Northern Territory

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NORTHERN TERRITORY TRENDS IN ECSTASY AND RELATED DRUG MARKETS 2014
Findings from the Ecstasy and Related Drugs Reporting System (EDRS)

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NORTHERN TERRITORY TRENDS IN ECSTASY AND RELATED DRUG MARKETS 2014



Findings from the Ecstasy and related Drugs Reporting System (EDRS)

Elizabeth Whittaker and Lucinda Burns

National Drug and Alcohol Research Centre
UNSW Australia

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TABLE OF CONTENTS

LIST OF TABLES iii
LIST OF FIGURES iv
ACKNOWLEDGEMENTS vi
ABBREVIATIONS vii
GLOSSARY OF TERMS ix
Guide to days of use/injection xi

EXECUTIVE SUMMARY xii
Executive summary snapshot xii
Implications xx

1 INTRODUCTION 1
1.1 Aims 2

2 METHODS 3
2.1 Survey of REU/RPU 4
2.2 Survey of key experts 7
2.3 Other indicators 8

3 DEMOGRAPHICS 9
3.1 Overview of the NT EDRS sample 9

4 CONSUMPTION PATTERN RESULTS 11
4.1 Drug use history and current drug use 11
4.2 Ecstasy use 16
4.3 Methamphetamine use 21
4.4 Cocaine use 28
4.5 LSD use 32
4.6 Ketamine use 35
4.7 GHB use 37
4.8 Cannabis use 38
4.9 Other drug use 42
4.10 New psychoactive substance (NPS) use 50

5 DRUG MARKET: PRICE, PURITY, AVAILABILITY 57
5.1 Ecstasy 57
5.2 Methamphetamine 62
5.3 Cocaine 66
5.4 LSD 68
5.5 Ketamine 70
5.6 GHB 71
5.7 Cannabis 72

6 HEALTH-RELATED TRENDS ASSOCIATED WITH ERD USE 76
6.1 Overdose 76

6.2 Hospital admissions 79
6.3 Help-seeking behaviour 80
6.4 Drug treatment 82
6.5 Other self-reported problems associated with ERD use 84
6.6 Mental health and psychological distress 85

7 RISK BEHAVIOURS 87

7.1 Injecting risk behaviour 87
7.2 Sexual risk behaviour 89
7.3 Problematic alcohol use among EDRS participants 91
7.4 Ecstasy dependence 92

8 LAW ENFORCEMENT-RELATED TRENDS ASSOCIATED WITH ERD USE 93

8.1 Reports of criminal activity among EDRS participants 93
8.2 Arrests 94
8.3 Perceptions of changes in peer drug use 97

9 SPECIAL TOPICS OF INTEREST 98

9.1 Backpackers sub-sample 98
9.2 NPS health harms 104
9.3 NPS health policy 105

REFERENCES 107

LIST OF TABLES

Table 1: Demographic characteristics of EDRS participants, NT 10
Table 2: Lifetime and recent polydrug use of EDRS participants, NT 13
Table 3: Patterns of ecstasy use among EDRS participants, NT 17
Table 4: Patterns of speed use among EDRS participants, NT..... 23
Table 5: Patterns of base use among EDRS participants, NT 23
Table 6: Patterns of crystal use among EDRS participants, NT 24
Table 7: Patterns of cocaine use among EDRS participants, NT 29
Table 8: Patterns of LSD use among EDRS participants, NT 33
Table 9: Patterns of ketamine use among EDRS participants, NT..... 36
Table 10: Patterns of GHB use among EDRS participants, NT 37
Table 11: Patterns of cannabis use among EDRS participants, NT 39
Table 12: New psychoactive substances..... 51
Table 13: NPS use among EDRS participants, NT 54
Table 14: Median price of ecstasy forms and price changes as reported by EDRS participants, NT 57
Table 15: Median price of various methamphetamine forms purchased by EDRS participants, NT 63
Table 16: Median price of cocaine purchased by EDRS participants, NT 66
Table 17: Median price of LSD purchased by EDRS participants, NT 68
Table 18: Median price of hydroponic and bush cannabis purchased by EDRS participants, NT 72
Table 19: Self-reported drug-related problems among EDRS participants, NT 84
Table 20: Mental health problems among EDRS participants, NT 85
Table 21: Injecting risk behaviour among EDRS participants, NT..... 87
Table 22: Trends in sexual activity with casual partners in the past six months among EDRS participants, NT..... 89
Table 23: Criminal activity reported by EDRS participants, NT 93
Table 24: Demographic characteristics of backpackers, NT 99
Table 25: Drug use patterns of backpackers, NT..... 100
Table 26: Health-related trends amongst backpackers, NT 101
Table 27: Risk behaviours amongst backpackers, NT 102
Table 28: Criminal activity amongst backpackers, NT 103
Table 29: Participant knowledge of the legality of NPS in NT 105
Table 30: Last occasion NPS use and motivating factors for using NPS in NT 106

LIST OF FIGURES

Figure 1: Last source ecstasy was purchased from among EDRS participants, NT. 18
Figure 2: Last location ecstasy was purchased from among EDRS participants, NT 19
Figure 3: Location of last ecstasy use among EDRS participants, NT 19
Figure 4: Percentage of sample reporting recent ecstasy use in the general population, NT and national 20
Figure 5: Last source methamphetamine was purchased from among EDRS participants, NT 25
Figure 6: Last location methamphetamine was purchased from among EDRS participants, NT 25
Figure 7: Last location methamphetamine use by form among EDRS participants, NT 26
Figure 8: Percentage of sample reporting recent methamphetamine use in the general population, NT and national 26
Figure 9: Last source cocaine was purchased from among EDRS participants, NT. 29
Figure 10: Last location cocaine was purchased from among EDRS participants, NT 30
Figure 11: Last location of cocaine use among EDRS participants, NT 30
Figure 12: Percentage of sample reporting recent cocaine use in the general population, NT and national 31
Figure 13: Last source LSD was purchased from among EDRS participants, NT 33
Figure 14: Last location LSD was purchased from among EDRS participants, NT .. 34
Figure 15: Last location of LSD use among EDRS participants, NT 34
Figure 16: Last source that hydro and bush cannabis were purchased from among EDRS participants, NT 39
Figure 17: Last location that hydro and bush cannabis were purchased from among EDRS participants, NT 40
Figure 18: Last location of hydro and bush cannabis use among EDRS participants, NT 40
Figure 19: Percentage of sample reporting recent cannabis use in the general population, NT and national 41
Figure 20: Days of alcohol use among EDRS participants in the last six months, NT 43
Figure 21: Proportion of EDRS participants reporting lifetime and recent tobacco use, NT 44
Figure 22: Proportion of EDRS participants reporting lifetime and recent benzodiazepine use, NT 45
Figure 23: Proportion of EDRS participants reporting lifetime and recent antidepressant use, NT 46
Figure 24: Proportion of EDRS participants reporting lifetime and recent amyl nitrite and nitrous oxide use, NT 47
Figure 25: Proportion of EDRS participants reporting lifetime and recent MDA use, NT 47
Figure 26: Proportion of EDRS participants reporting lifetime and recent mushroom use, NT 48
Figure 27: New psychoactive substances (NPS) investigated by the EDRS 50
Figure 28: EDRS participants' reports of current ecstasy purity, NT 58
Figure 29: EDRS participants' reports of changes in ecstasy purity in the past six months, NT 59
Figure 30: Number of ecstasy seizures, NT, 2007-2014 59
Figure 31: EDRS participants' reports of current ecstasy availability, NT 60
Figure 32: EDRS participants' reports of changes in ecstasy availability in the past six months, NT 60
Figure 33: EDRS participants' reports of current methamphetamine purity, NT 63

Figure 34: EDRS participants' reports of changes in methamphetamine purity in the past six months, NT 64
Figure 35: Number of amphetamine/methamphetamine seizures, NT, 2007-2014 .. 64
Figure 36: EDRS participants' reports of current availability of methamphetamine forms, NT 65
Figure 37: EDRS participants' reports of current purity of cocaine, NT 66
Figure 38: Number of cocaine seizures, NT, 2007-2014 67
Figure 39: EDRS participants' reports of current availability of cocaine, NT 67
Figure 40: EDRS participants' reports of current purity of LSD, NT 68
Figure 41: Number of LSD seizures, NT, 2007-2014 69
Figure 42: EDRS participants' reports of current availability of LSD, NT 69
Figure 43: EDRS participants' reports of price change of hydro and bush cannabis, NT 73
Figure 44: EDRS participants' reports of current potency of hydro and bush cannabis, NT 73
Figure 45: EDRS participants' reports of change in potency of hydro and bush cannabis over the last six months, NT 74
Figure 46: Number of cannabis seizures, NT, 2007-2014 74
Figure 47: EDRS participants' reports of current availability of hydro and bush cannabis, NT 75
Figure 48: EDRS participants' reports of change in availability of hydro and bush cannabis over the last six months, NT 75
Figure 49: Rates per million persons of principal amphetamine-related hospital admissions among persons aged 15-54, NT and nationally, 2006/07-2012/13 79
Figure 50: Rates per million persons of principal cocaine-related hospital admissions among persons aged 15-54, NT and nationally, 2006/07-2012/13 79
Figure 51: Rates per million persons of inpatient hospital admissions where cannabis was the principal diagnosis aged 15-54 years, NT and nationally, 2006/07-2012/13 80
Figure 52: Proportion of EDRS participants who recently accessed a medical or health service in relation to drug use, NT 80
Figure 53: Number of ecstasy treatment episodes, NT 2006/07 to 2012/13 82
Figure 54: Number of methamphetamine treatment episodes, NT 2006/07 to 2012/13 82
Figure 55: Number of cocaine treatment episodes, NT 2006/07 to 2012/13 83
Figure 56: Number of cannabis treatment episodes, NT 2006/07 to 2012/13 83
Figure 57: K10 scores for EDRS participants compared with the general Australian population, NT 86
Figure 58: K10 scores across time for EDRS participants, NT 86
Figure 59: Reasons for not using protective barriers among EDRS participants, NT 90
Figure 60: Recorded incidents of amphetamine arrests in the NT, 2006/07-2012/13 94
Figure 61: Recorded incidents of cocaine arrests in the NT, 2006/07-2012/13 94
Figure 62: Recorded incidents of hallucinogen arrests in the NT, 2006/07-2012/13 95
Figure 63: Recorded incidents of cannabis arrests in the NT, 2006/07-2012/13 95
Figure 64: Recorded incidents of steroid arrests in the NT, 2006/07-2012/13 96
Figure 65: Median ratings of motivating factors for using NPS in the NT 106

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ABBREVIATIONS

2C-B	4-bromo-2,5-dimethoxyphenethylamine
2C-E	2,5-dimethoxy-4-ethylphenethylamine
2C-I	2,5-dimethoxy-4-iodophenethylamine
5-MeO-DMT	5-methyoxy-dimethyltryptamine
ACC	Australian Crime Commission
ACPR	Australasian Centre for Policing Research
A&TSI	Aboriginal and/or Torres Strait Islander
AIHW	Australian Institute of Health and Welfare
AODTS MDS	Alcohol and Other Drug Treatment Services Minimum Data Set
ATS	amphetamine type stimulant
AUDIT	Alcohol Use Disorders Identification Test
BBVI	blood-borne viral infections
BZP	1-benzylpiperazine
CNS	central nervous system
DASSA	Drug and Alcohol Services South Australia
DMT	dimethyl tryptamine
DOB	2,5-dimethoxy-4-bromoamphetamine
DOI	death on impact; 2,5-dimethoxy-4-iodoamphetamine
DOM	2,5-dimethoxy-4-methylamphetamine
DXM	dextromethorphan
EDRS	Ecstasy and related Drugs Reporting System
ERD	ecstasy and related drugs
GBL	gamma-butyrolactone
GHB	gamma-hydroxybutyrate
IDRS	Illicit Drug Reporting System
IDU	injecting drug user(s)
K10	Kessler Psychological Distress Scale
KE	key expert(s)
LSD	*d*-lysergic acid diethylamide
MDA	3,4-methylenedioxyamphetamine
MDEA	3,4-methylenedioxyethylamphetamine
MDMA	3,4-methylenedioxymethamphetamine
MDPV	3,4-methylenedioxypyrovalerone; ivory wave
MPTP	1-methyl-4-phenyl-1,2,5,6-tetrahydropyridine
N	(or n) number of participants
NDARC	National Drug and Alcohol Research Centre

NDLERF	National Drug Law Enforcement Research Fund
NDSHS	National Drug Strategy Household Survey
NPS	new psychoactive substances
NSW	New South Wales
NT	Northern Territory
OTC	over the counter
PASW	Predictive Analytics Software
PDI	Party Drugs Initiative
PIED	performance and image enhancing drugs
PMA	para-methoxyamphetamine
PNS	peripheral nervous system
QLD	Queensland
REU	regular ecstasy user(s)
ROA	route of administration
RPU	regular psychostimulant user(s)
SA	South Australia
SDS	Severity of Dependence Scale
STI	sexually transmitted infection(s)
THC	delta-9-tetrahydro-cannabinol
TMA	3,4,5-trimethoxyamphetamine
VIC	Victoria

GLOSSARY OF TERMS

2C-B	Street term for 4-bromo-2,5-dimethoxyphenethylamine. It is a synthetic psychedelic of moderate duration
2C-I	Street term for 2,5-dimethoxy-4-iodophenethylamine. It is a short-acting synthetic psychedelic
Binge	Use over 48 hours without sleep
Bump	A bump refers to a small amount of powder, typically measured and snorted from the end of a key, the corner of a plastic card or a 'bumper'
Bumper	A bumper is a small glass nasal inhaler, purchased from tobacconists, used to store and administer powdered substances such as ketamine
Cap	Capsule
Cocaine	A central nervous system stimulant, obtained from the cocoa plant. Cocaine hydrochloride, the salt, is the more common form used in Australia. The freebase form is called 'crack'; little or no crack is available or used in Australia
Crystal	Street term for crystal methamphetamine, a potent form of methamphetamine. Also known as 'ice'
Daily use	Use occurring on each day in the past six months, based on a maximum of 180 days
Ecstasy	Street term for MDMA (3,4-methylenedioxymethamphetamine), which may contain a range of other substances. It is a hallucinogenic amphetamine
GBL	Acronym for gamma-butyrolactone. It is a GHB precursor and substitute, which metabolises into GHB in the stomach
GHB	Acronym for gamma-hydroxy butyrate. It is a central nervous system depressant. Other known terms include 'GBH' and 'liquid ecstasy'; however, the latter is misleading as GHB is a depressant, not a stimulant
Illicit	Illicit refers to pharmaceuticals obtained from a prescription in someone else's name, e.g. through buying them from a dealer or obtaining them from a friend or partner
Indicator data	Sources of secondary data used in the EDRS (see Method section for further details)
Ketamine	It is a dissociative psychedelic used as a veterinary and human anaesthetic

Key expert(s)	Also referred to as KE; persons participating in the Key Expert Survey component of the EDRS (see Method section for further details)
Licit	Licit refers to pharmaceuticals (e.g. benzodiazepines, antidepressants and opioids such as methadone, buprenorphine, morphine and oxycodone) obtained by a prescription in the user's name. This definition does not take account of 'doctor shopping' practices; however, it differentiates between prescriptions for self as opposed to pharmaceuticals bought on the street or those prescribed to a friend or partner
Lifetime injection	Injection (typically intravenous) on at least one occasion in the participant's lifetime
Lifetime use	Use on at least one occasion in the participant's lifetime via one or more of the following routes of administration: inject; smoke; snort; swallow; and/or shaft/shelve
LSD	Acronym for *d*-lysergic acid diethylamide. It is a powerful hallucinogen
MDA	Acronym for 3,4-methylenedioxyamphetamine. It is classed as a stimulant hallucinogen. It is closely related to MDMA (and is sometimes found in ecstasy tablets); however, its effects are said to be slightly more psychedelic
Mephedrone	Mephedrone (2-methylamino-1-p-tolylpropane-1-one), also known as 4-methylmethcathinone (4-MMC) or 4-methylephedrone, is a stimulant and entactogen drug of the phenethylamine, amphetamine, and cathinone chemical classes
Methamphetamine	An analogue of amphetamine, it is a central nervous system stimulant. The three main forms of methamphetamine in Australia are methamphetamine powder ('speed'), methamphetamine base ('base') and crystalline methamphetamine ('crystal', 'ice')
Opiates	Opiates are derived directly from the opium poppy by departing and purifying the various chemicals in the poppy
Opioids	Opioids include all opiates but also include chemicals that have been synthesised in some way, e.g. heroin is an opioid but not an opiate, morphine is both an opiate and opioid
PMA	Acronym for para-methoxyamphetamine. It is an amphetamine-type drug with both stimulant and hallucinogenic properties
Point	0.1 gram although may also be used as a term referring to an amount for one injection
Recent injection	Injection (typically intravenous) in the last six months

Recent use	Use in the last six months via one or more of the following routes of administration: inject; smoke; snort; swallow; and/or shaft/shelve
Shelving/shafting	Use via insertion into vagina (shelving) or the rectum (shafting)
Use	Use via one or more of the following routes of administration: injecting; smoking; snorting; shafting/shelving and/or swallowing

Guide to days of use/injection

180 days	daily use/injection* over preceding six months
90 days	use/injection* every second day
24 days	weekly use/injection*
12 days	fortnightly use/injection*
6 days	monthly use/injection*

* As appropriate

EXECUTIVE SUMMARY

The 2014 NT Trends in Ecstasy and Related Drug Markets report represents the twelfth year in which data has been collected in the NT on the markets for ecstasy and related drugs (ERD). The Ecstasy and related Drugs Reporting System (EDRS; formerly the Party Drugs Initiative, or PDI) is the most comprehensive and detailed study of ERD markets in the NT.

Using a similar methodology to the Illicit Drug Reporting System (IDRS), the EDRS monitors the price, purity and availability of 'ecstasy' (3,4-methylenedioxymethamphetamine; MDMA) and other related drugs such as methamphetamine, cocaine, gamma-hydroxybutyrate (GHB), d-lysergic acid diethylamide (LSD) and ketamine. It also examines trends in the use and harms of these drugs. It utilises data from three sources: a) surveys with regular ecstasy users (REU) and regular psychostimulant users (RPU); b) surveys with key experts (KE) who have contact with REU/RPU through the nature of their work; and c) the analysis of existing data sources that contain information on ecstasy and other drugs.

REU/RPU are recruited because they are considered a sentinel group to detect illicit drug trends. The information from REU/RPU surveys is, therefore, not representative of ecstasy and other drug users in the general population, but is indicative of emerging trends that may warrant further monitoring.

The findings from each year not only provide a snapshot of the drug markets in the NT, but also help to provide an evidence base for policy decisions, inform harm reduction messages, and provide directions for further investigation when issues of concern are detected. Continued monitoring of the ERD markets in the NT will help add to our understanding of the use of these drugs; the price, purity and availability of these drugs and how these may impact on each other; and the associated harms which may stem from the use of these drugs.

Executive summary snapshot

Demographics of EDRS participants

- 100 participants were interviewed in the 2014 NT EDRS (57 male and 43 female).
- Participants were young (mean age of 23 years) and most commonly spoke English as their first language. One-third of participants were born overseas, with the majority arriving in Australia in 2013/14.
- Most participants were heterosexual, single and living in rental accommodation.
- One participant reported being currently in drug treatment.
- There were two significant demographic differences between the 2013 and 2014 NT samples; the 2014 sample consisted of fewer tertiary qualified participants and fewer participants were employed full-time.

Patterns of drug use

- Participants had experience with a wide range of drugs, having used an average of 9 different drug types during their lifetimes and 6 different drug types over the past six months.
- Four per cent reported having ever injected a drug.
- No significant change in lifetime or recent drug use was recorded from 2013 to 2014; however, the most noticeable trends identified were increases in recent MDA and pharmaceutical stimulant use.
- Ecstasy was the main drug of choice for the majority of the sample, followed by cannabis and alcohol.
- Half of the group had recently binged on ERD. The median number of binge episodes was five in the past six months.

Ecstasy

Consumption patterns

- Ecstasy was used on a median of 12 days over the past six months (i.e. fortnightly).
- Participants had used a median of 2 tablets during a 'typical' occasion of use (range 0.5-10).
- Swallowing was the main route of administration (85%).
- The majority of participants (72%) reported using other drugs in combination with ecstasy the last time they used it, most commonly alcohol, cannabis, tobacco, cocaine and crystal.
- Two-fifths (40%) of participants used other drugs to help them come down from ecstasy the last time they used it (most commonly cannabis, benzodiazepines and alcohol).
- Ecstasy was most commonly last used at a nightclub (33%) and other public venues.
- The proportion of the NT population who reported using ecstasy within the last 12 months increased from 3.2% in 2010 to 4.3% in 2013.
- KE expressed concern about the use of ecstasy among young people, with some law enforcement KE indicating that other drugs had been replacing MDMA as the active constituent of ecstasy tablets in recent years.

Market characteristics

- *Price*: $40 per pill, stable.
- *Purity*: Currently medium to high and mostly stable.
- *Availability*: Currently easy to very easy to obtain and stable.
- KE reported that the price and purity of ecstasy was variable in the NT.

Methamphetamine

The 2014 EDRS distinguished between three different forms of methamphetamine: methamphetamine powder ('speed'); methamphetamine base ('base'); and crystal methamphetamine ('crystal').

Consumption patterns

Speed

- Over half of the NT participants had ever used speed and two-fifths had done so recently.
- Speed was used on a median of 3 days over the preceding six months and was primarily snorted.
- The quantity of use appeared to be stable from 2013 to 2014.

Base

- A minority of the sample had used base in their lifetime (11%) or recently (5%).
- The median age at which base was first used was 22 years (range 16-29).

Crystal

- Almost two-fifths had ever used crystal and one-quarter had done so recently.
- Of those who had recently used crystal, it was used on a median of 5 days over the preceding six months and was most commonly smoked.
- The frequency of use appeared to return to levels previously observed in 2009; however, quantity of use notably declined.

General methamphetamine consumption observations

- Speed and crystal were commonly purchased from friends, with the majority of purchases taking place in private settings.
- The use of methamphetamine among the NT general population increased slightly from 2010 (2.1%) to 2013 (2.8%); however, no gender differences were found.
- Most KE reported that crystal was currently the most problematic drug in the NT due to the adverse health and behavioural outcomes.

Market characteristics

Speed

- *Price*: $350 per gram and stable.
- *Purity*: Currently medium to high and appeared to be stable.
- *Availability*: Currently easy to very easy to obtain, mostly stable.

Base

- *Price*: $200 per gram and stable.
- *Purity*: Currently medium to high and appeared to be stable.
- *Availability*: Currently easy to obtain, mostly stable.

Crystal

- *Price*: $150 per point and stable.
- *Purity*: Currently medium to high and appeared to be stable.
- *Availability*: Currently very easy to obtain, mostly stable.

General methamphetamine market characteristic observations

- KE agreed that crystal had become easier to access and the purity has increased.

Cocaine

Consumption patterns

- The majority of the group (64%) had tried cocaine at least once, and one-third had used it recently.
- Cocaine was used on a median of 2 days (i.e. quarterly) over the preceding six months.
- The proportion using cocaine, the frequency and the quantities used had decreased slightly from 2013 to 2014.
- Cocaine was most commonly purchased and consumed within public settings.
- Despite recent use of cocaine remaining stable in the Australian population from 2010 to 2013, in the NT there was an increase from 0.5% to 2.4% over this time period.

Market characteristics

- *Price*: $350 per gram, stable.
- *Purity*: Medium to high, mostly stable.
- *Availability*: Currently difficult, stable.

LSD

Consumption patterns

- The majority of the sample had tried LSD at least once and two-fifths had used it recently.
- LSD was used on a median of 3 days over the preceding six months (i.e. once every two months).
- Although LSD was most often purchased within private settings, it was used in a variety of both public and private settings.

Market characteristics

- *Price*: $25 per tab, stable.
- *Purity*: Currently high, stable.
- *Availability*: Currently easy to very easy to obtain, stable.

Ketamine

Consumption patterns

- Two-fifths of the sample had tried ketamine at least once and 15% had used it recently.
- Ketamine was used on a median of 3 days over the preceding six months, which is an increase from 2013 (median 1 day).
- NT participants reported the most common route of ketamine administration was snorting.

Market characteristics

- There was no reliable NT data reported on the price, purity or availability of ketamine for 2014.

GHB

Consumption patterns

- Compared to other illicit drugs, GHB had been used by a smaller proportion of participants in their lifetime (10%) and recently (2%). This finding remains similar to previous years.

Market characteristics

- There was no NT data reported on the price, purity or availability of GHB for 2014.

Cannabis

Consumption patterns

- Almost every participant had tried cannabis at least once and the vast majority had used it recently.
- Cannabis was used on a median of 30 days (i.e. just over once per week) over the preceding six months.
- The use of cannabis had remained relatively stable over time.
- Both forms of cannabis (hydro and bush) are commonly purchased and consumed within private settings in the NT.
- The NT continued to have the highest proportion of recent cannabis users than any other jurisdiction (17.1% vs national rate of 10.2%).
- KE revealed that cannabis use was common and problematic amongst ERD users in Darwin.

Market characteristics

Hydro

- *Price*: $30 per gram; $450 per ounce, stable.
- *Potency*: Currently medium to high, stable.
- *Availability*: Currently very easy to obtain, stable.

Bush

- *Price*: $30 per gram; $400 per ounce, stable.
- *Potency*: Currently medium to low, stable.
- *Availability*: Currently easy to very easy to obtain, stable.

General cannabis market characteristic observations

- KE reported that the availability of cannabis was high, and the price had remained stable.

Other drug use

Alcohol

- Almost all NT participants reported lifetime and recent use of alcohol.
- KE reported that alcohol continued to be one of the most problematic drugs among REU.

Tobacco

- Three-quarters of the NT had used tobacco at least once and the majority (68%) had smoked within the past six months.

E-cigarettes

- Forty-seven percent of the NT sample reported they had used e-cigarettes in their lifetime and 27% had used e-cigarettes recently.

Benzodiazepines

- One-fifth of the NT sample had recently used benzodiazepines. Illicit use was notably more common than licit use (33% vs. 12%).

Antidepressants

- Seven per cent of participants had recently used antidepressants.

Inhalants

- Similar proportions reported both lifetime and recent use of amyl nitrite (21%; 6%) and nitrous oxide (23%; 10%).

MDA

- There was an increasing trend in lifetime (16% to 20%) and recent (4% to 13%) use of MDA from 2013 to 2014.

Heroin and other opiates

- Small numbers reported lifetime use of heroin and other opiates.

Mushrooms

- Almost half the sample reported lifetime use of mushrooms and one-in-ten had used mushrooms in the past six months.

Pharmaceutical stimulants

- One-tenth of the group had recently used pharmaceutical stimulants. Illicit use was notably more common than licit use (30% vs. 6%).

Over the counter (OTC) drugs

- Five participants reported recent use of OTC codeine-containing products and OTC stimulants respectively.

Antipsychotics

- Two participants reported lifetime use of antipsychotics.

Performance and image enhancing drugs (PIED)

- Four participants reported recent use of PIED.

New psychoactive substance (NPS) use

- Two-thirds reported having ever used NPS and one-third reported using NPS in the last six months.
- The most common psychoactive substances were capsules with unknown contents, DMT, other synthetic cannabinoids and Kronic.
- KE reported that although NPS use in the NT has appeared to have reduced, synthetic cannabinoids continued to be seized.

Health-related harms associated with ERD use

Overdose and hospital admissions

- One-in-five reported having overdosed on a stimulant drug and one-in-ten reported a depressant drug overdose throughout their lifetime.
- No hospital admissions in which the principal diagnosis was amphetamines, cocaine or cannabis were reported in the NT in 2012/13.

Service usage

- Nine participants reported that they had recently accessed a medical or health service in relation to their drug use.
- Treatment episodes for ecstasy and cocaine have remained relatively low over time in the NT. In contrast, there are notably higher numbers of presentations where amphetamine or cannabis was the principal drug of concern, and these rates have remained relatively stable from 2011/12 to 2012/13.

Self-reported problems associated with ERD use

- Participants commonly reported that their drug use resulted in exposure to risk of injury (36%), interfered with responsibilities (24%), and/or caused repeated social problems (15%).

Mental health

- One-in-five participants had recently experienced a mental health problem, and the majority of these participants had sought help from a health professional.
- Participants completed the K10. Levels of distress among the sample were comparable to Australian general population rates; however, over time there has appeared to be increasing levels of distress among ERD users.

Risk behaviours

- Four per cent (n=4) of the sample had ever injected a drug and 2 participants had done so recently.
- Three-quarters of the sample had recently had penetrative sex with a casual partner. Half the sample did not use a sexual barrier on the last occasion (regardless of whether or not they were intoxicated). The main reasons were that they were already using the contraceptive pill or they agreed to not use any protective sexual barrier.
- Participants completed the Alcohol Use Disorders Identification Test (AUDIT). The vast majority (87%) of the group fell in the 'harmful drinking' range, with males recorded a significantly higher AUDIT score on average than females.

- Thirteen per cent of participants scored within the problematic dependent ecstasy use category using the conservative cut-off score.

Law enforcement-related trends associated with ERD use

- One-fifth of participants had reportedly been arrested over the past year.
- One-third had committed a crime within the past month; most commonly drug dealing and property crimes.
- In 2012/13, there was a notable increase in the number of arrests in the NT for amphetamines. In contrast, arrests in the NT decreased for cannabis use/possession. Consumer and provider arrests remained stable and low for cocaine, hallucinogen and steroid use/possession.
- The majority of participants (81%) reported that half or more of their friends had used ecstasy during the previous six months.

Special topics of interest

- Backpackers who engaged in ERD use:
    - Were a mean of 24 years old, mostly female, heterosexual, well-educated and from mostly English speaking backgrounds.
    - Backpackers had used a median of six drug types in the past six months, the most common including ecstasy, alcohol, cannabis, mushrooms and tobacco.
    - One-tenth of backpackers reported a recent stimulant overdose.
    - No participants accessed a health service for their drug use.
    - The majority of backpackers' K10 psychological distress scores fell into the 'low/no distress' (63%) category. Only one backpacker reported a recent mental health problem.
    - Most backpackers reported having casual penetrative sex in the past six months, with almost all of these participants reporting that they had sex under the influence of drugs.
    - Over half of the backpackers scored within the 'harmful/hazardous' or 'alcohol dependence' categories of alcohol consumption.
    - One-fifth reported engaging in criminal activity during the month prior to the interview. One-in-ten were arrested over the preceding 12 months.
- New psychoactive substances (NPS):
    - The majority of NT participants were mostly unsure as to whether various NPS were legal or illegal.
    - Synthetic cannabis, 2C-X, DMT and mephedrone were the most commonly used NPS by the NT sample.

Implications

The NT branch of the EDRS aims to monitor trends in the Darwin ecstasy and related drug (ERD) markets and to investigate harms associated with ERD use. The 2014 NT EDRS revealed ongoing changes in drug markets and indications of drug-related harms which are discussed below.

Bingeing

Half of the sample reported bingeing on ERD over the past six months. The NT recorded the highest proportion of recent bingeing behavior, with the national EDRS average being 36%. Additionally, the NT sample reported bingeing just less than once per month, which relative to the national sample was notably more frequent.

Of particular concern was the proportion of RPU who reported bingeing on alcohol whilst consuming ecstasy. There is emerging evidence from animal studies to suggest that the interaction between these two drugs dramatically alters the pharmacology of MDMA in the brain, which in turn may exacerbate neurological harms or other associated problems, such as dependence. Furthermore, there is increased risk of dehydration when both alcohol and ecstasy are consumed, and individuals may end up consuming large quantities of alcohol because the immediate effects of intoxication are delayed when ecstasy has been consumed. Continued dissemination of harm reduction messages to reduce bingeing, particularly with a combination of substances, is recommended in light of these findings.

Ecstasy

There appeared to be an increase in ecstasy use among this year's NT sample compared to past years. Specifically, there was a notable increase in the proportion reporting that they had used ecstasy weekly, they had recently binged on ecstasy, and ecstasy was reported as the most common drug of choice among the sample. From a population level, ecstasy use in the last 12 months was most common in the NT (Australian Institute of Health and Welfare, 2014), and hence both population and targeted campaigns appear warranted.

New psychoactive substances

With two-thirds reporting having ever used NPS and over one-third reporting use of NPS in the last six months, there is a need for continued monitoring of these relatively new substances and acquiring a better understanding of the harms associated with these drugs. It is critical that research continues to identify the associated risks of NPS to assist in the delivery of informed decisions on appropriate interventions and harm reduction strategies.

Alcohol use

As in past years, alcohol use continued to be highly prevalent amongst the NT EDRS cohort in 2014. Results from this year's survey showed that hazardous alcohol consumption remains of concern in this population, particularly as a large majority of ERD users scored in the harmful range for alcohol consumption.

At a population level, the 2013 NDSHS revealed that the NT recorded the highest proportion of people consuming 5 or more standard drinks at least once a month (single occasion risk), and patterns of risky drinking were higher than the national

average. Such practices place individuals at risk of an alcohol-related disease, illness or injury. Given this, evidence-based interventions to reduce the harms associated with high-risk alcohol use (including binge drinking) are warranted for this group.

Tobacco and cannabis use

The vast majority of ERD users reported recent tobacco and cannabis use. Similarly at a population level, the NT recorded the highest proportion of daily tobacco smokers and the highest rate of cannabis users than any other jurisdiction (Australian Institute of Health and Welfare, 2014). As such, further research is required to determine whether traditional interventions (e.g. nicotine gum) are a suitable fit for this group, or whether novel tailored interventions would have more success reducing cannabis or tobacco use.

Health service utilisation

Half of the 2013 sample engaged with some form of health service over the past six months. However, only nine participants accessed a health service specifically to discuss their drug use. While further investigation on how to increase ERD users' utilisation of health services is warranted, emphasis should also be placed on starting conversations about drug use when ERD users are at health services.

In terms of psychological distress levels, about half of the sample reported 'distress' to some degree. Interestingly though, only 20% reported a mental health problem. Of these participants, the majority sought health assistance from a health professional. Additional resources should also be allocated to educate and engage this population about their mental health and well-being and avenues to access support.

Backpacker population

A considerable proportion of people constantly travel in and out of Darwin, including backpackers, travellers and seasonal workers. In previous years, backpackers have been identified by the NT EDRS as a sub-group who engages in ERD use in Darwin, which includes those who have purchased ERD in other jurisdictions and transported them to Darwin to consume. This year, the NT EDRS surveyed a sub-sample of backpackers to better understand the use of ERD amongst this group and associated risk factors.

The backpacker sample revealed a number of key differences in relation to health and law enforcement. Over the six months prior to the interviews, backpackers were less likely to have binged on drugs or engaged in criminal activity in the past six months, but were more likely to have had casual penetrative sex under the influence of drugs and recorded riskier drinking scores (AUDIT). While this research provides preliminary findings on the consumption patterns and risk behaviours of backpackers, further research examining backpackers who visit Australia is required to assess their areas of risk and develop an evidence-base to inform appropriate educational campaigns and harm minimisation strategies.

1 INTRODUCTION

The Ecstasy and related Drugs Reporting System (EDRS) is an ongoing monitoring system funded in 2014 by the Australian Government under the Substance Misuse Prevention and Service Improvement Grants Fund. It is run in a similar manner to the Illicit Drug Reporting System (IDRS), another ongoing data collection system funded by the Australian Government under the Substance Misuse Prevention and Service Improvement Grants Fund. The IDRS provides a coordinated approach to the monitoring of the markets of heroin, methamphetamine, cannabis and cocaine. It was identified that the IDRS did not capture the use of ecstasy and related drugs (ERD), as these were used infrequently among the target population of the IDRS – injecting drug users (IDU).

In June 2000, the National Drug Law Enforcement Research Fund (NDLERF), administered by the Australasian Centre for Policing Research (ACPR), funded a two-year, two state trial in New South Wales (NSW) and Queensland (QLD) of the feasibility of monitoring emerging trends in the markets for ecstasy and other related drugs using the extant IDRS methodology. In addition, Drug and Alcohol Services South Australia (DASSA) (formerly known as the Drug and Alcohol Services Council) agreed to provide funding for two years to allow the trial to proceed in this state. The results of this trial are presented elsewhere (see Topp, Breen, Kaye, & Darke, 2004).

This report provides a summary of trends from the twelfth year of monitoring ERD markets in the Northern Territory (NT). As with the IDRS, the EDRS involves the collection and analysis of three data components: a) interviews with current regular recreational drug users who use primarily non-injecting routes of administration for drug use – split into two groups, there are regular ecstasy users (REU) and regular psychostimulant users (RPU); b) interviews with professionals who have regular contact with REU/RPU (key experts, or KE); and c) the analysis of secondary indicator data sources, such as existing databases of customs seizures, police drug-related arrests, and drug information telephone services. The three data sources are triangulated against each other in order to minimise the biases and weaknesses inherent in each one, ensuring that only valid emerging trends are documented.

The term ‘ecstasy and related drugs’ or ‘psychostimulants’ includes drugs routinely used in the context of entertainment venues and other recreational locations including nightclubs, dance parties, pubs and music festivals. ERD include ecstasy (3,4-methylenedioxymethamphetamine – MDMA), methamphetamine, cocaine, LSD (*d*-lysergic acid diethylamide), ketamine, GHB (gamma-hydroxybutyrate) and MDA (3,4-methylenedioxyamphetamine). REU/RPU were identified as an appropriate sentinel population to investigate ERD markets, as they represent a sentinel population of ERD users likely to be aware of trends in illicit drug markets.

The NT Trends in Ecstasy and Related Drug Markets 2014 report provides information regarding ecstasy and related drug trends in Darwin. This is the first year since the project commenced that the NT EDRS has successfully recruited 100 participants.

1.1 Aims

The aims of the 2014 NT EDRS were:

1. to describe the demographic characteristics of a sample of current REU/RPU users interviewed in Darwin in 2014;

2. to examine the patterns of ecstasy and related drug use of this sample, including lifetime and recent use of over 20 licit and illicit drugs;

3. to document the current price, purity and availability of ecstasy and related drugs in Darwin, including locations and persons scored from and locations of use;

4. to examine participants' perceptions of the incidence and nature of ecstasy and other drug-related harms, including health-related harms, as well as financial, occupational, social and legal harms;

5. to identify emerging trends in the ecstasy and related drug market that may require further investigation; and

6. to compare key findings of this study (2014) with those reported in previous years (where available: 2007, 2008, 2009, 2013).

