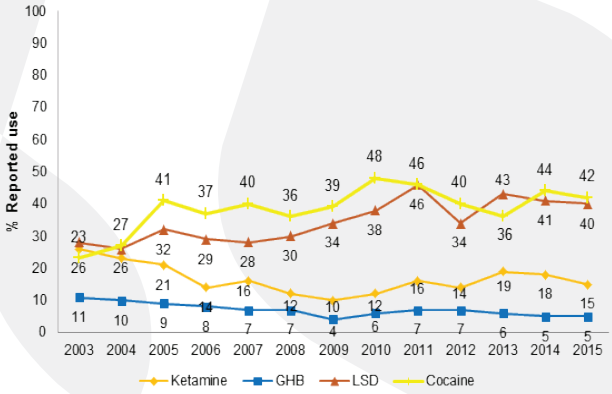
There were no significant differences in relation to ease of availability or in relation to reported purity for speed or base methamphetamine. Both forms were considered 'easy' to 'very easy' to obtain by over half their recent users, and both forms were considered 'medium' purity by the largest proportion that commented. Ice/crystal methamphetamine reported a significant increase in ease of availability ('easy' to 'very easy' to obtain) from 86% in 2014 compared to 97% in 2015 ($p<0.01$). Ice/crystal methamphetamine was considered of 'high' purity (46%) by the largest proportion that commented.

Cocaine, LSD, Ketamine and GHB

Consumption patterns

Recent use of Cocaine, LSD, Ketamine and GHB all remained stabled in 2015. Days of use remained low (sporadic) at 3 days nationally for Cocaine, and 2 days nationally for LSD, Ketamine and GHB (Figure 8).

Figure 8: Prevalence of use of Cocaine LSD, Ketamine and GHB, 2003-2015



Source: EDRS interviews

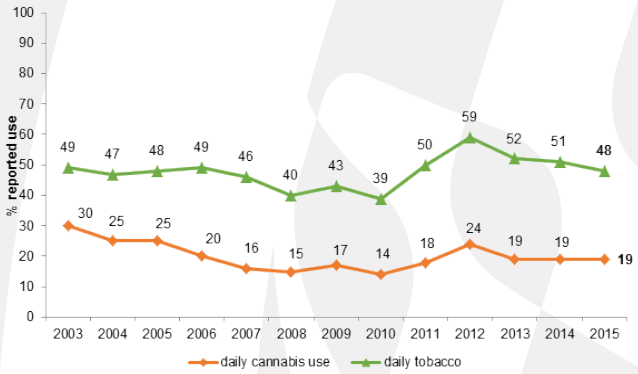
Cannabis, tobacco, alcohol and other drugs

Consumption patterns

Reported recent use of cannabis significantly increased from 2014 to 2015 (83% in 2014 vs. 87% in 2015, $p=0.02$). Daily use of cannabis was stable at 19% in 2015 (19% also in 2014 and 2013). Recent use of tobacco was has significantly increased from 77% in 2014 to 82% in 2015 ($p<0.02$). Daily use of tobacco was stable at 48% from 51% in 2014 (see figure 9).

Alcohol is the second most used drug by this sample over a six month period with almost all participants (97%) reporting recent use. Median days of use is 48 (approximately twice weekly), with 5% of the sample reporting daily drinking. Seventy-nine percent of the national sample obtained a score of eight or more on the AUDIT (Alcohol Use Disorders Inventory Test); these are levels at which alcohol intake may be considered hazardous. Use of alcohol in this group is warrants further monitoring.

Figure 9: Proportion of daily cannabis and tobacco smokers in EDRS sample, 2003-2015



Source: EDRS interviews

Note: * includes licit and illicit use

Most other drugs were reported at similar levels to those reported in 2015 (see Table 2).

FOR FURTHER INFORMATION:

For further jurisdictional information on any information reported above visit www.ndarc.med.unsw.edu.au, click on 'Drug Trends logo', and see: 2015 Drug Trends Conference: 'Key Findings of the 2015 EDRS (14th October 2015)'.

PARTICIPATING RESEARCHERS AND RESEARCH CENTRES

A/Prof Lucinda Burns, Natasha Sindicich, Jennifer Stafford, Kerryn Butler, Gavin Entwistle, Rachel Sutherland and Elizabeth Whittaker. National Drug and Alcohol Research Centre (National, NSW, ACT, SA & NT);

Arthur Truong and Prof Paul Dietze, Burnet Institute (VIC);

Dr Allison Matthews and A/Prof Raimondo Bruno, University of Tasmania (TAS);

Marina Nelson and Prof Simon Lenton, National Drug Research Institute (WA); and

Dr Caroline Salom and Prof Rosa Alati, Queensland Alcohol and Drug Research and Education Centre (QLD).

OTHER ACKNOWLEDGEMENTS

The participants and key experts who took part.

The agencies that assisted with interviewing and indicator data.

The funders, the Australian Government Department of Health.

REFERENCES

AIHW (2014). http://www.aihw.gov.au/alcohol-and-other-drugs/ndshs/2013/data-and-references/ (date accessed 8/09/2015)

United Nations Office on Drugs and Crime, World Drug Report 2015 (United Nations publication, Sales No. E.15.XI.6).

SUGGESTED CITATION

Sindicich, N., Breen, C. & Burns, L. (2015). An overview of the 2015 Ecstasy and Related Reporting System. EDRS Drug Trends Bulletin, October 2015. Sydney: National Drug and Alcohol Research Centre, University of New South Wales, Australia.

Table 2: Use of other drugs in the six months prior to interview, 2015

	National		NSW (n=100)	ACT (n=99)	VIC (n=100)	TAS (n=78)	SA (n=100)	WA (n=100)	NT (n=101)	QLD (n=85)
	2014 (N=800)	2015 (N=763)								
Alcohol %	98	97	100	95	99	97	100	98	96	97
Pharmaceutical stimulants%#	28	33	24	11	32	18	22	81	13	22
Amylnitrite %	17	21 ↑	46	17	34	12	7	4	6	6
Nitrous oxide%	23	26	26	15	53	17	8	32	10	26
Heroin%	2	2	2	3	6	2	2	0	1	3
Methadone%#	1	<1	0	0	1	3	1	2	0	2
Buprenorphine%#	1	<1	1	0	1	2	3	0	0	2
Other opiates%#	14	14	12	9	27	15	11	8	3	25
Antidepressants%#	8	9	8	9	7	5	6	6	7	16
Benzodiazepines%#	34	32	35	13	59	40	22	35	17	49
Mushrooms%	27	24	21	17	25	21	22	25	11	25
MDA%	12	13	12	10	21	6	3	13	13	17
Steroids%	2	1	2	0	2	0	3	1	4	3

Source: EDRS interviews