2 METHODS

The 2014 EDRS used the methodology trialled in the feasibility study (see Topp et al., 2004) to monitor trends in the markets for ERD. The three main sources of information used to document trends were:

1. face-to-face interviews with current REU/RPU recruited in Darwin;

2. telephone interviews with KE who, through the nature of their work, have regular contact with users of ecstasy and other related drugs, or knowledge of the markets for these drugs in Darwin; and

3. indicator data sources such as the number of illicit drug seizures, arrests and treatment services data.

These three data sources were triangulated to provide an indication of emerging trends in drug use and ecstasy and related drug markets.

2.1 Survey of REU/RPU

The sentinel population chosen to monitor trends in ERD markets consisted of people who engaged in the regular use of tablets sold as 'ecstasy'. Although a range of drugs fall into the ERD category, ecstasy is a drug that can be considered one of the main illicit drugs used in Australia. It is the third most widely used illicit drug after cannabis and illicit pain-killers/analgesics, with 2.5% of the population aged 14 years or older reporting recent use of ecstasy in the 2013 National Drug Strategy Household Survey (Australian Institute of Health and Welfare, 2011).

The ecstasy (tablets sold purporting to contain MDMA) market has existed here for more than two decades. In contrast, other drugs that fall into the class of ERD have either declined in popularity since the appearance of ecstasy in this country (e.g. LSD), have fluctuated widely in availability (e.g. MDA), or are relatively new in the market and are not as widely used as ecstasy (e.g. ketamine and GHB). It has been suggested that it would be difficult to identify a regular user of GHB or ketamine who was not also an experienced user of ecstasy, whereas the reverse will often be the case (Topp & Darke, 2001). Ecstasy may be the first illicit drug with which many young Australians who choose to use illicit drugs will experiment with, and a minority of these users will go on to experiment with the less common related drugs such as ketamine, LSD and GHB.

The entrenchment of ecstasy in Australia's illicit drug markets, relative to other related drugs, underpinned the decision that regular use of ecstasy could be considered the defining characteristic of the target population – REU (Topp & Darke, 2001). A sample of this population was successfully recruited and interviewed in the two-year feasibility trial (Topp et al., 2004), and was able to provide the data that were sought. However, in recent years it has become apparent that the ecstasy market and the regularity of its consumption and type of consumers may be changing. Researchers experienced significant difficulty recruiting a NT EDRS sample of meaningful size from 2010-2012 (2010 N=28; 2011 N=11; 2012 N=12). From 2012 onwards, due to difficulty in smaller jurisdictions such as the NT in recruiting REU, RPU have also been recruited to provide information on ERD markets.

2.1.1 Recruitment

A total of 100 REU/RPU residing in the Darwin metropolitan region were interviewed for the 2014 NT EDRS. Participants were recruited through a purposive sampling strategy (Kerlinger, 1986), which included advertisements in entertainment street press, radio campaigns, social media such as Facebook, interviewer contacts, and 'snowball' procedures (Biernacki & Waldorf, 1981). 'Snowballing' is a means of sampling 'hidden' populations which relies on peer referral, and is widely used to access illicit drug users both in Australian (Boys, Lenton, & Norcoss, 1997; Ovendon & Loxley, 1996; Solowij, Hall, & Lee, 1992) and international studies (Dalgarno & Shewan, 1996; Forsyth, 1996; Peters, Davies, & Richardson, 1997). Initial contact was established through advertisements or, more frequently, through interviewers' personal contacts. On completion of the interview, participants were requested to mention the study to friends who might be willing and able to participate and were handed cards containing the researcher's contact details to distribute to their peers.

2.1.2 Procedure

Participants contacted the researchers by telephone (call or text) and were screened for eligibility. Eligibility for NT EDRS participation was based on regular psychostimulant use; that is, used ERD on at least six occasions within Australia in the six months prior to interview. Further to this, eligible participants were required to have purchased at least one psychostimulant in the NT (that is, been able to answer questions on the price, purity and availability of an ERD based on the Darwin market). Unlike other jurisdictions, no restrictions were placed on the length of time participants had resided in the NT due to the transient nature of Darwin residents. All participants were required to be at least 16 years of age due to ethical constraints.

Participants were informed that all information provided was strictly confidential and anonymous, and that the study would involve a face-to-face interview that would take approximately 45 minutes. All respondents were volunteers who were reimbursed $40 for their participation. Informed consent to participate was obtained prior to the interview. All participants were assured that all information they provided would remain confidential and anonymous. Interviews took place in a location negotiated with participants, predominantly in coffee shops, and were conducted by a small group of interviewers trained in the administration of the interview schedule. The nature and purpose of the study was explained to participants before informed consent was obtained.

2.1.3 Measures

Participants were administered a structured interview schedule based on a national study of ecstasy users conducted by NDARC in 1997 (Topp et al., 1998; 2000), which incorporated items from a number of previous NDARC studies of users of ecstasy (Solowij et al., 1992) and powder amphetamine/methamphetamine (Darke, Cohen, Ross, Hando, & Hall, 1994; Hando & Hall, 1993; Hando, Topp, & Hall, 1997). The interview schedule focused primarily on the preceding six months, and assessed demographic characteristics; patterns of ecstasy use and related drug use, including: frequency and quantity of use and routes of administration; the price, purity and availability of a range of related drugs; health-related trends and service usage; risky behaviours (including injecting behaviours, sexual activity, and problematic alcohol use); law enforcement-related trends (including self-reported criminal activity and arrests); and trends in special areas of interest for 2014 (including NPS health harms and NPS health policy). An additional special area of interest that has been devised exclusively for the NT report was a backpackers' module, which aims to provide preliminary data on the characteristics and risk factors of backpackers who use ERD in Darwin.

2.1.4 Data analysis

For continuous, normally distributed variables, *t*-tests were employed and means reported. Where continuous variables were skewed, medians[1] were reported and the Mann-Whitney *U*-test, a non-parametric equivalent of the *t*-test (Siegel & Castellan, 1988), was employed. Categorical variables were analysed using chi-square analysis. The Fisher's exact test statistic was reported for analyses where there was an expected value less than 5. Analyses

[1] The median value lies in the middle of a series of data points arranged in order of size, i.e. it provides a more representative view of skewed data than the mean value.

were conducted using Predictive Analytics Software (PASW) Statistics Version 18 (PASW, 2009).

The data collected in 2014 were compared with data collected from previous years where meaningful sample sizes were collected (2007, 2008, 2009, 2013). As previously detailed, due to the small sample sizes recruited from 2010-2012, the data from these years have been omitted to prevent interpretation of trends from these years that may not be valid.

Differences between proportions were analysed using Newcombe-Wilson hybrid score confidence intervals without a continuity correction, based on the chi-square distribution (Tandberg, Version 1.49, available at: http://www.cebm.net/index.aspx?o=1023, see Newcombe 1998).

2.2 Survey of key experts

The main eligibility criterion for KE participation in the EDRS was regular contact with a range of ERD users in the preceding six months. Regular contact was defined as average weekly contact and/or contact with 10 or more ERD users throughout the past six months. KE were recruited either through professional networks of project staff or recommendations, and in some instances through 'cold calls'.[2]

A total of 13 KEs were interviewed in 2014. KE were administered a qualitative interview schedule derived from a previous study of cocaine use (Hando, Flaherty, & Rutter, 1997), with the focus dependent on the KE's area of expertise. In general, KE were interviewed on topics relating to patterns of illicit drug use among the REU/RPU they had had contact with in the past six months. All KE completed the interview online. The responses from the interviews were analysed and sorted for recurring themes. KE were renumerated with a small gift (e.g. gingerbread) for their time.

The KE interviewed for the 2014 EDRS came from a wide range of occupations which fell into three major categories: law enforcement; health care provision; and hospitality industry workers.

[2] People who were thought suitable to act as KE were contacted and invited to participate in a key expert (semi-structured) interview.

2.3 Other indicators

To complement and validate data collected from REU/RPU surveys and KE interviews, a range of secondary data sources were examined. These included health and law enforcement data. The pilot study for the IDRS recommended that such data should be available at least annually, include 50 or more cases, be brief, and be collected in the main study site (i.e. Darwin or NT) (Hando, O'Brien, Darke, Maher, & Hall, 1997).

Data sources that have been included in this report are:

- Australian Crime Commission (ACC) – number of consumer and provider arrests for illicit drug possession;
- Australian Institute of Health and Welfare (AIHW) – inpatient hospital admissions, treatment episodes, psychological distress (K10);
- National Drug Strategy Household Survey; and
- NT Police, Fire and Emergency Services – number of illicit drug seizures.

3 DEMOGRAPHICS

Summary:

- 100 participants were interviewed in the 2014 NT EDRS (57 male and 43 female).
- Participants were young (mean age of 23 years) and most commonly spoke English as their first language. One-third of participants were born overseas, with the majority arriving in Australia in 2013/14.
- Most participants were heterosexual, single and living in rental accommodation.
- One participant reported being currently in drug treatment.
- There were two significant demographic differences between the 2013 and 2014 NT samples; the 2014 sample consisted of fewer tertiary qualified participants and fewer participants were employed full-time.

3.1 Overview of the NT EDRS sample

There were 100 participants sampled in the 2014 NT EDRS. Table 1 presents the demographics of the sample across time. The mean age of the 2014 sample was 23 years (median 22, range 16-49), and just under three-fifths (57%) were male.

The majority (98%) spoke English as their first language and were born in Australia (63%). Of those who were born overseas (36%), two-thirds of these participants arrived in 2013/14 (69%) and were most commonly from the United Kingdom (n=24), Ireland (n=5), France (n=2) and Thailand (n=2). Five per cent of the 2014 NT EDRS participants identified as being of Aboriginal and/or Torres Strait Islander (A&TSI) descent.

Most participants identified as heterosexual (95%), followed by 2% as a gay man and 2% as a bisexual. Most participants reported being currently single (66%) and were either residing in rental accommodation (52%), their family home (22%) or a boarding house/hostel (19%).

The median number of years of school education completed was 12 years (range 9-12), and 61% had completed high school education (Year 12 or above). The majority had completed either a trade or technical qualification (37%) or a university or college degree (19%).

One-third (32%) of the sample reported being currently employed full-time, with an additional one-third (35%) working part-time or casually at the time of interview. The remaining one-third (30%) were currently unemployed and one participant was both working and studying. Mean weekly income for the NT EDRS sample was $898 per week (range $50-$4,346), and wage or salary was reported as the main source of income in the last month for the majority of participants (84%). One participant reported that they were currently in any form of drug treatment and seven participants reported a lifetime prison history.

Overall, the demographic characteristics between the 2014 and 2013 samples were notably similar. However, two key differences between the samples were identified. Firstly, the 2014 sample consisted of significantly fewer participants with tertiary qualifications (56% vs. 76%,

p<0.05) than the 2013 sample. Secondly, significantly less participants in 2014 were employed full-time than in 2013 (32% vs. 59%, *p<0.01*).

Table 1: Demographic characteristics of EDRS participants, NT

	2007 (N=66)	2008 (N=55)	2009 (N=67)	2013 (N=45)	**2014 (N=100)**
Mean age (years)	30	28	31	25	**23**
Male (%)	71	64	61	69	**57**
English-speaking background (%)	100	93	99	87	**98**
A&TSI (%)	11	13	12	0	**5**
Heterosexual (%)	63	64	60	91	**96**
Mean number of school years	11	11	11	12	**11**
Tertiary qualifications (%)	22	27	40	76	**56**
Employed full-time (%)	56	58	55	59	**32**
Full-time students (%)	5	4	5	2	**0**
Unemployed (%)	8	6	22	13	**30**
Mean weekly income ($) (range)	Data not available until 2009		572 (200-1,333)	1,140 (300-3,000)	**898 (50-4,346)**
Prison history (%)	9	0	11	0	**7**
In drug treatment (%)	0	0	0	0	**1**

Source: EDRS participant interviews 2007, 2008, 2009, 2013, 2014

4 CONSUMPTION PATTERN RESULTS

4.1 Drug use history and current drug use

Summary:

- Participants had experience with a wide range of drugs, having used an average of 9 different drug types during their lifetimes and 6 different drug types over the past six months.
- Four per cent reported having ever injected a drug.
- No significant change in lifetime or recent drug use was recorded from 2013 to 2014; however, the most noticeable trends identified were increases in recent MDA and pharmaceutical stimulant use.
- Ecstasy was the main drug of choice for the majority of the sample, followed by cannabis and alcohol.
- Half of the group had recently binged on ERD. The median number of binge episodes was five in the past six months.

Participants were asked about their lifetime and recent use of over 20 different drug types.[3] Experience with a broad range of drugs was very common. In 2014, we saw the average number of drugs used within the lifetime for NT participants (median: 9) remain stable compared to the 2013 figure. The average number of drugs used recently (median: 6) also continues to remain relatively stable over time (Table 2). Four per cent of EDRS participants reported having ever injected a drug, which is notably lower than in past years. A more thorough analysis of injecting drug use behaviours amongst this sample can be found in section 7.1 'Injecting risk behaviour'.

Table 2 presents the proportion of EDRS participants reporting lifetime and recent drug use across time. There were no significant changes in lifetime or recent drug use from 2013 to 2014; however, the most noticeable trends identified were increases in recent MDA (4% to 13%) and pharmaceutical stimulant (2% to 13%) use.

Participants also reported having used other drugs such as DMT (dimethyl tryptamine), Kronic (synthetic cannabis) and herbal highs. The EDRS began to systematically investigate these other, less commonly used, drugs in 2010. This information can be found in section 4.10 'New psychoactive substance (NPS) use'.

In 2014, the drug of choice among the largest proportion of NT participants was ecstasy (33%), followed closely by cannabis (30%) and alcohol (16%). Smaller proportions of the sample nominated crystal (7%), cocaine (5%) and LSD (4%) as their drug of choice. In keeping with these preferences, the majority of participants reported that the drug used most often in the last month was ecstasy (38%), cannabis (29%) or alcohol (17%). However, those participants who reported a discrepancy between their drug of choice and drug used most often attributed this to the factors of availability (57%) or use in social situations (24%).

[3] 'Lifetime' usage refers to drugs that have ever been used. 'Recent' usage refers to drugs that had been used in the six months prior to the interview.

Participants were asked how frequently they had used ERD in the past month. Relatively equal proportions of NT EDRS participants reported using this class of drugs weekly (29%), fortnightly (27%) or monthly (26%). Eleven per cent reported more than weekly use.

Half (50%) of the sample reported bingeing on ERD over the past six months. Bingeing is defined as using the drug on a continuous basis for 48 hours or more without sleep (Ovendon & Loxley, 1996). Participants who had binged had done so on a median of 5 occasions over the preceding six months (range 1-75). The median length of the longest binge was 72 hours (range 48-384). Among those who had recently binged, the majority had used ecstasy (56%) and more than five standard drinks of alcohol (52%) during a binge episode. Other drugs used during binge episodes included crystal (38%), tobacco (38%), cannabis (28%), cocaine (24%), LSD (22%), ketamine (14%), speed (14%), energy drinks (10%), MDA (10%), less than five standards drinks of alcohol (4%), amyl nitrite (2%), base (2%) and nitrous oxide (2%).

Table 2: Lifetime and recent polydrug use of EDRS participants, NT

	2007 (N=65)	2008 (N=55)	2009 (N=67)	2013 (N=45)	**2014 (N=100)**
Median no. drug types ever used	7	6	8	9	**9**
Median no. drug types used recently	6	3	5	5	**6**
Ever injected any drug (%)	26	16	31	16	**4**
Alcohol					
ever used (%)	100	98	100	98	**99**
used last 6 mths (%)	100	87	90	96	**96**
Cannabis					
ever used (%)	100	93	93	98	**97**
used last 6 mths (%)	96	40	60	71	**84**
Tobacco					
ever used (%)	91	73	88	76	**75**
used last 6 mths (%)	77	40	65	58	**68**
Cocaine					
ever used (%)	35	36	52	64	**64**
used last 6 mths (%)	9	2	23	33	**39**
LSD					
ever used (%)	70	60	47	64	**63**
used last 6 mths (%)	33	16	10	40	**43**
Methamphetamine powder (speed)					
ever used (%)	83	67	82	53	**58**
used last 6 mths (%)	55	24	61	33	**39**
Methamphetamine crystal (ice)					
ever used (%)	35	18	28	36	**39**
used last 6 mths (%)	24	0	15	20	**27**
Methamphetamine base (base)					
ever used (%)	49	35	52	7	**11**
used last 6 mths (%)	27	9	28	2	**5**
Ketamine					
ever used %	33	6	13	40	**37**
used last 6 mths (%)	8	0	0	9	**15**

Table 2: Lifetime and recent polydrug use of EDRS participants, NT (continued)

	2007 (N=65)	2008 (N=55)	2009 (N=67)	2013 (N=45)	**2014 (N=100)**
MDA					
ever used (%)	30	15	19	16	**20**
used last 6 mths (%)	5	2	5	4	**13**
GHB					
ever used (%)	15	6	13	13	**10**
used last 6 mths (%)	0	0	0	2	**2**
Mushrooms					
ever used (%)	46	33	45	44	**45**
used last 6 mths (%)	5	2	3	13	**11**
Benzodiazepines[*]					
ever used (%)	15	16	12	31	**40**
used last 6 mths (%)	8	2	3	11	**17**
Pharmaceutical stimulants[*]					
ever used (%)	15	23	22	18	**33**
used last 6 mths (%)	8	8	6	2	**13**
Nitrous oxide					
ever used (%)	21	13	15	27	**23**
used last 6 mths (%)	3	2	2	9	**10**
Amyl nitrite					
ever used (%)	30	29	33	29	**21**
used last 6 mths (%)	12	4	22	11	**6**
Antidepressants[*]					
ever used (%)	8	15	6	13	**20**
used last 6 mths (%)	0	0	3	2	**7**
Heroin					
ever used (%)	11	7	10	11	**4**
used last 6 mths (%)	0	0	2	0	**1**
Methadone					
ever used (%)	1	0	6	0	**1**
used last 6 mths (%)	0	-	3	-	**0**

[*] Includes licitly and illicitly obtained

Table 2: Lifetime and recent polydrug use of EDRS participants, NT (continued)

	2007 (N=65)	2008 (N=55)	2009 (N=67)	2013 (N=45)	**2014 (N=100)**
Buprenorphine					
ever used (%)	1	0	3	0	**2**
used last 6 mths (%)	0	-	2	-	**0**
Other opiates[*]					
ever used (%)	11	7	9	16	**14**
used last 6 mths (%)	0	0	5	2	**3**
OTC codeine	Data not collected until 2009				
ever used (%)			33	16	**13**
used last 6 mths (%)			25	4	**5**
OTC stimulants[**]	Data not collected until 2009				
ever used (%)			49	9	**11**
used last 6 mths (%)			19	2	**5**
Antipsychotics	Data not collected until 2010				
ever used (%)				4	**2**
used last 6 mths (%)				2	**1**
Steroids[***]	Data not collected until 2010				
ever used (%)				7	**4**
used last 6 mths (%)				0	**4**
E-cigarettes	Data not collected until 2014				
ever used (%)					**47**
used last 6 mths (%)					**27**

Source: EDRS participant interviews 2007, 2008, 2009, 2013, 2014
Note: OTC (over the counter)
[*] Includes licitly and illicitly obtained
[**] For non-pain use only
[***] For non-medicinal use only

4.2 Ecstasy use

Summary:

- Ecstasy was used on a median of 12 days over the past six months (i.e. fortnightly).
- Participants had used a median of 2 tablets during a 'typical' occasion of use (range 0.5-10).
- Swallowing was the main route of administration (85%).
- The majority of participants (72%) reported using other drugs in combination with ecstasy the last time they used it, most commonly alcohol, cannabis, tobacco, cocaine and crystal.
- Two-fifths (40%) of participants used other drugs to help them come down from ecstasy the last time they used it (most commonly cannabis, benzodiazepines and alcohol).
- Ecstasy was most commonly last used at a nightclub (33%) and other public venues.
- The proportion of the NT population who reported using ecstasy within the last 12 months increased from 3.2% in 2010 to 4.3% in 2013.
- KE expressed concern about the use of ecstasy among young people, with some law enforcement KE indicating that other drugs had been replacing MDMA as the active constituent of ecstasy tablets in recent years.

'Ecstasy' is a street term for a number of substances related to MDMA or 3,4-methylenedioxymethamphetamine. MDMA is classed as a hallucinogenic amphetamine. Tablets sold as ecstasy may contain a range of substances that do not include MDMA, and are more likely to contain methamphetamine, perhaps in combination with a hallucinogenic such as ketamine. They may also contain illegal chemicals like 3,4-methylenedioxyamphetamine (MDA), para-methoxyamphetamine (PMA) or 3,4-methylenedioxyethylamphetamine (MDEA) or substances such as caffeine or paracetamol or nothing at all. The results presented in this section relate to the participants' use and knowledge of tablets sold as 'ecstasy'.

On average, participants in the 2014 EDRS had used ecstasy for the first time at 17 years of age (median 17, range 13-29). Males were significantly younger than females when they used ecstasy for the first time (mean age 16.5 vs. 18.4, $U=760.0,\ p<0.01$). Participants reported using ecstasy regularly (at least monthly) at a mean age of 19 years (median 18, range 14-29). Again, males were significantly younger than females when they reported using ecstasy regularly (mean age 17.9 vs. 19.8, $U=610.0,\ p<0.01$).

4.2.1 Ecstasy use among EDRS participants

Table 3 presents an outline of patterns of ecstasy use among the EDRS sample. All participants in the 2014 NT EDRS sample reported that they had recently used ecstasy.

Ecstasy was used on a median of 12 days (range 1-146) over the preceding six months. Over the preceding six months, approximately one-third of the sample had used ecstasy

between monthly and fortnightly (34%), 21% had used it weekly and about one-quarter (27%) had used ecstasy more than once a week. Eighteen per cent of the sample reported that they had not used ecstasy in the past month.

The majority (64%) of respondents commonly used more than one tablet during a session. EDRS participants had used a median of 2 tablets during a 'typical' occasion of use (range 0.5-10) over the preceding six months. The median number of tablets consumed in the 'heaviest' session over the preceding six months was 3 (range 1-15).

The majority of EDRS participants reported that swallowing was their main route of administration (85%) for ecstasy, with the remaining 15% reporting mainly snorting it. Participants were asked to identify each method of administration they had used over the preceding six months for ecstasy 'pills'. Swallowing (88%) and snorting (55%) were the primary methods of administration reported for recent use, with one NT EDRS participant reporting that they had recently shelved/shafted ecstasy.

Table 3: Patterns of ecstasy use among EDRS participants, NT

	2007 (N=66)	2008 (N=55)	2009 (N=67)	2013 (N=43)	**2014 (N=100)**
Mean age first used ecstasy (years)	21	21	23	18	**17**
Ecstasy 'favourite' drug (%)	37	44	37	7	**33**
Median days used ecstasy last 6 mths	15	15	12	8.5	**12**
Use ecstasy weekly or more (%)	30	20	22	17	**33**
Median ecstasy tablets in 'typical' session	2	2	2	2	**2**
Typically use >1 tablet (%)	55	70	74	63	**64**
Recently binged on ecstasy (%)	55	58	37	22	**56**
Ever injected ecstasy (%)	15	9	19	0	**1**
Mainly swallowed ecstasy last 6 mths (%)	95	98	89	84	**85**
Mainly snorted ecstasy last 6 mths (%)	0	2	6	16	**15**
Mainly injected ecstasy last 6 mths (%)	5	0	5	0	**0**

Source: EDRS participant interviews 2007, 2008, 2009, 2013, 2014

Participants were asked about their use of different forms of ecstasy (tablets, powder, capsules and MDMA crystals). Almost every participant (99%) reported having used ecstasy tablets ('pills') during the preceding six months. Approximately one-third (33%) reported having ever used ecstasy powder and one-quarter (26%) had done so recently. Over half (54%) reported having ever used ecstasy capsules ('caps') and one-third (32%) had used them over the preceding six months. Three-fifths (57%) reported having used MDMA crystals in their lifetime, and two-fifths (43%) had used these recently. Pills were first used at a median age of 17 years (range 13-29), powder at 19 years (range 14-30), caps at 18.5 years (range 15-32) and MDMA crystals at 18 years (range 13-30).

The majority of EDRS participants (72%) reported using other drugs in combination with ecstasy the last time they used it. The drugs most commonly used with ecstasy were alcohol (56% of those who reported last using other drugs with ecstasy had more than five standard alcoholic drinks), cannabis (36%), tobacco (21%), cocaine (10%) and crystal (10%).

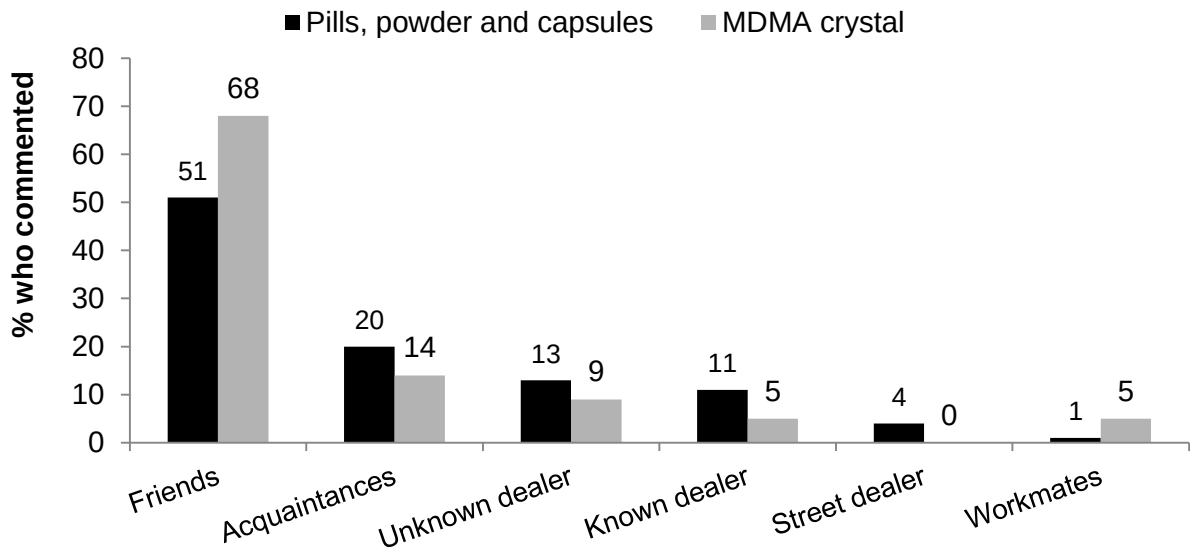
Two-fifths (40%) of the sample used other drugs to help them come down from ecstasy the last time they used it. Among these respondents, the three most commonly reported drugs used to come down from ecstasy were cannabis (85%), benzodiazepines (8%) and more than five standard drinks of alcohol (8%).

About half of the group reported that most (38%) or all (10%) of their friends had used ecstasy over the last six months. One-third reported that 'about half' and 18% reported that 'a few' of their friends had used ecstasy recently. Interestingly, no participants reported that they were the only person in their social network who had recently used ecstasy.

4.2.2 Last source, purchase location and use location of ecstasy

Among those who commented for pills, powder and capsules and MDMA crystal, the majority of these groups last purchased these forms of ecstasy from friends (51%; 68%), followed by acquaintances (20%; 14%) (Figure 1).

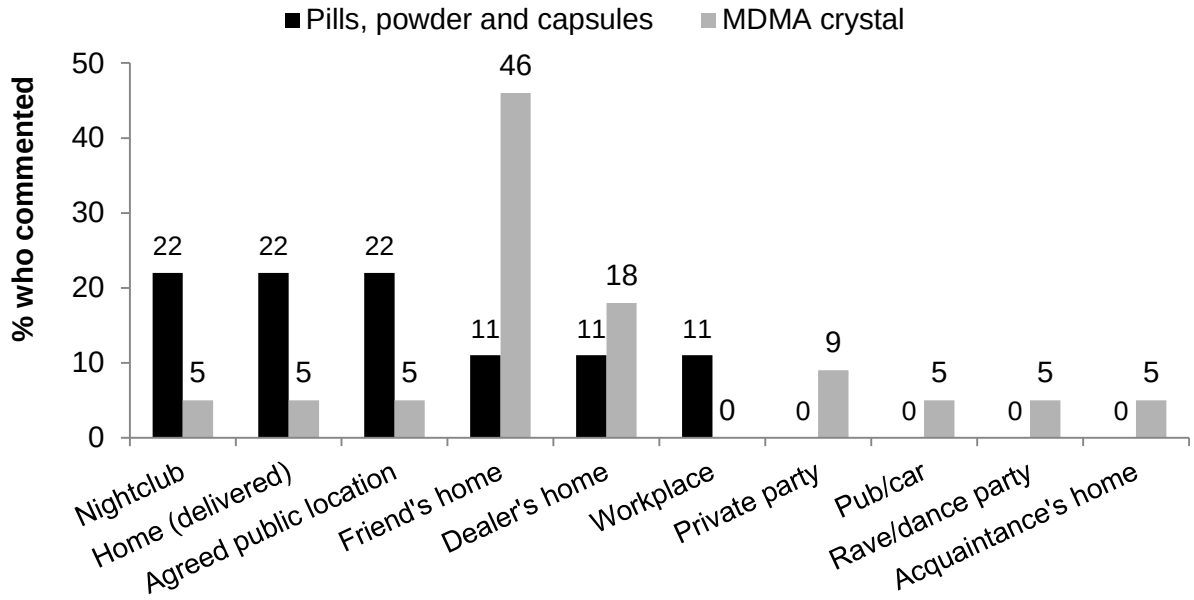
Figure 1: Last source ecstasy was purchased from among EDRS participants*, NT



Source: EDRS participant interviews 2014
* Pills, powder and capsules n=82; MDMA crystal n=22.

Participants reported last purchasing ecstasy pills, powder and capsules from a mixture of public and private settings. The most common locations reported included a nightclub, their own home or an agreed public location (22% respectively) (Figure 2). Conversely, MDMA crystal was most commonly last purchased in private settings, including a friend's home (46%) or the dealer's home (18%).

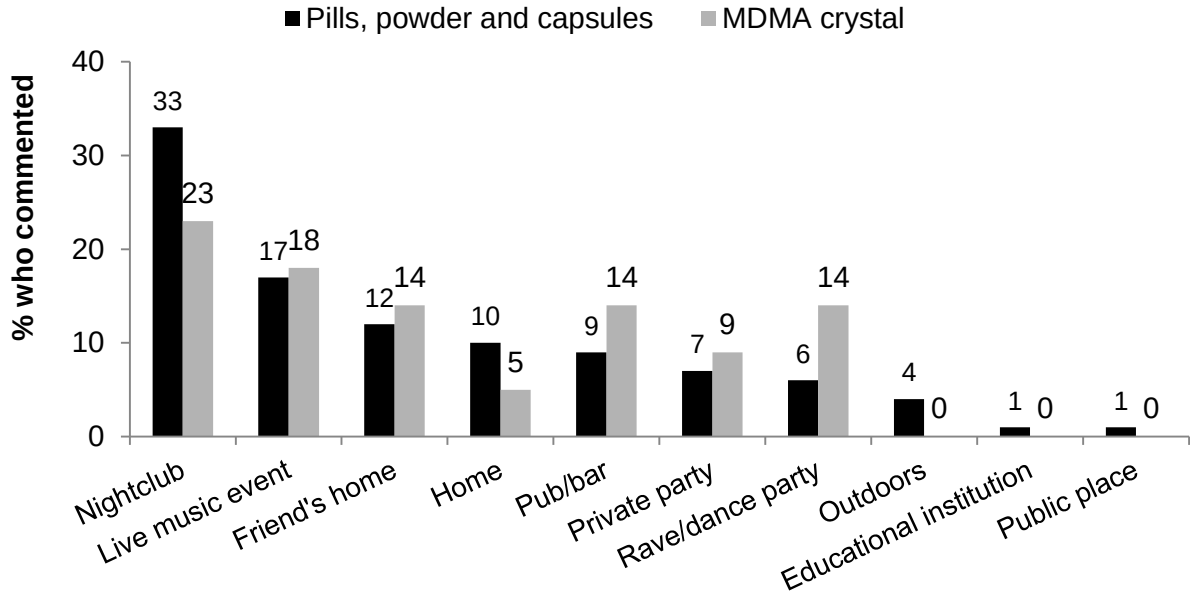
Figure 2: Last location ecstasy was purchased from among EDRS participants*, NT



Source: EDRS participant interviews 2014
* Pills, powder and capsules n=82; MDMA crystal n=22.

Participants were asked where they spent the most time while intoxicated the last time they used the different forms of ecstasy. Both pills, powder and capsules and MDMA crystal were most commonly last used in public venues (71%; 76%), with one-third of participants reporting that they last used ecstasy at a nightclub (33%) (Figure 3).

Figure 3: Location of last ecstasy use among EDRS participants*, NT



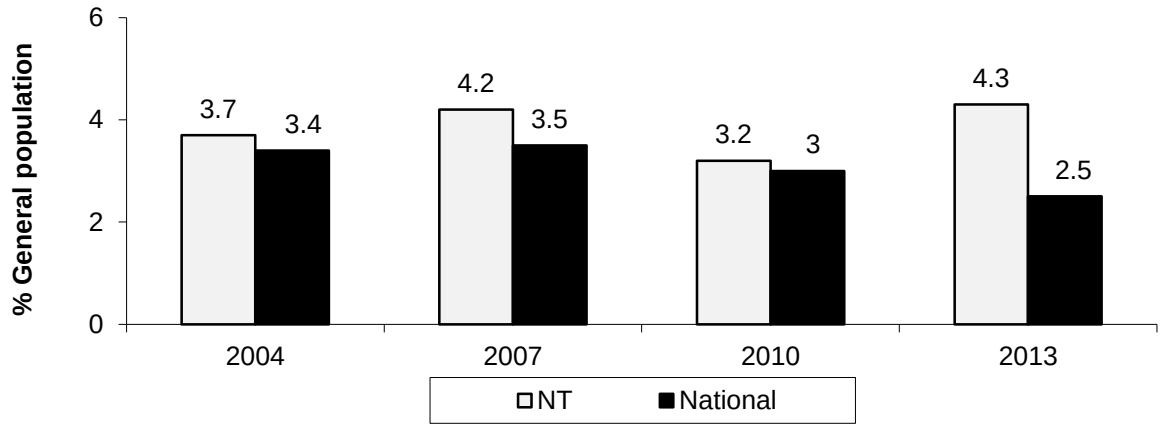
Source: EDRS participant interviews 2014
* Pills, powder and capsules n=82; MDMA crystal n=22.

4.2.3 Use of ecstasy in other populations

General population

Figure 4 presents data collected for the National Drug Strategy Household Survey (NDSHS) from 2004 to 2013. Since 2007, the reported prevalence of ecstasy use in the past 12 months among the general Australian population (aged 14 years and over) has declined. Despite this, the trend of recent ecstasy use in the NT has risen to 4.3% in 2013. Furthermore, ecstasy use in the last 12 months was most common in the NT (Australian Institute of Health and Welfare, 2014).

Figure 4: Percentage of sample reporting recent* ecstasy use in the general population, NT and national



Source: Australian Institute of Health and Welfare (2005, 2008, 2011, 2014)
* Used in the last 12 months

Key expert comments

Ecstasy was identified as the most problematic drug in the NT by three KE. MDMA had been in decline over the past three years, with other drugs replacing MDMA as the active constituent of ecstasy tablets.

4.3 Methamphetamine use

Summary:

Speed

- Over half of the NT participants had ever used speed and two-fifths had done so recently.
- Speed was used on a median of 3 days over the preceding six months and was primarily snorted.
- The quantity of use appeared to be stable from 2013 to 2014.

Base

- A minority of the sample had used base in their lifetime (11%) or recently (5%).
- The median age at which base was first used was 22 years (range 16-29).

Crystal

- Almost two-fifths had ever used crystal and one-quarter had done so recently.
- Of those who had recently used crystal, it was used on a median of 5 days over the preceding six months and was most commonly smoked.
- The frequency of use appeared to return to levels previously observed in 2009; however, quantity of use notably declined.

General methamphetamine consumption observations

- Speed and crystal were commonly purchased from friends, with the majority of purchases taking place in private settings.
- The use of methamphetamine among the NT general population increased slightly from 2010 (2.1%) to 2013 (2.8%); however, no gender differences were found.
- Most KE reported that crystal was currently the most problematic drug in the NT due to the adverse health and behavioural outcomes.

Throughout the 1990s, the proportion of amphetamine-type substance (ATS) seizures that were methamphetamine (rather than amphetamine sulphate, the form most commonly available throughout the 1980s) steadily increased, until methamphetamine dominated the market (Australian Bureau of Criminal Intelligence, 2001). The number and weight of both ATS (excluding MDMA) detections and seizures at the Australian border increased in 2012-13 and are the highest on record (Australian Crime Commission, 2014).

Chemically, amphetamine and methamphetamine differ in molecular structure but are closely related. They exert their effects indirectly by stimulating the release of peripheral nervous system (PNS) and central nervous system (CNS) monoamines (principally dopamine, noradrenaline, adrenaline and serotonin), and both have psychomotor, cardiovascular, anorexogenic and hyperthermic properties (Seiden, Sobol, & Ricaurte,

1993). Compared to amphetamine, methamphetamine has proportionally greater CNS than PNS stimulatory effects (Chesher, 1993), and is a more potent form with stronger subjective effects.

In Australia today, the powder traditionally known as 'speed' is almost exclusively methamphetamine. The more potent forms of this family of drugs, known by terms such as ice, shabu, crystal meth, base and paste, are also methamphetamine.

The distinction between methamphetamine powder ('speed'), methamphetamine base ('base') and crystalline methamphetamine ('crystal') has been made in an attempt to collect more comprehensive information on the use, price, purity and availability of each of these different forms.

'Speed' is typically manufactured in Australia and ranges in colour from white to yellow, orange, brown or pink, due to differences in the chemicals used to produce it. It is usually of relatively low purity (approximately 10%) (McKetin, McLaren, & Kelly, 2005).

'Base' (also called paste, wax, point or pure) is thought to be an oily or gluggy, damp, sticky, powder that often has a brownish tinge. Base is also thought to be manufactured in Australia; its purity has been found to be approximately twice that of speed (21%) (McKetin et al., 2005).

The crystal form (also called ice, shabu, or crystal meth) is large crystals that range from translucent to white but may also have a green, blue or pink tinge due to either impurities or the addition of food dye. Crystal is predominantly manufactured in Asia and imported into Australia (L. Topp & Churchill, 2002), although the first crystalline methamphetamine laboratory was detected in QLD in February 2002 (Australian Crime Commission, 2003). Pure crystal has an estimated purity of 80%.

A form of methamphetamine with a crystalline appearance has been detected which has a lower purity (19%); this lower purity crystalline methamphetamine may reflect either methamphetamine base with a crystalline appearance or crystal methamphetamine cut with crystalline adulterants (McKetin et al., 2005).

4.3.1 Methamphetamine use among EDRS participants

Methamphetamine powder (speed)

Just over half of the sample (58%) had ever used speed and about two-fifths (39%) had used it during the preceding six months. Speed was first used at a median age of 18 years (range 14-29). Speed was used on a median of 3 days (range 1-48) over the preceding six months. The majority (77%) of those who had recently used speed had done so on a less than monthly basis.

Most recent users quantified their use in terms of 'grams' (n=18). The median amount used in a 'typical' or 'average' use episode in the preceding six months was 1 gram (range 0.20-2.5). The median amount used in the 'heaviest' use episode was the same on average to 'average' use, 1 gram (range 0.40-4.0). The most common route of administration for speed users in the preceding six months was snorting (56%); however, other routes of administration included swallowing (39%), smoking (23%) and injecting (3%).

Proportions reporting lifetime and recent use of speed in 2014 compared to 2013 were relatively stable. Reported frequency of use appears stable, albeit it did decline from 2013 to 2014, and reported quantity consumed has remained stable over the time period (Table 4).

Table 4: Patterns of speed use among EDRS participants, NT

	2007 (N=66)	2008 (N=55)	2009 (N=67)	2013 (N=45)	**2014 (N=100)**
Ever used (%)	83	67	82	53	**58**
Used last 6 mths (%)	55	24	61	33	**39**
Of those who had used recently:	(n=36)	(n=13)	(n=41)	(n=14)	**(n=39)**
Median days used last 6 mths (range)	4 (1-180)	2 (1-14)	3 (1-180)	4.5 (1-30)	**3 (1-48)**
Median quantities used (grams):					
Typical (range)	1 (0.2-2.5)	1 (0.2-2)	1 (0.25-3.5)	1 (0.05-2)	**1 (0.20-2.5)**
Heavy (range)	1 (0.2-8)	1.5 (0.2-6.5)	1 (0.5-20)	1 (0.05-5)	**1 (0.40-4.0)**

Source: EDRS participant interviews 2007, 2008, 2009, 2013, 2014

Methamphetamine base

Eleven per cent of the sample had ever used base and the median age at which base was first used was 22 years (range 16-29). Five participants in the NT EDRS sample had reported base use over the preceding six months. Due to small numbers reporting, no findings were able to be published on recent base use and consumption patterns.

Similar to the trend observed for speed use in the NT, lifetime and recent use of base amongst NT EDRS participants has remained mostly stable (Table 5).

Table 5: Patterns of base use among EDRS participants, NT

	2007 (N=66)	2008 (N=55)	2009 (N=67)	2013 (N=45)	**2014 (N=100)**
Ever used (%)	49	35	52	7	**11**
Used last 6 mths (%)	27	9	28	2	**5**
Of those who used recently:	(n=18)	(n=5)	(n=19)	(n=1)	**(n=5)**
Median days used last 6 mths (range)	4 (2-28)	N/A N/A	2 (1-180)	N/A N/A	**N/A N/A**
Median quantities used (points):					
Typical (range)	1 (1-2)	N/A	1 (1-4)	N/A	**N/A**
Heavy (range)	2 (1-5)	N/A	1 (1-4)	N/A	**N/A**

Source: EDRS participant interviews 2007, 2008, 2009, 2013, 2014
N/A: Due to small numbers reporting, these figures were not reported.

Crystal methamphetamine

Almost two-fifths (39%) had ever used crystal, and one-quarter (27%) had used it over the six months prior to the interview. The median age of first use of crystal was 21 years (range 15-30). Crystal was used on a median of 5 days (range 1-150) over the preceding six months. Half (51%) of those who had recently used crystal had done so on a less than monthly basis, one-fifth (19%) had used between monthly and fortnightly, one-tenth had used crystal between fortnightly and weekly, and the remaining one-fifth (19%) had used crystal more than once per week.

The majority of respondents quantified their use in terms of 'points' (generally believed to be 0.1 grams). These participants reported using a median of 1 point (range 0.5-10) during 'typical' sessions of use and a median of 3 points (range 0.5-10) on the heaviest episode of crystal use over the preceding six months. Recent users reported smoking as the most common route of administration for crystal (89%); however, smaller proportions also reported recently swallowing (15%), snorting (11%) and injecting (4%) crystal.

The proportions reporting the use of crystal have appeared to remain stable to levels previously seen in 2013 (Table 6). It has also been observed that the frequency of use and quantities used have remained relatively consistent in 2014.

Table 6: Patterns of crystal use among EDRS participants, NT

	2007 (N=66)	2008 (N=55)	2009 (N=67)	2013 (N=45)	**2014 (N=100)**
Ever used (%)	35	18	28	36	**39**
Used last 6 mths (%)	24	0	15	20	**27**
Of those used recently:	(n=16)	(n=0)	(n=10)	(n=9)	**(n=27)**
Median days used last 6 mths (range)	3 (1-80)	- -	5 (1-180)	3 (1-30)	**5 (1-150)**
Median quantities used (points):					
Typical (range)	1 (0.5-3)	-	3 (1-3)	2 (1-4)	**1 (0.5-10)**
Heavy (range)	2 (0.5-5.5)	-	3 (3)	4 (1-5)	**3 (0.5-10)**

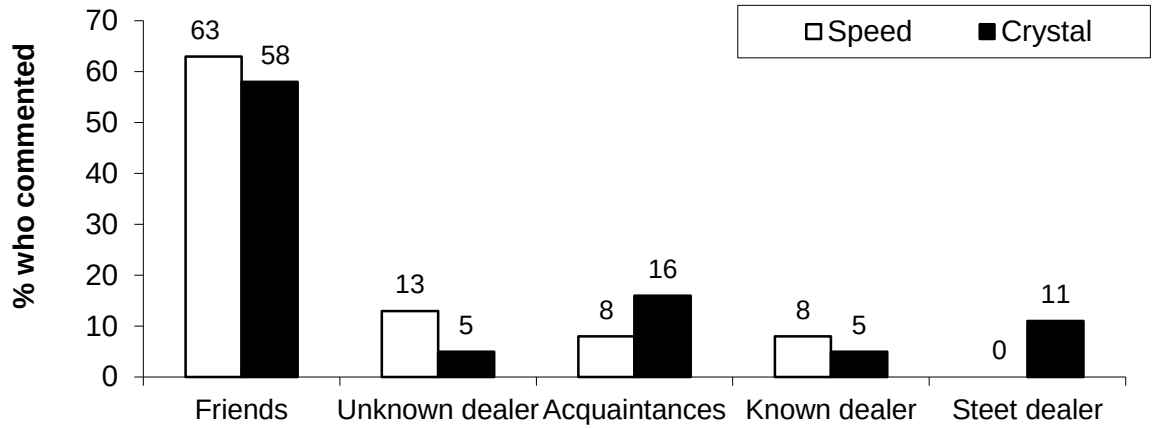
Source: EDRS participant interviews 2007, 2008, 2009, 2013, 2014

4.3.2 Last source, purchase location and use location of methamphetamine

Figure 5 shows that the sources that participants obtained speed and crystal from on the last occasion were very similar. Both speed and crystal were predominately obtained from friends (63% and 58% respectively), followed by an unknown dealer (13%; 5%), acquaintances (8%; 16%) and a known dealer (8%; 5%). Participants who had recently sourced crystal also reported purchasing it from a street dealer (11%).

Due to small numbers reporting, base purchasing patterns were not published.

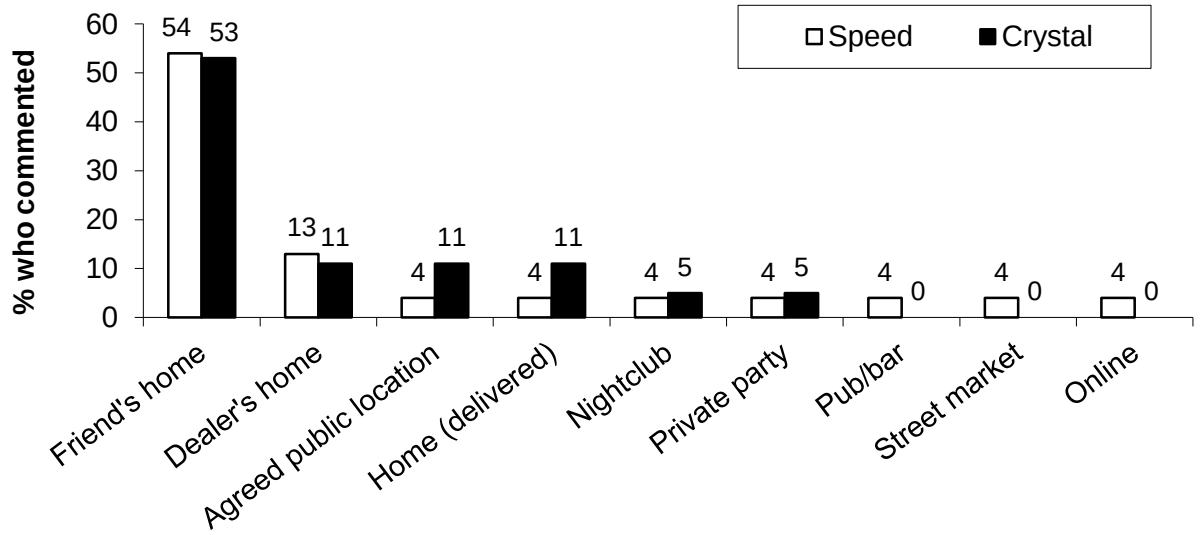
Figure 5: Last source methamphetamine was purchased from among EDRS participants, NT*



Source: EDRS participant interviews 2014
* Speed n=24; crystal n=19. Due to base n=5, numbers were too small to report.

Approximately two-thirds of those who had recently purchased speed and crystal had obtained it from private locations, including a friend's home (54%; 53%), a dealer's home (13%; 11%) or their own home (4%; 11%) (Figure 6).

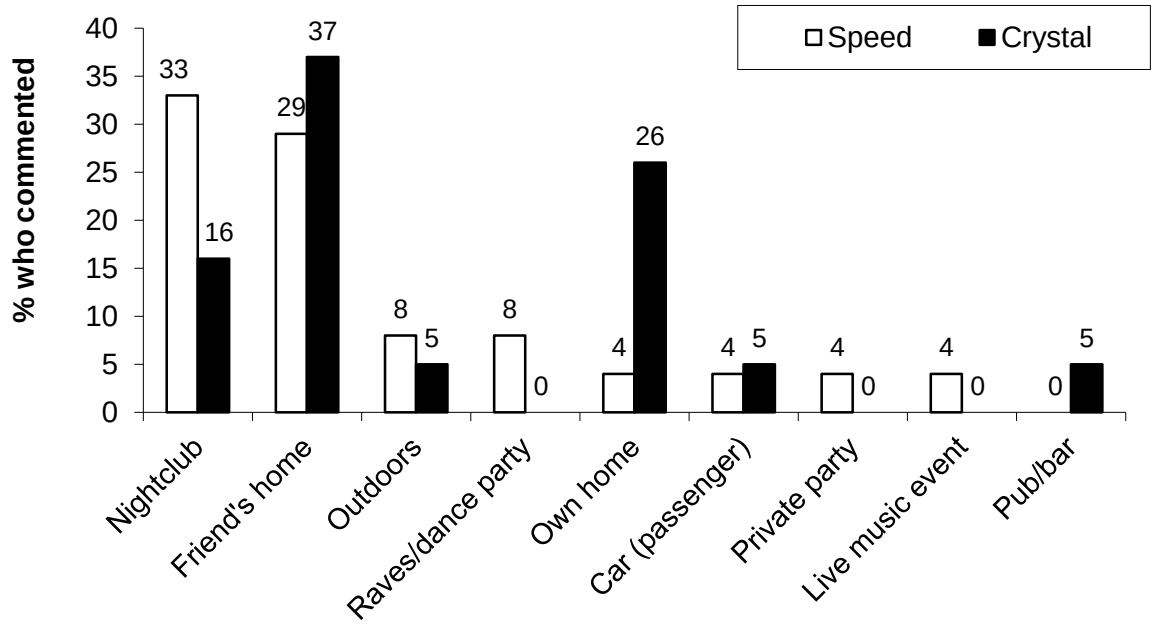
Figure 6: Last location methamphetamine was purchased from among EDRS participants, NT*



Source: EDRS participant interviews 2014
* Speed n=24; crystal n=19. Due to base n=5, numbers were too small to report.

Most participants who had recently used speed reported that they had last used it in a public setting, including at a nightclub (33%), outdoors (8%) or at a rave/dance party (8%). In contrast, the majority of participants who used crystal reported that they had last used it in a private setting, most commonly a friend's home (37%) or their own home (26%) (Figure 7).

Figure 7: Last location methamphetamine use by form among EDRS participants, NT*



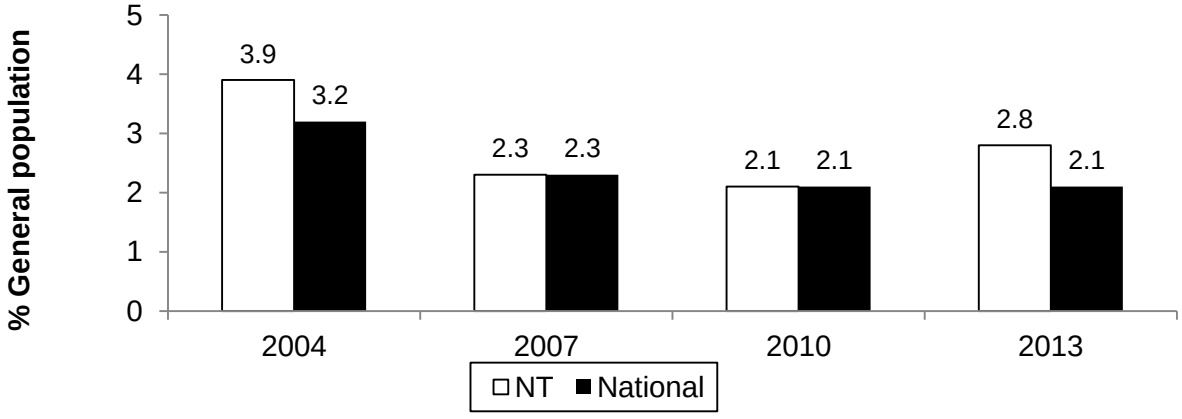
Source: EDRS participant interviews 2014
* Speed n=24; crystal n=19. Due to base n=5, numbers were too small to report.

4.3.3 Methamphetamine use in other populations

General population

Figure 8 shows the proportion of the general population in the NT and nationally (aged 14 years and over) who reported having recently used any form of methamphetamine. The graph shows that the proportion who had recently used methamphetamine nationally remained stable from 2010 to 2013; however, there was a non-significant increase in the proportion of NT residents reporting recent methamphetamine use in 2013.

Figure 8: Percentage of sample reporting recent* methamphetamine use in the general population, NT and national



Source: Australian Institute of Health and Welfare (2005, 2008, 2011, 2014)
* Used in the last 12 months

Illicit Drug Reporting System

A separate monitoring system investigating trends in the use of methamphetamine in injecting drug users has been conducted in NSW since 1996, in Victoria (VIC) and South Australia (SA) since 1997 and nationally since 2000. This is called the Illicit Drug Reporting System, or IDRS, and reports and bulletins are available from the NDARC website (http://ndarc.med.unsw.edu.au/group/drug-trends#menu_item_5).

Key expert comments

Speed and crystal methamphetamine were a cause of concern for both law and health KE. In particular, crystal was identified as the most problematic drug in the NT by the vast majority of KE.

KE reported that speed was widely distributed through the NT. A number of parents have voiced concerns over their children who are using speed, who often display violent and abusive behaviour.

Crystal was identified as the most problematic drug currently in the NT, with KE highlighting its addictive and harmful properties. Crystal was reported to be the second most common drug in the NT (behind cannabis), and there had been an increase in the number of presentations to health services for related problems. Examples of problems that ice has been associated with include violence, social isolation, criminal activity, gambling, financial difficulties, damage to relationships and various mental health issues such as psychosis, anxiety and mood disorders. One KE reported that users often report they are still in control of their crystal use, despite evidence to the contrary.

The profile of crystal users appears mixed, with KE reporting that they often come from a range of socio-economic groups, ages and geographical areas. However, most KE agreed that crystal users often had mental health issues, including depression, anxiety and paranoia. One KE reported that the age of people using crystal is getting younger, and that most people are smoking crystal rather than injecting it. It was also reported that most users have days without sleeping, which may result in a psychotic event.

Health KE emphasised the importance of prevention and early intervention strategies targeted at youths, parents, schools and the general community. Such strategies should increase awareness of the risks and harms of dependence, with the goal of reducing the number of individuals who become dependent on methamphetamine. One health KE reported that they were currently putting together a brief to attract resources to develop programs and information to combat the increasing methamphetamine issue in the NT.

4.4 Cocaine use

Summary:

- The majority of the group (64%) had tried cocaine at least once, and one-third had used it recently.
- Cocaine was used on a median of 2 days (i.e. quarterly) over the preceding six months.
- The proportion using cocaine, the frequency and the quantities used had decreased slightly from 2013 to 2014.
- Cocaine was most commonly purchased and consumed within public settings.
- Despite recent use of cocaine remaining stable in the Australian population from 2010 to 2013, in the NT there was an increase from 0.5% to 2.4% over this time period.

Cocaine is a stimulant, like methamphetamine. Cocaine is a colourless or white crystalline alkaloid. Cocaine hydrochloride, a salt derived from the cocoa plant, is the most common form of cocaine available in Australia ('crack' cocaine is most prevalent in North America and infrequently encountered in this country) (Australian Crime Commission, 2008). 'Crack' is a form of freebase cocaine (hydrochloride removed) which is particularly pure.

Street cocaine is usually 'cut' or diluted with other substances, some of which mimic the taste or appearance of cocaine. There is not a great deal of information on the adulterants found in street cocaine, but lidocaine, glucose, lactose, baking soda and even talcum powder have been found.

The majority (64%) of regular ecstasy users in 2014 had ever used cocaine, and over one-third (39%) had used it during the six months prior to the interview. The median age at which cocaine was first used was 18 years (range 14-25).

4.4.1 Cocaine use among EDRS participants

Participants who had used cocaine over the preceding six months had done so on a median of 2 days (range 1-24). The majority (74%) had used cocaine on a less than monthly basis, 15% had used between monthly and fortnightly, and 5% had used on a fortnightly to weekly or more than weekly basis respectively.

The majority (67%) of recent cocaine users quantified their use in terms of grams. The median amount used during a 'typical' occasion of use was 1 gram (range 0.5-2.5) and the median amount used on the heaviest occasion was also 1 gram (range 0.5-8). Eight recent users quantified their use of cocaine according to 'lines'. These participants reported using a median of 1 line (range 1-3) in a 'typical' session and a median of 1.5 lines (range 1-3) on the heaviest occasion. The majority (90%) of recent users of cocaine reported to have snorted it over the preceding six months, with smaller proportions reporting that they had swallowed (8%) or smoked (3%) it.

Table 7 presents data across time on the prevalence, frequency and quantity of cocaine use among EDRS participants interviewed in the NT. The number of participants reporting the lifetime and recent use of cocaine has remained mostly stable from 2013 to 2014. The frequencies of use and quantities used have decreased slightly since 2013; however, this was not significant.

Table 7: Patterns of cocaine use among EDRS participants, NT

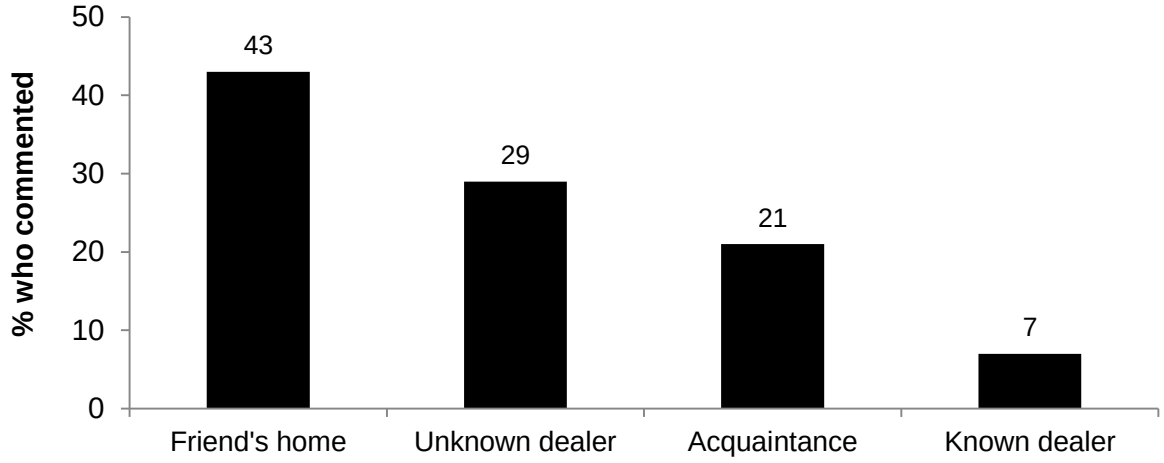
	2007 (N=66)	2008 (N=55)	2009 (N=67)	2013 (N=45)	**2014 (N=100)**
Ever used %	35	36	52	64	**64**
Used last 6 mths %	9	2	23	33	**39**
Of those who recently used:	(n=3)	(n=1)	(n=15)	(n=15)	**(n=39)**
Median days used last 6 mths (range)	2 (1-8)	N/A N/A	2 (1-12)	4 (1-30)	**2 (1-24)**
Median quantities used (grams):					
Typical (range)	1.25 (0.5-2)	0.5 (0.5)	0.5 (0.25-1)	1 (0.25-2)	**1 (0.5-2.5)**
Heavy (range)	2.75 (1-4.5)	4 (4)	0.5 (0.25-2)	1.5 (0.25-8)	**1 (0.5-8)**

Source: EDRS participant interviews 2007, 2008, 2009, 2013, 2014
N/A: Due to small numbers reporting, these figures were not reported.

4.4.2 Last source, purchase location and use location of cocaine

Among those who commented (n=14), two-fifths last purchased cocaine from a friend (43%), while the remaining users had last purchased from an unknown dealer (29%), acquaintance (21%) or known dealer (7%) (Figure 9).

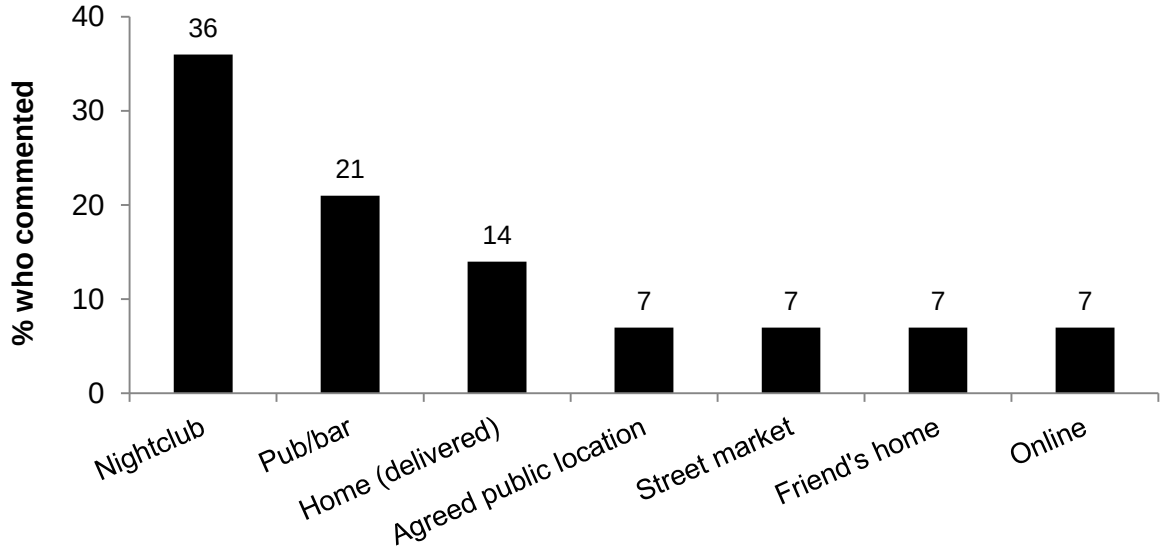
Figure 9: Last source cocaine was purchased from among EDRS participants, NT



Source: EDRS participant interviews 2014

Participants reported last purchasing cocaine mostly at public settings. The most common locations reported included at a nightclub (36%), pub/bar (21%) or delivered to their home (14%) (Figure 10).

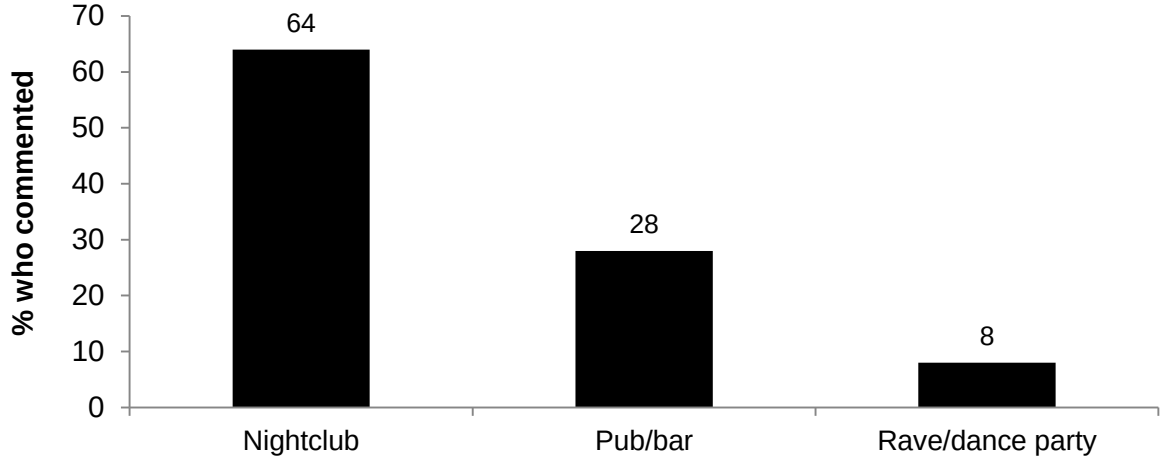
Figure 10: Last location cocaine was purchased from among EDRS participants, NT



Source: EDRS participant interviews 2014

Of those who reported on the last venue where they spent the most time intoxicated, all reported last using cocaine in a public setting, including at a nightclub (64%), pub/bar (28%) or rave/dance party (8%) (Figure 11).

Figure 11: Last location of cocaine use among EDRS participants, NT



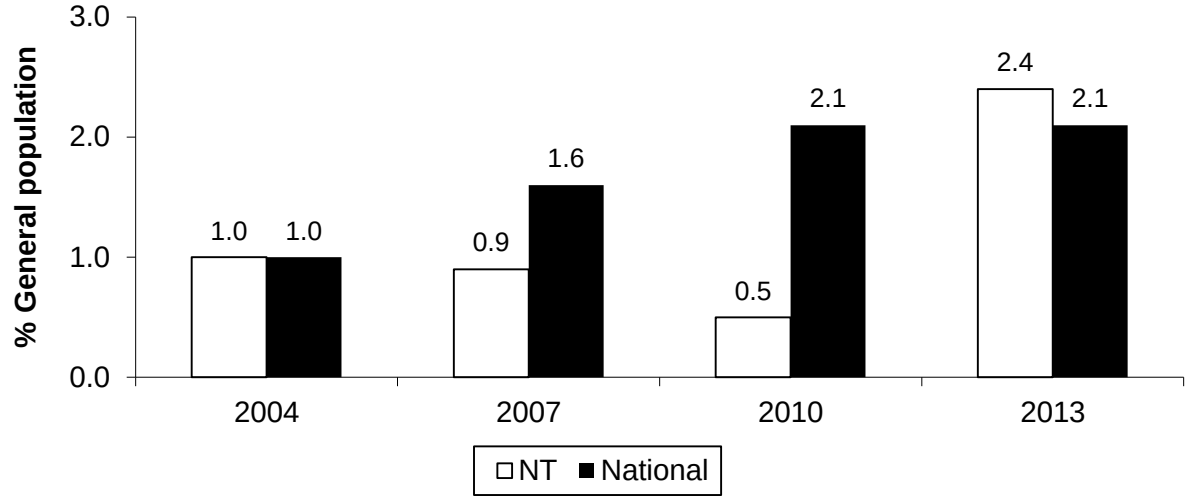
Source: EDRS participant interviews 2014

4.4.3 Cocaine use in other populations

General population

Reported recent use of cocaine across the Australian population remained stable from 2010 to 2013 (Figure 12). Despite this, the NT has shown a notable increase in recent cocaine use over this time period from 0.5% to 2.4%; however, this trend did not reach significance.

Figure 12: Percentage of sample reporting recent* cocaine use in the general population, NT and national



Source: Australian Institute of Health and Welfare (2005, 2008, 2011, 2014)
* Used in the last 12 months

Illicit Drug Reporting System

A separate monitoring system investigating trends in the use of cocaine in injecting drug users has been conducted in NSW since 1996, VIC and SA since 1997 and nationally since 2000. This is called the Illicit Drug Reporting System, or IDRS, and reports and bulletins are available from the NDARC website (http://ndarc.med.unsw.edu.au/group/drug-trends#menu_item_5).

Key expert comments

KE did not make any comments on the availability of cocaine or problems recently experienced from this illicit drug in the NT.

4.5 LSD use

Summary:

- The majority of the sample had tried LSD at least once and two-fifths had used it recently.
- LSD was used on a median of 3 days over the preceding six months (i.e. once every two months).
- Although LSD was most often purchased within private settings, it was used in a variety of both public and private settings.

Lysergic acid diethylamide is commonly known as LSD, 'trips' or 'acid'. It is a powerful hallucinogen which can produce significant changes in perception, mood and thought. Only a small amount is needed to cause visual hallucinations and distortions. These experiences are known as 'trips'. Unpleasant reactions to LSD include fear, anxiety and depression. LSD is manufactured in illicit laboratories and the majority of LSD is believed to be imported from overseas.

LSD is usually adhered to perforated sheets. Small paper squares ('tabs') are detached from these sheets and usually decorated with designs which can often be culturally specific to the user groups. LSD is potent, so trips are often cut into halves or quarters and shared with others.

The majority (63%) of the sample had ever used LSD and two-fifths (43%) had used it recently. Respondents had first used LSD at a median age of 18 years (range 13-30).

4.5.1 LSD use among EDRS participants

LSD was used on a median of 3 days (range 1-24) over the preceding six months (Table 8). Of those who had used LSD, the vast majority (88%) had done so on a less than monthly basis, 7% had used it between monthly and fortnightly, and one-in-ten (9%) had used LSD between fortnightly and weekly.

All respondents quantified their use in terms of tabs. They reported having used a median of 1 tab (range 0.25-6) during a 'typical' episode of use, and 1.5 tabs (range 0.25-8) during the heaviest episode of use in the preceding six months (Table 8). All recent users of LSD had swallowed it in the last six months.

Table 8 presents data across time on patterns of LSD use among EDRS participants. The proportions reporting lifetime and recent use of LSD have remained stable since 2013. While the frequency of use has increased slightly, the quantities used appear to have remained relatively stable over the past years.

Table 8: Patterns of LSD use among EDRS participants, NT

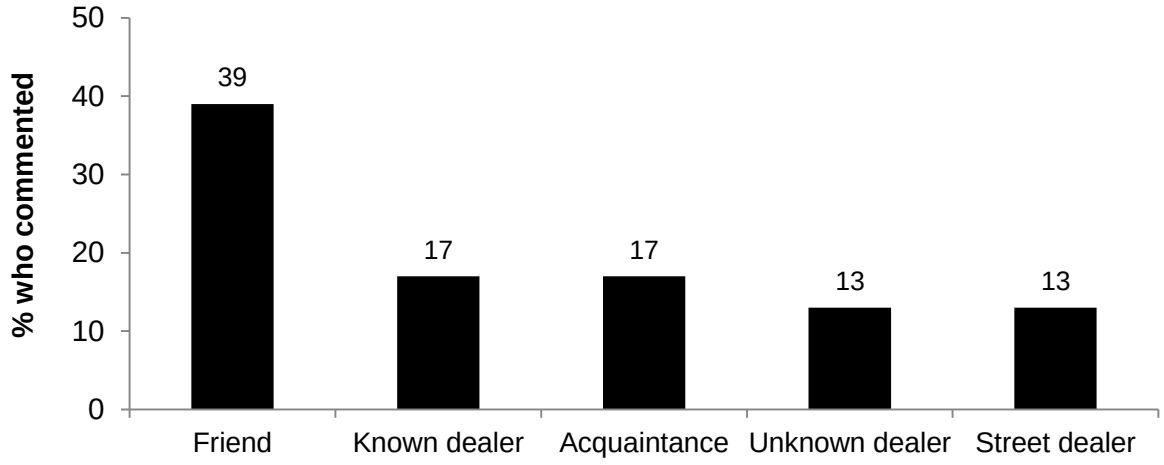
	2007 (N=66)	2008 (N=55)	2009 (N=67)	2013 (N=45)	**2014 (N=100)**
Ever used (%)	70	60	47	64	**63**
Used last 6 mths (%)	33	16	11	40	**43**
Of those who recently used:	(n=22)	(n=9)	(n=7)	(n=18)	**(n=43)**
Median days used last 6 mths (range)	3 (1-14)	1.5 (1-8)	3 (1-12)	2 (1-15)	**3 (1-24)**
Median quantities used (tabs):					
Typical (range)	1 (1-3)	2 (0.5-3)	1 (0.75-2)	1 (1-3)	**1 (0.25-6)**
Heavy (range)	1.5 (1-8)	3 (0.5-11)	1 (0.75-3)	1 (1-5)	**1.5 (0.25-8)**

Source: EDRS participant interviews 2007, 2008, 2009, 2013, 2014

4.5.2 Last source, purchase location and use location of LSD

Among those who commented (n=23), two-fifths last purchased LSD from a friend (40%). The remaining recent LSD users had last purchased the drug from a known dealer (17%), acquaintance (17%), unknown dealer (13%) or street dealer (13%) (Figure 13).

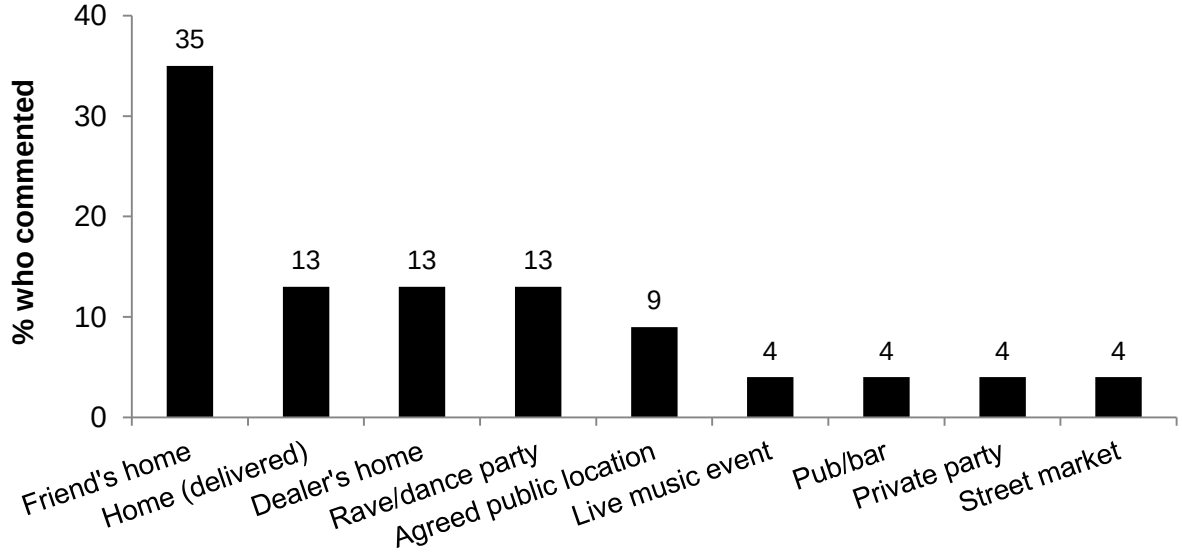
Figure 13: Last source LSD was purchased from among EDRS participants, NT



Source: EDRS participant interviews 2014

The largest proportion of participants reported last purchasing LSD in private settings. The most common private locations included a friend's home (35%), their own home (13%) or a dealer's home (13%). About one-third of recent LSD users had purchased at various public settings, including a rave/dance party (13%) or an agreed public location (9%) (Figure 14).

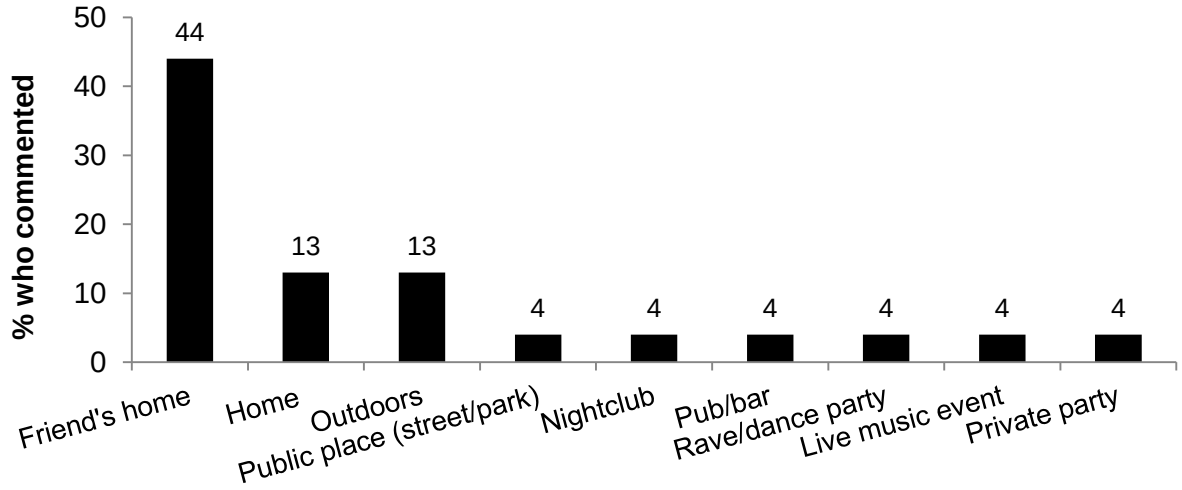
Figure 14: Last location LSD was purchased from among EDRS participants, NT



Source: EDRS participant interviews 2014

Participants reported on the last venue where they spent the most time intoxicated on LSD. These included a mixture of public and private settings, with the most common locations reported as a friend's home (44%), their own home (13%) or outdoors (13%) (Figure 15).

Figure 15: Last location of LSD use among EDRS participants, NT



Source: EDRS participant interviews 2014

Key expert comments

KE did not make any comments on the availability of LSD or problems recently experienced from this illicit drug in the NT.

4.6 Ketamine use

Summary:

- Two-fifths of the sample had tried ketamine at least once and 15% had used it recently.
- Ketamine was used on a median of 3 days over the preceding six months, which is an increase from 2013 (median 1 day).
- NT participants reported the most common route of ketamine administration was snorting.

Ketamine is a rapid acting, dissociative anaesthetic that is used in veterinary surgery and less commonly in human surgery. Ketamine is a liquid that can be injected for legitimate use. It is typically converted into a fine powder through evaporation, and is typically snorted. Ketamine can also be made into tablets, capsules and tabs which are usually swallowed. Common names for ketamine include K, special K or vitamin K.

Ketamine produces a dissociative state in the user, commonly eliciting an out-of-body experience. It has a combination of stimulant, depressant, hallucinogenic and analgesic properties. Too much ketamine can result in the user having a 'near death experience' or falling into a 'K hole'.

As ketamine is complicated to manufacture, and precursor chemicals are difficult to obtain, it is unlikely that it is produced in clandestine laboratories. The majority of ketamine used by EDRS participants is probably diverted from veterinary sources or imported from overseas, making supply irregular compared with other illicit substances (Australian Crime Commission, 2008, 2009, 2010).

Two-fifths (37%) of the 2014 NT sample reported having ever used ketamine and 15% had done so recently. Ketamine was first used at a median age of 20 years (range 15-27).

4.6.1 Ketamine use among EDRS participants

Ketamine had been used on a median of 3 days (range 1-10) by EDRS participants who had recently used ketamine. Just under two-thirds of recent users reporting using ketamine less than monthly (62%), with the remaining one-third reporting either monthly to fortnightly (23%) or fortnightly to weekly (8%) use.

Two recent users of ketamine reported their use in terms of 'bumps'.[4] They reported using a median of 4.5 bumps on a typical occasion (range 1-8) and 6.5 bumps on the heaviest occasion (range 1-12) over the preceding six months. Six recent ketamine users reported their use in grams. These participants reported using a median of 0.5 grams on a typical occasion (range 0.5-1) and a median of 0.75 grams on the heaviest occasion (range 0.5-5).

The most common route of administration reported by those who had used ketamine in the past six months was snorting (87%), followed by smoking and swallowing (7% respectively).

[4] A bump refers to a small amount of powder, typically measured and snorted from the end of a key, the corner of a plastic card or a 'bumper'. A bumper is a small glass nasal inhaler, purchased from tobacconists, used to store and administer powdered substances such as ketamine.

Only three recent ketamine users reported on their source, purchase location or use location of their most recent use of ketamine. As such, these results have not been presented due to small numbers.

Table 9 presents data across time regarding patterns of ketamine use among participants interviewed in the EDRS. While the proportion reporting lifetime use of ketamine remained stable from 2013 to 2014, there was a slight increase in the proportion reporting recent ketamine use. Caution should be advised when interpreting the frequency and amounts of use due to small numbers reporting; however, it does appear that frequency and amount of use has increased since 2013.

Table 9: Patterns of ketamine use among EDRS participants, NT

	2007 (N=66)	2008 (N=55)	2009 (N=67)	2013 (N=45)	**2014 (N=100)**
Ever used (%)	33	6	13	40	**37**
Used last 6 mths (%)	8	0	0	9	**15**
Of those who recently used:	(n=5)	(n=0)	(n=0)	(n=4)	**(n=15)**
Median days used last 6 mths (range)	1 (1-12)	- -	- -	1 (1-2)	**3 (1-10)**
Median quantities used (bumps):					
Typical (range)	4 (4)	-	-	2.75 (1-6)	**4.5 (1-8)**
Heavy (range)	8 (8)	-	-	3.5 (1-6)	**6.5 (1-12)**

Source: EDRS participant interviews 2007, 2008, 2009, 2013, 2014

Key expert comments

KE did not make any comments on the availability of ketamine or problems recently experienced from this illicit drug in the NT.

4.7 GHB use

Summary:

- Compared to other illicit drugs, GHB had been used by a smaller proportion of participants in their lifetime (10%) and recently (2%). This finding remains similar to previous years.

Gamma-hydroxybutyrate (GHB) has been researched and used for a number of clinical purposes including as an anaesthetic (Kam & Yoong, 1998; Nicholson & Balster, 2001). In 1964, GHB was introduced in Europe as an anaesthetic agent particularly for children (Laborit, 1964; Vickers, 1968), but was not widely used due to the incidence of vomiting and seizures (Hunter, Long, & Ryrie, 1971). Research also examined the effectiveness of GHB as a narcolepsy treatment (Chin, Kreutzer, & Dyer, 1992; Mack, 1993; Mamelak, 1989) and for alcohol dependence and opioid withdrawal (Kam & Yoong, 1998; Nicholson & Balster, 2001).

In recent years, there has been documentation of the use of GHB as a recreational drug, in a range of countries around the world. Common street names for GHB in Australia include 'liquid ecstasy', 'fantasy', 'GBH', 'grievous bodily harm' and 'blue nitro'. Following restrictions on the availability of GHB, there have been reports of the production of GHB from its precursor, gamma-butyrolactone (GBL). The use of GBL, and a similar chemical, 1,4-butanediol (1,4-B), has also been documented (Ingels, Rangan, Bellezo, & Clark, 2000). GBL and 1,4-B are metabolised into GHB in the body. They may be used as substitutes for GHB, but are known to be pharmacologically different.

Ten participants (10%) had ever used GHB and two EDRS participants (2%) reported having done so recently. GHB was first used at a median of 19 years (range 17-21).

4.7.1 GHB use among EDRS participants

Due to small numbers reporting, no findings were able to be published on recent GHB consumption patterns. However, Table 10 shows that lifetime and recent use rates in 2014 are notably similar to those recorded in 2013.

Table 10: Patterns of GHB use among EDRS participants, NT

	2007 (N=66)	2008 (N=55)	2009 (N=67)	2013 (N=45)	**2014 (N=100)**
Ever used (%)	15	6	13	13	**10**
Used last 6 mths (%)	0	0	0	2	**2**

Source: EDRS participant interviews 2007, 2008, 2009, 2013, 2014

Key expert comments

KE did not make any comments on the availability of GHB or problems recently experienced from this illicit drug in the NT.

4.8 Cannabis use

Summary:

- Almost every participant had tried cannabis at least once and the vast majority had used it recently.
- Cannabis was used on a median of 30 days (i.e. just over once per week) over the preceding six months.
- The use of cannabis had remained relatively stable over time.
- Both forms of cannabis (hydro and bush) are commonly purchased and consumed within private settings in the NT.
- The NT continued to have the highest proportion of recent cannabis users than any other jurisdiction (17.1% vs national rate of 10.2%).
- KE revealed that cannabis use was common and problematic amongst ERD users in Darwin.

Cannabis is derived from the cannabis plant (C*annabis sativa*). While cannabis can be grown in almost any climate, it is being increasingly cultivated by means of indoor hydroponic technology. The main active ingredient in cannabis is delta-9-tetrahydro-cannabinol (THC). Cannabis is used recreationally in three main forms: marijuana ('bush' or 'hydro' – see below for a description of these forms of marijuana); hashish ('hash'); and hash oil (National Drug and Alcohol Research Center, 2008). Cannabis remains the dominant illicit drug in Australia in terms of arrests, seizures and use (Australian Crime Commission, 2014).

Almost every participant in the 2014 NT EDRS (97%) had ever used cannabis and the majority (84%) reported having done so over the six months preceding the interview (Table 11). Cannabis was first used at a median age of 14 years (range 10-23); however, no significant gender effect was found.

4.8.1 Cannabis use among EDRS participants

Recent cannabis users reported having used it on a median of 30 days (range 1-180), which equates to once or twice per week on average. While one-fifth (21%) of users had used cannabis on a less than monthly basis and about one-tenth (9%) had used on a monthly to fortnightly or fortnightly to weekly basis (10% respectively), the majority had used cannabis more than weekly (54%) or on a daily basis (17%). The majority of recent users of cannabis had smoked it over the past six months (87%), with almost half also reporting that they had recently inhaled it (46%) and 13% had recently ingested it.

Recent users of cannabis were asked how much they had smoked on their last occasion of use. Thirty-six participants quantified their last use in terms of cones and reported having smoked a median of 4 cones (range 1-32). Thirty-five EDRS participants quantified their use in terms of joints and reported having smoked a median of 1 joint (range 0.3-6) on their last occasion of use.

Trends in the use of cannabis are presented in Table 11. There was no significant change in the proportions reporting the lifetime or recent use of cannabis or in the number of days of use from 2013 to 2014.

Table 11: Patterns of cannabis use among EDRS participants, NT

	2007 (N=66)	2008 (N=55)	2009 (N=67)	2013 (N=45)	**2014 (N=100)**
Ever used (%)	100	93	93	98	**97**
Used last 6 mths (%)	95	40	60	71	**84**
Of those who recently used:	(n=63)	(n=22)	(n=40)	(n=31)	**(n=82)**
Median days used last 6 mths (range)	15 (1-180)	6 (1-180)	37 (1-180)	24 (1-180)	**30 (1-180)**

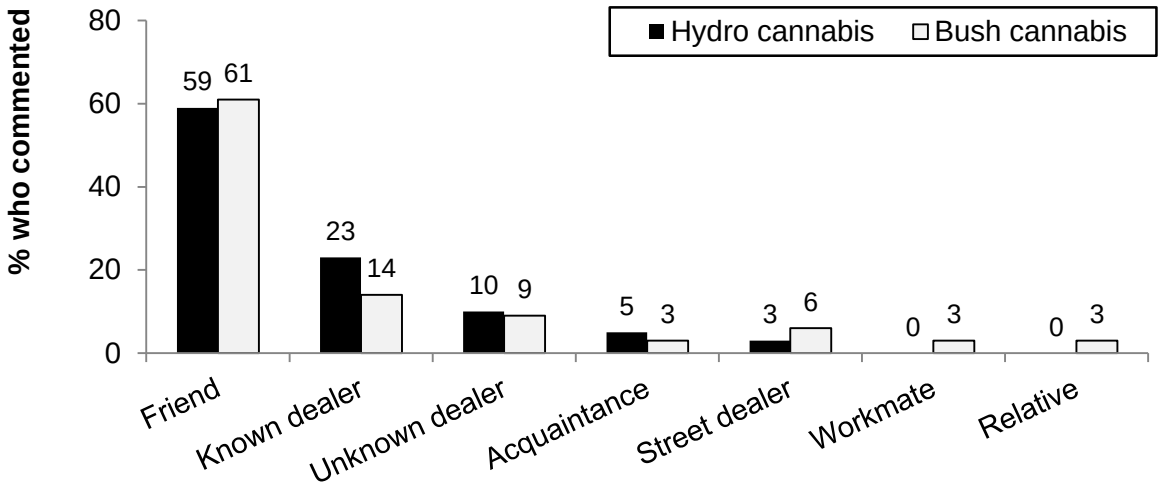
Source: EDRS participant interviews 2007, 2008, 2009, 2013, 2014

4.8.2 Last source, purchase location and use location of hydro and bush cannabis

From 2006, the EDRS included a more detailed section about cannabis and made a distinction between indoor-cultivated 'hydroponic' cannabis (hydro) and outdoor-cultivated 'bush' cannabis. In 2014, only participants who were able to distinguish between hydro and bush provided information about their last purchase of cannabis.

Both hydro (59%) and bush (61%) were most commonly purchased from friends. However, a notable proportion reported purchasing hydro and bush from various dealers (Figure 16).

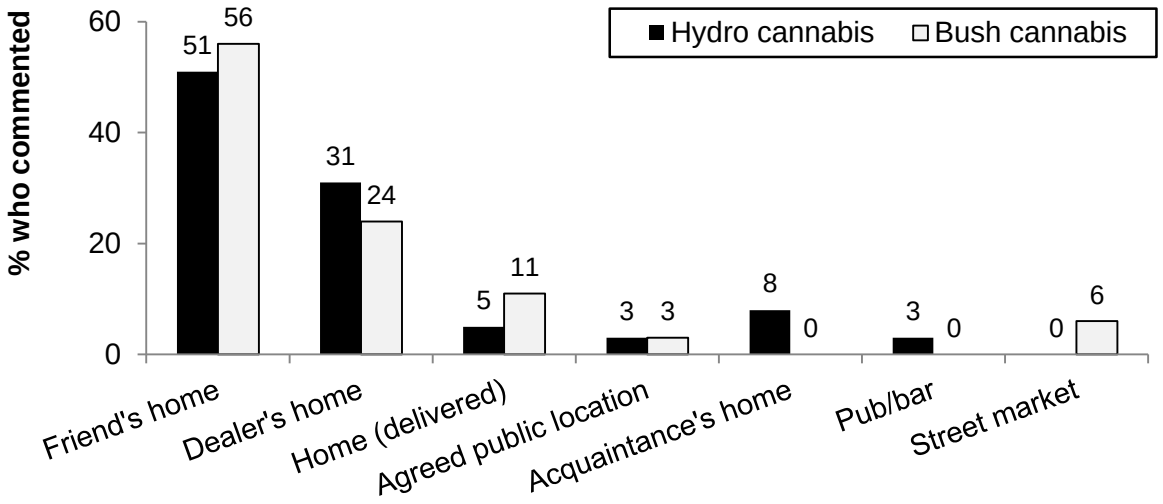
Figure 16: Last source that hydro and bush cannabis were purchased* from among EDRS participants, NT



Source: EDRS participant interviews 2014
* Of those who commented (n=39 for hydro, n=34 for bush)

The largest proportion of participants reported last purchasing both hydro and bush cannabis at a friend's home (51% and 56% respectively) or a dealer's home (31% and 24% respectively) (Figure 17).

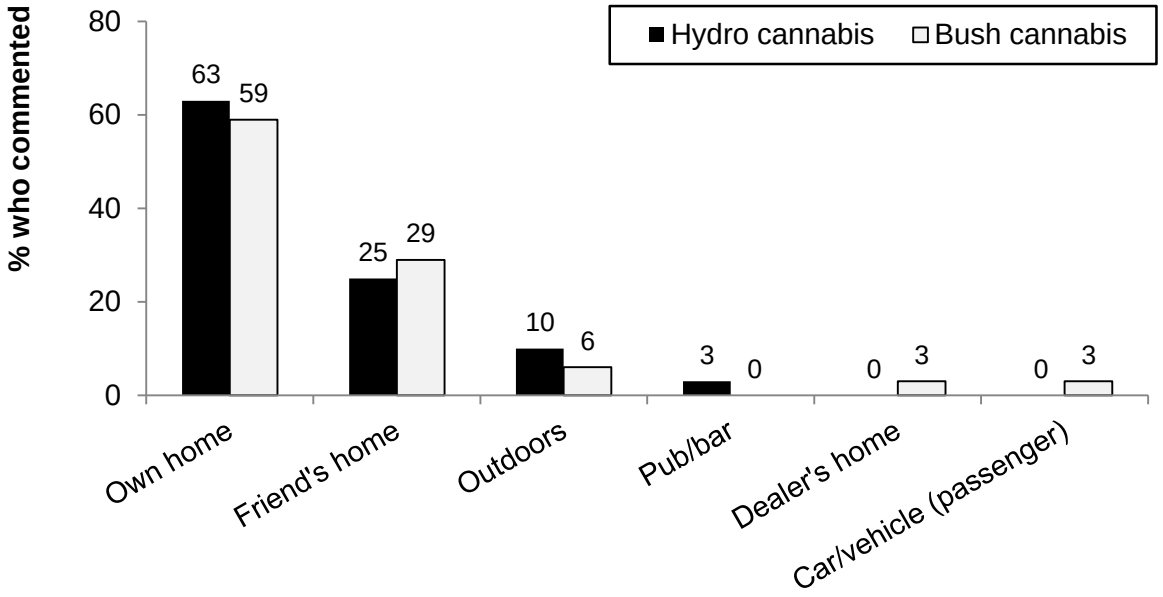
Figure 17: Last location that hydro and bush cannabis were purchased* from among EDRS participants, NT



Source: EDRS participant interviews 2014
* Of those who commented (n=39 for hydro, n=34 for bush)

Most participants who had recently used hydro or bush reportedly last used it in a private setting, including at their own home (63% and 59% respectively) or a friend's home (25% and 29% respectively) (Figure 18).

Figure 18: Last location of hydro and bush cannabis use* among EDRS participants, NT



Source: EDRS participant interviews 2014
* Of those who commented (n=40 for hydro, n=34 for bush)

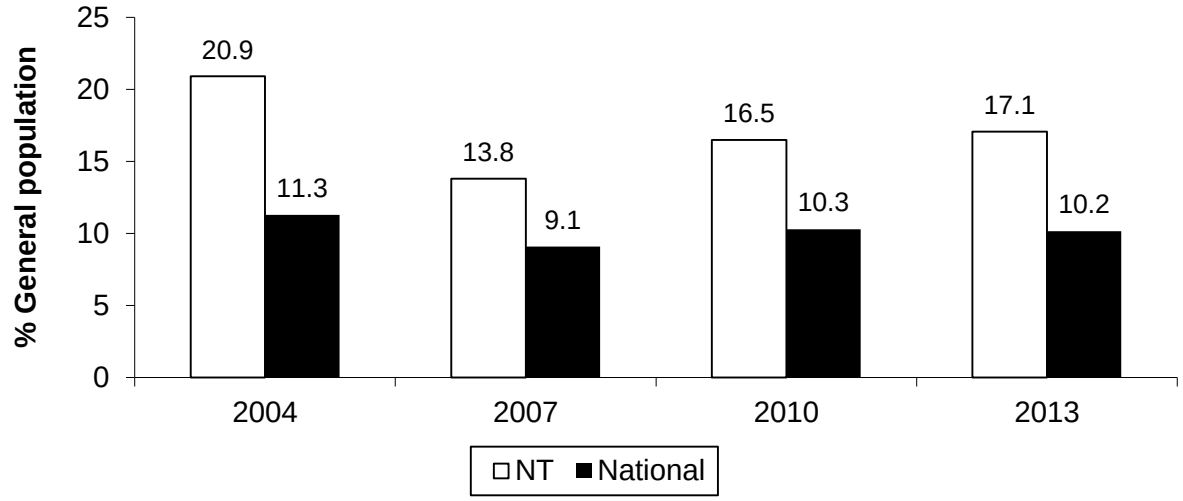
4.8.3 Cannabis use in other populations

General population

The proportion of the NT general population aged 14 years or over reporting recent use of cannabis increased from 16.5% in 2010 to 17.1% in 2013, whereas the national rate

remained mostly stable at 10.2%. The NT has consistently had the highest proportion of recent cannabis users than any other jurisdiction since 1998.

Figure 19: Percentage of sample reporting recent* cannabis use in the general population, NT and national



Source: Australian Institute of Health and Welfare (2005, 2008, 2011, 2014)
* Used in the last 12 months

Illicit Drug Reporting System (IDRS)

A separate monitoring system investigating trends in the use of cannabis in IDU has been conducted in NSW since 1996, VIC and SA since 1997 and nationally since 2000. This is called the Illicit Drug Reporting System, or IDRS, and reports and bulletins are available from the NDARC website (http://ndarc.med.unsw.edu.au/group/drug-trends#menu_item_5).

Key expert comments

All health and law enforcement KE reported that cannabis was one of the primary illicit drugs consumed. KE also reported that cannabis was a problematic drug in the NT, particularly in terms of the mental health consequences of use.

4.9 Other drug use

Summary:

Alcohol

- Almost all NT participants reported lifetime and recent use of alcohol.
- KE reported that alcohol continued to be one of the most problematic drugs among REU.

Tobacco

- Three-quarters of the NT had used tobacco at least once and the majority (68%) had smoked within the past six months.

E-cigarettes

- Forty-seven percent of the NT sample reported they had used e-cigarettes in their lifetime and 27% had used e-cigarettes recently.

Benzodiazepines

- One-fifth of the NT sample had recently used benzodiazepines. Illicit use was notably more common than licit use (33% vs. 12%).

Antidepressants

- Seven per cent of participants had recently used antidepressants.

Inhalants

- Similar proportions reported both lifetime and recent use of amyl nitrite (21%; 6%) and nitrous oxide (23%; 10%).

MDA

- There was an increasing trend in lifetime (16% to 20%) and recent (4% to 13%) use of MDA from 2013 to 2014.

Heroin and other opiates

- Small numbers reported lifetime use of heroin and other opiates.

Mushrooms

- Almost half the sample reported lifetime use of mushrooms and one-in-ten had used mushrooms in the past six months.

Pharmaceutical stimulants

- One-tenth of the group had recently used pharmaceutical stimulants. Illicit use was notably more common than licit use (30% vs. 6%).

Over the counter (OTC) drugs

- Five participants reported recent use of OTC codeine-containing products and OTC stimulants respectively.

Antipsychotics

- Two participants reported lifetime use of antipsychotics.

Performance and image enhancing drugs (PIED)

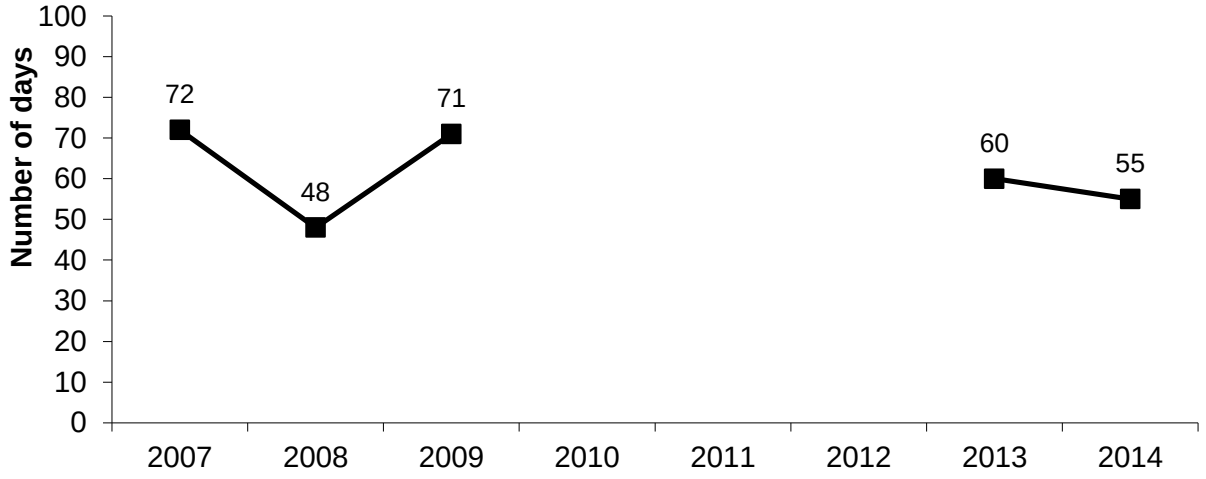
- Four participants reported recent use of PIED.

4.9.1 Alcohol

Almost the entire 2014 sample of EDRS participants reported having used alcohol at least once (99%) and almost all of these (96%) reported having done so during the past six months. Participants had first used alcohol at a median age of 14 years (range 8-18). Participants reported having consumed alcohol on a median of 55 days (range 2-180) over the preceding six months and the majority of EDRS participants had used alcohol on a greater than weekly basis (57%), with an additional 11% reporting daily alcohol use.

Figure 20 presents the median days of use of alcohol by EDRS participants within the six months preceding the interview across time. This figure appears to have remained relatively stable across the time points. See section 7.3 'Problematic alcohol use among EDRS participants' for a discussion of harmful alcohol use among EDRS participants in NT.

Figure 20: Days of alcohol use among EDRS participants in the last six months, NT



Source: EDRS participant interviews 2007, 2008, 2009, 2013, 2014

Key expert comments

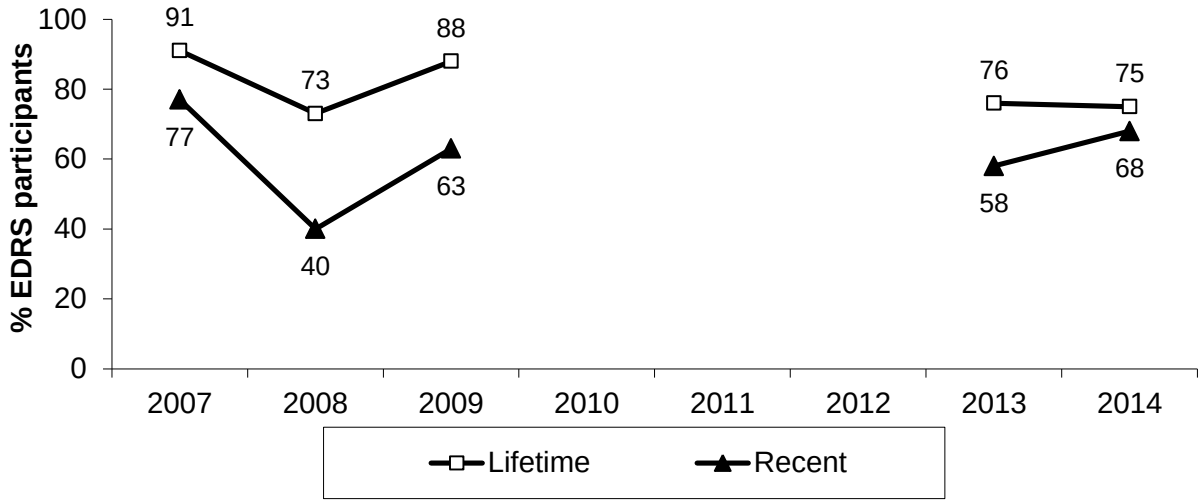
KE commented that alcohol was currently the most problematic licit drug, but that drinking alcohol in large quantities was often seen as socially acceptable by the wider community, and that alcohol consumption increased during higher humidity. Various alcohol-related health problems observed were overconsumption, self-harm, antisocial behaviour, and alcohol-related assaults and violence.

A number of KE reported that young people often consumed alcohol in conjunction with other illicit substances, and specifically that simultaneous use of alcohol and crystal exacerbates the harmful outcomes of use. Two KE had observed that, with the combination of alcohol becoming more expensive and the availability of illicit drugs increasing, this has resulted in young people either drinking at home and using pills when they go out or using pills exclusively.

4.9.2 Tobacco

Three-quarters (75%) of EDRS participants interviewed in 2014 had used tobacco at some point and the majority (68%) reported having done so over the preceding six months. Tobacco was first used at a median age of 15 years (range 7-24). Tobacco had been used on a median of 180 days (range 1-180) over the preceding six months and the majority of those who had recently used tobacco were daily (63%) smokers. The proportion of EDRS participants using tobacco in their lifetime remained stable between 2013 and 2014; however, there was a small increase in the proportion reporting recent tobacco use (Figure 21).

Figure 21: Proportion of EDRS participants reporting lifetime and recent tobacco use, NT



Source: EDRS participant interviews 2007, 2008, 2009, 2013, 2014

4.9.3 E-cigarettes

Forty-seven percent of the NT sample reported they had used e-cigarettes in their lifetime and 27% had used e-cigarettes in the six months prior to interview. Median days used was reported at three days, i.e. once every two months (range 1-180 days). Median age of first use is 20 years (range 15-49 years). This was the first year data was collected on e-cigarettes.

4.9.4 Benzodiazepines

Two-fifths (40%) of the sample reported having ever used any benzodiazepines and one-fifth (17%) reported having done so recently. Among those who had recently used them, benzodiazepines had been used on a median of 2 days (range 1-35) in the last six months. Compared to 2013 figures, lifetime and recent use of benzodiazepines remained relatively stable in 2014 (Figure 22).

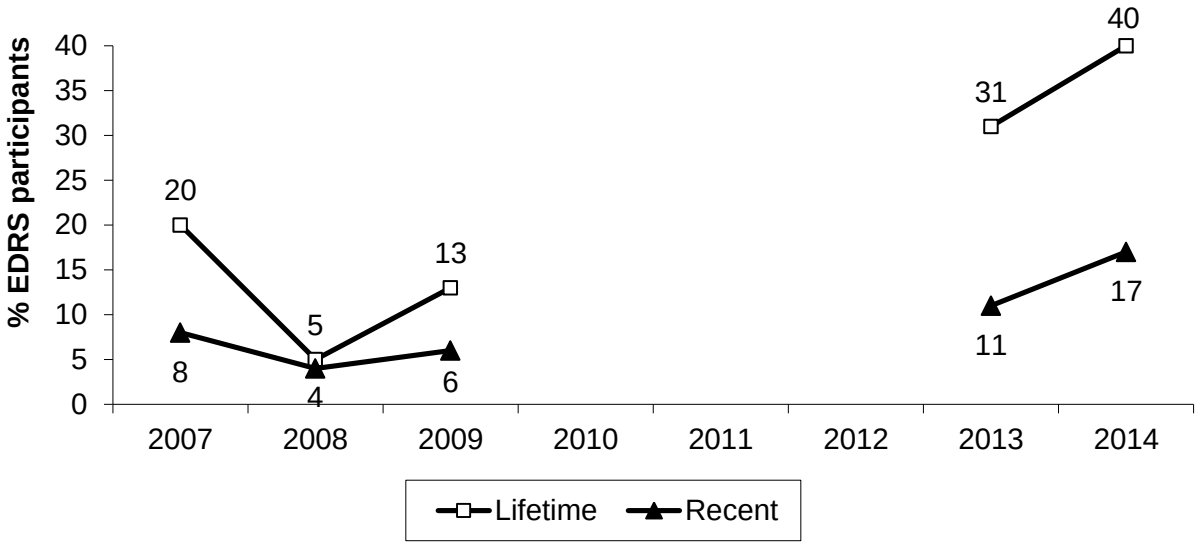
Licit benzodiazepines

One-tenth (12%) of EDRS participants reported having ever used licitly obtained benzodiazepines and four participants (4%) had done so recently. Licit benzodiazepines were first used at a median age of 20 years (range 17-26). Of the four recent users, they had used licit benzodiazepines on a median of 17.5 days (range 1-30) over the six months prior to the interview and both reported swallowing as their only route of administration over this period.

Illicit benzodiazepines

One-third (33%) of EDRS participants had ever used illicitly obtained benzodiazepines, and fifteen participants (15%) had done so over the preceding six months. They were first used at a median age of 17 years (range 13-21) and were either swallowed (73%) or snorted (20%). Illicit benzodiazepines had been used on a median of 2 days (range 1-10) in the last six months.

Figure 22: Proportion of EDRS participants reporting lifetime and recent benzodiazepine use, NT



Source: EDRS participant interviews 2007, 2008, 2009, 2013, 2014

4.9.5 Antidepressants

One-fifth (20%) of participants reported having ever used antidepressants and 7% had done so over the preceding six months. Figure 23 presents data from 2007 onwards on the reported lifetime and recent use of any antidepressants. Both of these proportions have remained relatively stable from 2013 to 2014.

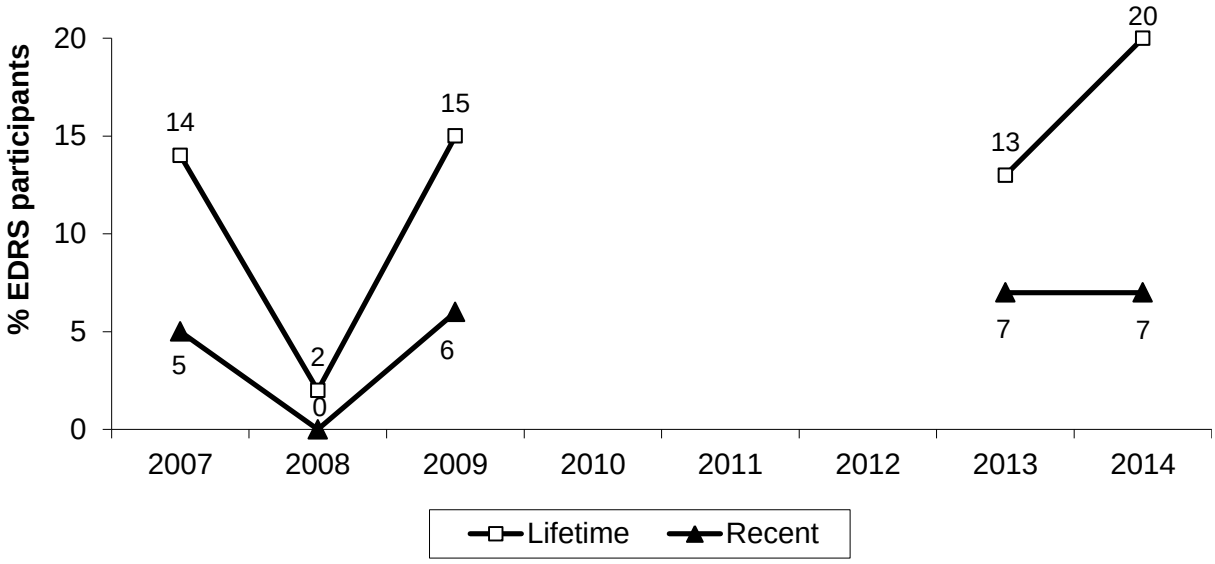
Licit antidepressants

Sixteen participants (16%) had ever used licitly obtained antidepressants and 6% had done so over the preceding six months. Licit antidepressants were first used at a median age of 20.5 years (range 16-28). Those who had recently used it had done so on a median of 180 days (range 20-180) over the preceding six months, and all reporting swallowing as their route of administration.

Illicit antidepressants

Five participants (5%) reported having ever used illicit antidepressants, with one participant reporting that they had used them over the past six months.

Figure 23: Proportion of EDRS participants reporting lifetime and recent antidepressant use, NT



Source: EDRS participant interviews 2007, 2008, 2009, 2013 , 2014

4.9.6 Inhalants

Amyl nitrite

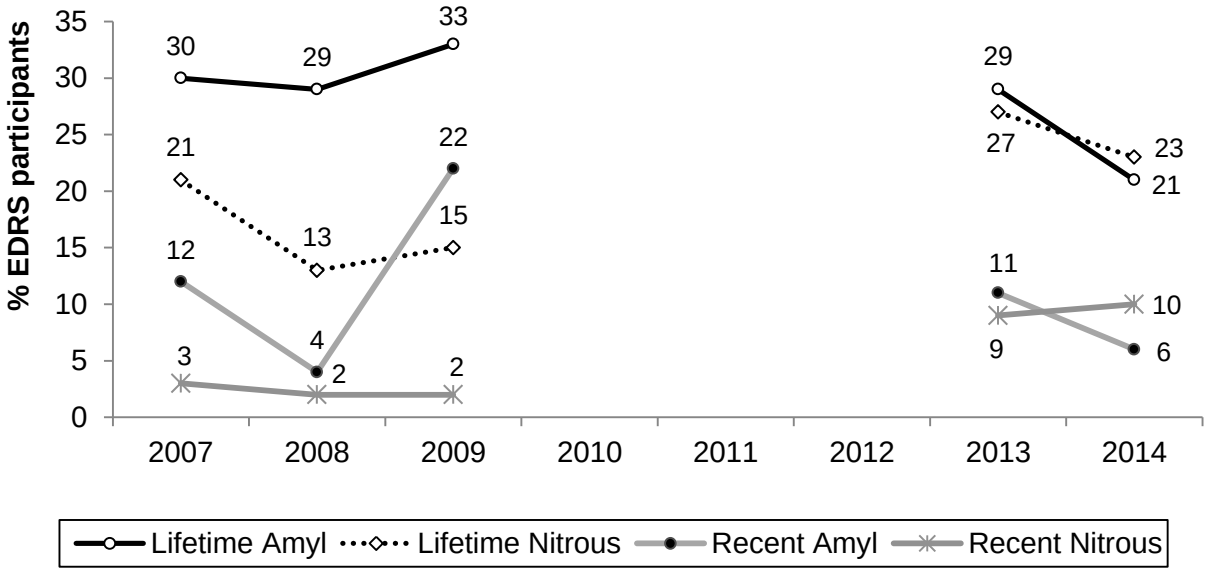
One-fifth (21%) of EDRS participants interviewed had ever used amyl nitrite, of which six participants (6%) had used it over the preceding six months. Amyl nitrite was first used at a median age of 18 years (range 15-23). Those who had recently used it had done so on a median of 9 days (range 1-100) over the preceding six months, with the majority of recent users of amyl nitrite reportedly using it on a less than fortnightly basis (66%).

Nitrous oxide

Approximately one-quarter (23%) of the sample reported having ever used nitrous oxide and 10% had done so recently. Nitrous oxide was first used at a median age of 17.5 years (range 16-20). Among those who had used it over the last six months, nitrous oxide had been used on a median of 3.5 days (range 1-20) during this time, with the majority reporting that they used it on a less than monthly basis (60%).

Figure 24 presents trends across time of the proportions of the EDRS samples that had ever used, and had recently used, both amyl nitrite and nitrous oxide. The proportions reporting lifetime and recent use of both drugs remained relatively stable from 2013 to 2014.

Figure 24: Proportion of EDRS participants reporting lifetime and recent amyl nitrite and nitrous oxide use, NT



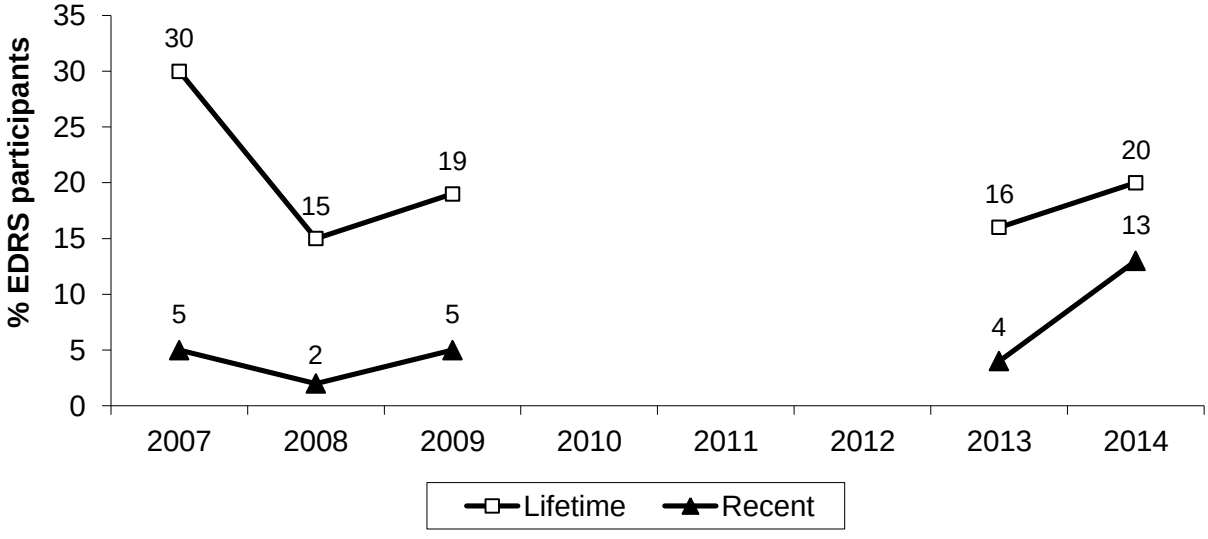
Source: EDRS participant interviews 2007, 2008, 2009, 2013, 2014

4.9.7 MDA

Twenty per cent of participants in the 2014 EDRS reported having ever used MDA. Thirteen participants (13%) reported they had used it over the preceding six months. Among those who had used it over the last six months, MDA had been used on a median of 5 days (range 1-72) during this time, with two-thirds (69%) reporting less than monthly use. Participants reported the most common route of administration of MDA was swallowing (77%) followed by snorting (54%).

The proportion of EDRS participants who have used MDA recently and in their lifetime has appeared to have increased in 2014 compared to 2013; however, this change was not significant (Figure 25).

Figure 25: Proportion of EDRS participants reporting lifetime and recent MDA use, NT



Source: EDRS participant interviews 2007, 2008, 2009, 2013, 2014

4.9.8 Heroin and other opiates

Heroin

Four EDRS participants reported that they had ever used heroin, with one of these participants reporting using it in the preceding six months. The median age that heroin was first used was 21 years (range 21). Due to small numbers reporting recent use of heroin, data was not published on the median days of use and routes of administration.

Methadone and buprenorphine

No participants in the 2013 NT EDRS reported lifetime use of methadone. Two participants reported lifetime use of buprenorphine; however, no use was reported for the six months preceding interview.

Other opiates

While ten respondents (10%) had ever used a licitly obtained opiate (other than methadone or buprenorphine), only two participants (2%) had used a licitly obtained opiate recently. Five participants (5%) had ever used illicitly obtained opiates (other than heroin, methadone or buprenorphine); however, only one these participants had used them over the six months prior to the interview.

Opiate use in other populations

A separate monitoring system investigating trends in the use of opioids in injecting drug users has been conducted in NSW since 1996, VIC and SA since 1997 and nationally since 2000. This is called the Illicit Drug Reporting System, or IDRS, and reports and bulletins are available from the NDARC website (http://ndarc.med.unsw.edu.au/group/drug-trends#menu_item_5).

4.9.9 Mushrooms

Just under half (45%) of the EDRS participants interviewed in 2014 reported having ever used mushrooms and 11% had done so over the preceding six months. Mushrooms were first used at a median age of 18 years (range 15-25). The majority of those who had recently used mushrooms had done so on a less than monthly basis (91%) and the main route of administration described by users of mushrooms was swallowing (91%). Lifetime and recent use of mushrooms appears to have remained relatively stable from 2013 to 2014 (Figure 26).

Figure 26: Proportion of EDRS participants reporting lifetime and recent mushroom use, NT



Source: EDRS participant interviews 2007, 2008, 2009, 2013, 2014

4.9.10 Pharmaceutical stimulants

One-third (33%) of participants in 2014 reported having ever used pharmaceutical stimulants and over one-tenth (13%) had done so within the six months preceding the interview. Although there was a notable increase in lifetime and recent use of pharmaceutical stimulants from 2013 to 2014, these did not reach significance.

Licit pharmaceutical stimulants

While six participants reported having used licitly obtained pharmaceutical stimulants, three of these EDRS participants had used them recently. Licitly obtained pharmaceutical stimulants were first used at a median age of 20 years (range 13-23).

Illicit pharmaceutical stimulants

Just under one-third (30%) had ever used illicitly obtained pharmaceuticals and 13 participants had done so over the preceding six months. Illicit pharmaceutical stimulants were first used at a median age of 21 years (range 13-32). Recent users reported using illicit pharmaceutical stimulants on a median of 1 day (range 1-10), with participants reporting that they either swallowed (62%) or snorted (38%) them.

4.9.11 Over the counter drugs

Codeine

Thirteen per cent of the sample reported having ever used over the counter codeine-containing products for non-pain use and five participants (5%) reported having done so over the preceding six months. These products were first used at a median age of 17 years (range 15-26). Due to a small sample of recent users, data on frequency and quantity of use are not presented.

Stimulants

One-tenth of the sample (11%) reported having ever used over the counter stimulants (such as Sudafed and Codral) for non-medicinal use and five participants (5%) had used them recently. These products were first used at a median age of 18 years (range 17-20). Given such a small sample of recent users, details regarding frequency and quantity of use are not presented.

4.9.12 Antipsychotics

Two participants (2%) in 2014 reported having ever used antipsychotics (both licit). Given such a small sample of recent users, details regarding frequency and quantity of use are not presented.

4.9.13 Performance and image enhancing drugs (PIED)

Four participants reported lifetime use of steroids, all of whom reported steroid use in the preceding six months in the 2014 NT EDRS sample. The median age of first use of PIED was 22 years (range 18-24). Due to a small sample of recent users, data on frequency and quantity of use are not presented.

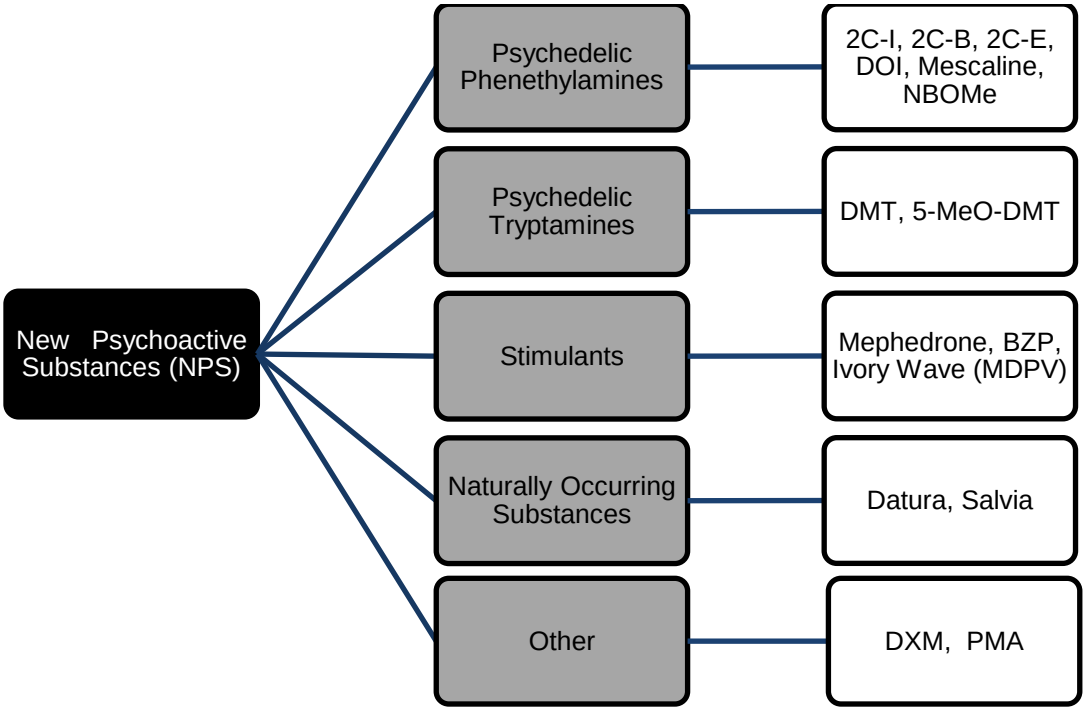
4.10 New psychoactive substance (NPS) use

Summary:

- Two-thirds reported having ever used NPS and one-third reported using NPS in the last six months.
- The most common psychoactive substances used among Darwin EDRS participants were capsules with unknown contents, DMT, other synthetic cannabinoids and Kronic.
- KE reported that although NPS use in the NT has appeared to have reduced, synthetic cannabinoids continued to be seized.

From 2010 onward, the EDRS attempted to systematically investigate a group of emerging drugs known as 'new psychoactive substances' (also known as research chemicals, analogues, legal highs, herbal highs, party pills). These drugs can be classified as outlined in Figure 27.

Figure 27: New psychoactive substances (NPS) investigated by the EDRS



Psychedelic refers to "a mental state of enlarged consciousness, involving a sense of aesthetic joy and increased perception transcending verbal concepts" or "denoting or relating to any of a group of drugs inducing such a state, especially LSD" (Macquarie Dictionary). Phenethylamine is a neurotransmitter that is an amine resembling amphetamine in structure and pharmacological properties. Derivatives of phenethylamine are referred to as phenethylamines (Merriam-Websters Medical Dictionary). Tryptamine is a crystalline amine derived from tryptophan. Substituted derivatives of this amine, some of which are significantly hallucinogenic or neurotoxic, are known as 'tryptamines' (Merriam-Websters Medical Dictionary).

Table 12 provides a very brief introduction to these drugs to provide a rough guide for interpreting trends data. Interested readers are directed toward online sources such as Erowid (http://www.erowid.org/splash.php) and Drugscope (http://www.drugscope.org.uk/) for more comprehensive information on these drugs.

Table 12: New psychoactive substances

Street name	Chemical name	Information on drug	Information on use and effects
		Psychedelic Phenethylamines	
2C-I	2,5-dimethoxy-4-iodophenethylamine	A psychedelic drug with stimulant effects	Recent reports suggest that 2C-I is slightly more potent than the closely related 2C-B. A standard oral dose of 2C-I is between 10-25mg.
2C-B	4-Bromo-2,5-dimethoxyphenethylamine	A psychedelic drug with stimulant effects	2C-B is sold as a white powder sometimes pressed in tablets or gel caps. The dosage range is listed as 16-24mg. Commonly taken orally but can also be snorted.
2C-E	2,5-dimethoxy-4-ethylphenethyl-amine	A psychedelic drug with stimulant effects	Mostly taken orally and is highly dose-sensitive. 2C-E is commonly active in the 10-20mg range.
DOI (death on impact)	2,5-dimethoxy-4-iodoamphetamine	A psychedelic phenethylamine	Requires only very small doses to produce full effects. It is uncommon as a substance for human ingestion but common in research. Has been found on blotting paper and may be sold as LSD.[5]
Mescaline	3,4,5-trimethoxyphene-thylamine	A hallucinogenic alkaloid	First isolated in 1896 from the peyote cactus of northern Mexico. A standard dose for oral mescaline use ranges from 200-500mg.
NBOMe	4-chloro-2,5-dimethoxy-N-(2-methoxybenzyl) phenethylamine	A psychedelic drug with stimulant and euphoriant effects	Discovered in 2003, NBOMe emerged on the market in 2010, despite little history of human use prior. Reported that NBOMe blotters are sometimes misrepresented as, or mistaken for, LSD.
		Psychedelic Tryptamines	
DMT	Dimethyl tryptamine	A hallucinogenic drug in the tryptamine family	Similar to LSD though its effects are said to be more powerful. Pure DMT is usually found in crystal form but has been reportedly sold in powder form.[6]
5-MeO-DMT	5-methoxy-N,N-dimethyltryptamine	A naturally occurring psychedelic tryptamine	5-MeO-DMT is comparable in effects to DMT; however, it is substantially more potent. It can be injected, smoked or sniffed. Mostly seen in crystalline form[7] but has been reportedly sold as powder.

[5] Erowid: http://www.erowid.org/chemicals/doi/doi.shtml
[6] Drugscope: http://www.drugscope.org.uk/resources/drugsearch/drugsearchpages/dmt
[7] Erowid: http://www.erowid.org/chemicals/5meo_dmt/5meo_dmt.shtml

Table 12: New psychoactive substances (continued)

Street name	Chemical name	Information on drug	Information on use and effects
		Stimulants	
Mephe-drone	4-methyl-methcathin-one	A stimulant which is closely chemically related to amphetamines	Reportedly produces a similar experience to drugs like amphetamines, ecstasy or cocaine. Mephedrone is a white, off-white or yellowish powder although it may also appear in pill or capsule form. Mephedrone is probably the most well-known of a group of drugs derived from cathinone (a chemical found in the plant called khat).[8]
BZP	1-benzylpiperazine	A piperazine; a CNS stimulant.	Gained popularity in some countries in the early 2000s as a legal alternative to amphetamines and ecstasy. One of the more common piperazines, providing stimulant effects which people describe as noticeably different than those of amphetamines. Not particularly popular as many people find that it has more unpleasant side effects than amphetamines. BZP is used orally at doses of between 70-150mg and effects are reported to last 6-8 hours.[9]
MDPV / Ivory wave	Methylenedioxypyrov-alerone (3,4-methylenedioxy)	A cathinone derivative	More potent than other cathinones. Lidocaine (a common local anesthetic) is frequently used as a cutting agent, to give users the numbing sensation in the mouth or nose which is associated with drugs of high purity (e.g. high-purity cocaine).[10]
		Naturally Occurring Substances	
Datura	Commonly *Datura inoxia* and *Datura strammonium.* Contains Atropine and Scopolamine. Also known as Angel's Trumpet	Atropine is a potent anticholinergic agent. Scopolamine is a CNS depressant and has antimuscarinic properties	The plant's effects make the user feel drowsy, drunk-like and detached from things around them. They can also bring on hallucinations**.** Doses are difficult to judge and can cause unconsciousness and death.[11]

[8] Drugscope: http://www.drugscope.org.uk/resources/drugsearch/drugsearchpages/mephedrone
[9] Erowid: http://www.erowid.org/chemicals/bzp/bzp_basics.shtml
[10] Drugscope: http://www.drugscope.org.uk/Media/Press+office/pressreleases/ivory_wave_MDPV
[11] Drugscope: http://www.drugscope.org.uk/resources/drugsearch/drugsearchpages/datura

Table 12: New psychoactive substances (continued)

Street name	Chemical name	Information on drug	Information on use and effects
Naturally Occurring Substances (continued)			
Salvia	*Salvia divinorum* (contains Salvinorin A)	Salvia is derived from the American plant *Salvia divinorum*, a member of the mint family	At low doses (200-500mcg) salvia produces profound hallucinations that last from 30 minutes to an hour or so. In higher doses the hallucinations last longer and are more intense.[12]
LSA	*d*-lysergic acid amide	A naturally occurring psychedelic found in plants such as Morning Glory and Hawaiian Baby Woodrose seeds	LSA has some similarities in effect to LSD, but is generally considered much less stimulating and can be sedating in larger doses.
Other Psychoactive Substances			
DXM	Dextromethorphan	A semisynthetic opiate derivative which is legally available over the counter in the US	Commonly found in cough suppressants, especially those with 'DM' or 'Tuss' in their names. It is a dissociative drug that is almost always used orally, although pure DXM powder is occasionally snorted. Recreational doses range from 100-1,200mg or more.[13]
PMA	Paramethoxyamphetamine; 4-methoxy-amphetamine	A synthetic hallucinogen that has stimulant effects	Ingesting a dose of less than 50mg (usually one pill or capsule) without other drugs or alcohol induces symptoms reminiscent of MDMA, although PMA is more toxic than MDMA. Doses over 50mg are considered potentially lethal (due to the risk of overheating). Pure PMA is a white powder, but street products can also be beige, pink or yellowish. Today it is usually made into pressed pills.[14]
K2/Spice	Synthetic cannabinoid	Usually sold as loose, generic plant material with a mix of chemicals on it (containing synthetic cannabinoids)	A psychoactive herbal and chemical product that, when consumed, mimics the effects of cannabis.
Methylone	3,4-methylenedioxy-*N*-methylcathinone	An entactogen and stimulant of the phenethylamine, amphetamine, and cathinone classes	Reported dosages range from 100-250mg orally. Effects are primarily psychostimulant in nature.

[12] Drugscope: http://www.drugscope.org.uk/resources/drugsearch/drugsearchpages/salvia
[13] Erowid: http://www.erowid.org/chemicals/dxm/dxm_basics.shtml
[14] Drugscope: http://www.drugscope.org.uk/resources/drugsearch/drugsearchpages/pma

Amongst the 2014 NT EDRS sample, 66% reported having ever used NPS and 37% reported using NPS in the last six months. The most common psychoactive substances ever used among Darwin EDRS participants were other synthetic cannabinoids (38%), Kronic (24%) and capsules with unknown contents (22%). However, the proportions who had used psychoactive substances in the last six months were notably lower. Those most commonly used over the preceding six months were capsules with unknown contents (9%), DMT (8%) and other synthetic cannabinoids (6%) (Table 13).

Table 13: NPS use among EDRS participants, NT

	2013 (N=45)	**2014 (N=100)**
Other synthetic cannabinoids		
ever used (%)	7	**38*** **
used last 6 mths (%)	4	**6**
Kronic		
ever used (%)	38	**24**
used last 6 mths (%)	13	**3***
Capsule (contents unknown)		
ever used (%)	11	**22**
used last 6 mths (%)	7	**9**
Salvia		
ever used (%)	7	**18**
used last 6 mths (%)	4	**5**
K2 / Spice		
ever used (%)	7	**17**
used last 6 mths (%)	0	**2**
Mephedrone		
ever used (%)	7	**16**
used last 6 mths (%)	2	**5**
DMT		
ever used (%)	16	**15**
used last 6 mths (%)	2	**8**
Herbal highs		
ever used (%)	33	**11****
used last 6 mths (%)	18	**3****
2C-I		
ever used (%)	7	**11**
used last 6 mths (%)	2	**3**
2C-B		
ever used (%)	9	**8**
used last 6 mths (%)	2	**2**

** p<0.05; ** p<0.01; *** p<0.001*

Table 13: NPS use among EDRS participants, NT (continued)

	2013 (N=45)	**2014 (N=100)**
Methylone		
ever used (%)	4	**5**
used last 6 mths (%)	4	**2**
2C-E		
ever used (%)	0	**5**
used last 6 mths (%)	0	**0**
DXM		
ever used (%)	4	**4**
used last 6 mths (%)	0	**3**
MPTP		
ever used (%)	0	**3**
used last 6 mths (%)	0	**3**
NBOMe		
ever used (%)	Data not collected until 2014	**3**
used last 6 mths (%)		**3**
MDPV / Ivory Wave		
ever used (%)	2	**3**
used last 6 mths (%)	2	**0**
LSA		
ever used (%)	2	**2**
used last 6 mths (%)	0	**1**
5-MeO-DMT		
ever used (%)	0	**2**
used last 6 mths (%)	0	**1**
Benzo Fury / 6-APB		
ever used (%)	0	**2**
used last 6 mths (%)	0	**1**
Datura		
ever used (%)	2	**2**
used last 6 mths (%)	0	**0**
Mescaline		
ever used (%)	7	**1**
used last 6 mths (%)	4	**0**
BZP		
ever used (%)	4	**0**
used last 6 mths (%)	0	**0**

** p<0.05; ** p<0.01; *** p<0.001*

Table 13: NPS use among EDRS participants, NT (continued)

	2013 (N=45)	**2014 (N=100)**
MDAI		
ever used (%)	0	**1**
used last 6 mths (%)	0	**0**
PMA		
ever used (%)	0	**1**
used last 6 mths (%)	0	**0**
Methoxetamine / MXE		
ever used (%)	0	**0**
used last 6 mths (%)	0	**0**
5-IAI		
ever used (%)	0	**0**
used last 6 mths (%)	0	**0**
DOI (Death on Impact)		
ever used (%)	0	**0**
used last 6 mths (%)	0	**0**
Other substituted cathinone		
ever used (%)	Data not collected until 2014	**0**
used last 6 mths (%)		**0**

Source: EDRS participant interviews 2013, 2014
** p<0.05; ** p<0.01; *** p<0.001*

Key expert comments

KE reported that they had observed a reduction in NPS use in the NT, possibly due to the less than favourable effects of use being reported. One KE reported that young people started using synthetic cannabinoids to reduce their cannabis use; however, their use had since ceased.

Although KE agreed that use of NPS occurred at mostly low levels, it was reported that there had been a number of high profile cases of people using NPS which highlighted the potentially serious health harm consequences of use (e.g. psychosis, death). KE expressed concern that the ingredients in NPS and the long-term effects of use were still unknown.

Law enforcement KE commented that cathinone-type substances were on the increase and synthetic cannabinoids continued to be seized within the NT, either through person searches, but also increasingly in mail interceptions. It was noted that many of the new synthetic cannabinoids are no longer captured by existing legislation, including by existing analogue provisions.

5 DRUG MARKET: PRICE, PURITY, AVAILABILITY

5.1 Ecstasy

Summary:

- *Price*: $40 per pill, stable.
- *Purity*: Currently medium to high and mostly stable.
- *Availability*: Currently easy to very easy to obtain and stable.
- KE reported that the price and purity of ecstasy was variable in the NT.

5.1.1 Price

The majority (82%) of participants were able to comment on the price of ecstasy tablets in Darwin. The median price was reported by users to be $40 per tablet (range $20-60), $321 per gram of powder (range $40-600), $42 per capsule (range $25-70) and $384 per gram of MDMA crystal (range $40-600) (Table 14).

Table 14: Median price of ecstasy forms and price changes as reported by EDRS participants, NT

	2007 (N=66)	2008 (N=55)	2009 (N=67)	2013 (N=45)	**2014 (N=100)**
Median price $ (range)					
Per ecstasy pill	50 (35-60)	50 (30-50)	50 (17-70)	35 (15-50)	**40 (20-60)**
Per gram powder	N/A	N/A	N/A	N/A	**350 (40-600)^**
Per capsule	N/A	N/A	N/A	N/A	**40 (25-70)**
Per gram crystal	Data not available until 2013			N/A	**400 (40-600)**
Price change of ecstasy pills, powder and capsules:					
Increased (%)	12	0	5	23	**28**
Stable (%)	76	80	83	50	**52**
Decreased (%)	9	4	3	4	**7**
Fluctuated (%)	3	9	9	23	**13**
Price change of MDMA crystal:	Data not available until 2014				
Increased (%)					**6**
Stable (%)					**70**
Decreased (%)					**6**
Fluctuated (%)					**18**

Source: EDRS participant interviews 2007, 2008, 2009, 2013, 2014
Note: Response option 'don't know' was removed from analyses from 2010 onward
^ Small numbers reporting, interpret with caution
N/A: No data available

In relation to price changes of various ecstasy forms over the six months preceding the interview, the majority felt that ecstasy pills, powder and capsules had either remained stable (52%) or increased (28%), whereas the majority reported that the price of MDMA crystal had remained stable (70%).

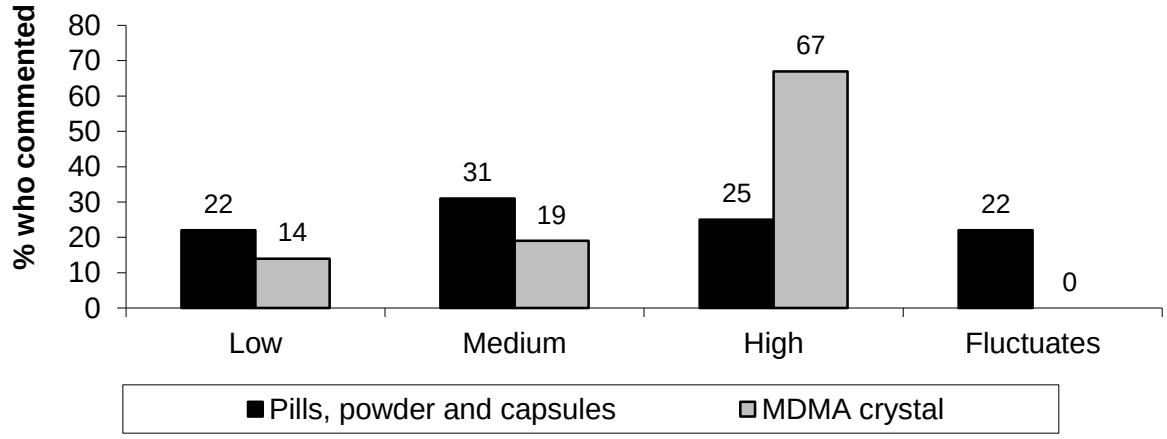
Participants were asked questions regarding their purchasing of ecstasy over the last six months. Participants reported that they had purchased ecstasy from a median of 3 people (range 1-20). While one-third (33%) of the sample usually purchased ecstasy for themselves only, the majority (65%) had purchased ecstasy for themselves and others. When asked about how frequently they purchased ecstasy, the majority of participants reported that they had bought ecstasy either monthly or less (44%) or fortnightly to monthly (32%). The median number of tablets purchased was 3 (range 1-100).

5.1.2 Purity

Current purity

Figure 28 presents EDRS participants' reports of ecstasy purity in 2014. As illustrated, there was less agreement on the purity of ecstasy pills, powder and capsules compared to MDMA crystals. The highest proportion reported that pills, powder and capsules were of medium purity; however, the majority of participants clearly indicated that MDMA crystal was of high purity.

Figure 28: EDRS participants' reports of current ecstasy purity, NT

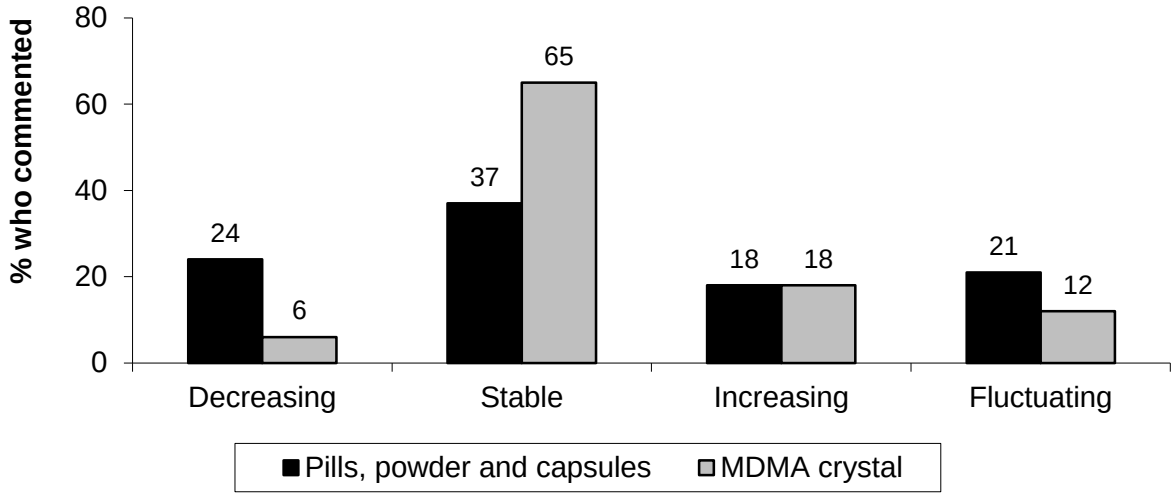


Source: EDRS participant interviews 2014
Note: Response option 'don't know' was removed from analyses from 2010 onward
* Of those who commented (pills, powder and capsules n=81; MDMA crystal n=21).

Purity change

Figure 29 presents EDRS participants' reports of changes in the purity of ecstasy over the six months prior to the interview. Over half of the sample reported that the purity of ecstasy pills, powder and capsules either remained stable (37%) or decreased (24%). Participants reported that the purity of MDMA crystal remained mostly stable (65%) over this time.

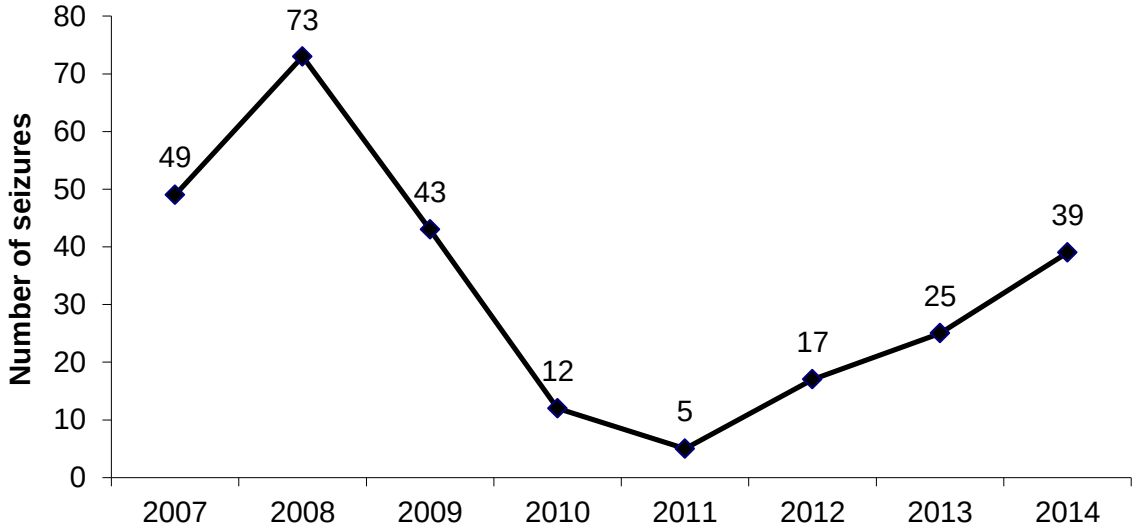
Figure 29: EDRS participants' reports of changes in ecstasy purity in the past six months*, NT



Source: EDRS participant interviews 2014
Note: 'Don't know' responses removed
* Of those who commented (pills, powder and capsules n=62; MDMA crystal n=17).

Figure 30 presents data on the number of ecstasy seizures made by the NT police. It should be noted that the data does not relate to purity, and the drug name under which the seizure is coded is the drug that it is traded as, and has not been forensically tested. Since 2011, there has been an upward trend in the number of ecstasy seizures in the NT, with 39 seizures recorded for 2014.

Figure 30: Number of ecstasy seizures, NT, 2007-2014

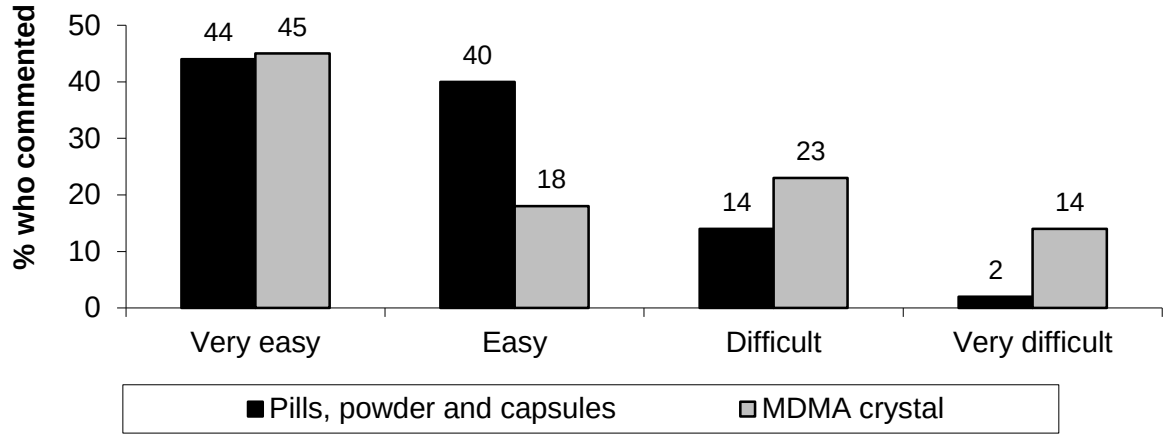


Source: NT Police Real-time Online Information Management System (PROMIS)
Note: Drugs are classified according to information available to police at the time of seizure; however, no toxicological analyses are undertaken to establish the content of drugs found. Data from 1 July 2012 has been revised due a recording inconsistency.

5.1.3 Availability

The majority (84%) of EDRS participants reported that it was currently 'easy' or 'very easy' to obtain ecstasy pills, powder or capsules. Similarly, although to a lesser extent, it was reported that MDMA crystal was also relatively easy to obtain (45% and 18%) see Figure 31.

Figure 31: EDRS participants' reports of current ecstasy availability, NT

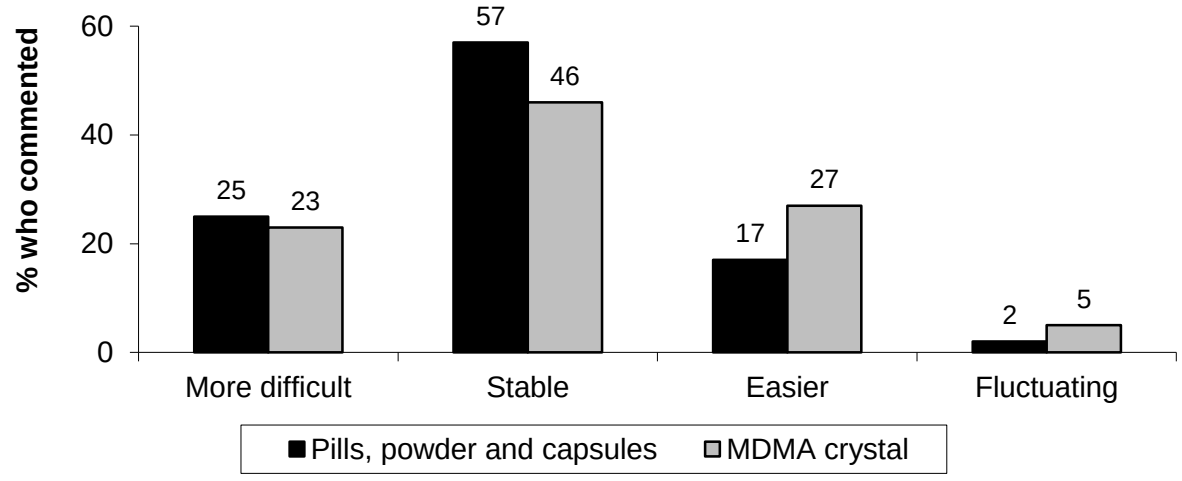


Source: EDRS participant interviews 2014
Note: Response option 'don't know' was removed from analyses from 2010 onward
* Of those who commented (pills, powder and capsules n=80; MDMA crystal n=22).

Availability change

Figure 32 presents EDRS participants' reports of changes in the availability of ecstasy over the six months prior to the interview. While the majority of the sample reported the availability of ecstasy pills, powder and capsules to be stable (57%) or more difficult (25%), the majority reported MDMA crystal availability to be stable (46%) or easier (27%).

Figure 32: EDRS participants' reports of changes in ecstasy availability in the past six months*, NT



Source: EDRS participant interviews 2014
Note: 'Don't know' responses removed
* Of those who commented (pills, powder and capsules n=60; MDMA crystal n=22).

Key expert comments

A number of KE reported that the price and purity of ecstasy had continued to fluctuate. KE reported that an ecstasy pill sold for $30 to $50, depending on the purity. A health KE emphasised that it was very difficult to monitor a safe usage of ecstasy when the purity is constantly changing.

5.2 Methamphetamine

Summary:

Speed

- *Price*: $350 per gram and stable.
- *Purity*: Currently medium to high and appeared to be stable.
- *Availability*: Currently easy to very easy to obtain, mostly stable.

Base

- *Price*: $200 per gram and stable.
- *Purity*: Currently medium to high and appeared to be stable.
- *Availability*: Currently easy to obtain, mostly stable.

Crystal

- *Price*: $150 per point and stable.
- *Purity*: Currently medium to high and appeared to be stable.
- *Availability*: Currently very easy to obtain, mostly stable.

- KE agreed that crystal had become easier to access and the purity has increased.

5.2.1 Price

Speed

Twenty-four participants reported on the price of speed over the six months prior to the interview (Table 15). The median price reported the last time speed was purchased was $350 per gram (range $80-900) and $100 per point (range $60-150); however, since smaller numbers reported on speed per point, these figures must be interpreted with caution (Table 15). The majority of participants (77%) who commented believed the price of speed had remained stable over the preceding six months.

Base

Only four participants were able to comment on the price of base over the preceding six months. The median price for a gram of base was $200 (range $200); however, caution is advised due to small numbers reporting (Table 15). These four participants commented on changes to the price of base over this time, and all reported that it had remained stable.

Crystal

Nineteen participants were able to comment on the price of crystal over the preceding six months. All participants reported the price of crystal per point, whereby the median price for a point of crystal was $150 (range $80-400) (Table 15). The majority of participants (69%) who commented on changes to the price of crystal over this time reported that it had remained stable.

Table 15: Median price of various methamphetamine forms purchased by EDRS participants, NT

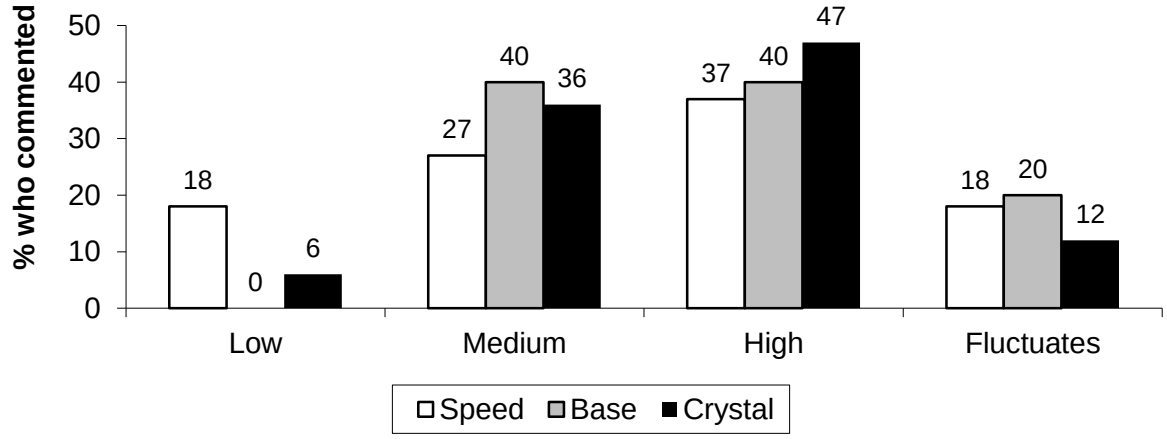
$	2007	2008	2009	2013	**2014**
Speed	n=23	n=8	n=24	n=5	**n=24**
Point (range)	50 (50)^	-	50 (50)	-	**100 (60-150)^**
Gram (range)	250 (100-350)	300 (15-700)^	300 (100-800)	300 (250-450)^	**350 (80-900)**
Base	n=12	n=1	n=3	n=0	**n=3**
Point (range)	35 (30-40)^	-	55 (50-60)^	-	**150 (150)^**
Gram (range)	350 (200-500)^	400 (400)^	350 (300-400)^	-	**200 (200)^**
Crystal	n=9	n=0	n=3	n=4	**n=19**
Point (range)	45 (40-50)^	-	100 (50-100)^	200 (200)^	**150 (80-400)**
Gram (range)	250 (100-350)^	-	1000 (1000)^	300 (200-600)^	**850 (30-1200)**

Source: EDRS participant interviews 2007, 2008, 2009, 2013, 2014
^ Small numbers reporting, interpret with caution

5.2.2 Purity

Figure 33 illustrates that the current purity of all three forms of methamphetamine was high to medium. It appears that the consensus among participants on purity was lowest for speed and highest for crystal.

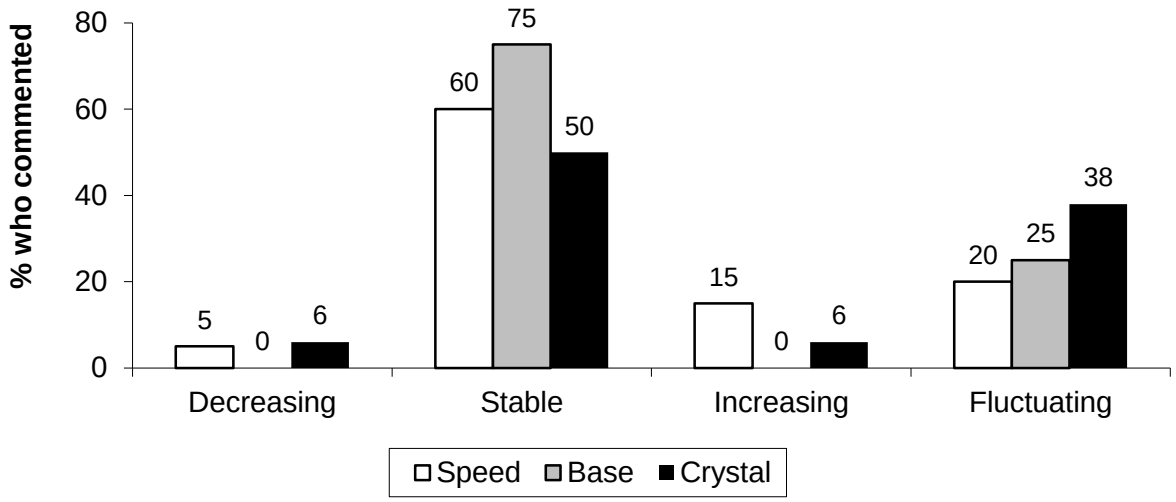
Figure 33: EDRS participants' reports of current methamphetamine purity*, NT



Source: EDRS participant interviews 2014
Note: 'Don't know' responses removed
* Of those who commented (speed n=22; base n=5; crystal n=17).

Figure 34 presents data on the perceived change in purity of the forms of methamphetamine over the six months preceding the interview. The purity of speed, base and crystal was largely reported to have remained stable (60%; 75%; 50%). However, a notable proportion reported that each form of methamphetamine had been fluctuating in purity, and this was most evident amongst those reporting the purity of crystal.

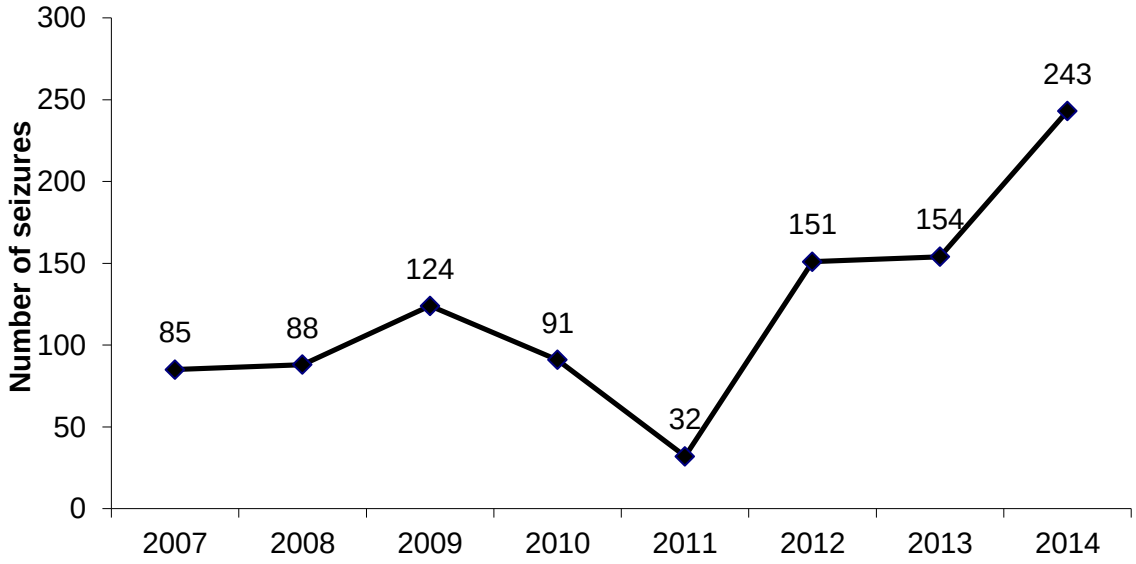
Figure 34: EDRS participants' reports of changes in methamphetamine purity in the past six months*, NT



Source: EDRS participant interviews 2014
Note: 'Don't know' responses removed
* Of those who commented (speed n=20; base n=4; crystal n=16).

Figure 35 presents data on the number of amphetamine/methamphetamine seizures made by the NT police. It should be noted that the data does not relate to purity, and the drug name under which the seizure is coded is the drug that it is traded as, and has not been forensically tested. The number of amphetamine/methamphetamine seizures in the NT has risen markedly since 2011, with 2014 data indicating that 243 amphetamine/ methamphetamine seizures had been made in the NT during the year.

Figure 35: Number of amphetamine/methamphetamine seizures, NT, 2007-2014

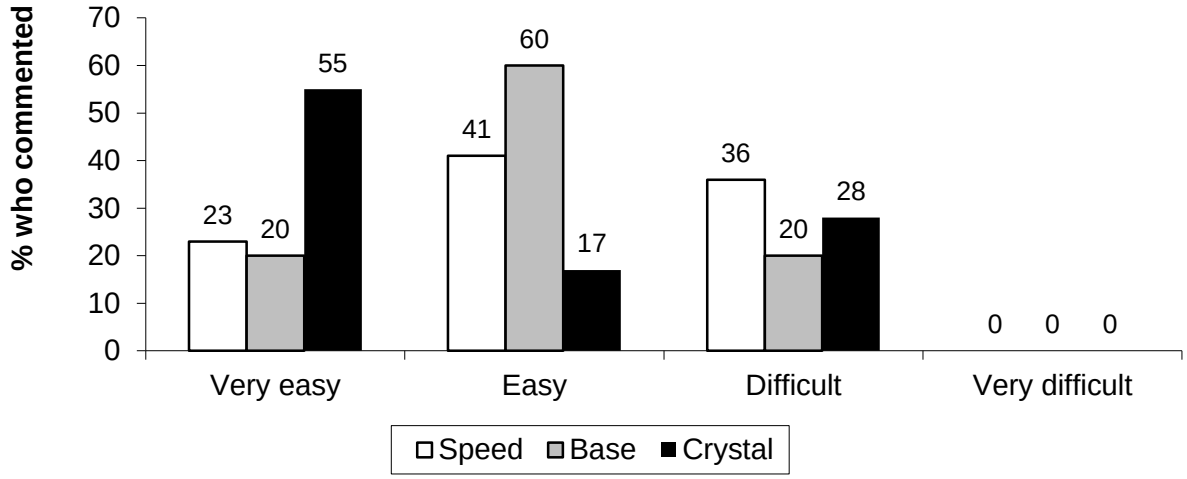


Source: NT Police Real-time Online Information Management System (PROMIS)
Note: Drugs are classified according to information available to police at the time of seizure; however, no toxicological analyses are undertaken to establish the content of drugs found. Data from 1 July 2012 has been revised due a recording inconsistency.

5.2.3 Availability

All forms of methamphetamine were reported to be easily available among Darwin participants. Most notably, crystal was reported to be 'very easy' by the majority of users. Base was most often reported to be 'easy' to obtain (60%). The availability of speed appeared to be more mixed; however, two-thirds reported that it was currently easily available (Figure 36).

Figure 36: EDRS participants' reports of current availability of methamphetamine forms*, NT



Source: EDRS participant interviews 2014
* Of those who commented (speed n=22; base n=5; crystal n=18).

The majority of the participants who commented on the change of speed availability reported that it had been mostly stable (44%) or more difficult (33%). Similarly with base, two of the four participants commenting reported that ease of base access had remained stable (50%). Finally for crystal, the largest proportions reported that availability had either remained stable (47%) or had become increasingly easier (47%).

Key expert comments

KE reported that there had been an increase in the use of crystal across all community groups, which may be due to its increasing availability and that crystal use is becoming more social acceptable among certain groups. Law enforcement KE reported that the vast majority of methamphetamine is transported into the NT from interstate. There has been a slight increase in the number of small clan labs discovered operating in the NT, and KE suspect that this trend will continue.

KE also reported that both the purity and demand of crystal had been increasing. Health KE reported that as an impact of the purity level increasing, they are experiencing an increase in psychosis related to methamphetamine use; however, there are currently limited effective interventions available for treatment.

5.3 Cocaine

Summary:

- *Price*: $350 per gram, stable.
- *Purity*: Medium to high, mostly stable.
- *Availability*: Currently difficult, stable.

5.3.1 Price

Thirteen participants were able to comment on the price of cocaine in the NT. The median price per gram was $350 (range $100-800). This figure has continued to remain relatively stable since the previous data collection point in 2013 (Table 16).

The majority of participants (90%) who commented on whether the price of cocaine had changed in the NT over the preceding six months believed that it had remained stable.

Table 16: Median price of cocaine purchased by EDRS participants, NT

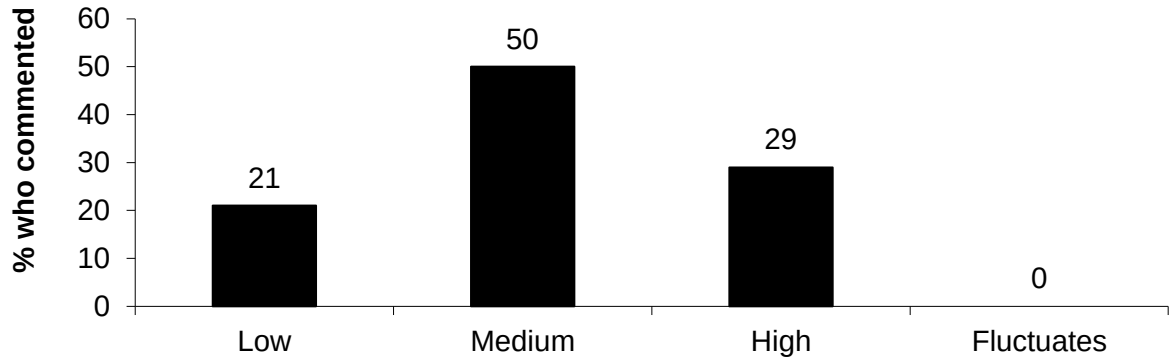
$	2007 (n=5)	2008 (n=2)	2009 (n=5)	2013 (n=6)	**2014 (n=13)**
Per gram	350^	350^	325^	325^	**350**
(range)	(250-1200)	(300-400)	(50-350)	(300-450)	**(100-800)**

Source: EDRS participant interviews 2007, 2008, 2009, 2013, 2014
^ Small numbers reporting, interpret with caution

5.3.2 Purity

Fourteen EDRS participants were able to comment on the current purity of cocaine. The majority of participants rated cocaine purity as 'medium' (50%), followed by 'high' (29%) and 'low' (21%) (Figure 37). There was general agreement amongst participants who were able to comment on how the purity of cocaine had changed over the preceding six months, with the majority reporting that cocaine purity had remained stable (73%).

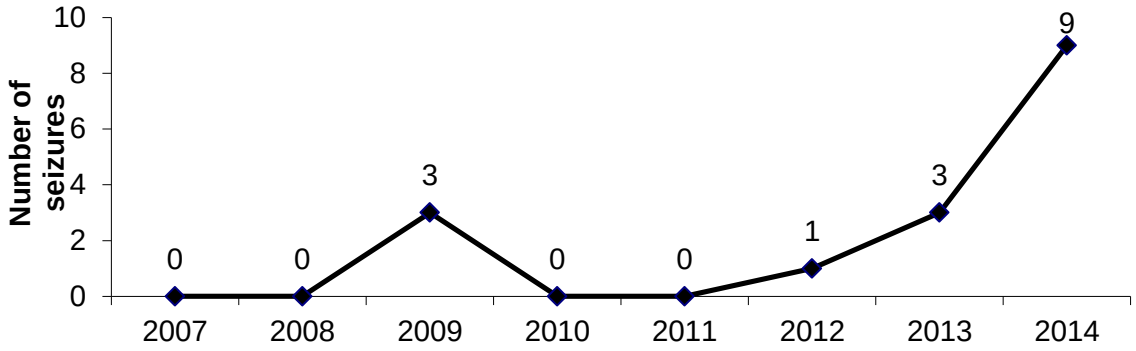
Figure 37: EDRS participants' reports of current purity of cocaine*, NT



Source: EDRS participant interviews 2014
Note: Response option 'don't know' was removed from analyses
* Of those who commented (n=14)

Figure 38 presents data on the number of cocaine seizures made by the NT police. It should be noted that the data does not relate to purity, and the drug name under which the seizure is coded is the drug that it is traded as, and has not been forensically tested. The number of cocaine seizures has continued to remain low over time in the NT, with less than ten seizures per year.

Figure 38: Number of cocaine seizures, NT, 2007-2014

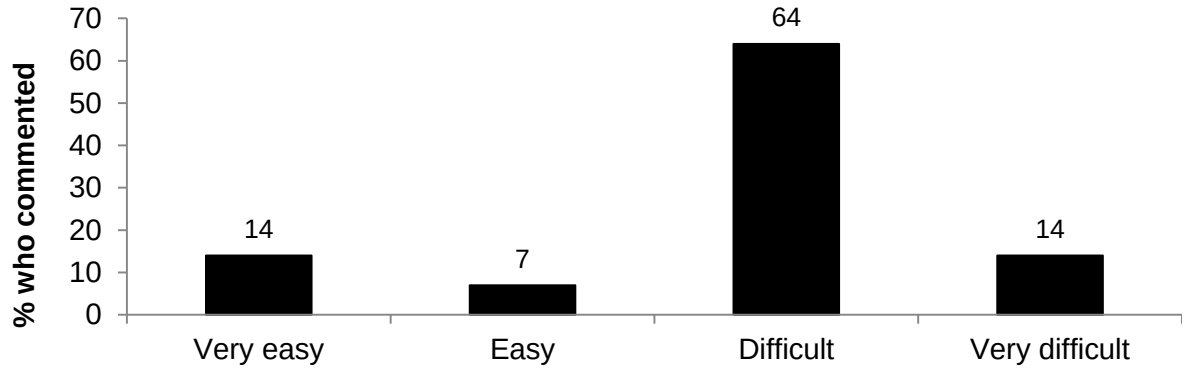


Source: NT Police Real-time Online Information Management System (PROMIS)
Note: Drugs are classified according to information available to police at the time of seizure; however, no toxicological analyses are undertaken to establish the content of drugs found. Data from 1 July 2012 has been revised due a recording inconsistency.

5.3.3 Availability

Fourteen participants commented on the availability of cocaine in the NT. Of these, the majority (64%) believed cocaine was currently 'difficult' to obtain (Figure 39). Almost three-quarters (73%) of those who commented (n=11) stated that the availability of cocaine had remained stable over the preceding six months.

Figure 39: EDRS participants' reports of current availability of cocaine*, NT



Source: EDRS participant interviews 2014
Note: Response option 'don't know' was removed from analyses
* Of those who commented (n=14)

Key expert comments

KE did not provide comment on the price, purity or availability of cocaine in the NT.

5.4 LSD

Summary:

- *Price*: $25 per tab, stable.
- *Purity*: Currently high, stable.
- *Availability*: Currently easy to very easy to obtain, stable.

5.4.1 Price

Twenty-three participants reported on the price of LSD (Table 17). The median price last paid for a tab of LSD was $25 (range $10-40), which appears to have decreased notably compared to the median price reported in 2013. The majority of those who commented (69%; n=11) reported that the price had remained stable over the preceding six months, with only a small portion reporting that the price had decreased or fluctuated (13% respectively).

Table 17: Median price of LSD purchased by EDRS participants, NT

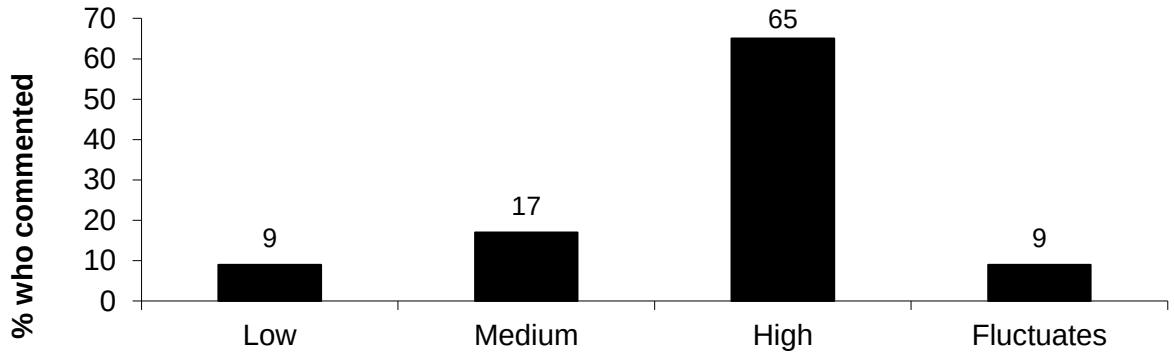
$	2007 (n=24)	2008 (n=5)	2009 (n=3)	2013 (n=9)	**2014 (n=23)**
Per tab (range)	25 (20-30)	20^ (15-20)	25^ (20-40)	35^ (20-50)	**25 (10-40)**

Source: EDRS participant interviews 2007, 2008, 2009, 2013, 2014
^ Small numbers reporting, interpret with caution

5.4.2 Purity

Twenty-three participants commented on the purity of LSD. Of these, 65% reported that LSD was currently of 'high' purity and 17% reported 'medium' purity (Figure 40). The majority reported that purity had remained stable (56%) over the past six months; however, a smaller proportion (25%) reported that it had fluctuated.

Figure 40: EDRS participants' reports of current purity of LSD*, NT

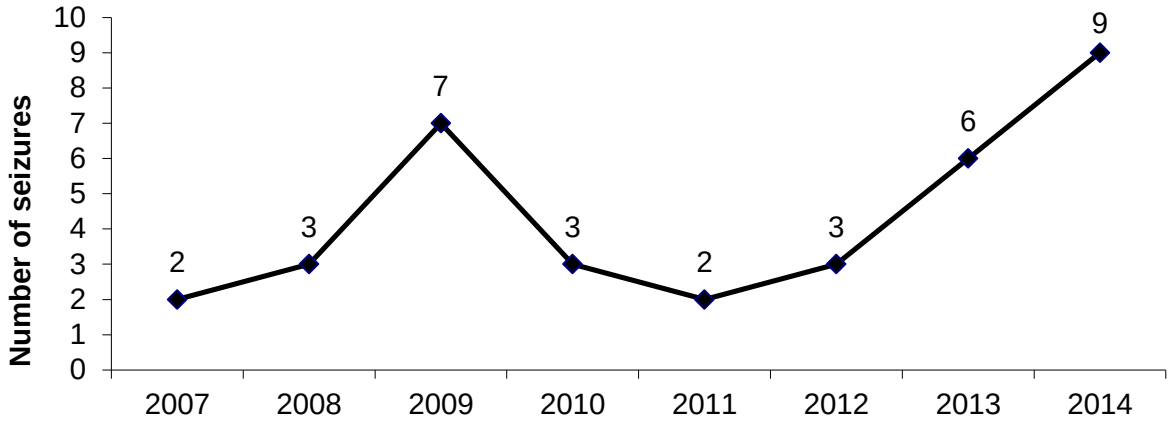


Source: EDRS participant interviews 2014
Note: Response option 'don't know' was removed from analyses
* Of those who commented (n=23)

Figure 41 presents data on the number of LSD seizures made by the NT police. It should be noted that the data does not relate to purity, and the drug name under which the seizure is

coded is the drug that it is traded as, and has not been forensically tested. Overall, LSD seizure numbers have remained low over time in the NT, with less than ten seizures per year.

Figure 41: Number of LSD seizures, NT, 2007-2014

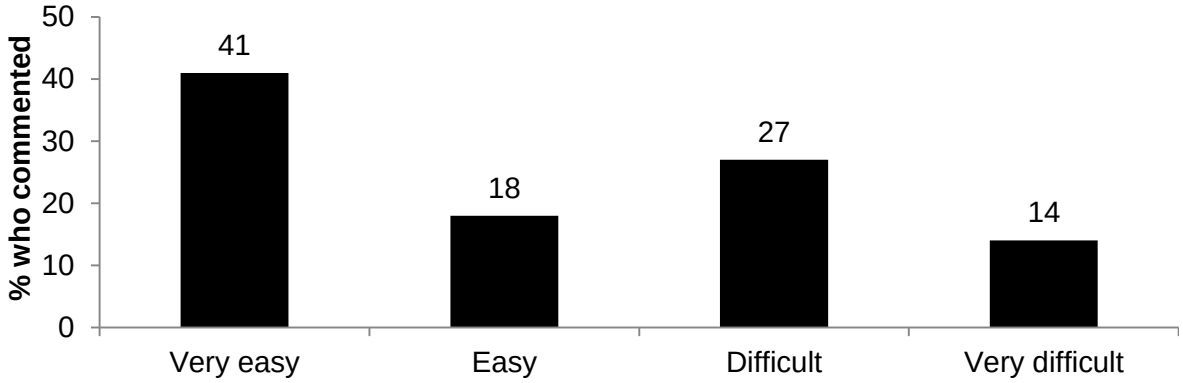


Source: NT Police Real-time Online Information Management System (PROMIS)
Note: Drugs are classified according to information available to police at the time of seizure; however, no toxicological analyses are undertaken to establish the content of drugs found. Data from 1 July 2012 has been revised due a recording inconsistency.

5.4.3 Availability

Twenty-two participants commented on the availability of LSD. The majority of respondents (59%) believed that LSD was currently 'easy' or 'very easy' to obtain; however, 27% reported that it was 'difficult' (Figure 42). The majority of those who commented on availability of LSD reported that it had remained stable (53%) and 24% reported that availability had become easier over the past six months.

Figure 42: EDRS participants' reports of current availability of LSD*, NT



Source: EDRS participant interviews 2014
Note: Response option 'don't know' was removed from analyses
* Of those who commented (n=22)

Key expert comments

KE did not provide comment on the price, purity or availability of LSD in the NT.

5.5 Ketamine

Summary:

- There was no reliable NT data reported on the price, purity or availability of ketamine for 2014.

Only three participants in the NT EDRS provided information on the price, purity or availability of ketamine in Darwin for 2014. Due to small numbers, these data have not been published.

Key expert comments

KE did not provide comment on the price, purity or availability of ketamine in the NT.

5.6 GHB

Summary:

- There was no NT data reported on the price, purity or availability of GHB for 2014.

No participants in the NT EDRS provided information on the price, purity or availability of GHB in Darwin for 2014.

Key expert comments

KE did not provide comment on the price, purity or availability of GHB in the NT.

5.7 Cannabis

Summary:

Hydro

- *Price*: $30 per gram; $450 per ounce, stable.
- *Potency*: Currently medium to high, stable.
- *Availability*: Currently very easy to obtain, stable.

Bush

- *Price*: $30 per gram; $400 per ounce, stable.
- *Potency*: Currently medium to low, stable.
- *Availability*: Currently easy to very easy to obtain, stable.

- KE reported that the availability of cannabis was high, and the price had remained stable.

From 2006, the EDRS made a distinction between indoor-cultivated 'hydroponic' cannabis (hydro) and outdoor-cultivated 'bush' cannabis for price, potency and availability. In 2014, only participants who were able to distinguish between hydro and bush provided information about the price, purity and availability of cannabis.

5.7.1 Price

Table 18 presents the reported price for one ounce and one gram of hydro and bush cannabis.[15] These data should be interpreted with caution since in 2008 participants were asked to report the 'median' price paid for these quantities, whereas from 2009 participants were asked to report what they paid the last time they purchased this amount.

Table 18: Median price of hydroponic and bush cannabis purchased by EDRS participants, NT

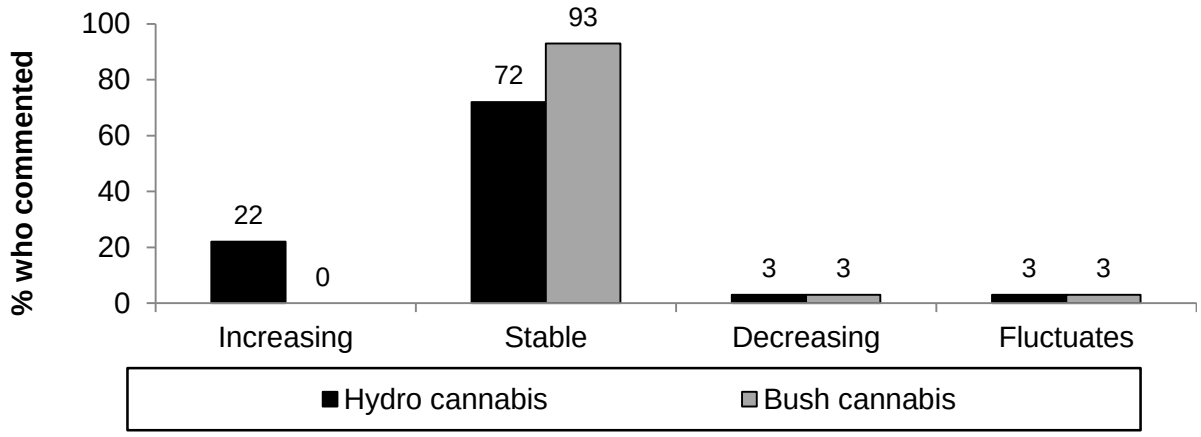
$	2007	2008	2009	2013	**2014**
Hydro	n=22	n=2^	n=6^	n=3^	**n=20**
Per ounce (range)	350 (200-500)	350 (350)	360 (150-500)	320 (300-400)	**450 (280-500)**
Per gram (range)	n=4^ 22.5 (15-30)	n=3^ 20 (17-30)	n=8^ 30 (10-30)	n=2^ 40 (30-50)	**n=21 30 (20-60)**
Bush	n=7^	n=3^	n=3^	n=2^	**n=13**
Per ounce (range)	300 (180-400)	300 (250-300)	320 (250-400)	200 (150-250)	**400 (100-450)**
Per gram (range)	n=1^ 30 (30)	n=3^ 20 (10-20)	n=6^ 22.5 (10-50)	n=1^ 30 (30)	**n=14 30 (15-30)**

Source: EDRS participant interviews 2007, 2008, 2009, 2013, 2014
^ Small numbers reporting, interpret with caution

[15] Data regarding the price of hash or hash oil is not presented here due to small numbers reporting.

Participants were asked about changes to the price of hydro and bush over the preceding six months. The vast majority reported that it had been stable both for hydro (72%) and bush (93%) (Figure 43).

Figure 43: EDRS participants' reports of price change of hydro and bush cannabis*, NT

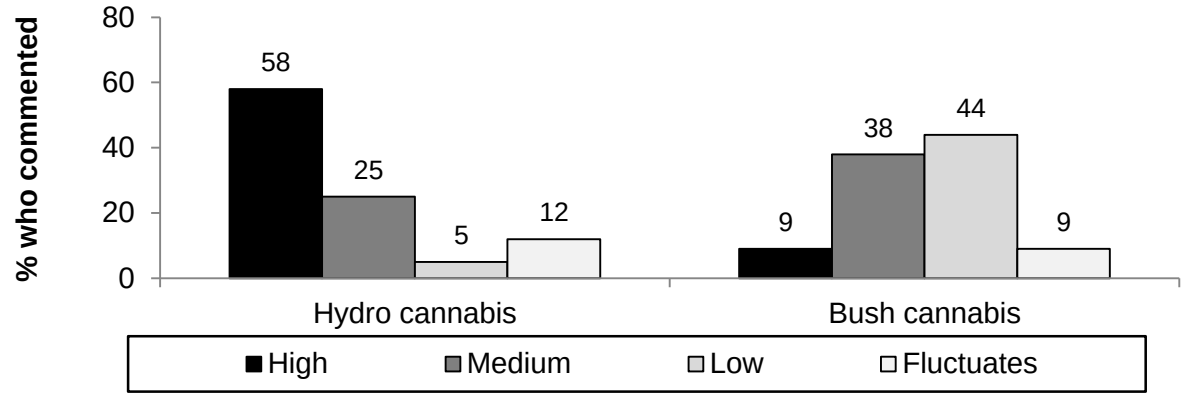


Source: EDRS participant interviews 2014
Note: 'Don't know' responses removed from analyses
* Of those who commented (n=36 for hydro, n=30 for bush)

5.7.2 Potency

Figure 44 presents participants' perceptions of the current potency of hydro and bush cannabis. The majority reported that hydro was currently of 'high' or 'medium' potency (58% and 25% respectively), whereas less than half of those who commented on bush potency reported that it was currently of 'high' or 'medium' potency (9% and 38% respectively).

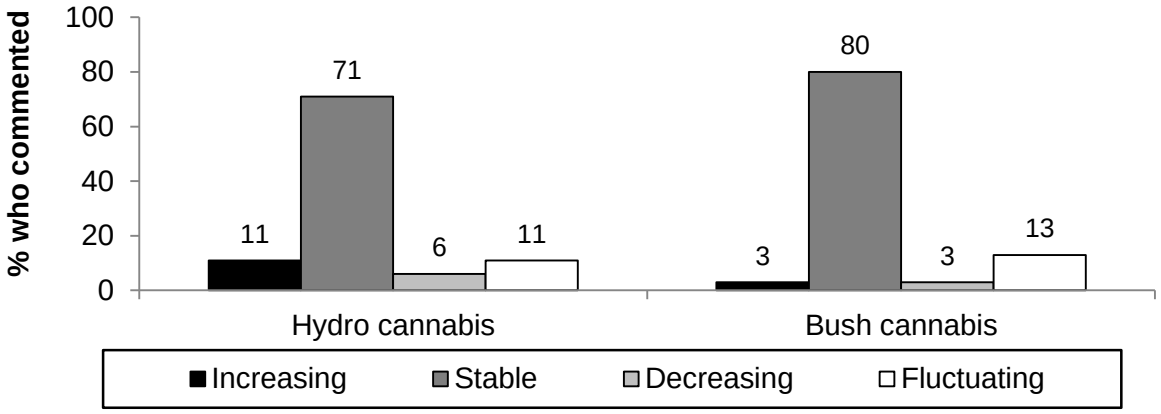
Figure 44: EDRS participants' reports of current potency of hydro and bush cannabis*, NT



Source: EDRS participant interviews 2014
* Of those who commented (n=40 for hydro, n=34 for bush)

Participants were asked to comment on changes in the potency of cannabis over the preceding six months. Respondents agreed that the potency of hydro and bush had remained relatively stable over this time (71% and 80% respectively) (Figure 45).

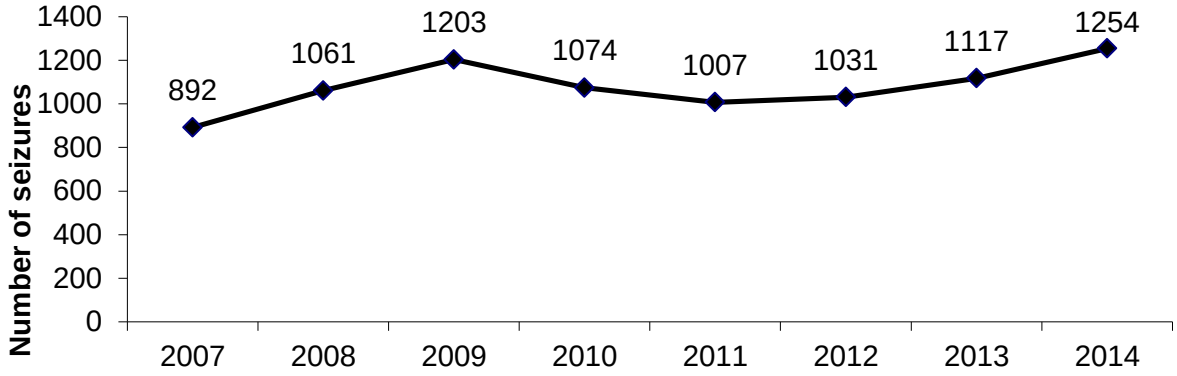
Figure 45: EDRS participants' reports of change in potency of hydro and bush cannabis over the last six months*, NT



Source: EDRS participant interviews 2014
* Of those who commented (n=34 for hydro, n=30 for bush)

Figure 46 presents data on the number of cannabis seizures made by the NT police. It should be noted that the data does not relate to purity, and the drug name under which the seizure is coded is the drug that it is traded as, and has not been forensically tested. There has been a steady increase in the number of cannabis seizures per year, with 2014 recording the highest number of seizures in the NT over the past eight years.

Figure 46: Number of cannabis seizures, NT, 2007-2014

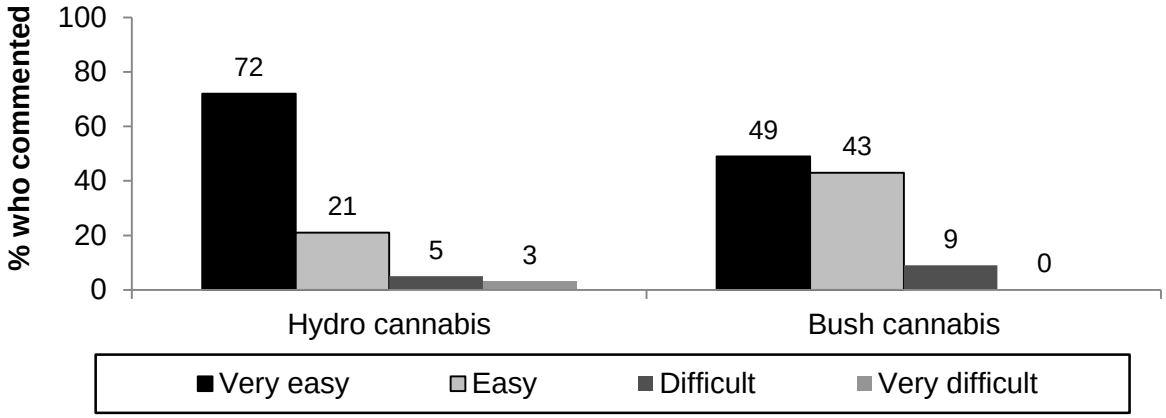


Source: NT Police Real-time Online Information Management System (PROMIS)
Note: Drugs are classified according to information available to police at the time of seizure; however, no toxicological analyses are undertaken to establish the content of drugs found. Data from 1 July 2012 has been revised due a recording inconsistency.

5.7.3 Availability

Figure 47 presents data on how the EDRS participants reported current availability of hydro and bush. Almost all respondents believed that hydro was currently 'easy' (21%) or 'very easy' (72%) to obtain. Similarly, the majority of respondents reported that bush was 'easy' (43%) or 'very easy' (49%) to obtain in Darwin.

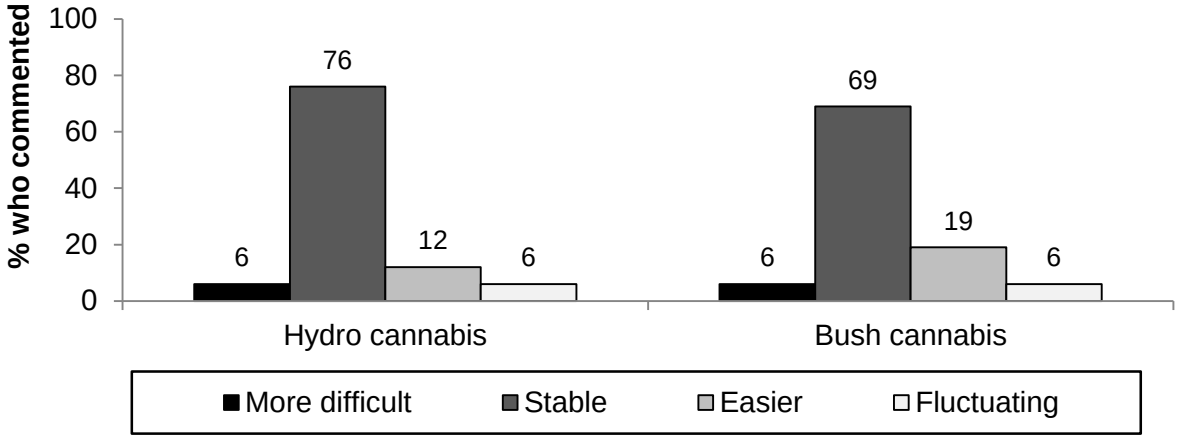
Figure 47: EDRS participants' reports of current availability of hydro and bush cannabis*, NT



Source: EDRS participant interviews 2014
* Of those who commented (n=39 for hydro, n=35 for bush)

The majority of those who commented reported that the availability of both hydro and bush had remained stable over the preceding six months (76% and 69% respectively) (Figure 48).

Figure 48: EDRS participants' reports of change in availability of hydro and bush cannabis over the last six months*, NT



Source: EDRS participant interviews 2014
* Of those who commented (n=33 for hydro, n=32 for bush)

Key expert comments

A law enforcement KE reported that cannabis has been the most prevalent drug seen in the NT by weight and number of seizures. Typically cannabis cost $30 per gram; however, it was reported that the price is highly variable in regional and remote areas of the NT.

6 HEALTH-RELATED TRENDS ASSOCIATED WITH ERD USE

Summary:

Overdose and hospital admissions

- One-in-five reported having overdosed on a stimulant drug and one-in-ten reported a depressant drug overdose throughout their lifetime.
- No hospital admissions in which the principal diagnosis was amphetamines, cocaine or cannabis were reported in the NT in 2012/13.

Service usage

- Nine participants reported that they had recently accessed a medical or health service in relation to their drug use.
- Treatment episodes for ecstasy and cocaine have remained relatively low over time in the NT. In contrast, there are notably higher numbers of presentations where amphetamine or cannabis was the principal drug of concern, and these rates have remained relatively stable from 2011/12 to 2012/13.

Self-reported problems associated with ERD use

- Participants commonly reported that their drug use resulted in exposure to risk of injury (36%), interfered with responsibilities (24%), and/or caused repeated social problems (15%).

Mental health

- One-in-five participants had recently experienced a mental health problem, and the majority of these participants had sought help from a health professional.
- Participants completed the K10. Levels of distress among the sample were comparable to Australian general population rates; however, over time there has appeared to be increasing levels of distress among ERD users.

6.1 Overdose

Participants were asked if they had ever overdosed on a stimulant drug or a depressant drug. In both instances, 'overdose' was defined as presenting with symptoms consistent with either stimulant toxicity (e.g. nausea and vomiting, chest pains, tremors, increased body temperature or heart rate, seizure, extreme paranoia, anxiety, panic or agitation, hallucinations, excited delirium) or symptoms consistent with a depressant overdose (e.g. reduced level of consciousness, respiratory depression, turning blue, collapsing). As such, the following sections are based on participants' understanding of these definitions and their opinions as to whether they had overdosed.

6.1.1 Stimulant overdose

Approximately one-in-five (18%) participants reported having overdosed on a stimulant drug throughout their lifetime. Participants reported having experienced a median of 1.5 overdoses (range 1-10), and that their last overdose had occurred a median of 12 months ago (range 1-24).

Fourteen participants reported having overdosed on a stimulant drug within the preceding 12 months. These overdoses most commonly occurred at a live music event (27%), at their own home (18%) or at a friend's home (18%). The majority of participants who overdosed felt that there was a sober person present to assist them (73%).

The participants who had recently overdosed (i.e. within the last year) were asked to identify the main drug to which they attributed their last overdose and also to identify other drugs they had used. Ecstasy was reported by the majority of participants as the drug to have caused the overdose (64%); however, smaller proportions reported crystal, LSD and ketamine (9% respectively). The majority of these participants (82%) had been using multiple drugs on that occasion, most commonly alcohol, cannabis, speed and LSD.

Of the participants who overdosed within the preceding year, the most severe symptoms reported included dizziness (n=4), paranoia (n=4), passing out (n=3) and increased heart rate (n=3). The majority (73%) did not receive any immediate treatment on the last occasion of stimulant overdose; however, three participants reported that they were monitored by friends. Only one participant sought information about stimulant overdose or treatment after their overdose episode, which was to ask friends/acquaintances about it.

Participants were asked how long they had been partying prior to overdosing on the last occasion. The participants had been partying for a median of 12 hours (range 1-48). The vast majority (91%) reported that their last stimulant overdose occurred during a heavy session.

6.1.2 Depressant overdose

Eight per cent of the current sample of EDRS participants reported having ever overdosed on a depressant drug. Those who had overdosed reported having done so on a median of 2 occasions (range 1-4) with the most recent having occurred a median of 8 months prior to the interview (range 1-204). Five participants reported having overdosed on a depressant drug within the year preceding the interview.

Alcohol (100%) was the main drug that participants attributed their most recent depressant overdose to. In contrast to those who recently experienced a stimulant overdose, the majority (n=3) of those who had recently overdosed on a depressant drug reported not having used any other drugs on that occasion. However, the remaining two participants reported also using cannabis with alcohol prior to their most recent depressant overdose.

The five participants were asked where they were when they last overdosed within the past 12 months. All participants reported private locations, including a private party (n=2), their own home (n=2) or a friend's home (n=1). Four of the five participants reported that there had been a sober person present at the time of overdose who was able to assist them.

Four participants reported the most severe symptom of their depressant overdoses as vomiting, with the other participant reporting losing consciousness as their most severe symptom. Two of the five participants who had recently experienced a depressant overdose reported that they did not receive any formal treatment or care on the last occasion. Two participants reported that they were monitored by friends. None of the participants sought information about drug overdose or treatment following their depressant overdose.

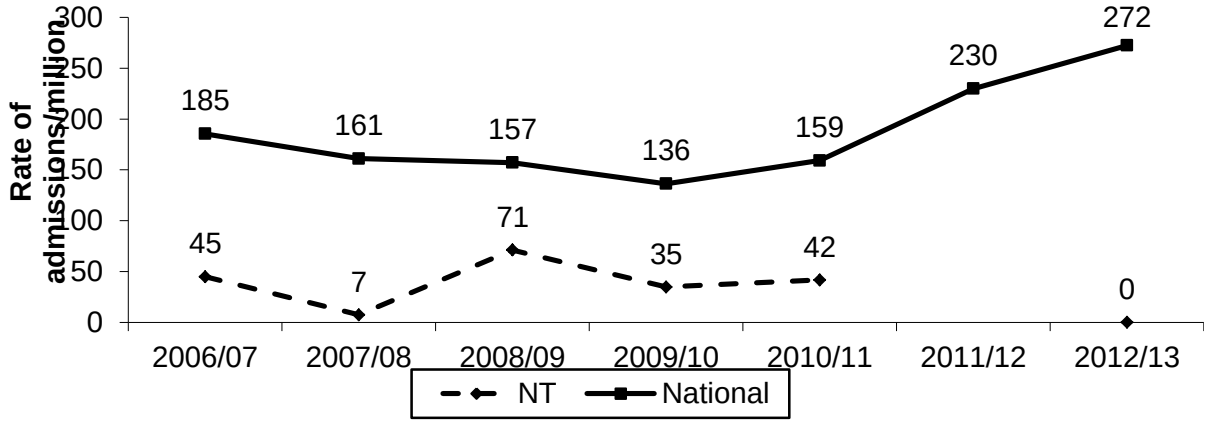
Participants reported that on their last occasion of overdosing on a depressant drug, they had been partying for a median of 6 hours (range 4-8). Three respondents reported that the overdose had occurred on a heavy session (60%) rather than on a normal night out.

6.2 Hospital admissions

6.2.1 Methamphetamine

The rate per million of inpatient hospital admissions among persons aged 15-54 years in which amphetamines were the principal diagnosis is shown in Figure 49 below. A principal diagnosis is defined as having been chiefly responsible for occasioning the patient's episode of care in hospital. There were no amphetamine-related hospital admissions in the NT in 2012/13, which is in contrast to the national rate which has increased over time.

Figure 49: Rates per million persons of principal amphetamine-related hospital admissions among persons aged 15-54, NT and nationally, 2006/07-2012/13*

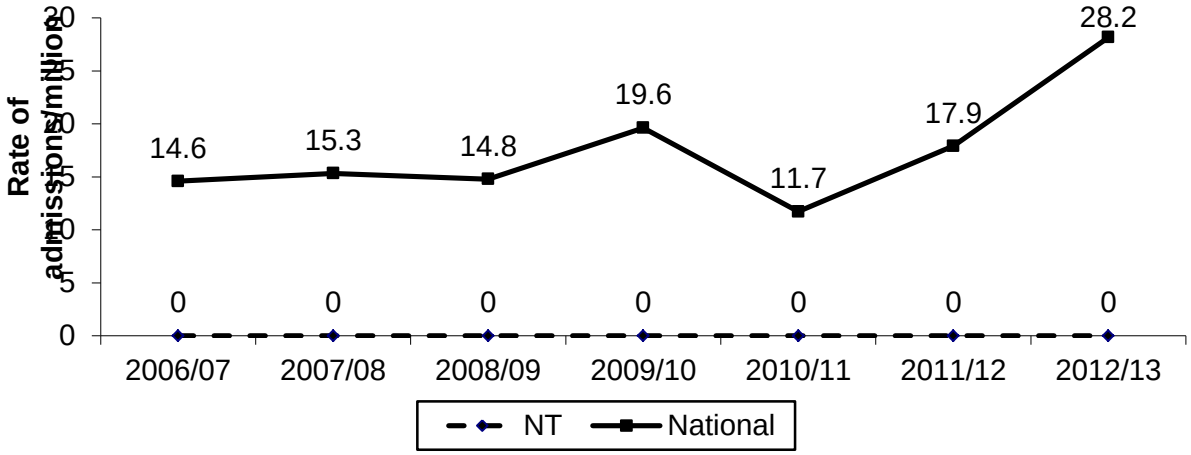


Source: National Hospital Morbidity Database, AIHW; Roxburgh and Burns (in press)
Note: The NT rate for 2011/12 is not presented because numbers were too small
* Data for 2013/14 were unavailable at time of publication

6.2.2 Cocaine

The rates of inpatient hospital admissions where cocaine was the principal diagnosis per million people aged 15-54 years are shown in Figure 50. The national rate increased to 28.2 per million persons in 2012/13, whilst the NT continued to report no incidences of cocaine-related admissions.

Figure 50: Rates per million persons of principal cocaine-related hospital admissions among persons aged 15-54, NT and nationally, 2006/07-2012/13*

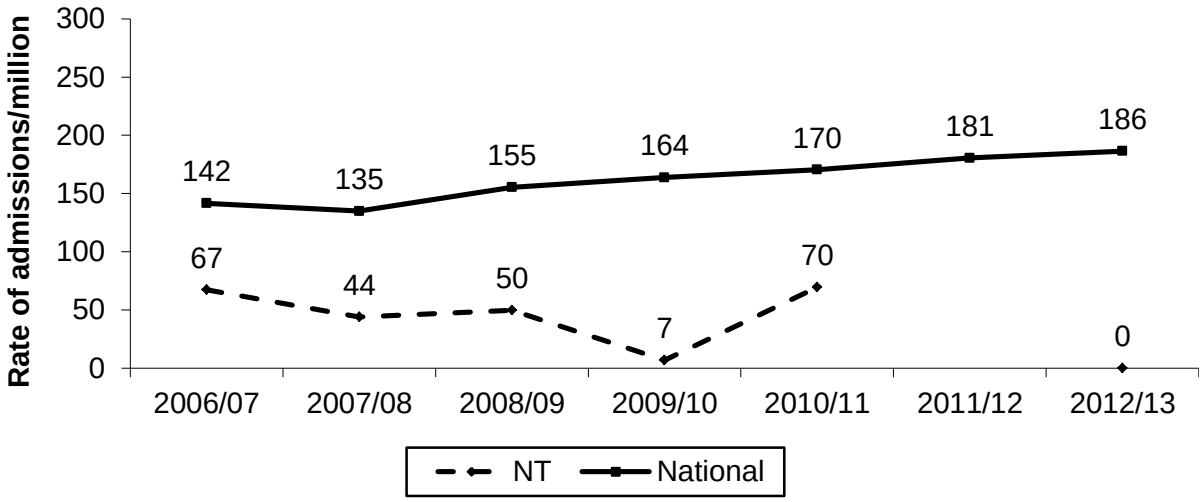


Source: National Hospital Morbidity Database, AIHW; Roxburgh and Burns (in press)
* Data for 2013/14 were unavailable at time of publication

6.2.3 Cannabis

Figure 51 shows the rates of hospital admissions where cannabis was the principal diagnosis per million people aged 15-54 years. Cannabis-related admissions nationally have steadily increased over time, with 2012/13 representing the highest rate recorded. The NT reported no incidences for cannabis-related hospital admissions in 2012/13.

Figure 51: Rates per million persons of inpatient hospital admissions where cannabis was the principal diagnosis aged 15-54 years, NT and nationally, 2006/07-2012/13*

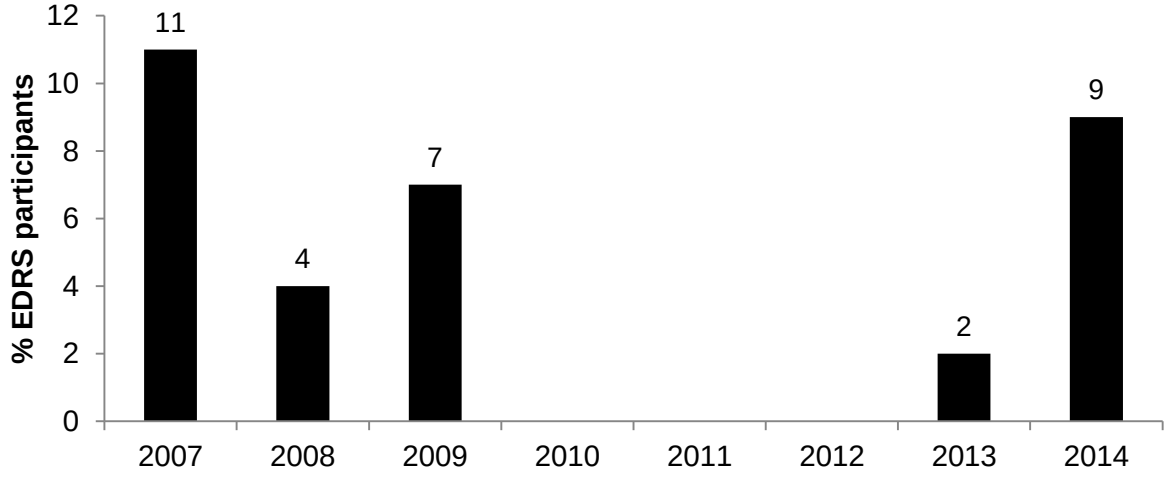


Source: National Hospital Morbidity Database, AIHW; Roxburgh and Burns (in press)
Note: The NT rate for 2011/12 is not presented because numbers were too small
* Data for 2013/14 were unavailable at time of publication

6.3 Help-seeking behaviour

Participants were asked if they had accessed any medical or health services in relation to their alcohol and/or drug use in the last six months. Nine participants (9%) interviewed in 2014 reported that they had done so, which is an increase from 2013 (Figure 52).

Figure 52: Proportion of EDRS participants who recently accessed a medical or health service in relation to drug use, NT



Source: EDRS participant interviews 2007, 2008, 2009, 2013, 2014

EDRS participants were asked whether they had thought about contacting any services or health professionals for reasons relating to their drug use, but failed to do so. Seven participants (7%) reported that they had thought about it but had not made contact with any services or health professionals. The various reasons that participants reported that they did not make contact included that they had 'no time' (n=1), 'didn't know what services were available' (n=1), 'not a priority' (n=1), 'I worked it out on my own' (n=1), 'not in the right position' (n=1) and two participants were 'not sure' why they did not make contact.

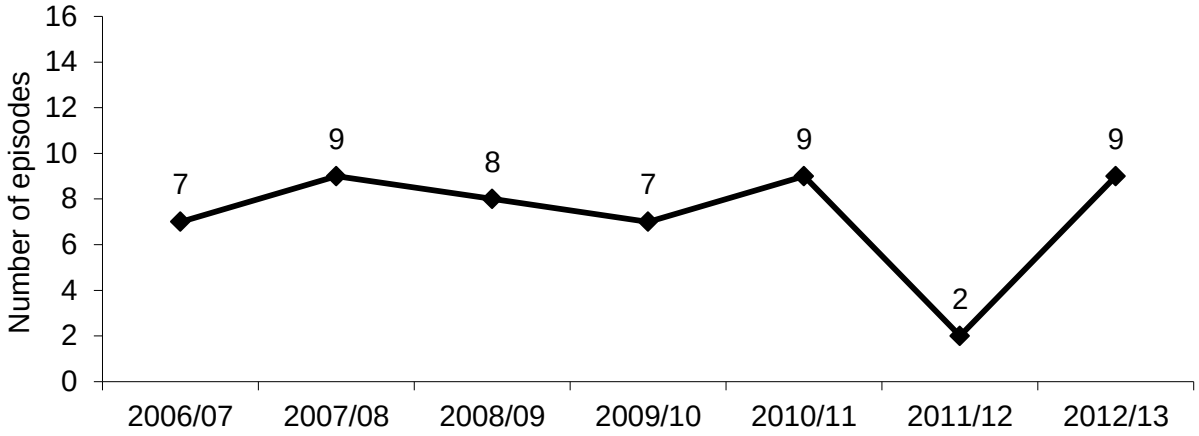
To ascertain whether participants had any contact with health professionals, participants were asked whether they had been to any health services for any reason in the preceding six months. Just over half the sample (53%) reported accessing a health service in the past six months. The most common health professionals these participants reported consulting during this time included a GP (80%), emergency department (32%), dentist (28%), specialist doctor (14%) and/or other health professionals such as chiropractors or physiotherapists. Other health services accessed by smaller proportions of the sample include a psychiatrist (8%), psychologist (8%), social/welfare worker (6%), hospital admission as an inpatient (6%), medical tent at a festival/rave (6%), drug and alcohol counsellor (6%), hospital admission as an outpatient (6%) and/or ambulance attendance (2%).

6.4 Drug treatment

6.4.1 Ecstasy

The number of closed treatment episodes based on the date of commencement where the principal drug of concern was ecstasy has continued to remain relatively stable in the NT from 2006/07 to 2012/13 (Figure 53).

Figure 53: Number of ecstasy treatment episodes, NT 2006/07 to 2012/13

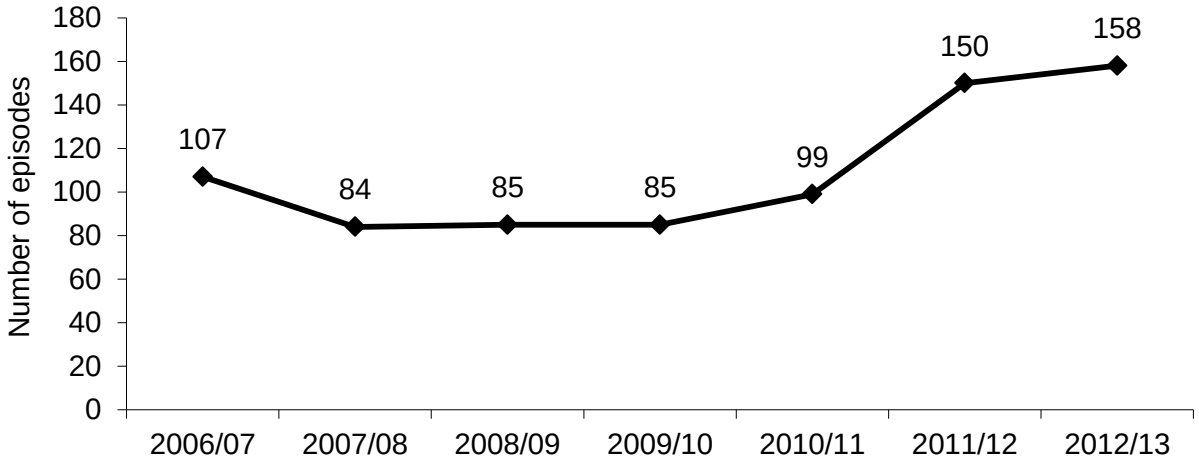


Source: AODTS NMDS (AIHW, 2014)
Note: The AODTS NMDS is based on closed treatment episodes, and so some episodes may be excluded if they were not closed in the financial year.

6.4.2 Methamphetamine

The number of closed treatment episodes based on date of commencement where methamphetamine was the principal drug of concern has increased from 2009/10 (Figure 54); however, the number of episodes has appeared to have remained relatively stable from 2011/12 to 2012/13.

Figure 54: Number of methamphetamine treatment episodes, NT 2006/07 to 2012/13

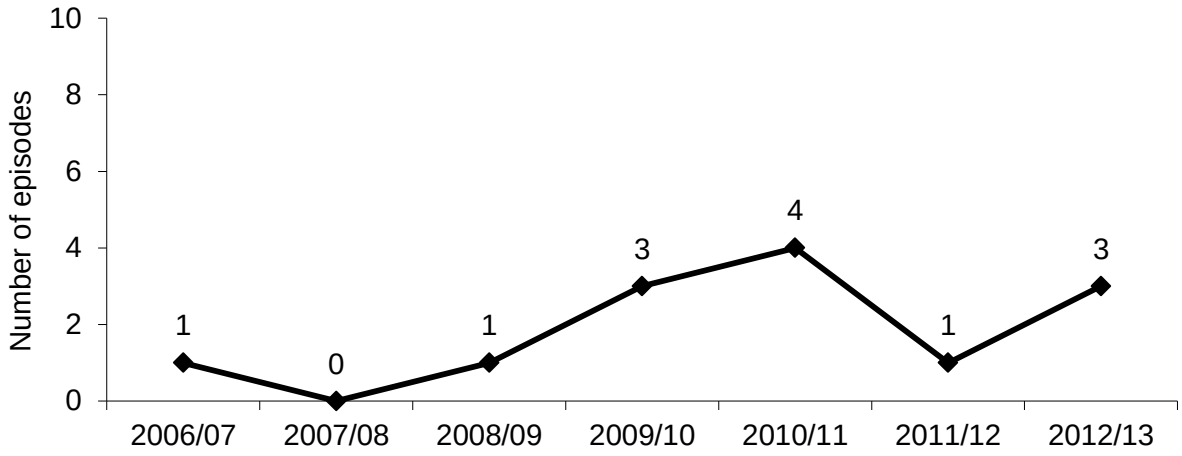


Source: AODTS NMDS (AIHW, 2014)
Note: The AODTS NMDS is based on closed treatment episodes, and so some episodes may be excluded if they were not closed in the financial year.

6.4.3 Cocaine

The number of closed treatment episodes based on date of commencement where cocaine was the principal drug of concern has remained low and stable across time (Figure 55).

Figure 55: Number of cocaine treatment episodes, NT 2006/07 to 2012/13

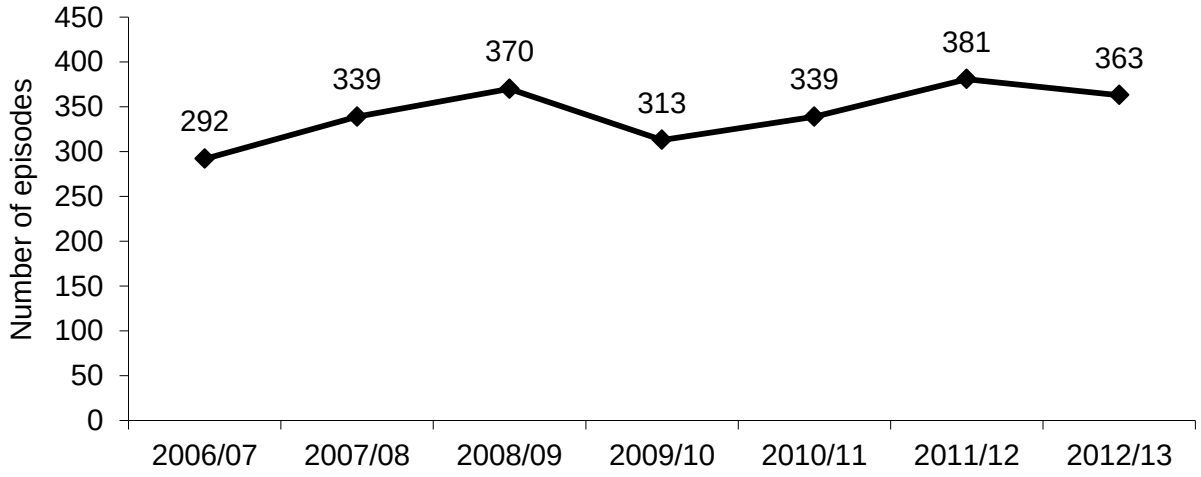


Source: AODTS NMDS (AIHW, 2014)
Note: The AODTS NMDS is based on closed treatment episodes, and so some episodes may be excluded if they were not closed in the financial year.

6.4.4 Cannabis

Figure 56 shows the number of closed treatment episodes based on the year of commencement where the principal drug of concern was cannabis. These data show that presentations for cannabis have remained mostly stable over time in the NT.

Figure 56: Number of cannabis treatment episodes, NT 2006/07 to 2012/13



Source: AODTS NMDS (AIHW, 2014)
Note: The AODTS NMDS is based on closed treatment episodes, and so some episodes may be excluded if they were not closed in the financial year.

6.5 Other self-reported problems associated with ERD use

Participants were asked about a range of other problems associated with their drug use. Participants were asked if, in the past six months, their drug use had recurrently interfered with their responsibilities at home, work or school; if they had recurrently found themselves in situations where they were under the influence of any drug and could have gotten themselves or others hurt, or put themselves or others at risk; if their drug use had caused repeated problems with family, friends or people at work or school; or if they had any recurrent drug-related legal problems (Table 19).

- One-third of the sample reported recurrently finding themselves in situations where they were under the influence of a drug and could have caused injury either to themselves or others, or put themselves or others at risk. Respondents most commonly identified alcohol (54%) as the main drug causing these problems, followed by ecstasy (26%) and crystal (11%).
- About one-quarter of the 2014 sample (24%) reported that their drug use had recurrently interfered with their responsibilities at home, at work or at school. Cannabis was the drug most commonly associated with these problems, followed by alcohol and ecstasy.
- Fifteen participants reported that their use of drugs had caused repeated problems with family, friends or people at work or school in the six months prior to the interview. The highest proportion of these participants identified crystal as most commonly causing these problems, followed by ecstasy, alcohol and cannabis.
- Five participants in 2014 reported experiencing recurring legal problems due to drug use. These participants most commonly attributed these legal problems to alcohol, followed by ecstasy and cannabis.

Overall, it was evident that a sizeable proportion of EDRS participants experienced problems associated with their drug use across multiple domains and that these were most commonly associated with the use of alcohol, ecstasy, cannabis and crystal.

Table 19: Self-reported drug-related problems among EDRS participants, NT

Problems in the following areas (last 6 mths):	**Any drug (N=100)**	**Alcohol**	**Ecstasy**	**Cannabis**	**Crystal**
Risk (%)	36	54	26	3	11
Responsibility (%)	24	29	25	33	8
Social (%)	15	13	27	13	33
Legal (%)	5	50	25	25	0

Source: EDRS participant interviews 2014

6.6 Mental health and psychological distress

6.6.1 Self-reported mental health

Participants were asked whether they had experienced any mental health problems over the previous six months (Table 20). One-in-five (20%) had recently experienced a mental health problem, which is notably lower than that recorded among the general population of a similar age range (16-24 years (26%) and 25-34 years (25%) (Australian Bureau of Statistics, 2007)). Mood disorders were those most commonly reported by far (depression 70%; anxiety 60%). Almost three-quarters (70%) of those who experienced a mental health problem sought assistance from a health professional, and two-in-five (40%) had been prescribed medication (most commonly antidepressants and benzodiazepines).

Trends over time in self-reported mental health problems and help-seeking behaviours around these are presented in Table 20. With one-in-five NT participants reporting a recent mental health problem, it is positive to see that the majority sought help from a health professional.

Table 20: Mental health problems among EDRS participants, NT

	2008 (N=55)	2009 (N=67)	2013 (N=45)	**2014 (N=99)**
Any mental health problem recently (%)	7	21	9	**20**
Of these (%):				
Depression	100	86	100	**70**
Anxiety	75	43	25	**60**
Panic	25	14	25	**0**
Bipolar Disorder	-	-	50	**0**
Mania	50	14	0	**0**
Paranoia	50	7	0	**0**
Personality Disorder	25	-	0	**0**
Schizophrenia	-	-	0	**0**
Drug-Induced Psychosis	-	7	0	**0**
Obsessive Compulsive Disorder	-	7	25	**5**
Sought help from health professional^ (%)	0	43	75	**70**
Prescribed medication^ (%)	-	36	67	**40**

Source: EDRS participant interviews 2008, 2009, 2013, 2014
^ Percentage of those who had recently experienced a mental health problem

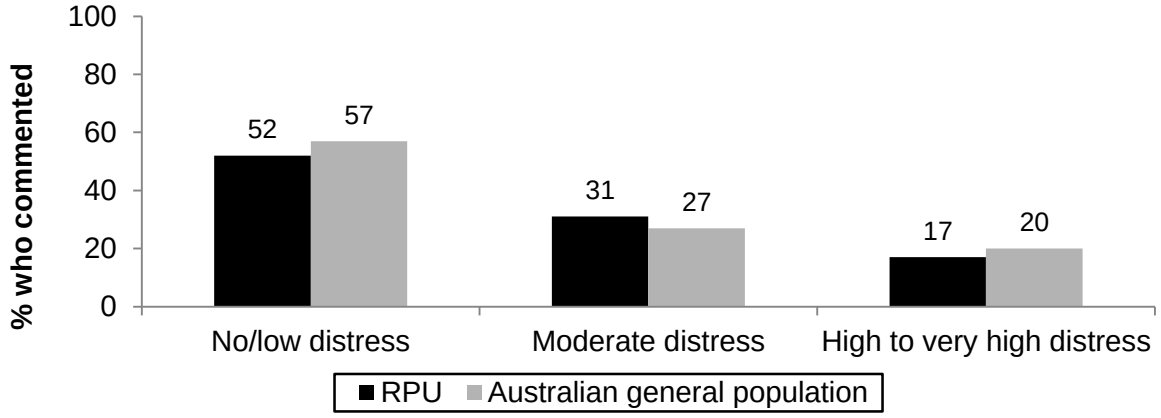
6.6.2 Kessler Psychological Distress Scale (K10)

From 2006, the EDRS has included the 10-item Kessler Psychological Distress Scale (K10) (Kessler et al., 2002), which is a questionnaire designed to measure the level of distress and severity associated with psychological symptoms in population surveys. The minimum score is 10 and the maximum is 50. Scores ranging from 10-15 are classified as 'no/low distress', 16-21 'moderate distress' and 22-50 'high to very high distress' (Australian Institute of Health and Welfare, 2014).

The median score for participants was 15 (range 2-36). Half of the participants' scores fell into the 'no/low distress' (52%) category. The remaining half displayed distress to some degree, including 'moderate distress' (31%) or 'high to very high distress' (7%) (Figure 57).

Figure 57 compares the spread of EDRS participants' scores across these three categories with those of the general Australian population. Across the two distress categories ('moderate' and 'high to very high' distress), there are mostly comparable proportions of EDRS participants in these categories compared to the Australian general population.

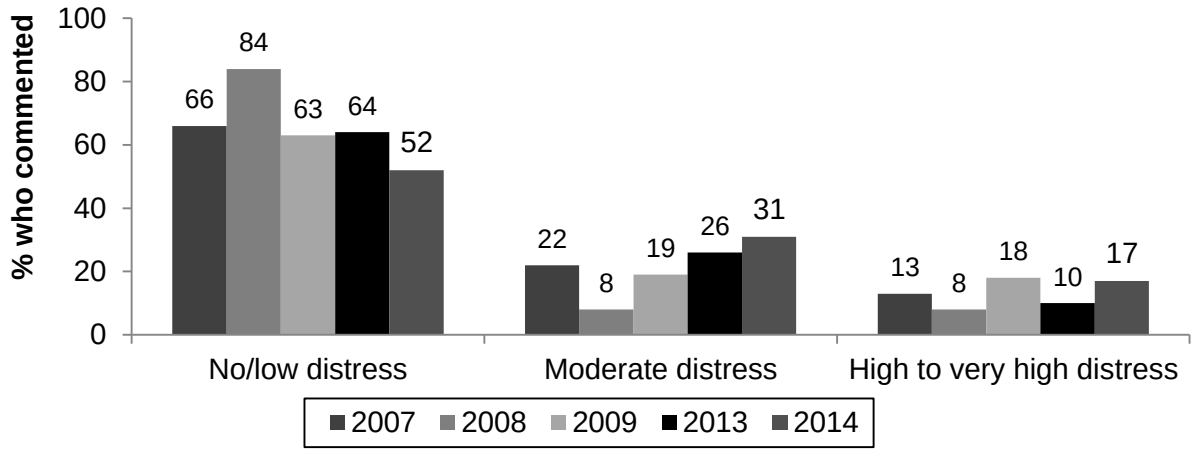
Figure 57: K10 scores for EDRS participants compared with the general Australian population, NT



Source: EDRS participant interviews 2014; Australian Institute of Health and Welfare (2014)

Figure 58 presents data across time on the proportions of each sample from 2007 to 2014 that fell into each distress category. While data appear to have remained relatively stable over time, there appeared to be an increase in the proportion of respondents scoring some degree of distress in 2014 compared to prior years.

Figure 58: K10 scores across time for EDRS participants, NT



Source: EDRS participant interviews 2007, 2008, 2009, 2013, 2014

7 RISK BEHAVIOURS

Summary:

- Four per cent (n=4) of the sample had ever injected a drug and 2 participants had done so recently.
- Three-quarters of the sample had recently had penetrative sex with a casual partner. Half the sample did not use a sexual barrier on the last occasion (regardless of whether or not they were intoxicated). The main reasons were that they were already using the contraceptive pill or they agreed to not use any protective sexual barrier.
- Participants completed the Alcohol Use Disorders Identification Test (AUDIT). The vast majority (87%) of the group fell in the 'harmful drinking' range, with males recorded a significantly higher AUDIT score on average than females.
- Thirteen per cent of participants scored within the problematic dependent ecstasy use category using the conservative cut-off score.

7.1 Injecting risk behaviour

Four per cent of participants (n=4) had ever injected a drug and 2% (n=2) had done so within the past six months (Table 21).

Table 21: Injecting risk behaviour among EDRS participants, NT

	2007 (N=66)	2008 (N=55)	2009 (N=67)	2013 (N=45)	**2014 (N=100)**
Ever injected (%)	26	16	31	16	**4**
Injected last 6 mths (%)	15	7	25	4	**2**

Source: EDRS participant interviews 2007, 2008, 2009, 2013, 2014

7.1.1 Lifetime injectors

Patterns of lifetime injecting drug use

The median age of initiation for respondents who had ever injected was 18 years (range 16-21). Of these participants (n=4), half reported that the first drug injected was speed (n=2), with the other two participants reporting heroin or morphine respectively. A handful of drug types had ever been injected by these participants: speed (n=2); ecstasy powder (n=1); crystal (n=1); heroin (n=1); buprenorphine (n=1); and other illicit opioids (n=1).

7.1.2 Recent injectors

Patterns of recent injecting drug use

Participants who had injected a drug in the six months prior to the interview (n=2) reported having injected any drug a median of 11 times (range 10-12) over this period. Participants were asked about the last time they had injected a drug. One participant reported that they

last injected crystal, while the other last injected steroids. In terms of location of their last injection, one reported last injecting at a friend's home whereas the other had injected in a venue toilet.

Injecting risk behaviour

Neither of the two respondents reported having used a needle after someone else in the past six months. Additionally, no other injecting equipment was reportedly used by the respondents after someone else in the past six months.

Context of injecting

One participant reported usually injecting alone, whereas the other recent injector reported commonly injecting with their close friends in the past six months. One of the two recent injectors had injected while 'under the influence' or 'coming down' from ecstasy and other drugs over the past six months.

Obtaining needles

Respondents were asked to identify where they had obtained needles from over the preceding six months. Both recent injectors obtained their needles from a chemist.

7.2 Sexual risk behaviour

Participants were asked questions about their recent sexual activity, particularly with regards to penetrative sex. This was defined as 'penetration by penis or hand of the vagina or anus'. Given the sensitive nature of these questions, participants were given the option of self-completing this section of the questionnaire.

Approximately three-quarters (72%) of the sample reported having had penetrative sex with at least one casual partner (i.e. someone who was not a regular partner) over the preceding six months. Of the 72 participants who reported penetrative sex with a casual partner, the vast majority (82%) reported having done so while under the influence of alcohol or drugs (Table 22). The drugs most commonly used were alcohol, ecstasy, cannabis and crystal.

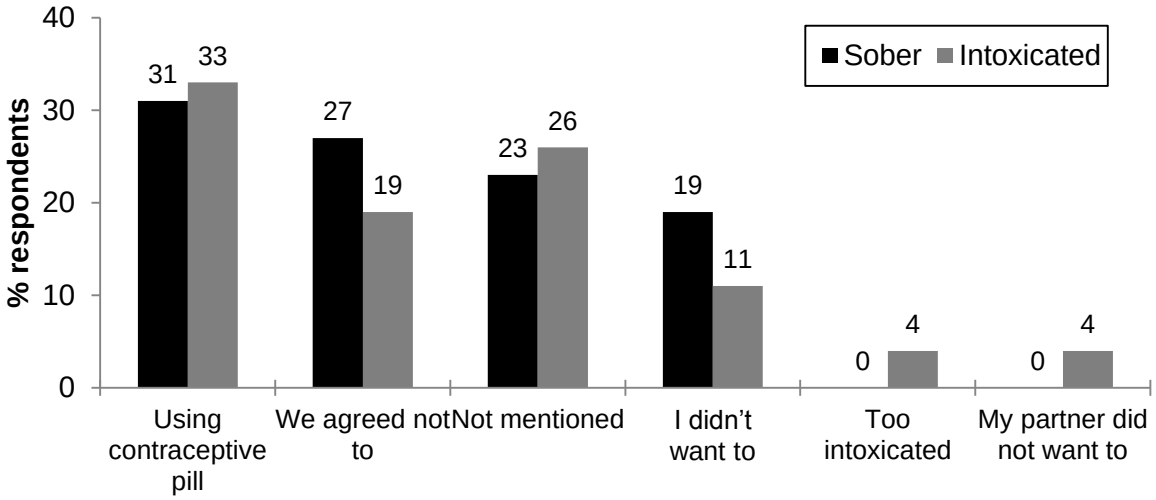
Table 22: Trends in sexual activity with casual partners in the past six months among EDRS participants, NT

	2007 (N=67)	2008 (N=55)	2009 (N=67)	2013 (N=43)	**2014 (N=99)**
Casual penetrative sex (%)	92	62	60	70	**72**
No. of sexual partners (%)[*]					
1 person	38	21	28	7	**14**
2 people	13	32	22	12	**19**
3-5 people	25	32	22	26	**42**
6-10 people	16	12	15	21	**14**
10+ people	8	6	11	5	**11**
Penetrative sex with casual partner while on drugs[*]	97	79	72	84	**82**
Drugs used (%)					
Alcohol	72	85	56	35	**75**
Ecstasy	85	82	88	62	**44**
Cannabis	38	7	18	42	**32**
Crystal	3	-	6	12	**17**
Cocaine	-	-	-	19	**5**
LSD	-	-	-	12	**9**
Speed	22	4	21	8	**9**
MDA	-	-	-	-	**7**
GHB	-	-	-	-	**2**
Mushrooms	-	-	-	-	**2**
Ketamine	-	-	-	4	**-**
Base	2	-	6	-	**-**

Source: EDRS participant interviews 2007, 2008, 2009, 2013, 2014
[*] Of those who had penetrative sex in the last 6 months

Participants were also asked whether they had used a protective sexual barrier the last time they had penetrative sex with a casual partner. The same proportion of the sample reportedly used a protective sexual barrier when they were sober and when they were last under the influence of drugs or alcohol (52% respectively). The major reasons for not using protection were either that they were already using the contraceptive pill or they agreed to not use any protective sexual barrier (Figure 59).

Figure 59: Reasons for not using protective barriers among EDRS participants, NT



Source: EDRS participant interviews 2014

7.3 Problematic alcohol use among EDRS participants

7.3.1 Alcohol Use Disorders Identification Test (AUDIT)

The Alcohol Use Disorders Identification Test (AUDIT) (Saunders, Aasland, Babor, de la Fuente, & Grant, 1993) was designed by the World Health Organization as a brief screening scale to identify individuals with alcohol problems, including those in early stages. It is a 10-item scale, designed to assess three conceptual domains: alcohol intake; dependence; and adverse consequences (Reinert & Allen, 2002).

Total scores of 8 or more are recommended as indicators of hazardous and harmful alcohol use, as well as possible alcohol dependence (Babor, de la Fluente, Saunders, & Grant, 1992). Higher scores indicate greater likelihood of hazardous and harmful drinking; higher scores may also reflect greater severity of alcohol problems and dependence, as well as a greater need for more intensive treatment (Babor et al., 1992).

The median score on the AUDIT for the NT 2014 sample was 14 (range 0-30). The majority (87%) of EDRS participants scored in the harmful range (i.e. total score of 8 or more). Males recorded a significantly higher AUDIT score on average than females (mean score 16.3 vs. 12.6, $t(97) = -2.78$, $p=0.007$).

The AUDIT guidelines (Babor, Higgins-Biddle, Saunders, & Monteiro, 2001) indicate four 'zones' into which total scores on the test can be divided. In the current sample, one-tenth (13%) scored in zone 1 (low risk drinking or abstinence), two-fifths of the sample (42%) scored in zone 2 (alcohol in excess of low-risk guidelines), one-fifth (19%) scored in zone 3 (harmful or hazardous drinking) and the remaining one-quarter (25%) scored in zone 4 (possible alcohol dependence – may be referred for evaluation and possible treatment).

7.4 Ecstasy dependence

It has been traditionally believed that dependence on MDMA (the active ingredient in ecstasy) is unlikely given the relatively infrequent use patterns exhibited by ecstasy users (i.e. fortnightly or weekly). However, there is nonetheless evidence from animal research of a dependence potential for MDMA which is relatively attenuated and displays unique characteristics compared with other drugs. Little work has been done to characterise a dependence syndrome among ecstasy users (Bruno et al., 2009a).

In 2014, participants were asked questions from the Severity of Dependence Scale (SDS) adapted to investigate ecstasy dependence. The SDS is a five-item 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. The SDS appears to be a reliable measure of the dependence construct. It has demonstrated good psychometric properties with heroin, cocaine, amphetamine and methadone maintenance patients across five samples in Sydney and London (Dawe, Loxton, Hides, Kavanagh, & Mattick, 2002). A total score was created by summing responses to each of the five questions. Possible scores range from 0 to 15.

Two cut-off scores are presented below of 3 or more and 4 or more. A cut-off score of 3 or more was used as these scores have been recently found in the literature to be a good balance between sensitivity and specificity for identifying problematic dependent ecstasy use (Bruno, Gomez, & Matthews, 2011). Fifteen per cent of NT participants recorded a score of 3 and above. The cut-off of 4 and above is a more conservative estimate which has been used previously in the literature as a validated cut-off for methamphetamine dependence (Bruno et al., 2009b; Topp & Mattick, 1997). Thirteen per cent of participants scored 4 or above.

The median SDS score was 1 (range 0-13). Half of participants (53%) obtained a score of zero on the ecstasy SDS, and one-quarter (24%) obtained a score of 1 on the scale; that is, the majority of respondents reported no or few symptoms of dependence in relation to ecstasy use. These findings are supported by responses of the majority of participants (75%) reporting ‘never or almost never’ thinking that their use of ecstasy was out of control and 83% reporting that they would find it ‘not difficult to stop or miss a prospective dose of ecstasy’.

8 LAW ENFORCEMENT-RELATED TRENDS ASSOCIATED WITH ERD USE

Summary:

- One-fifth of participants had reportedly been arrested over the past year.
- One-third had committed a crime within the past month; most commonly drug dealing and property crimes.
- In 2012/13, there was a notable increase in the number of arrests in the NT for amphetamines. In contrast, arrests in the NT decreased for cannabis use/possession. Consumer and provider arrests remained stable and low for cocaine, hallucinogen and steroid use/possession.
- The majority of participants (81%) reported that half or more of their friends had used ecstasy during the previous six months.

8.1 Reports of criminal activity among EDRS participants

Almost one-fifth (18%) of EDRS participants interviewed in 2014 had reportedly been arrested over the preceding 12 months. These arrests were for a number of offenses, including violent crime (33%), public order (33%), property crime (22%), alcohol and driving (11%), the use/possession of drugs (6%), the use/possession of weapons (6%) and other drugs and driving (6%).

Table 23 presents data across time on both self-reported criminal activity and arrests among samples of EDRS participants. Compared to past years, the 2014 participants reported higher levels of criminal activity in the month preceding the interview, particularly in terms of recent drug dealing and violent crime.

Table 23: Criminal activity reported by EDRS participants, NT

	2007 (N=66)	2008 (N=55)	2009 (N=67)	2013 (N=45)	**2014 (N=100)**
Any crime past month (%):	18	18	33	13	**30**
Drug dealing	10	18	31	7	**19**
Property crime	5	0	3	7	**10**
Fraud	0	2	0	2	**0**
Violent crime	1	0	5	2	**9**
Arrested past 12 months (%)	5	2	9	7	**18**

Source: EDRS participant interviews 2007, 2008, 2009, 2013 , 2014

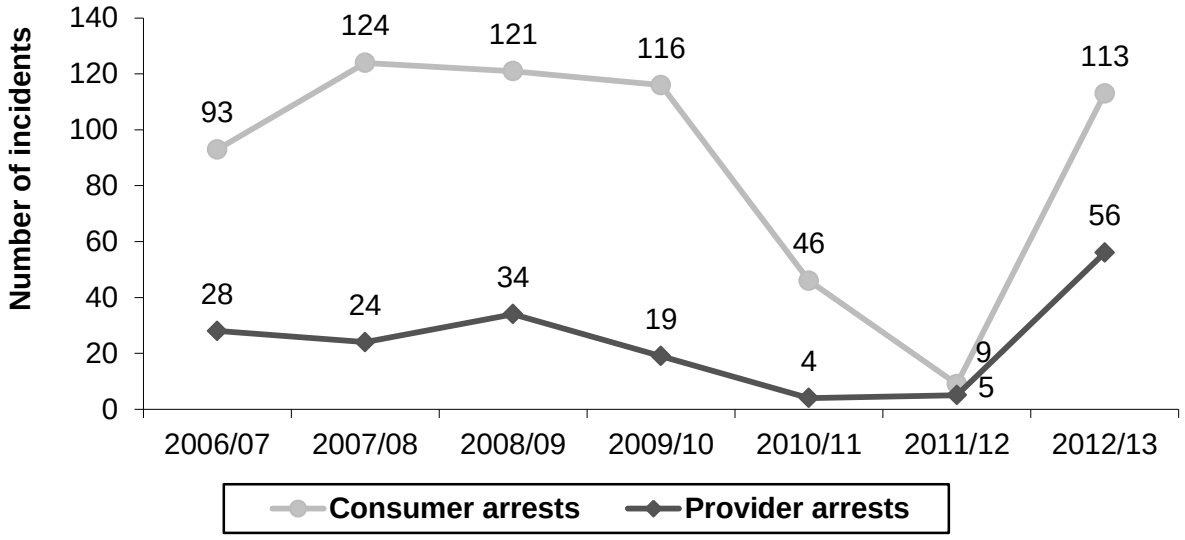
Nineteen participants (19%) had dealt drugs in the month leading up to the interview. Of these, the majority had dealt drugs less than once a week (63%); however, five participants reported dealing a few times per week. Ten EDRS participants (10%) had committed a property crime over the last month, which was mostly less than once per week (n=7). The nine participants who had committed violent crime over the last month all reporting doing so less than once a week. No participants reported fraudulent crime over the past month.

8.2 Arrests

8.2.1 Methamphetamine

Figure 60 shows the recorded incidents of amphetamine consumer and provider arrests for the NT. There appears to have been a notable increase in the number of arrests in the NT from 2011/12 to 2012/13, with provider arrests at their highest recorded level.

Figure 60: Recorded incidents of amphetamine arrests in the NT, 2006/07-2012/13

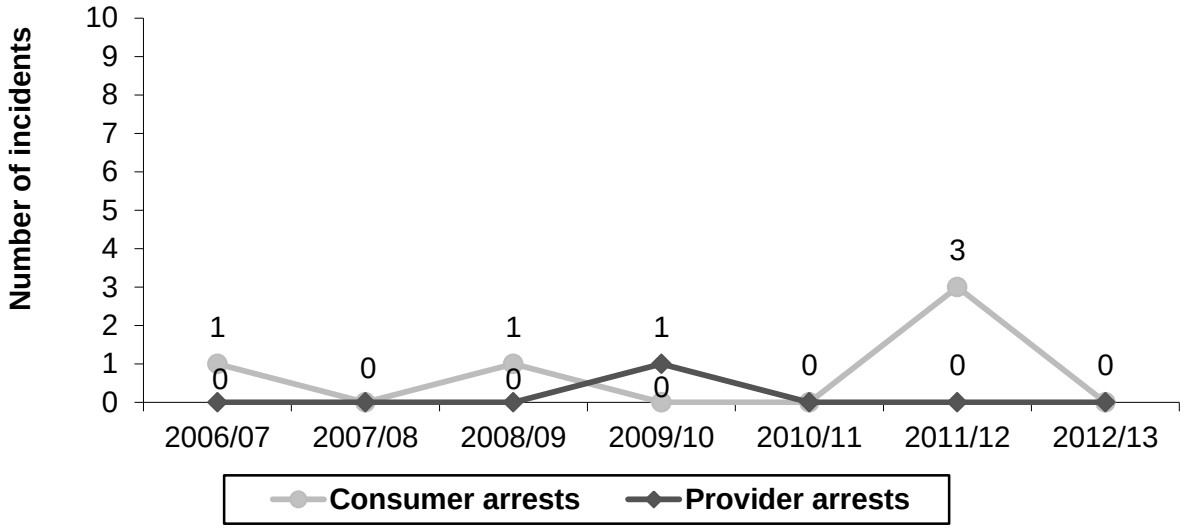


Source: ACC (2008, 2009, 2010, 2011, 2012, 2013, 2014)

8.2.2 Cocaine

The number of recorded incidents for cocaine arrests has remained low and stable since 2006/07 (Figure 61).

Figure 61: Recorded incidents of cocaine arrests in the NT, 2006/07-2012/13

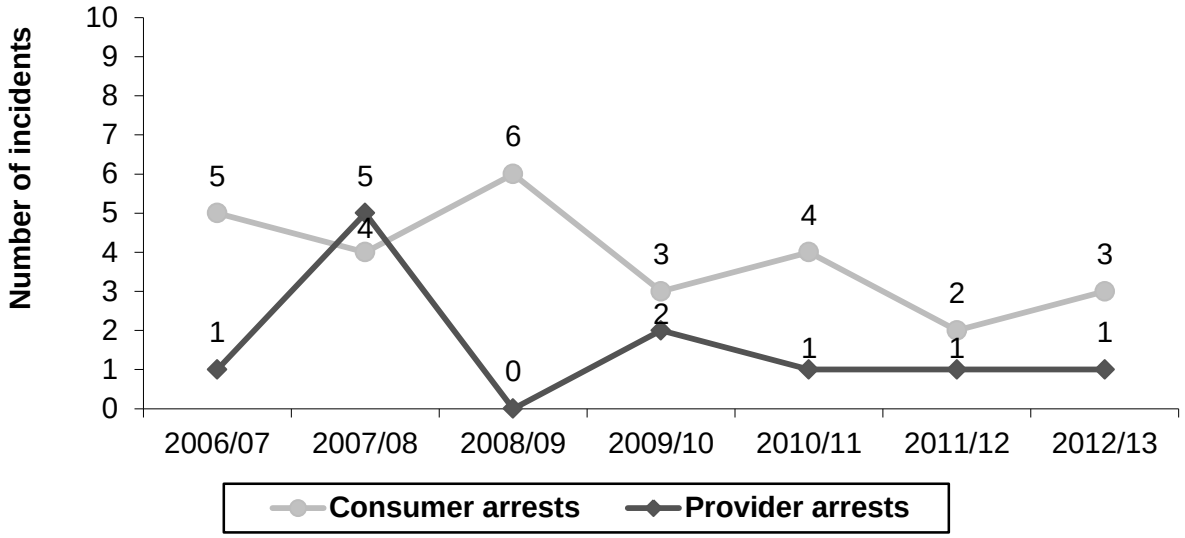


Source: ACC (2008, 2009, 2010, 2011, 2012, 2013, 2014)

8.2.3 Hallucinogens

In relation to consumer and provider arrests of hallucinogens, such as LSD and mushrooms, arrest numbers continued to remain low and stable in the NT (Figure 62).

Figure 62: Recorded incidents of hallucinogen arrests in the NT, 2006/07-2012/13

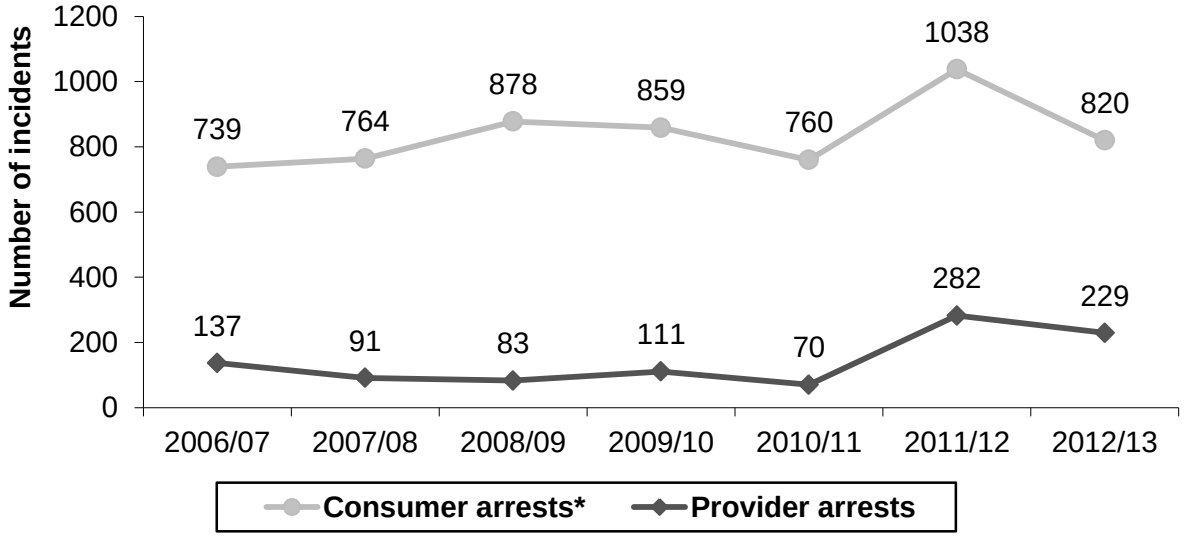


Source: ACC (2008, 2009, 2010, 2011, 2012, 2013, 2014)

8.2.4 Cannabis

Figure 63 shows the number of police-recorded consumer and provider arrests of cannabis in the NT. Compared to 2011/12, in 2012/13 the number of arrests decreased slightly for both consumer and provider offences.

Figure 63: Recorded incidents of cannabis arrests in the NT, 2006/07-2012/13

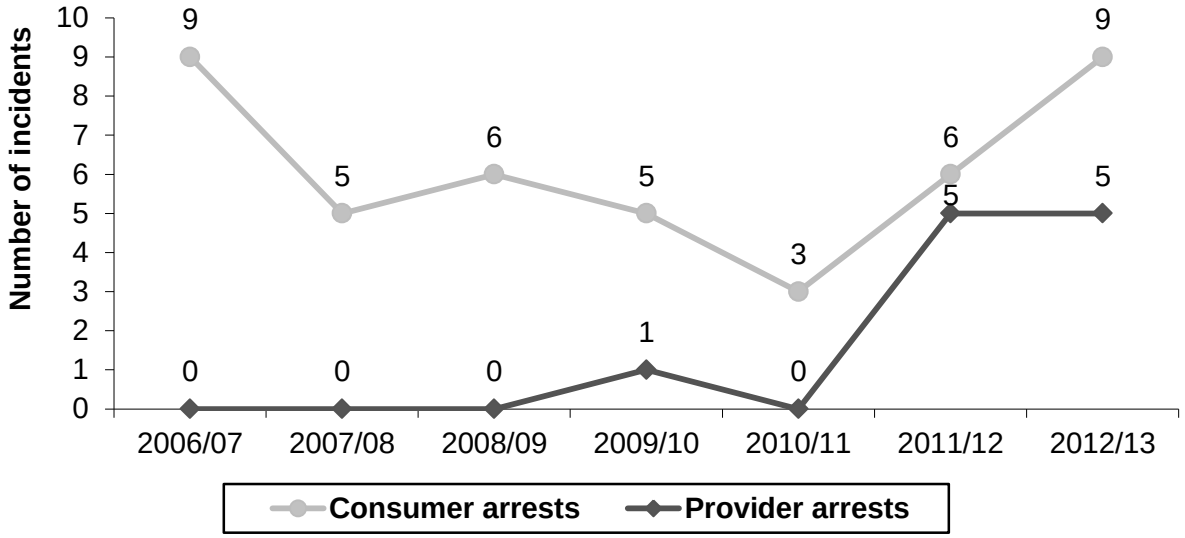


Source: ACC (2008, 2009, 2010, 2011, 2012, 2013, 2014)
* Consumer arrests for cannabis includes drug infringement notices

8.2.5 Steroids

The number of arrests of consumers and providers for steroid possession has remained relatively low over time (Figure 64). However, the graph below shows that in 2012/13, there was a slight increase in the number of consumer arrests for steroids compared to previous years.

Figure 64: Recorded incidents of steroid arrests in the NT, 2006/07-2012/13



Source: ACC (2008, 2009, 2010, 2011, 2012, 2013, 2014)

8.3 Perceptions of changes in peer drug use

The majority of participants (81%) reported that half or more of their friends had used ecstasy during the previous six months (10% 'all'; 38% 'most'; 33% 'about half'). One-fifth (18%) of participants reported that 'a few' of their friends had used ecstasy.

One-third (30%) of participants had perceived changes in drug use amongst their social group. Some of the more common themes in participants' comments included the following:

- There was increasing experimentation with ERD, with participants reporting that their friends had recently started to use methamphetamine and LSD.
- A number of participants reported increases in both the proportion and frequency of friends using ERD.
- Participants reported the recent use of 'new drugs' including ice, speed and acid. Some participants specifically mentioned exploring the use of 'research chemicals' such as 'Snapchat', as well as new types of LSD.

9 SPECIAL TOPICS OF INTEREST

Summary:

- Backpackers who engaged in ERD use:
  - Were a mean of 24 years old, mostly female, heterosexual, well-educated and from mostly English speaking backgrounds.
  - Backpackers had used a median of six drug types in the past six months, the most common including ecstasy, alcohol, cannabis, mushrooms and tobacco.
  - One-tenth of backpackers reported a recent stimulant overdose.
  - No participants accessed a health service for their drug use.
  - The majority of backpackers' K10 psychological distress scores fell into the 'low/no distress' (63%) category. Only one backpacker reported a recent mental health problem.
  - Most backpackers reported having casual penetrative sex in the past six months, with almost all of these participants reporting that they had sex under the influence of drugs.
  - Over half of the backpackers scored within the 'harmful/hazardous' or 'alcohol dependence' categories of alcohol consumption.
  - One-fifth reported engaging in criminal activity during the month prior to the interview. One-in-ten were arrested over the preceding 12 months.
- New psychoactive substances (NPS):
  - The majority of NT participants were mostly unsure as to whether various NPS were legal or illegal.
  - Synthetic cannabis, 2C-X, DMT and mephedrone were the most commonly used NPS by the NT sample.

9.1 Backpackers sub-sample

Prior to 2014, the NT EDRS has had difficulty obtaining a sample of ERD users of meaningful size. It has been hypothesised that this has been due to a number of reasons, including that Darwin comprises a number of backpackers who were using ERD, but were not meeting the EDRS eligibility criteria (e.g., been a resident of Darwin for the last 12 months). Over the past two years, the research team decided to also interview a sub-sample of backpackers who had used ERD in Australia at least twice in the past six months. The aim of this module was to examine demographics, drug use, health-related trends, risk behaviours and criminal activity amongst this group. To date, there is very little literature on the risk factors facing backpackers in Darwin, and, as such, this section aims to provide preliminary data to address this knowledge gap.

The 2014 NT backpackers' sub-sample was comprised of 22 participants who had arrived in Australia over the past two years (2012 to 2014). All of these participants were included in the REU/RPU sample, as they reported regular use of psychostimulants (used at least six times) in Australia over the past six months. As shown in Table 24, over the 12 months prior

to the interview, the backpackers had spent an average of 7 months in Australia (range 2-12) and 2 months in Darwin (range 1-12).

The mean age of backpackers was 24 years old (range 19-32). Over half the sample was female (64%) and the majority (91%) were from English-speaking backgrounds. The backpackers were comprised of individuals mostly from the United Kingdom (n=17), although smaller proportions reported their home country to be Ireland (n=1), United States of America (n=1), France (n=1), Scotland (n=1) and Sweden (n=1).

Most of the backpackers reported their sexual orientation as heterosexual (91%) and were currently single (86%). Two-thirds (64%) reported living in a boarding house or hostel at the time of interview, and an additional 32% reported that they were living in a rental property.

The vast majority of backpackers had completed Grade 12 (91%) and most had a tertiary qualification (71%). Half of the sample were currently unemployed (55%). All of those participants who received an income over the month prior to interview (86%) reported that this had come in the form of a wage or salary. Sixteen participants disclosed their weekly income, which equated to a mean of $673 (range $200-1,120).

Table 24: Demographic characteristics of backpackers, NT

	2013 (n=23)	2014 (n=22)
Of the past 12 months:		
How many months in Australia (median, range)	6 (1-12)	7 (2-12)
How many months in Darwin (median, range)	3 (1-8)	2 (1-12)
Mean age (years, range)	24 (19-34)	24 (19-32)
Male (%)	61	36
English-speaking background (%)	35	91
Heterosexual (%)	100	91
Single relationship status	57	86
Median number of school years	12	12
Tertiary qualifications (%)	65	71
Unemployed (%)	52	55
Part-time/casual employment (%)	26	36
Full-time employment (%)	17	9
Mean weekly income ($, range)	950 (200-3,077)	673 (200-1,120)
Prison history (%)	0	0
Currently in drug treatment (%)	0	0

Source: EDRS participant interviews 2013, 2014

Table 25 shows that the median number of drugs ever used for backpackers was 9 (range 5-17) and a median of 6 drug types (range 3-12) had been used in the last six months. Injection as a route of administration was not reported by this group. About one-third (32%) reported bingeing on stimulants or related drugs in the past six months. Half of the backpackers reported that ecstasy (59%) was their drug of choice, followed by cannabis (18%) and cocaine (9%).

Table 25: Drug use patterns of backpackers, NT

	2013 (n=23)	2014 (n=22)
Median no. drug types ever used (range)	7 (3-17)	9 (5-17)
Median no. drug types used recently (range)	5 (3-7)	6 (3-12)
Ever injected any drug (%)	9	0
Recently injected any drug (%)	0	0
Binged in the last six months (%)	22	32
Drug of choice (%):		
Alcohol	22	5
Cannabis	52	18
Cocaine	0	9
Ecstasy	9	59
Recently used (%):		
Cannabis	100	96
Ecstasy	91	100
Alcohol	87	100
Tobacco	65	50
LSD	57	36
Herbal highs	39	0
Crystal	26	5
MDA	17	0
Mushrooms	17	55
Speed	9	18
Cocaine	9	46
Ketamine	4	27
Amyl nitrite	4	5
OTC codeine	4	5
GHB	0	5
Nitrous oxide	0	23
Illicit benzodiazepines	0	14
Licit benzodiazepines	0	5
Illicit pharmaceuticals	0	18
Illicit antidepressants	0	5
Used other drugs with ecstasy (%)	82	50
Used other drug to come down from ecstasy (%)	46	41

Source: EDRS participant interviews 2013, 2014

During the six months prior to the interview, the majority of backpackers reported use of a number of substances, including ecstasy (100%), alcohol (100%), cannabis (96%), mushrooms (55%) and tobacco (50%) (Table 25). Those who had used ecstasy reported that during their last session, the majority had used other drugs with ecstasy (50%) including more than five standard drinks of alcohol (n=8), cocaine (n=4), cannabis (n=2), tobacco

(n=3), LSD (n=2), ketamine (n=2), benzodiazepines (n=2), nitrous oxide (n=1) and energy drinks (n=1). Two-fifths of the sample of backpackers reported using other drugs to come down from ecstasy (41%), which included cannabis (n=9), less than five standard drinks of alcohol (n=1) and tobacco (n=1).

Health-related trends for backpackers have been detailed in Table 26. As shown below, three backpackers reported a stimulant drug overdose during the six months prior to interview (14%). Two of these backpackers provided further details of their overdose episodes. Ecstasy (n=1) and ketamine (n=1) were nominated as the primary cause of the overdose. Neither of the backpackers accessed treatment for their overdose, nor did they seek information about the overdose or drug use after the episode. No backpackers reported experiencing a depressant drug overdose in the past six months.

Table 26: Health-related trends amongst backpackers, NT

%	2013 (n=23)	2014 (n=22)
Overdosed on stimulant drug past six months	4	14
Overdosed on depressant drug past six months	22	0
Recently sought help from a health professional for D&A use	0	0
Recently thought about seeking help from a health professional for D&A use	0	9
Recently been to a health service for any reason	26	32
K10 psychological distress scores:		
No/low distress	65	63
Moderate distress	23	21
High to very high distress	12	16
Self-reported mental health problem past six months	4	5
Self-reported problems from drug use:		
Responsibility problems	22	18
Risk problems	13	27
Social problems	9	5
Legal problems	4	0

Source: EDRS participant interviews 2013, 2014

During the six months prior to interview, none of the backpackers reported that they sought help from a health professional for their drug and/or alcohol use; however, 9% had thought about seeking help. One-third (32%) of participants reported accessing at least one health service during this time for any reason, which included visits to the GP (n=4), hospital (Emergency Department (n=2); inpatient treatment (n=1); outpatient hospital (n=1)), dentist (n=1) or other health professionals (n=1).

Table 26 shows that the majority of backpackers' K10 psychological distress scores fell into the 'low/no distress' (65%) category. The remaining one-third displayed distress to some degree, including 'moderate distress' (21%) or 'high to very high distress' (16%). When asked about recent mental health issues, only one backpacker reported that they had experienced a mental health problem in the last six months.

Backpackers reported on whether their drug use had led to various problems in their lives over the past six months. One-quarter reported that alcohol (n=4) or ecstasy (n=2) use had caused them to put themselves or others at risk. One-fifth (18%) of backpackers reported that drug use had contributed to responsibility problems, which was primarily due to alcohol (n=2), cannabis (n=1) or ecstasy (n=1) use. One participant reported that they had recently experienced social problems due to their LSD use.

Table 27 outlines engagement in various risk behaviours, including sexual activity and problematic alcohol consumption. In terms of sexual risk behaviours, 78% of backpackers reported having casual penetrative sex in the past six months. The majority reported having multiple sexual partners during this time, and 89% reported having penetrative sex while on drugs, including alcohol (n=8), ecstasy (n=7) and cannabis (n=3). Approximately half of backpackers reported using a protective sexual barrier during the last occasion of sexual intercourse with a casual partner when sober (50%); however, a higher proportion reported using a protective sexual barrier under the influence of drugs (69%).

Table 27 also details the results of the Alcohol Use Disorders Identification Test (AUDIT), which identifies harmful alcohol consumption patterns through four 'zones' into which total scores on the test can be divided. Amongst the sample, not a single backpacker scored in zone 1, which is the low risk drinking. About half (48%) scored in zone 2, one-third (29%) scored in zone 3 and the remaining one-quarter (24%) scored in zone 4 (possible alcohol dependence – may be referred for evaluation and possible treatment).

Table 27: Risk behaviours amongst backpackers, NT

	2013 (n=23)	2014 (n=22)
Casual penetrative sex (%)	78	82
No. of sexual partners (%):[*]		
1 person	9	5
2 people	4	18
3-5 people	35	36
6-10 people	22	14
10+ people	9	9
Penetrative sex with casual partner while on drugs[*]	94	89
AUDIT zones based on total scores about alcohol use (%):		
Zone 1: Low risk drinking	30	0
Zone 2: Drinking in excess of low-risk guidelines	30	48
Zone 3: Harmful or hazardous drinking	26	29
Zone 4: Possible alcohol dependence	13	24

Source: EDRS participant interviews 2013, 2014
[*] Of those who had penetrative sex in the last 6 months

Table 28 details the proportion of backpackers who reported engagement in criminal activity. One-fifth (18%) reported engaging in criminal activity during the month prior to the interview. These criminal activities included drug dealing (14%), property crime (9%) and violent crime (5%). A notable proportion (9%) of backpackers had reportedly been arrested over the preceding 12 months.

Table 28: Criminal activity amongst backpackers, NT

	2013 (n=23)	2014 (n=22)
Any crime past month (%):	26	18
Drug dealing	13	14
Property crime	9	9
Fraud	9	0
Violent crime	4	5
Arrested last 12 months (%)	17	9

Source: EDRS participant interviews 2013, 2014

9.2 NPS health harms

The past 10 years has seen the emergence of a range of substances that mimic illicit stimulants and hallucinogens such as amphetamines, ecstasy and LSD – often referred to collectively as 'new psychoactive substances' (NPS). As they are designed to be structurally similar to their banned counterparts, without containing controlled substances, they do not fall readily under legislative control and some have been marketed as 'legal highs'. The promotion of these substances as 'legal highs', together with the fact that they can be bought over the Internet, over the counter, and in shop fronts in Australia, has made them accessible to people who may not have used illicit drugs previously, and also gives the illusion of safety. However, the safety or otherwise of these substances is unclear, and there is little evidence on which to base public policies relating to these substances. Indeed, the health and social consequences of these drugs remain poorly understood in Australia, and internationally. This module has therefore been included to improve our knowledge and understanding of the use and effects of the most commonly used NPS. Participants were asked if they had experienced a particular effect whilst using NPS, and were then asked to rate the severity ('mild', 'moderate' or 'severe') of that experience. However, due to small numbers ($n<10$), jurisdictional findings will not be presented; for national findings, please refer to Sindicich and Burns (2015).

9.3 NPS health policy

Drug policy and the legality of certain drugs differ between jurisdictions within Australia. This may influence opportunities and motivations to use certain drugs over others, particularly when NPS may be new analogues of similar existing drugs not specifically listed as illegal in some jurisdictions. In the NT, various acts were introduced or amended in 2014 (*Misuse of Drugs Act 2014; Medicines, Poisons and Therapeutic Goods Act 2014; Medicines, Poisons and Therapeutic Goods Regulations 2014*) to clarify the legislative status of NPS.

As there have been changes in the legislation in the NT recently, and given that a notable proportion of participants are travellers from other jurisdictions, we are interested in finding out what people understand the law in the NT to be at the moment and whether a change in drug law has an effect on people's usage of these substances.

The drugs asked about in the 2014 survey were 2CB, 2CI, DMT and mephedrone. These substances were selected as they were the most commonly reported in the 2013 EDRS. Table 29 below illustrates participant responses. Very few participants reported that any of the NPS were legal, with higher proportions reporting correctly that these substances are illegal. Of note, however, are the rather substantial proportions that report that they are 'unsure' of the legal status of these drugs.

Table 29: Participant knowledge of the legality of NPS in NT

%	**2014 (N=100)**
2CB	
Legal	1
Illegal	37
Unsure	62
2CI	
Legal	1
Illegal	28
Unsure	71
DMT	
Legal	2
Illegal	53
Unsure	45
Mephedrone	
Legal	6
Illegal	53
Unsure	41

Source: EDRS participant interviews 2014

Participants were also asked if making all NPS illegal in the future would impact on their use of those substances. Ninety-one per cent reported that making NPS illegal would not make them stop taking them and the remaining 9% reported that it would make them stop or not

start using NPS. This is not surprising given that this population has been recruited primarily for their illicit psychostimulant drug use.

Participants were also asked which NPS they had used most recently and the time period this use had occurred. As seen in Table 30, synthetic cannabis, 2C-X, DMT and mephedrone were the most commonly used NPS. As a whole, the NPS group was used a median of 4.5 months ago (140 days, range 2-1,344 days i.e. approximately four years ago).

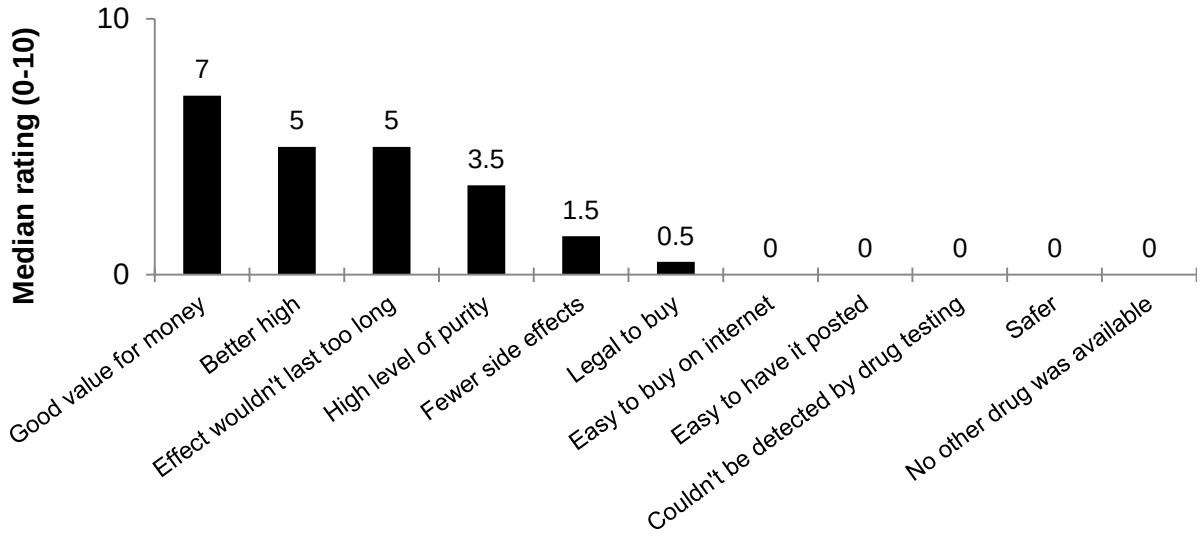
Table 30: Last occasion NPS use and motivating factors for using NPS in NT

Last NPS used %	2014 (N=100)
Synthetic cannabis	18
2C-X (e.g. 2CB, 2CI)	16
DMT	16
Mephedrone	16
Salvia divinorum	11
Capsule with unknown contents	9
DXM	5
NBOMe	5
5-MeO-DMT	2

Source: EDRS participant interviews 2014

For those who had ever used an NPS, they were asked to rate (from 0-10, whereby 0 is no influence and 10 is maximum influence) how motivating the following factors were in using their last NPS. Median ratings were reported below (see Figure 65). As is evident, the factors that had some influence on participants using NPS were that NPS were considered: 'good value for money', 'have a better high than other ERDs', the 'effect of NPS wouldn't last too long', 'higher level of purity than other ERDs', 'fewer side effects than other ERDs' and 'it was legal to buy'.

Figure 65: Median ratings of motivating factors for using NPS in the NT



Source: EDRS participant interviews 2014

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